



Abstract

Purpose: The aim of this review is to determine the most effective type of alternative seating for attention in young students.

Design: A systematic literature review was conducted.

Method: Peer-reviewed articles were analyzed through electronic databases. The search focused on studies published from 2010-2021. Scientific validity of studies was assessed.

Results: Beginning with 428 articles, 15 studies met the required criteria. Five key themes were discovered within the analyzed articles. Results show alternative seating was found to be effective in maintaining attention in young school-aged students.

Introduction

- Attention is an important academic skill that allows students to thrive throughout their educational journey.
- Due to advancing academic rigor, maintaining attention may be challenging for younger students, affecting their developmental ability.
- Teachers reported a challenging skill students face is maintaining attention throughout classroom activities.
- Students often exhibit difficulties in selective and sustained attention.
- Attention difficulties are often expressed when students are asked to attend with relevant stimuli or engage in activities.

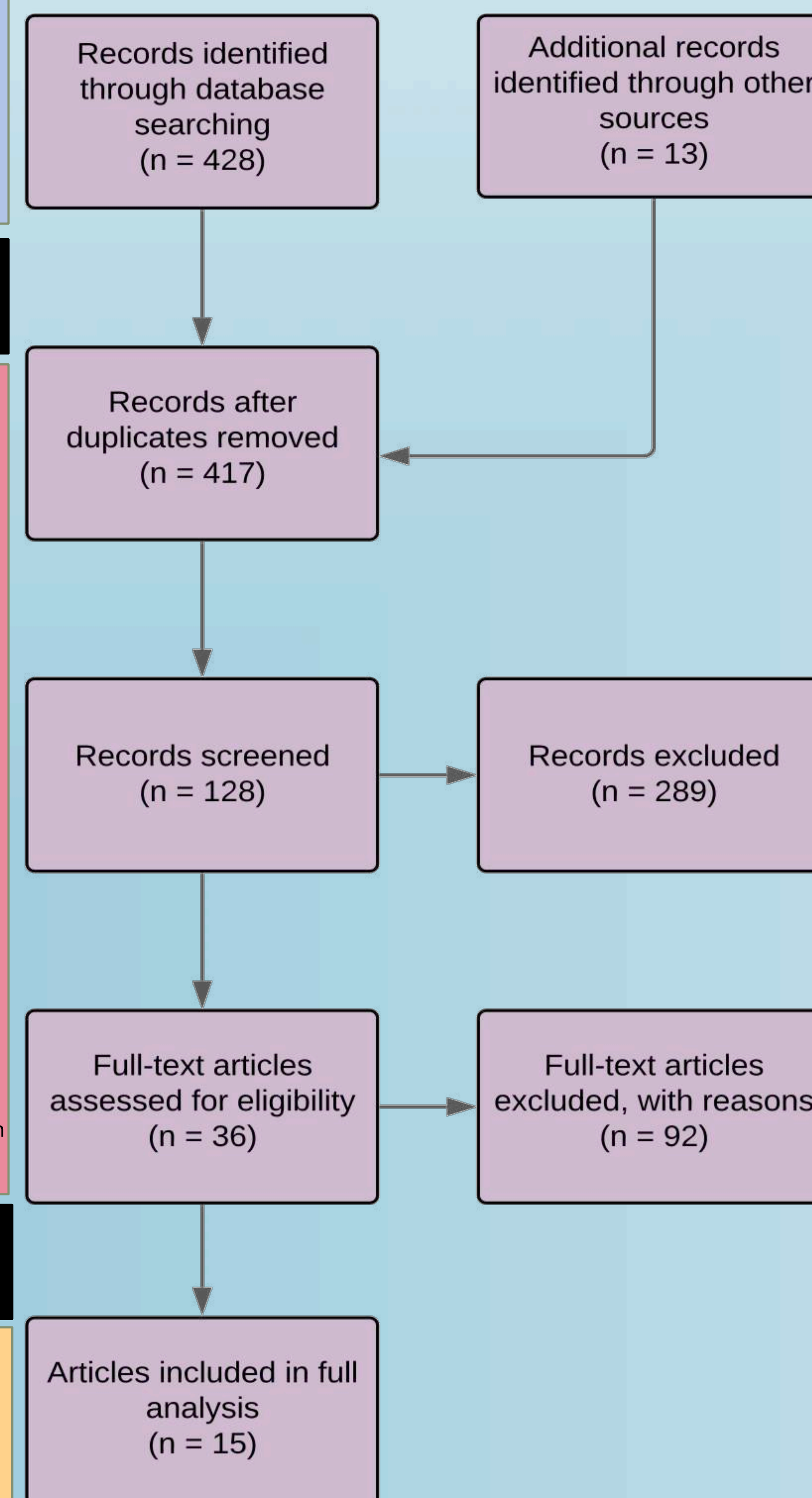
(Andrade et al., 2009; Bagatell et al., 2010; Cefai et al., 2013; Fisher et al., 2014; Hertzog et al., 2019; Krombach & Miltenberger, 2019; Miller & Simmering, 2018; Seifert & Metz, 2016; Zaghlawan & Ostrosky, 2011)

PIO Question

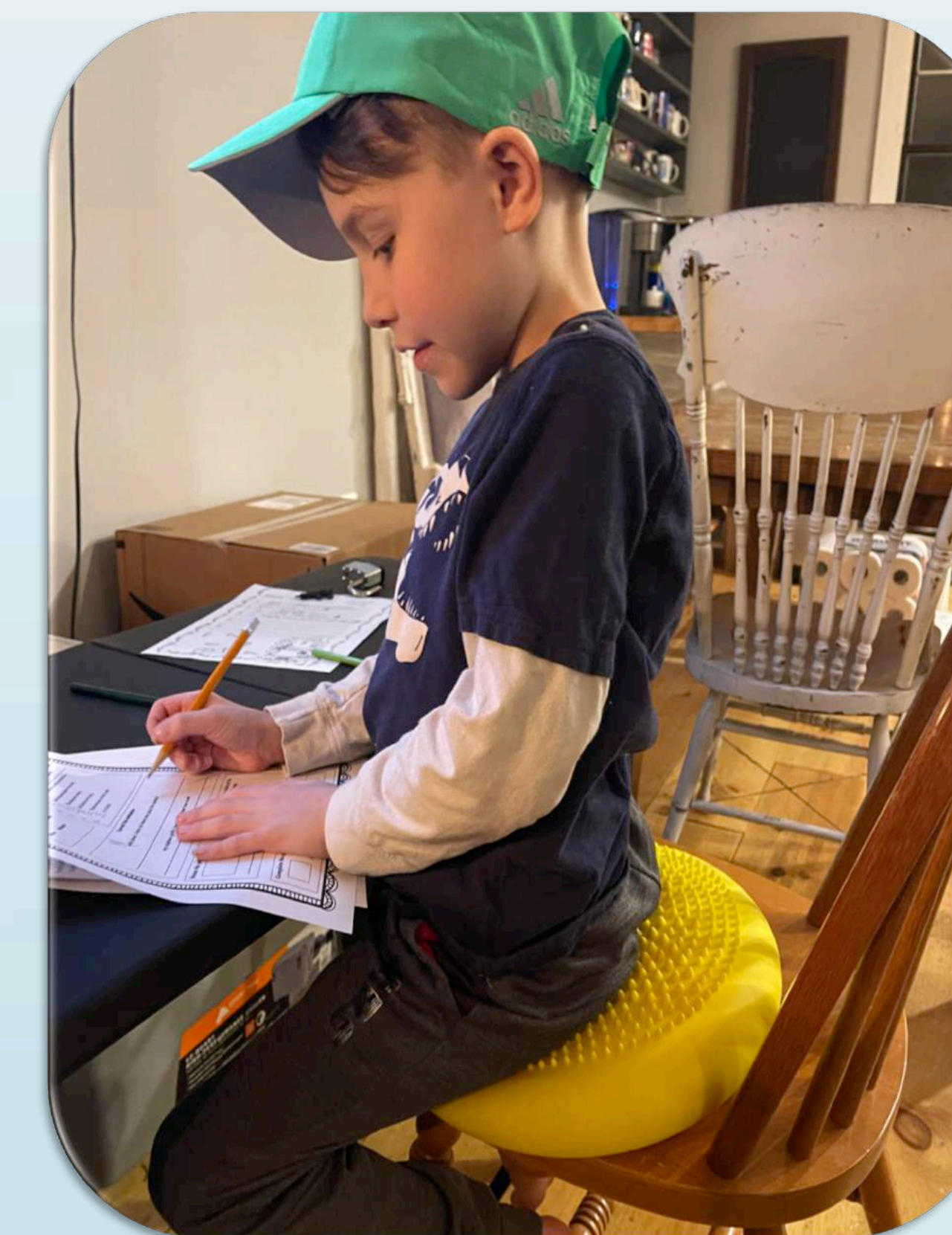
“Which type of alternative seating is most effective in improving attention in young students during classroom activity?”

Methods

- Systematic literature review
- Databases used:
 - PubMed
 - EBSCOhost
 - Sage Journals
- Specific key terms used in the search included:
 - “sensory integration activities”
 - “dynamic seating”, “alternative seating”
 - “movement therapy and sensation”
 - “attention”, “focus”



Wobble cushion

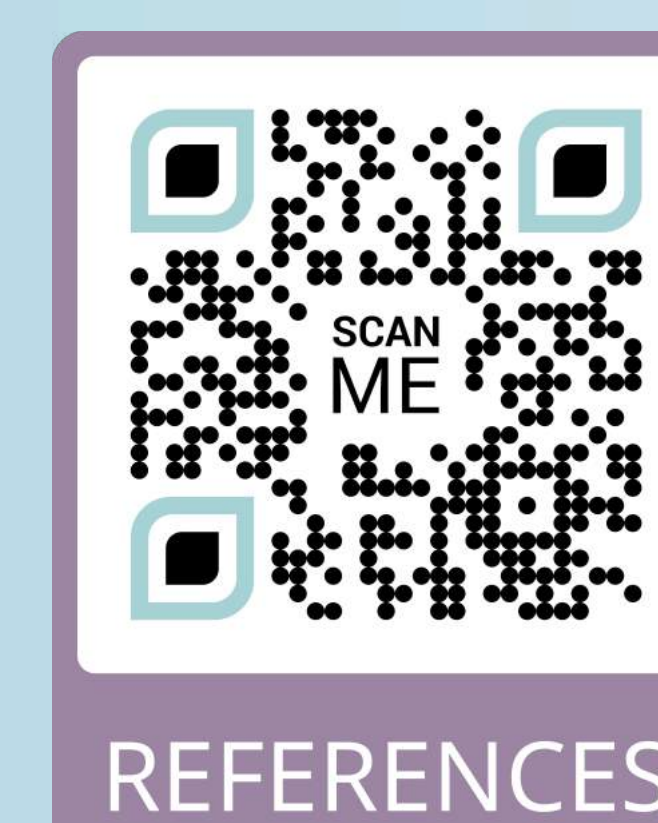


Stability Ball



Images of different alternative seating during table-task activities.

T-Stool



REFERENCES

Results

- Alternative seating was found to have a positive effect in sustaining attention due to a positive relationship between attention and physical stimulation that helps promote sensory integration.

Five key themes were found within the articles:

- Alternative/dynamic seating – Independent variables
- Circle time – Most common setting
- In-seat and on-task behavior – Improvement in attention
- A-B-C intervention design – Over 60% of the studies analyzed used this approach
- Social validity scale – Utilized to gather qualitative data

Studies found integrating alternative seating during classroom activities:

- Improved attention span
- Increased participation in longer in-seat durations during on-task activities
- Enhanced engagement and enjoyment throughout tasks
- Reduced social, emotional, and behavioral problems
- Alleviated anxiety and depressive symptoms
- Decreased disruptive behavior
- Increased literacy skills
- Improved in the production of students due to alternative seating in occupational therapy practices

(Bagatell et al., 2010; Cefai et al., 2013; Fedewa & Erwin, 2011; Gaston et al., 2016; Krombach & Miltenberger, 2019; Mccoy et al., 2018; Merritt, 2014; Miller & Simmering, 2018; Seifert & Metz, 2016; Zaghlawan & Ostrosky, 2011).

Discussion

- Although there is evidence that states the benefits of alternative seating for attention in young students, there is a gap in the literature regarding what form of seating is most effective.

Significance to Occupational Therapy

- Occupational therapists can incorporate alternative seating within classroom environments across the world to promote focus and successful learning outcomes, resulting in improved academic skills and social advantages in all students.