

STRATEGIES TO MANAGE ATTENTION DEFICIT HYPERACTIVE (ADHD) STUDENTS IN CLASSROOM: AN ACTION RESEARCH

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ABSTRACT

Attention-deficit hyperactivity disorder (ADHD) is one of the most prevalent mental illnesses in youngsters. ADHD symptoms include impulsivity, hyperactivity, and inattention. It is seen as a chronic and incapacitating illness that affects a person's everyday functioning, interpersonal connections, academic and professional accomplishments, and many other areas of their life. When left untreated, it can cause youngsters to have low self-esteem and poor social skills. The core aim of the research is to explore the strategies to manage the attention of students in the classroom. It's action research. The research design is a qualitative case study. The sampling technique is convenient sampling. The data was analyzed through thematic analysis by finding patterns from the observed data. The two major themes that emerged from the data are classroom accommodation and tailored instructions. It is found that to arrest the attention of attention deficit students teachers need to focus on strategic seating, nonverbal clues, display rules in big bold letters, and use timers to enhance class accommodation. The teacher also needs to tailor the teaching strategies by incorporating hands-on activities, using visual aids, task breakdown, and persistent feedback.

Keywords: Strategies, ADHD Students, Class Accommodation, Tailored Instructions, Improved teaching, Student's focus.

INTRODUCTION

ADHD, or attention deficit hyperactivity disorder, is typified by widespread issues with hyperactivity, impulsivity, and attention that are developmentally inappropriate (American Psychiatric Association, 2000). ADHD symptoms are linked to a variety of behavioral issues, including violence and noncompliance, and they significantly affect both the home and the classroom (Meza, 2020). Such children are more likely to experience social rejection and more challenges with their peers than their classmates who grow normally (Becker, 2024). Furthermore, its symptoms are linked to a variety of behavioral issues, including violence and noncompliance, and they significantly affect both the home and the classroom (Frank, 2024). Additionally, Such children are more prone than their classmates with regular development to experience social rejection and struggle with their peers (Wiener, 2023). According to Aldabbagh (2023) teachers are more likely to see a child with an ADHD designation negatively in terms of conduct, personality, and IQ.

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They are more likely to perform worse academically and receive lower scores on standardized examinations, in comparison to peers. (Salvatore, 2024). These students are three times more likely to be retained in elementary school, have a greater absenteeism rate, and are more likely to drop out of high school (Rumberger, 1995). After high school, they are less likely than their peers to continue their education after high school (DuPaul & Weyandt, 2009; Shiakh et al, 2023). It's interesting to note that there is less research on approaches to address the behavioral and social issues, as opposed to research on strategies to address academic issues (Babinski, 2024). Early implementation of empirically validated therapies is crucial, especially during the primary school years, given the poor prognosis for children with ADHD.

Along with the more well-known negative behavioral effects (such as disobedience to authority figures and strained relationships with classmates), Such students sometimes have academic difficulties, most likely as a result of their low academic performance. involvement and uneven output at work. Findings from Research on students with hyperactive disorder show notably greater rates of special education classroom placement (Pervaiz et al., 2024), grade retention, higher school dropout rates in comparison to their classmates (Amur, Bukhari & Lashari, 2023), along with noticeably lower levels of high socioeconomic status, college degree program enrollment, and school grade point average status (Frank Y. , 2024).

There is a serious dearth of knowledge and study on neurodivergence and ADHD in Pakistan (Janik, 2024). This explains why it is very rare to diagnose and treat these patients utilizing comprehensive psychological evaluation and standardized behavioral rating scales. In order to address this, the Pakistani medical community must dispel the stigma associated with neurodivergence and increase knowledge about ADHD and the difficulties it presents for patients who are not yet diagnosed. Early primary school screening can boost diagnosis rates and encourage the provision of greater chances for neurodivergent people to raise their educational and professional standards.

Problem Statement

ADHD, or attention-deficit hyperactivity disorder, is a common juvenile behavioral disease that is thought to affect 2-7% of children worldwide and so in Pakistan (Frank Y. , 2024). ADHD is underdiagnosed, particularly in older children and adolescents, despite its high incidence and growing number of yearly cases. Social skills, time perception, stress management, and mood problems are just a few of the areas of a person's life that undiagnosed ADHD negatively impacts (Siouti, 2023). Such students have a higher risk of developing depression, according to meta-analyses of data from both community-based and clinic-referred groups (Girma, 2024). As a result, these individuals experience poor academic performance, difficulties finding work, marital issues, and in severe situations, criminal activity (Christoffersen, 2023). Hence, it is important to address the needs of ADHD students for their academic success, socioemotional well-being, and classroom environment.

Having trouble managing the social, behavioral, and academic aspects of school is linked to symptoms of attention-deficit/hyperactivity disorder. There is less data regarding school-based interventions than there is for medicine and other non-pharmacological treatments—strategies for helping such students. Furthermore, no research has been conducted and centered on the experiences and methods used by Pakistani educators in their work with kids who are impulsive, energetic, and inattentive.

Research Objective:

To explore the Strategies to manage the attention of ADHD students in class room.

Research Question:

What are the Strategies for teachers to manage ADHD students' attention in classroom?

Theoretical Framework:

People learn and act by observing others, their surroundings, and their own experiences, according to the social cognitive theory (SCT) (Erfanian, 2024). Communication, education, and psychology all make use of it. The foundation of SCT is that learning occurs through a three-way interaction between an individual's

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environment, behavior, and personal variables (Al Halbusi, 2023). We refer to this connection as reciprocal determinism. The essential elements of SCT are: Self-efficacy: The conviction that you can carry out an action

Behavioral capability:

The capacity to comprehend and execute a behavior

Expectations:

Identifying the results of altering behavior Observational learning is the process of observing and picking up knowledge from others.

Reinforcements:

Rewards and incentives that promote behavior modification

Albert Bandura developed the Social Learning Theory (SLT) in the 1960s, which later became the Social Cognitive Theory (SCT). In 1986, it evolved into the SCT, which holds that behavior, environment, and people all interact dynamically and reciprocally in a social setting throughout learning (O'Leary, 2024). The focus on social influence and internal and outward social reinforcement is what makes SCT special. SCT takes into account both the social context in which people engage in the behavior and the distinctive ways in which people learn and retain it. The theory considers an individual's prior experiences, which influence the likelihood of behavioral action. These prior encounters impact expectations, expectancies, and reinforcements, all of which determine whether an individual will participate in a behavior. These prior experiences have an impact on expectations, expectancies, and reinforcements, all of which influence whether or not an individual would engage in a particular activity and the motivations behind it. Many behavior theories utilized in health promotion concentrate on behavior initiation rather than behavior maintenance (Fayaz et al., 2023). This is regrettable because the real objective of public health is to maintain behavior, not only initiate it. SCT aims to clarify how individuals use reinforcement and control to accomplish goal-directed behavior that they can sustain over time. When the theory changed into SCT, the construct of self-efficacy was included. The first five components were created as part of the SLT. The fundamental idea of SCT is reciprocal determinism. This is the dynamic and reciprocal interaction of the environment (the external social context), the behavior (the responses to stimuli to attain goals), and the person (the individual with a set of learned experiences) (Zubbir, 2023). A person's actual capacity to carry out a behavior using fundamental knowledge and abilities is referred to as behavioral capability (Pervaiz et al., 2024). A person needs to understand what to do and how to accomplish it to carry out a behavior successfully (Amur, Bukhari & Lashari, 2023; Simming, Asad & Lashari, 2015). Individuals get knowledge from the results of their actions, which also have an impact on their surroundings (Ahmad, 2023).

According to the theory of observational learning, people can watch and notice how others behave and then mimic similar behaviors. This is frequently demonstrated by "modeling" actions (Fayaz et al., 2023). When a behavior is successfully demonstrated, people are more likely to perform it themselves (Bandura, 2023). Reinforcements are reactions, either internal or external, to an individual's behavior that influence whether they will continue or stop. Reinforcements can be either positive or negative, and they can be self-initiated or environmental (Fayaz et al., 2023). This is the SCT construct that has the strongest connection to the mutually reinforcing interaction between environment and behavior (Cai, 2023).

These are the expected results of an individual's actions. Expectations for results may or may not be related to health. When people engage in a behavior, they expect certain outcomes, and these outcomes can affect whether the behavior is completed successfully. Expectations are mostly based on past experiences. Expectations are subjective to the individual and center on the value a person places on the result, even though they are also influenced by past experiences. Self-efficacy is the degree to which an individual believes that they can carry out a behavior successfully. Although other theories, such the Theory of Planned Behavior, have included this component later, self-efficacy is exclusive to SCT. In addition to environmental

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influences (barriers and facilitators), self-efficacy is also impacted by an individual's unique skills and other personal characteristics (Hamann, 2024;Reichenberg, 2024).

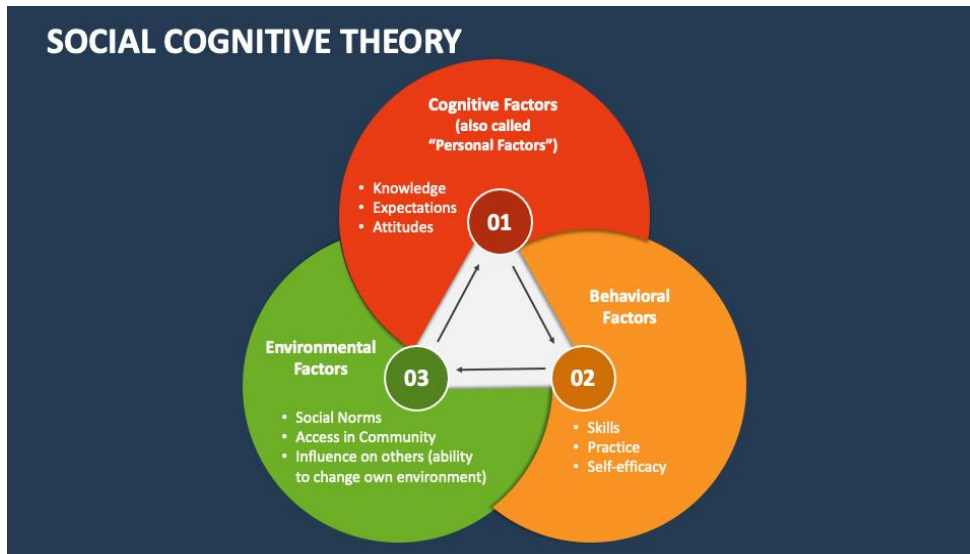


Fig 1: Social Cognitive Theory

Research Methodology

Qualitative :

The research design is qualitative. The researcher often investigates meanings and insights in a particular context in qualitative research, which is inductive (Strauss & Corbin, 2008). It describes various methods for gathering and analyzing data that use semi-structured, open-ended interviews and purposive sampling (Dudwick et al.,2006; Gopaldas, 2016). It is said to be an efficient model that takes place in a natural environment and allows the researcher to cultivate a degree of specificity through intense engagement with real events (Creswell, 2009).

Phenomenological research

The phenomenological study in qualitative research conceptualizes the phenomenon's meaning in the individual's inner awareness. Phenomenology is a method used to investigate people's experiences in daily life. It is employed when researching how one or more people have encountered a notion or occurrence in their lives. people. A researcher who uses phenomenology studies subjective phenomena(Creswell, 2009).

Data Collection Method

Data was collected through observations. One of the earliest and most basic research strategies in qualitative research is observation. This method entails gathering information with one's senses, particularly via looking and paying attention in a methodical and significant manner” (Tracy, 2024).A bachelors class was observed with ADHD students.The issues were found and an intervention is carried out for 15 days.

Data Analysis:

Data was analyzed through thematic analysis.First, the problem was identified that because of ADHD students teaching efficacy is suffering.The changes were made in the class systematically after a rich literature review.A journal was made for making notes on class observations.Over several lessons, and different phases of experimentations with a variety of approaches by reflecting on documented reflective observations the teaching strategies emerged. This research is cyclical with a spiral of actions that are grounded in previous data that is collected from classroom observations. The process continued for 15 days in asystematic way ,which is Collecting new information, Analyzing the data,Drawing out insights and

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conclusions, Interpreting findings. Observations are done using this grid. The grid is designed after a careful literature review on ADHD Students behavior

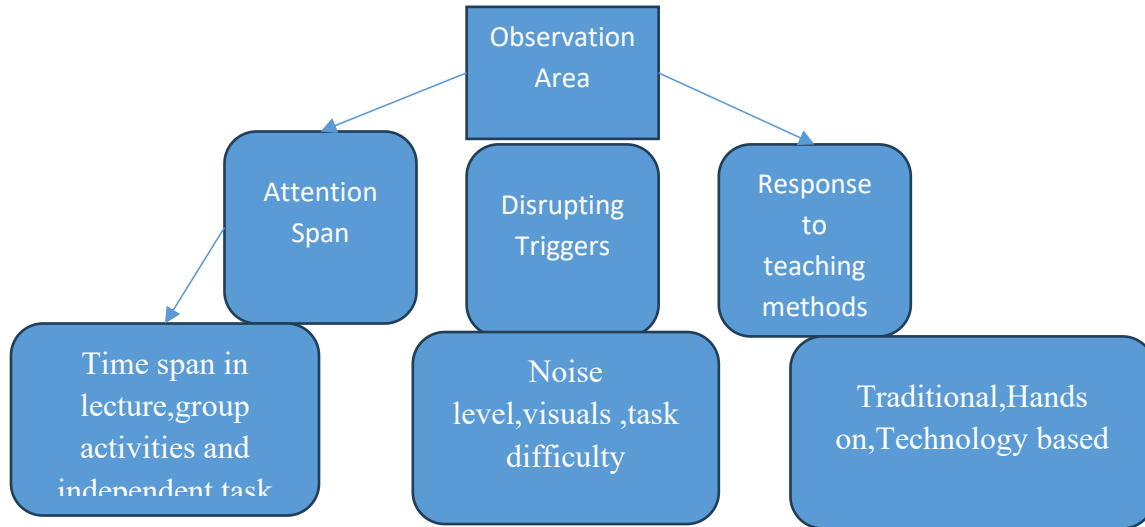
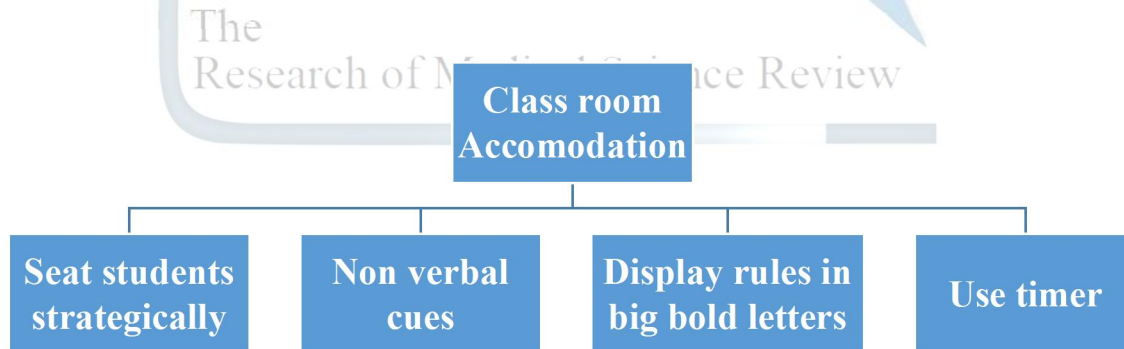


Fig 2: Graphical Representation of Observation areas.

After the observations the data was analyzed, and two prominent themes emerged: Classroom accommodation and tailored instructions. The graphic representation of the themes are as follows

Classroom Accommodation :

For students with ADHD, classroom accommodations play a vital role in improving their academic performance and educational experience (Wise, 2018; Fabiano, 2024). By reducing the difficulties like impulsiveness and inattention, accommodations can improve the learning environment. Nonetheless, there is continuous discussion over the application and effects of these adjustments, and their efficacy varies. Congenial and facilitating environment helps a student to perform at their best (Bukhari et al., 2024)



Graphic Representation of Major Theme 1

Seat Students Strategically

In order to effectively support ADHD adolescents in the classroom, specialized treatments that target their particular difficulties must be put in place. Effective solutions that address these students' executive function deficiencies and the need for an accommodating environment have been shown to dramatically improve their learning experience (Familoni, 2024). Attention, working memory, and organization are executive skills that ADHD students frequently trouble with (Nagarhalli, 2021). Teachers should be trained in techniques that improve these abilities as part of interventions to create a positive learning environment in the classroom (Majko, 2017).

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By enabling the required movement, dynamic seats have been demonstrated to enhance in-seat behavior and task performance in ADHD kids (Stanić et al., 2022).

According to studies, by offering a cozy workspace that may accommodate restlessness, these seats can improve cognitive performance (Stanić et al., 2022). ADHD kids can benefit from interactive chairs that promote fidgeting and gather information on their level of participation (Huang & Tai, 2022). By meeting each student's unique demands, flexible class schedules can help promote effective learning even more (Huang & Tai, 2022).

ADHD students are especially susceptible to noise from different sources, classroom setups should reduce auditory distractions. Minimizing visual distractions and encouraging concentration, using subdued hues in furniture can produce a relaxing atmosphere. Certain seating configurations are essential to maximizing learning results for students with ADHD. Alternative sitting choice such as active seats, have dramatically improved focus and reduced hyperactivity.

Non Verbal Cues :

Students with Attention Deficit Hyperactivity Disorder (ADHD) can greatly benefit from rules displayed in classrooms using bold fonts. These children frequently struggle with impulsivity and inattention, which can be lessened by emphasizing crucial facts. This method improves their capacity to successfully follow instructions in addition to helping with comprehension. Research indicates that kids with ADHD who highlight words exhibit fewer inattentive behaviors (Santos & Albuquerque, 2021). Students are more likely to provide accurate responses on school assignments when regulations are highlighted using bold writing (Santos & Albuquerque, 2022). According to Berenguer (2002), bolded letters act as visual signals that help ADHD kids identify and retain classroom rules. By giving students who have trouble with traditional teaching techniques more precise instructions, the implementation of such measures can reduce teacher stress (Groen et al., 2018).

For students with ADHD, who frequently struggle with social interactions and emotional identification, it is essential to understand nonverbal signs. According to research, kids with ADHD may struggle to read nonverbal social cues, which may affect how they behave in class and interact with their peers (Khuman, 2024). By using nonverbal techniques like eye contact, visual clues, and gestures to support spoken instructions, teachers can increase student participation (Ruswandi, 2024). According to Abdullayeva (2023), regular use of nonverbal cues can assist ADHD kids concentrate better and comprehend classroom dynamics.

Use Timer:

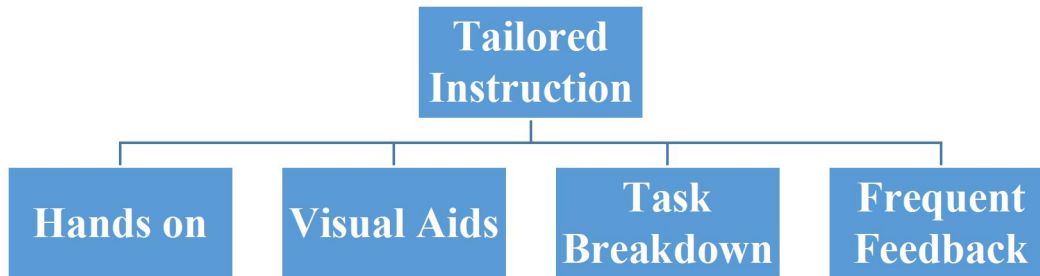
In classroom settings, timers can greatly help kids with ADHD by boosting their on-task conduct and time management abilities. According to research, these children can overcome their difficulties with time perception and task completion with the support of structured time-related treatments, which will improve their academic performance.

For kids with ADHD in particular, tools such as portable digital devices can be configured to improve time management by enabling them to enter tasks and earn rewards for completing them on time (Groot 2014). Research has demonstrated that using nonverbal cues, like vibration reminders, can effectively reduce hyperactive behaviors and improve students' ability to concentrate on the activities at hand (Lai et al., 2018). According to Evans et al. (2005), children with ADHD may engage in less off-task behaviors when using devices such as the Attention Training System, which automatically reinforces on-task conduct. Positive conduct is efficiently reinforced by this system's ability to provide instant feedback. Participation in the Classroom Although fidget spinners are not directly related to timers, they have been demonstrated to enhance on-task behavior, indicating that physical activity can support time management techniques (Aspiranti & Hulac, 2022).

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Tailored Instructions

Tailor means to mold and adjust. The classes adjustment according to the demands of students is required for effective teaching. This major theme talks about four sub-themes which are hands-on, visual aids, task breakdown, and frequent feedbacks.



Graphic Representation of Major Theme 2

Hands-On :

It has been demonstrated that providing kids with ADHD with hands-on activities greatly improves their focus and level of involvement in class. Numerous studies demonstrate how integrating tactile stimuli and physical movement into the learning process can enhance task performance and on-task behavior. It has been discovered that teachers who use hand gestures in addition to spoken directions improve the responsiveness and task completion rates of their ADHD students. In particular, the best gestures for keeping students' attention were deictic and representational (Arter, 2001). Gestures and speech combine to provide a multimodal learning environment that meets the special requirements of students with ADHD. Tools for Fidgeting

It has been demonstrated that fidget spinners and related devices help ADHD kids behave more on-task. According to a study, allowing pupils to use fidget spinners during class activities significantly improved their attentiveness (Aspiranti & Hulac, 2021). Students also created their own fidget toys, which encouraged creative and problem-solving abilities in addition to giving them a physical outlet (Hansen et al., 2017). By integrating movement games and structured physical exercises into the classroom helps ADHD students focus better and be less impulsive. Frequent movement breaks can improve concentration and general classroom behavior (Mulrine et al., 2008). Additionally, play-based therapies imply that active engagement can result in improved academic achievements (Alothman, 2024)

Visual Aids:

By meeting their specific learning needs, visual aids are essential in improving the educational experience of such students. To increase engagement and retention among these learners, a number of cutting-edge strategies have been put forth, including as games, augmented reality (AR), and hypermedia tools. To address the unique difficulties presented by ADHD students, the "Digital Path" framework incorporates games with a Virtual Learning Environment (VLE), increasing engagement and lowering academic failures (Souza et al., 2023). Games can offer engaging and dynamic experiences that cater to these students' hyperactive tendencies and enhance their enjoyment of learning. Students can choose their own learning style and speed with the help of multimedia technologies that deliver knowledge in a variety of formats for example text, graphics or sounds (Gencoglu, 2024).

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Task Breakdown:

An organized strategy that takes into account each student's individual learning demands is necessary while teaching students with Attention Deficit Hyperactivity Disorder (ADHD). These pupils' educational experience can be greatly improved by using efficient work breakdown techniques. Adapting tactics according to evaluation results can assist in addressing the unique requirements of students with ADHD (Lieberman, 2024)

Frequent Feedback:

Teachers' regular input is essential for helping students with attention deficit because it affects both their behavior and academic achievement. The teacher-student relationship is crucial, and research suggests that customized feedback might improve it. Regular feedback encourages accountability in the learning process by assisting in the identification and resolution of certain behavioral concerns in ADHD kids (Leiser, 2024) While corrective feedback can help students comprehend and change their activities, positive feedback is crucial for reinforcing desired behaviors (Staff et al., 2023); Luman, 2023).

Conclusion :

Teachers should use techniques that accommodate the distinct learning styles of kids with Attention Deficit. To engage them in class. This entails setting up a disciplined and aesthetically pleasing classroom, which involves situating pupils in strategic locations to reduce distractions and displaying regulations in bold, legible characters. To keep pupils engaged and focused, teachers should also divide work into smaller, more doable steps and give frequent feedback. Because they provide chances for active involvement and investigation, interactive learning experiences and hands-on activities can also greatly improve the educational experience for children with ADHD. Teachers may foster a more welcoming and encouraging learning environment that enables children with ADHD to realize their full potential by putting these methods into practice.

Recommendations :

The following recommendations should be followed to grasp the focus of attention deficit students.

- Teachers should create customized IEPs that list particular modifications and accommodations based on the requirements of each ADHD student.
- Teacher -Parent collaboration should be emphasized to cope up with the issues and to stay abreast of the students needs.
- Higher Education should work on the professional growth of the faculty so they can acquire research-based methods for instructing students with ADHD.
- Higher education should have sufficient technological resources like educational software and applications.
- Project-based learning should be reinforced.

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