





## REVIEW

# STRATEGIES FOR TEACHING UNIVERSITY STUDENTS WITH ADHD: SCOPE REVIEW

### HIGHLIGHTS

1. Among the teaching strategies are extra time and schedule flexibility.
2. Prioritize clinical practice in teaching for nursing students with ADHD.
3. There is a noticeable lack of studies on ADHD in undergraduate nursing.

Lucas Batista Ferreira<sup>1</sup>   
Rafaella Guilherme Gonçalves<sup>1</sup>   
Rejane Maria Paiva de Menezes<sup>1</sup>   
Soraya Maria de Medeiros<sup>1</sup> 

### ABSTRACT

**Objective:** to map strategies for teaching university students with attention deficit hyperactivity disorder and identify recommended strategies for teaching these students pursuing a degree in nursing. **Method:** this is a scoping review. Conducted in December 2023 in six databases and the catalog of theses and dissertations. **Results:** the selection resulted in 14 studies. The mapped strategies were classified as general and active: extra time and flexible scheduling to conduct assessments and problem-based learning. In nursing, promoting better communication, organization, and prioritization of activities during clinical practice is necessary. **Conclusion:** it is essential to recognize that attention deficit hyperactivity disorder may be present in university students. Therefore, higher education institutions must reflect on inclusive teaching strategies for this target audience.

**KEYWORDS:** Attention Deficit Disorder with Hyperactivity; Teaching; Universities; Nursing; Education.

### HOW TO REFERENCE THIS ARTICLE:

Ferreira LB, Gonçalves RG, Menezes RMP de, Medeiros SM de. Strategies for teaching university students with ADHD: scope review. Cogitare Enferm. [Internet]. 2024 [cited "insert year, month and day"]; 29. Available from: <https://doi.org/10.1590/ce.v29i0.96179>.

## INTRODUCTION

Neurodevelopmental disorders are a group of conditions that arise in early childhood development and generally occur before the child enters the school environment. These conditions are characterized by the presence of developmental deficits, which can range from specific impairments and limitations in learning to general damage in social or intellectual skills<sup>1</sup>.

Among these conditions is Attention Deficit Hyperactivity Disorder (ADHD), which is defined by harmful and persistent levels of inattention, disorganization, and hyperactivity-impulsivity. The causes of ADHD are multifactorial, involving genetic, environmental, biological, and social aspects<sup>2,3</sup>.

Previously, it was mistakenly believed that ADHD was a diagnosis with few repercussions in the lives of patients and that it would disappear during puberty. However, it is observed that ADHD tends to persist into adulthood, affecting about 2.5% of this population, and with real possibilities of resulting in impairments in the social, academic, and professional functioning of these individuals<sup>1,2</sup>.

Among the academic difficulties pointed out by students with ADHD are reading and writing, lack of dynamism in classes, hyperactivity, taking non-adapted theoretical assessments, indiscipline, communication difficulties and relationships with other classmates, and low self-esteem<sup>4</sup>. Some of these difficulties are attributed to the teachers' lack of knowledge about the disorder's characteristics. Therefore, the need for meaningful teaching is evident, with innovative methods adapted for these students so they are not driven to seek during classes. These parallel activities release their energy and creativity<sup>4</sup>.

In the adult population with ADHD, low academic performance is commonly observed, and inattention prevails as the main symptom, which signals a possible focus on pedagogical actions. Individuals with elevated levels of ADHD symptoms generally exhibit lower academic success, something that is independent of gender<sup>5</sup>.

The presence of university students diagnosed with ADHD is a reality. Your identification by those involved in this process, especially by the teachers, is necessary and can occur through practical advice, guidance, and recommendations based on expert consensus. However, this alone is not enough; it is necessary to abandon the prevailing notions that ADHD is a specific learning difference (or difficulty) and enable these students to have timely access to inclusive and quality education, as well as treatment and support according to their needs<sup>6</sup>.

Inclusive education must support all students and strive for new educational strategies to allow students with special needs to be involved in the teaching-learning process<sup>6</sup>.

Given this context, it is noted that university students diagnosed with ADHD, including those pursuing a degree in nursing, the authors' field of study, need innovative, meaningful, and adapted teaching strategies. These students need to be recognized to provide them, in the same way, with learning opportunities and active participation in their formative process, to increase the possibilities of personal, social, and professional success.

Thus, the study aims to map strategies for teaching university students with ADHD and identify recommended strategies for teaching these students pursuing a nursing degree.

## METHOD

The research is a scoping review. This type of study aims to map and categorize the main concepts of certain areas of knowledge and analyze the extent, scope, and origin of the investigation, as well as select these studies, extract the data, summarize and disseminate the research data, and identify the research gaps existing in the literature<sup>7</sup>.

In an attempt to identify scope reviews that approached or equaled the objective of this study, a search was conducted in December 2023 on the following study platforms: International Prospective Register of Systematic Reviews (PROSPERO), Open Science Framework (OSF), The Cochrane Library, JBI Clinical Online Network of Evidence for Care and Therapeutics (CONNECT+) and Database of Abstracts of Reviews of Effects (DARE). The results showed the absence of research with a scope similar to this study's aim.

This research was developed according to the recommendations of the Joanna Briggs Institute Review Manual<sup>7</sup>. It used the protocol Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR)<sup>8</sup>. It was registered on the platform for registering scientific works OSF ([https://osf.io/cfr4k/?view\\_only=5a9f20a7e2ee469c82267bbbd5186aeba](https://osf.io/cfr4k/?view_only=5a9f20a7e2ee469c82267bbbd5186aeba)).

The Population, Concept, and Context (PCC) research strategy was used. For the first guiding question, "P" students with ADHD, "C" strategies "C" university institutions were considered; therefore, the following question was elaborated on: What are the strategies for teaching students with ADHD in university institutions? As for the second guiding question, it was considered "P" students with ADHD, "C" strategies, and "C" nursing graduation, which allowed the construction of the following inquiry: what are the recommended strategies for teaching students with ADHD who are pursuing a nursing degree?

Six databases and the catalog of theses and dissertations were accessed through the federated academic community on the Portal de Periódicos of the Coordination for the Improvement of Higher Education Personnel (CAPES), including Latin American and Caribbean Health Sciences Literature (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE), Scopus, Web of Science, Scientific Electronic Library Online (SciELO), Cochrane Library and Catalog of Theses and Dissertations (CAPES).

The controlled descriptors selected through the Descritores em Ciências da Saúde/ Medical Subject Headings (DECS/MeSH), were: Attention Deficit Disorder with Hyperactivity; Universities; Teaching; Nursing. The intersection between them occurred using the boolean operator *AND*, as shown below: 1) Attention Deficit Disorder with Hyperactivity AND Universities AND Teaching; 2) Attention Deficit Disorder with Hyperactivity AND Teaching AND Nursing; 3) Attention Deficit Disorder with Hyperactivity AND Universities AND Nursing. The search strategy for each selected database is described in Chart 1.

**Chart 1** – Search strategy for each selected database. Natal, RN, Brazil, 2024.

Database	Search Strategy
LILACS	<ol style="list-style-type: none"> <li>1. (Attention Deficit Disorder with Hyperactivity) AND (Universities) AND (Teaching)</li> <li>2. (Attention Deficit Disorder with Hyperactivity) AND (Teaching) AND (Nursing)</li> <li>3. (Attention Deficit Disorder with Hyperactivity) AND (Universities) AND (Nursing)</li> </ol>
MEDLINE	<ol style="list-style-type: none"> <li>1. ((Attention Deficit Disorder with Hyperactivity) AND (Universities)) AND (Teaching)</li> <li>2. ((Attention Deficit Disorder with Hyperactivity) AND (Teaching)) AND (Nursing)</li> <li>3. ((Attention Deficit Disorder with Hyperactivity) AND (Universities)) AND (Nursing)</li> </ol>
SCOPUS	<ol style="list-style-type: none"> <li>1. TITLE-ABS-KEY (attention AND deficit AND disorder AND with AND hyperactivity) AND TITLE-ABS-KEY (universities) AND TITLE-ABS-KEY (teaching)</li> <li>2. TITLE-ABS-KEY (attention AND deficit AND disorder AND with AND hyperactivity) AND TITLE-ABS-KEY (teaching) AND TITLE-ABS-KEY (nursing)</li> <li>3. TITLE-ABS-KEY (attention AND deficit AND disorder AND with AND hyperactivity) AND TITLE-ABS-KEY (universities) AND TITLE-ABS-KEY (nursing)</li> </ol>
WEB OF SCIENCE	<ol style="list-style-type: none"> <li>1. ((ALL=(Attention Deficit Disorder with Hyperactivity)) AND ALL=(Universities)) AND ALL=(Teaching)</li> <li>2. ((ALL=(Attention Deficit Disorder with Hyperactivity)) AND ALL=(Teaching )) AND ALL=(Nursing)</li> <li>3. ((ALL=(Attention Deficit Disorder with Hyperactivity)) AND ALL=(Universities)) AND ALL=(Nursing)</li> </ol>
SCIELO	<ol style="list-style-type: none"> <li>1. (Attention Deficit Disorder with Hyperactivity) AND (Universities) AND (Teaching)</li> <li>2. (Attention Deficit Disorder with Hyperactivity) AND (Teaching) AND (Nursing)</li> <li>3. (Attention Deficit Disorder with Hyperactivity) AND (Universities) AND (Nursing)</li> </ol>
COCHRANE LIBRARY	<ol style="list-style-type: none"> <li>1. Attention Deficit Disorder with Hyperactivity in Title Abstract Keyword AND Universities in Title Abstract Keyword AND Teaching in Title Abstract Keyword</li> <li>2. Attention Deficit Disorder with Hyperactivity in Title Abstract Keyword AND Teaching in Title Abstract Keyword AND Nursing in Title Abstract Keyword</li> <li>3. Attention Deficit Disorder with Hyperactivity in Title Abstract Keyword AND Universities in Title Abstract Keyword AND Nursing in Title Abstract Keyword</li> </ol>
CAPES	<ol style="list-style-type: none"> <li>1. Attention Deficit Disorder with Hyperactivity AND Universities AND Teaching</li> <li>2. Attention Deficit Disorder with Hyperactivity AND Teaching AND Nursing</li> <li>3. Attention Deficit Disorder with Hyperactivity AND Universities AND Nursing</li> </ol>

Source: The authors (2023).

The search strategy was carried out in December 2023, and according to the objective of this review, the following inclusion criteria were adopted: scientific articles, documents, booklets, and manuals that are available in full, without time limit, in any language, and address the research theme. Scientific articles that did not answer the guiding questions of the research, duplicate articles, abstracts, conference proceedings, and letters to the editor were excluded.

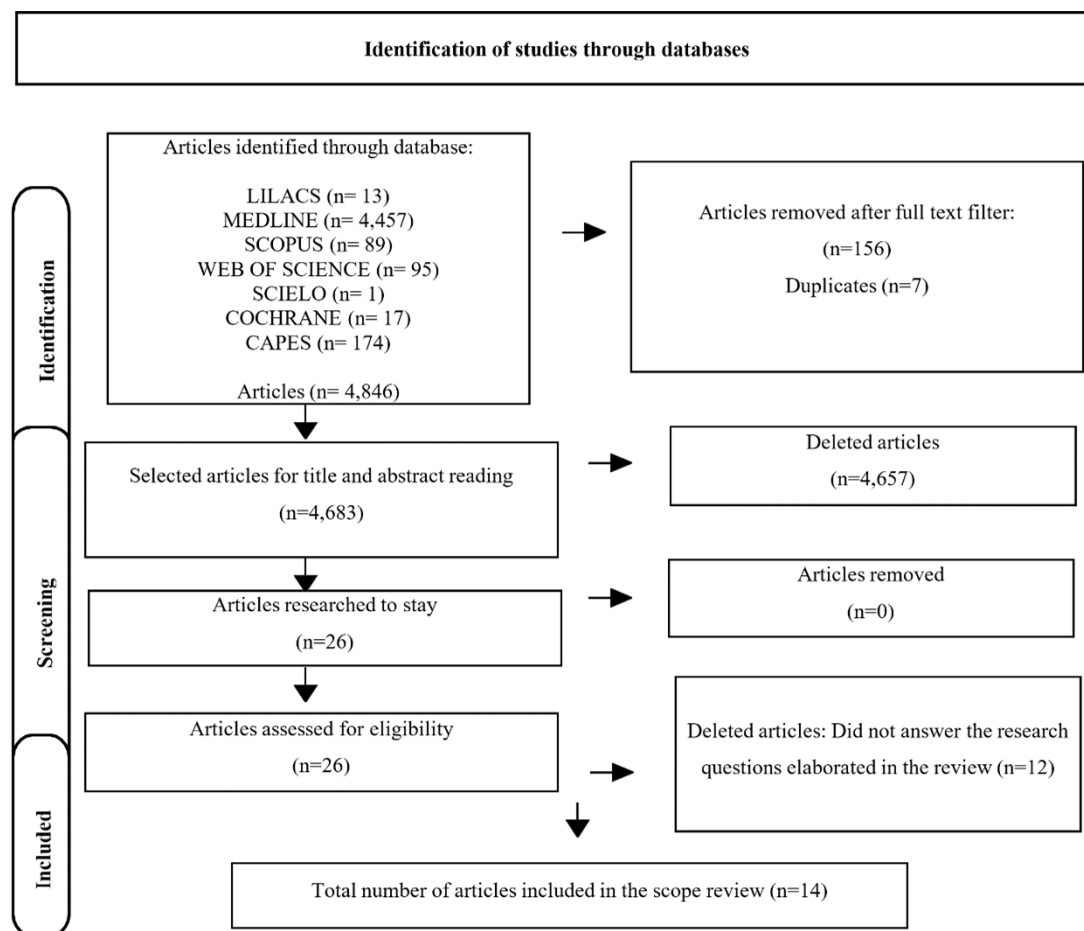
The selection of publications included in the research was carried out by two reviewers independently and blinded by them, who conducted the entire analysis process on the same day and at the same time using different electronic devices based on the information available in the title and abstract. Two independent reviewers selected the final sample, with the full text read in full. In case of disagreement about including any article in the final list, the reviewers analyzed the full version of the works until they reached a consensus; therefore, there was no need for a third reviewer.

The study variables were: 1- year of publication; 2- country of origin; 3- objective of the study; 4- strategies for teaching university students with ADHD; 5- strategies for teaching university students with ADHD who are pursuing a degree in nursing. A data collection instrument was developed to extract data from the studies, and these variables were entered into a spreadsheet and analyzed using simple descriptive statistics. A descriptive analysis of the selected studies was also carried out, which made it possible to construct a synthesis of the main evidence and summarize these results in response to the guiding questions.

## RESULTS

The initial search resulted in 4,846 scientific articles. Next, after filtering according to the inclusion criteria, 4,690 studies were obtained, which were read for titles and abstracts. After this initial reading, 26 articles were selected for full eligibility evaluation. In this way, the final selection consisted of 14 scientific articles, as shown in Figure 1.

**Figure 1** - Flowchart of search and selection of studies for the scoping review. Natal, RN, Brazil, 2024



Source: Page *et al.*<sup>9</sup>

The 14 selected studies, identified by the letter “E,” met the previously established inclusion criteria for the development of this scoping review, as they dealt with strategies for teaching university students with ADHD. Table 1 presents the description of the articles included, organized by study, year of publication, country, and objective.

**Table 1** - Characterization of studies on strategies for teaching university students with ADHD, according to study, year of publication, country, and objective (n=14). Natal, RN, Brazil, 2024.

Study	Year	Country	Objective(s)
E <sup>10</sup>	2023	Australia	Clarify whether educators have adapted teaching methods to accommodate students with ADHD and identify which teaching methods were most used by the inattention and hyperactivity/impulsivity subtypes.
E <sup>11</sup>	2023	United States	Characterize the learning and self-defense experiences of students with ADHD/specific learning difficulties in undergraduate science, technology, engineering, and mathematics courses incorporating active learning.
E <sup>5</sup>	2022	Canada	Enhance various methodological issues related to the current literature investigating the relationship between ADHD symptomatology and academic success in adults and examine the relative contributions of specific dimensions of ADHD symptomatology to post-secondary academic success.
E <sup>6</sup>	2022	United Kingdom	Provide an informed understanding of the impact of ADHD on the educational (or academic) outcomes of college students and highlight an urgent need for timely access to treatment and management.
E <sup>12</sup>	2022	United States	Identify the predictors of academic success in college for students with ADHD through a systematic literature review.
E <sup>13</sup>	2021	Canada	Examine issues and challenges encountered by university and clinical means in addressing the needs of students with disabilities during their clinical internships and identify existing or potential accommodation and support measures to address the challenges encountered.
E <sup>(14)</sup>	2018	United Kingdom	Review the existing literature on college students with ADHD.
E <sup>15</sup>	2018	Brazil	To know and analyze the reports of dyslexia and ADHD used for admission to higher education based on the contributions of historical-cultural theory.
E <sup>16</sup>	2015	Brazil	Check how the diagnosis of ADHD, or the presence of disorder symptoms, interferes with the academic life of university students.
E <sup>17</sup>	2014	Japan	Reveal the prevalence of nursing students with special educational needs in Japan.
E <sup>18</sup>	2010	United States	Investigate teachers' perceptions of college students with ADHD.
E <sup>19</sup>	2010	United States	Examine the impact of age on teachers' acceptance of ADHD.
E <sup>20</sup>	2009	United States	Examine the existing literature on the functioning, evaluation, and treatment of university students with ADHD.
AND <sup>21</sup>	2008	United States	Summarize the main research findings on developmental issues university students face with ADHD.

Source: The authors (2024)



It is observed that in this scope review, studies conducted in the United States were most prevalent (42.8%), followed by Canada, the United Kingdom, and Brazil (14.2% each), and finally, Australia and Japan (7.1% each). The articles included in the study were published between 2008 and 2023.

In mapping strategies for teaching university students with ADHD, the following topics were established when analyzing scientific articles: 1) General strategies for teaching college students with ADHD; 2) Active strategies for teaching college students with ADHD. These are represented in Chart 2.

**Chart 2** - Mapping of strategies for teaching university students with ADHD. Natal, RN, Brazil, 2024

Topic 1: General strategies for teaching college students with ADHD	
STUDY	STRATEGIES
E <sup>6</sup> , E <sup>10</sup> , E <sup>12</sup> , E <sup>13</sup> , E <sup>14</sup> , E <sup>15</sup> , E <sup>17</sup> , E <sup>19</sup> , E <sup>20</sup> , E <sup>21</sup>	Allow extra time in assessments;
E <sup>6</sup> , E <sup>11</sup> , E <sup>14</sup> , E <sup>15</sup> , E <sup>17</sup>	Flexibilize schedules for conducting assessments;
E <sup>5</sup> , E <sup>13</sup> , E <sup>14</sup> , E <sup>16</sup> , E <sup>17</sup>	Help manage and organize study and activity time;
E <sup>11</sup> , E <sup>18</sup> , E <sup>20</sup> , E <sup>21</sup>	Provide copies of interactive notes on the topics covered in the classroom;
E <sup>6</sup> , E <sup>14</sup> , E <sup>19</sup>	Accommodate the student in a separate room for essay assessments;
E <sup>6</sup> , E <sup>14</sup> , E <sup>17</sup>	Negotiate extensions of activity delivery deadlines;
E <sup>18</sup> , E <sup>21</sup>	Perform alternative activities or assessments;
E <sup>10</sup>	Adopt clear information during classes;
E <sup>11</sup>	Do not select long texts for preparation or execution of activities;
E <sup>12</sup>	Stimulate university independence;
E <sup>15</sup>	Adapt from the didactic material.
Topic 2: Active strategies for teaching college students with ADHD	
STUDY	STRATEGIES
E <sup>10</sup>	Problem-based learning; Simulation-based learning; Case-based learning.
E <sup>10</sup> , E <sup>11</sup>	Flipped classroom; Team-based learning.

Source: The authors (2024).

In the undergraduate nursing scenario, there were only two studies, E<sup>13</sup> and E<sup>17</sup>, published in Canada and Japan, respectively, which referred to the education of university students with ADHD within the reality of the course, which highlights a scarcity of research on this topic at the international and, mainly, national level.

**Chart 3** - Recommended strategies for teaching university students with ADHD in clinical nursing practice, according to study and strategies. Natal, RN, Brazil, 2024

STUDY	STRATEGIES
E <sup>13</sup> , E <sup>17</sup>	Promote a better communication process between the student and the healthcare team; Promote better organization and prioritization of activities during clinical practice.
E <sup>17</sup>	Provide additional preparation time for clinical practice; Interrupt the clinical stage for a few days to allow students with ADHD to work on skills that need to be improved; Identify a clinical supervisor and/or a clinical setting willing to welcome and support students with ADHD facing specific challenges; Allow access to technological aids such as <i>iPad</i> and <i>Smart Pen</i> in writing nurses' notes, as well as a calculator for calculating medication dosage.
E <sup>13</sup>	Provide extra training for practical activities.

Source: The authors (2024)

DISCUSSION

In higher education, the number of students entering with learning difficulties associated with neurodiversity, such as ADHD, is increasing, which represents a common and shared challenge among teachers and institutional leaders<sup>22</sup>. However, many higher education institutions (HEIs) seem to be “cold” towards neurodiversity because, despite having support services, low levels of staff awareness and traditional/inflexible teaching and assessment approaches are observed<sup>22</sup>.

When considering the academic journey of university students with ADHD, it becomes essential that all professionals involved in the education of these individuals, especially teachers, seek to gain knowledge about the disorder, that is, what it is and how it can negatively impact the academic life of students<sup>23</sup>. In a survey conducted with teachers, this need was recognized. Most of them stated that it is necessary to study the characteristics of ADHD and the impacts of the disorder on academic life. Additionally, they expressed interest in possible professional training on the subject, which could be addressed through workshops sponsored by HEIs or support services<sup>18</sup>.

Subsequently, it becomes necessary to understand that, given the learning difficulties presented by students with ADHD, teaching needs to be meaningful, participatory, and questioning to motivate and engage students during classes. These strategies include simultaneous activities that stimulate creativity and the release of energy since people with ADHD in adulthood have difficulties adhering to sedentary and routine activities and avoid taking on jobs and roles that are not flexible or do not allow free movement, which consequently leads them to change jobs frequently<sup>23</sup>.

Among the available strategies to ensure that the education of university students with ADHD has the qualities suggested above, one can consider the use of active learning methodologies, such as problem-based learning, simulation, cases, teams, and flipped classroom<sup>11</sup>, described in the results of this review.

However, it is necessary to understand that for these methodologies to be effective, it is advisable to plan them considering the use of universal design for learning<sup>11</sup>, which is



guided by three guiding principles: (1) provide multiple means of engagement, (2) provide multiple means of representation, and (3) provide multiple means of action and expression. Although it was created to make classrooms more accessible to elementary and high school students with some disability<sup>25</sup>, universal learning design is now considered beneficial to many students, regardless of whether they have disabilities or not<sup>24</sup>.

Attention is drawn to the fact that if the teacher, even when adopting active teaching methodologies, chooses to provide students with extensive texts or only a single source of information, they will still contradict the principles of universal learning design. Thus, the chosen methodology may act not as a facilitator but as a barrier to the learning of all students, including those with ADHD<sup>11</sup>.

The act of not selecting extensive texts for preparation or conducting classroom activities, as presented in the results of this research, fits into the general strategies for teaching university students with ADHD, that is, which involves accommodations for these students, which also includes allowing extra time in assessments, flexible schedules for conducting assessments, negotiating extensions of deadlines for activities, separate room for writing assessments, among others. The extra time for conducting assessments has proven to be the most effective strategy used by HEIs that have students with ADHD.

It is noteworthy that learning problems among these students in higher education may also be related to the teaching methods and assessments used. However, reasonable adaptations are necessary for this target audience, which need to be selected taking into account the student's personal characteristics and the institution's environmental characteristics<sup>26</sup>.

In general, the entire academic community needs to understand that students diagnosed with ADHD may show impairment in executive function. This human function is responsible for time management, action planning, personal organization, focus, and short-term memory<sup>27</sup>.

Another highlight of this review's results was the identification of recommended strategies for teaching university students with ADHD in the context of clinical nursing practice.

Implementing these strategies requires structural modifications to the nursing undergraduate course, not only regarding clinical practice but also concerning all the support provided to students with ADHD enrolled in the course. It also clarifies the need for better preparation of clinical instructors, who sometimes feel uncomfortable and unable to adequately assist students with special needs.

In clinical nursing practice, it is observed that the most difficult learning situations involving students with ADHD are typical care activities in the professional area and communication with other team members. However, what causes the most fear among nurse educators are serious medical errors. However, despite the risks, it is possible to prevent these errors through the meticulous attention of clinical instructors and educators during the internship<sup>19</sup>.

Finally, it is emphasized that nursing educators are also among those responsible for identifying students with a high possibility of making medical errors and, from there, planning and providing activities such as extra training or appropriate professional guidance<sup>19</sup>.

The study presented as a limitation the scarcity of research on the education of university students with ADHD inserted within the reality of the nursing undergraduate course, both

nationally and internationally, highlighting the need for more efforts and interest from researchers in this professional area on the topic in question.

## CONCLUSION

This scope review mapped strategies for teaching college students with ADHD, which were classified as general and active. These strategies included allowing extra time and flexible schedules for assessments, helping to manage and organize study and activity time, problem-based learning, simulation, and cases.

It was also possible to identify the recommended strategies for teaching university students with ADHD who are pursuing a degree in nursing, such as promoting a better communication, organization, and prioritization of activities during clinical practice, providing additional preparation time for clinical practice, and offering extra training for practical activities.

The development of this study seeks to draw the attention of HEIs to the need to recognize that ADHD is a disorder that may be present in university students. From this emerging and global reality, it becomes necessary to reflect on teaching strategies for this target audience, to practice inclusive education and increase the possibilities of personal and professional success.

It is suggested that studies be conducted with a higher level of evidence to evaluate the effectiveness of strategies for teaching university students with ADHD, as mapped and identified in this review.

## REFERENCES

1. American Psychiatric Association (APA). Diagnostic and statistical manual of mental disorders. 5th ed. Arlington: Virginia; 2013.
2. Oliveira QS, Stofele FMC, Rocha MPM, Santos MAJO, Ventura MSS, Nunes MAC. Diagnosed with ADHD: what now teacher? Rev Nursing [Internet]. 2020 [cited 2023 Dec. 05]; 23(264). Available from: <http://dx.doi.org/10.36489/nursing.2020v23i264p4036-4047>
3. Signor RCF, Santana APO. The constitution of the subjectivity of the child diagnosed with attention deficit hyperactivity disorder. Bakhtiniana: Rev. Estud. Discurso [Internet]. 2020 [cited 2023 Dec. 05]; 15(2). Available from: <http://dx.doi.org/10.1590/2176-457340739>
4. Reis MGF, Camargo DMP. School practices and academic performance of students with ADHD. Psicol. Esc. Educ. [Internet]. 2008 [cited 2023 Dec. 05]; 12(1). Available from: <http://dx.doi.org/10.1590/s1413-85572008000100007>
5. Henning C, Summerfeldt LJ, Parker J. ADHD and academic success in university students: the important role of impaired attention. J. atten. disord. [Internet]. 2021 [cited 2023 Dec. 05]; 26(6). Available from: <http://dx.doi.org/10.1177/10870547211036758>
6. Sedgwick-Müller JA, Müller-Sedgwick U, Adamou M, Catani M, Champ R, Gudjónsson G, et al. University students with attention deficit hyperactivity disorder (ADHD): a consensus statement from the UK adult ADHD network (UKAAN). BMC Psychiatry [Internet]. 2022 [cited 2023 Dec. 05]; 22(1). Available from: <http://dx.doi.org/10.1186/s12888-022-03898-z>

7. Peters MDJ, Godfrey C, Mclnerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: scoping reviews (2020 version). In: Aromataris E, Munn Z. Joanna Briggs Institute reviewer's manual. JBI; [Internet]. 2020 [cited 2023 Dec. 05]. Available from: <https://doi.org/10.46658/JBIMES-20-12>
8. Moher D, Liberati A, Tetzlaff J, Altman DG. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS Med. [Internet]. 2009 [cited 2023 Dec. 10]; 6(7). Available from: <https://doi.org/10.1371/journal.pmed.1000097>
9. Page MJ, Mckenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ. [Internet]. 2021 [cited 2023 Dec. 10]; 372(71). Available from: <http://doi.org/10.1136/bmj.n71>
10. Bailey A, Grotowski M, Bailey S. Medical education: accommodating students with ADHD. Med. teach. [Internet]. 2023 [cited 2023 Dec. 10]. Available from: <http://doi.org/10.1080/0142159X.2023.2287984>
11. Pfeifer MA, Cordero JJ, Stanton JD. What i wish my instructor knew: how active learning influences the classroom experiences and self-advocacy of stem majors with adhd and specific learning disabilities. CBE life sci. ed. [Internet]. 2023 [cited 2023 Dec. 10]; 22(1). Available from: <http://dx.doi.org/10.1187/cbe.21-12-0329>
12. Stevens AE, Abu-Ramadan TM, Hartung CM. Promoting academic success in college students with ADHD and LD: a systematic literature review to identify intervention targets. J. am. col. health [Internet]. 2021 [cited 2023 Dec. 10]; 70(8). Available from: <http://dx.doi.org/10.1080/07448481.2020.1862127>
13. Phillion R, St-Pierre I, Bourassa M. Accommodating and supporting students with disability in the context of nursing clinical placements: a collaborative action research. Nurse educ. pract. [Internet]. 2021 [cited 2023 Dec. 10]; 54. Available from: <http://dx.doi.org/10.1016/j.nepr.2021.103127>
14. Sedgwick JA. University students with attention deficit hyperactivity disorder (ADHD): a literature review. Ir J Psychol Med. [Internet]. 2018 [cited 2023 Dec. 10]; 35(3). Available from: <http://dx.doi.org/10.1017/ipm.2017.20>
15. Rodrigues TS. Dyslexia and ADHD in higher education: the use of medicalization as a privilege for admission? [Dissertation]. Uberlândia (MG): Federal University of Uberlândia; 2018. 269 p. Available from: <http://dx.doi.org/10.14393/ufu.di.2019.308>
16. Oliveira CT, Dias ACG. Effects of attention deficit/hyperactivity disorder on college experience. Psicol. ciênc. prof. [Internet]. 2015 [cited 2023 Dec. 10]; 35(2). Available from: <http://dx.doi.org/10.1590/1982-370300482013>
17. Ikematsu Y, Mizutani M, Tozaka H, Mori S, Egawa K, Endo M, et al. Nursing students with special educational needs in Japan. Nurse educ. pract. [Internet]. 2014 [cited 2023 Dec. 10]; 14(6). Available from: <http://dx.doi.org/10.1016/j.nepr.2014.08.007>
18. Vance TA, Weyandt L. Professor perceptions of college students with attention deficit hyperactivity disorder. J. am. col. health [Internet]. 2008 [cited 2023 Dec. 10]; 57(3). Available from: <http://dx.doi.org/10.3200/jach.57.3.303-308>
19. Buchanan T, Charles MS, Rigler M, Hart C. Why are older faculty members more accepting of students with attention-deficit hyperactivity disorder? A life-course interpretation. Intl J Disabil Dev Educ. [Internet]. 2010 [cited 2023 Dec. 10]; 57(4). Available from: <http://dx.doi.org/10.1080/1034912X.2010.524407>
20. DuPaul GJ, Weyandt LL, O'Dell SM, Varejao M. College students with ADHD: current status and future directions. J. atten. disord. [Internet]. 2009 [cited 2023 Dec. 10]; 13(3). Available from: <http://dx.doi.org/10.1177/1087054709340650>
21. Weyandt LL, DuPaul GJ. ADHD in college students: developmental findings. Dev disabil res rev. [Internet]. 2008 [cited 2023 Dec. 10]; 14(4). Available from: <http://dx.doi.org/10.1002/ddrr.38>

22. Clouder L, Karakus M, Cinotti A, Ferreyra M, Fierros G, Rojo P. Neurodiversity in higher education: a narrative synthesis. High. Educ. (Amst. Print). [Internet]. 2020 [cited 2023 Dec. 10]; 80(4). Available from: <http://dx.doi.org/10.1007/s10734-020-00513-6>
23. Oliveira CAF, Reis LPC. Students with adhd, life project and accessibility center: support for inclusion. SciELO Preprints. [Internet]. 2022 [cited 2023 Dec. 10]. Available from: <https://doi.org/10.1590/SciELOPreprints.5147>
24. Cast. Universal design guidelines for learning version 2.2. [Internet]. 2018 [cited 2023 Dec. 10]. Available from: <http://udlguidelines.cast.org>
25. Jimenez TC, Graf VL, Rose E. Gaining access to general education: the promise of universal design for learning. Issues Teach. Educ. [Internet]. 2007 [cited 2023 Dec. 10]; 16(2). Available from: <https://eric.ed.gov/?id=EJ796250>
26. Jansen D, Petry K, Ceulemans E, Oord SVD, Noens I, Baeyens D. Functioning and participation problems of students with ADHD in higher education: which reasonable accommodations are effective? Eur J Spec Needs Educ. [Internet]. 2017 [cited 2023 Dec. 10]; 32(1). Available from: <http://dx.doi.org/10.1080/08856257.2016.1254965>
27. Karawekpanyawong N, Wongpakaran T, Wongpakaran N, Boonnag C, Siritikul S, Chalanunt S, et al. Impact of perceived social support on the relationship between adhd and depressive symptoms among first year medical students: a structural equation model approach. Child. [Internet]. 2021 [cited 2023 Dec. 10]; 8(5). Available from: <https://doi.org/10.3390/children8050401>

**Received:** 28/01/2024

**Approved:** 04/06/2024

**Associate editor:** Dr. Gilberto Tadeu Reis da Silva

**Corresponding author:**

Lucas Batista Ferreira

Universidade Federal do Rio Grande do Norte

Avenida Senador Salgado Filho, 3000, Lagoa Nova, Natal/RN, CEP 59078-900.

E-mail: [lucas08batista@gmail.com](mailto:lucas08batista@gmail.com)

**Role of Author:**

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Ferreira LB, Gonçalves RG, Menezes RMP de, Medeiros SM de**. Drafting the work or revising it critically for important intellectual content - **Ferreira LB, Gonçalves RG, Menezes RMP de, Medeiros SM de**. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Ferreira LB, Medeiros SM de**. All authors approved the final version of the text.

ISSN 2176-9133



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).