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THERAPEUTIC
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School of Therapeutics Science

**Evidence in school-based practice within the scope of
occupational therapy: A scoping review**

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Introduction / Rationale:

- School-based occupational therapy (SBOT) is a growing field that plays a vital role in supporting learners' participation and performance in educational activities.
- The occupation of education includes: academic activities (such as writing, reading, and mathematics), non-academic activities (such as sports and cultural engagements), as well as technological (online learning or task completion) and vocational educational pursuits.
- To be effective, SBOT interventions must be evidence-based, ensuring they reduce barriers and enhance engagement in all aspects of school life.

Objectives of study:

- **Map out research evidence** in school-based occupational therapy
- To identify:
 - The **levels** and **strength** of evidence
 - The **gaps** related to the evidence in school-based occupational therapy practice

Methods:

- A **scoping review** based on the framework from the **Joanna Briggs Institute** was carried out
- **Inclusion criteria:**

Participants	Concept	Context
<ul style="list-style-type: none">• Learners 5-19 years	<ul style="list-style-type: none">• Research demonstrating the effectiveness of occupational therapy interventions within a school-based setting	<ul style="list-style-type: none">■ School setting■ National and international study populations■ Different socioeconomic, cultural and ethnic backgrounds

- **Exclusion Criteria:**
 - Interventions that had not been evaluated by research
 - Articles before 2014
 - Reports from congress proceedings

PRISMA diagram

Search terms:

Effective treatments OR interventions

School-based occupational therapy

Efficacy OR effect OR impact

School-based AND occupational therapy

Identification

Data base searches: MEDLINE (PubMed), CINAHL (EBSCO), OT seeker, ClinicalKey, ProQuest, Cochrane Library, ERIC, SAGE, Taylor and Francis.
Studies from databases/registers (n = 533)

References removed (n = 65)
Duplicates identified manually (n = 42)
Duplicates identified by Covidence (n = 23)

Studies screened (n = 468)

Studies excluded (n = 146)

Screening

Studies sought for retrieval (n = 322)

Studies excluded (n = 282)
Duplicate (n = 2)
Editorial (n = 1)
Book review (n = 2)
Presentation (n = 2)
Not school-based (n = 34)
Articles extracted (n = 6)
Older than 10 years (n = 5)
No effective outcomes (n = 176)
Not appropriate to study (n = 47)
Wrong patient population (n = 7)
Not appropriate information (n = 24)

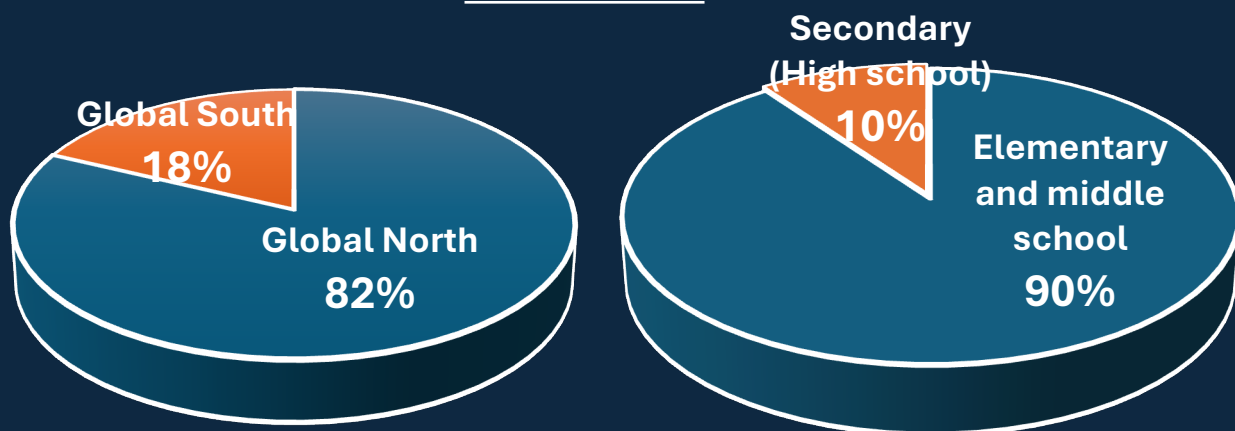
Studies assessed for eligibility (n = 322)

Included

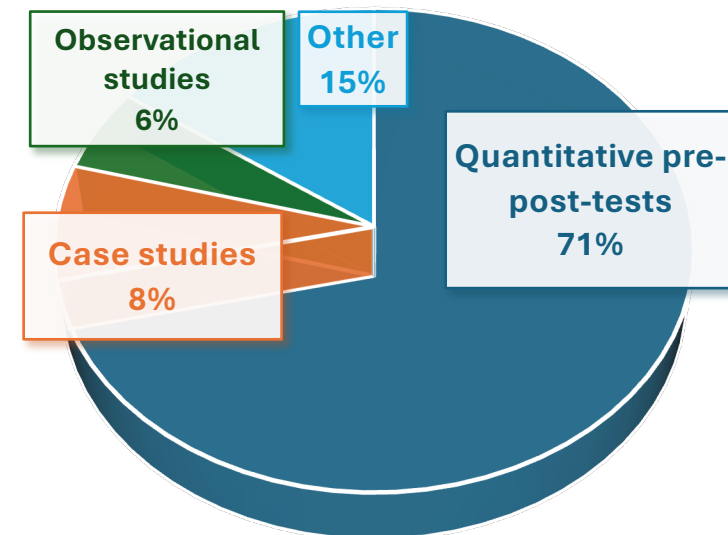
Studies included in review (n = 39)

Results:

Location



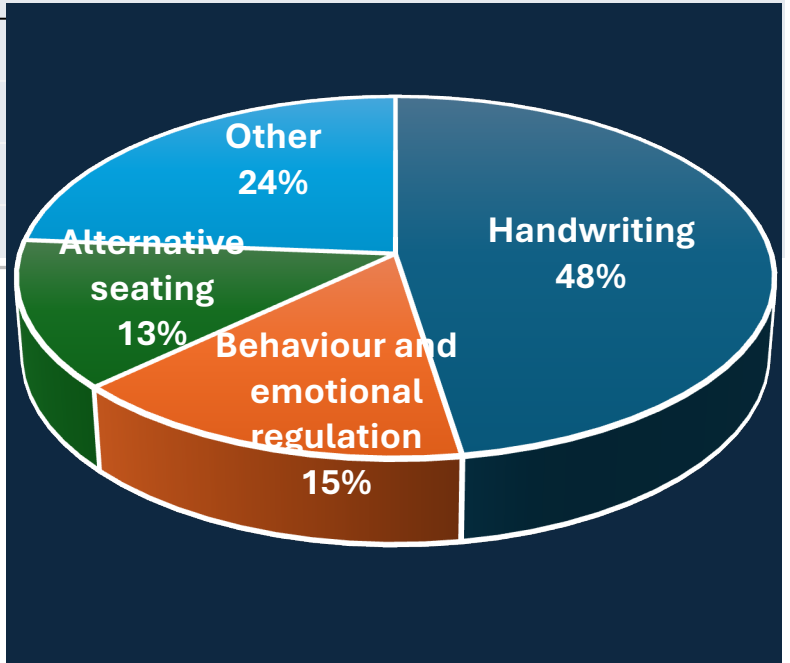
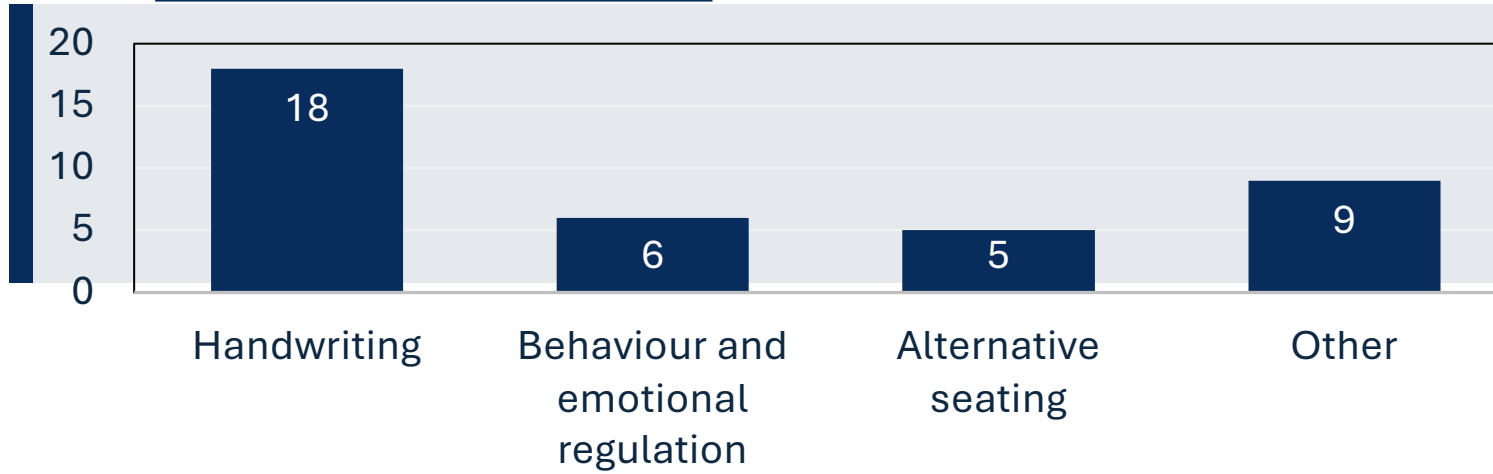
Study designs



Participants:

- Learners 5-19 years
- Majority of studies (51%) focused on first and second graders, aged 5 to 8 years.

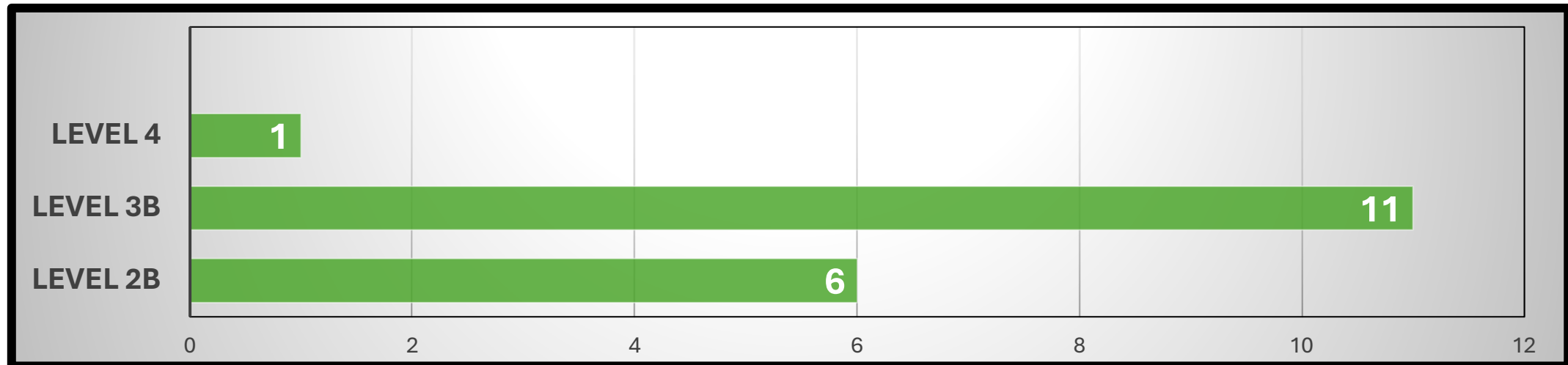
Number of studies:



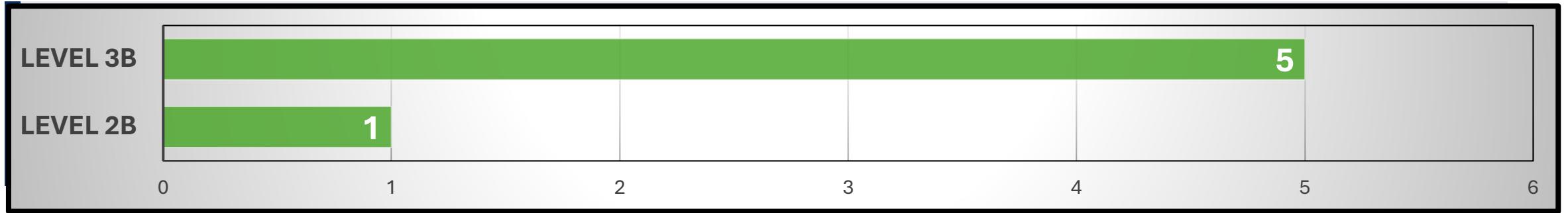
Evidence for school-based interventions:

(Guidelines described by Howick et al (2016))

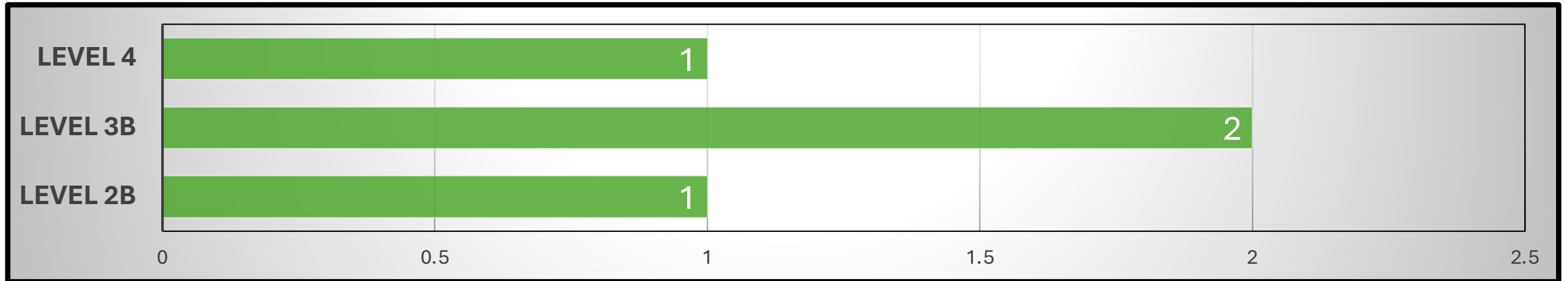
Handwriting interventions:



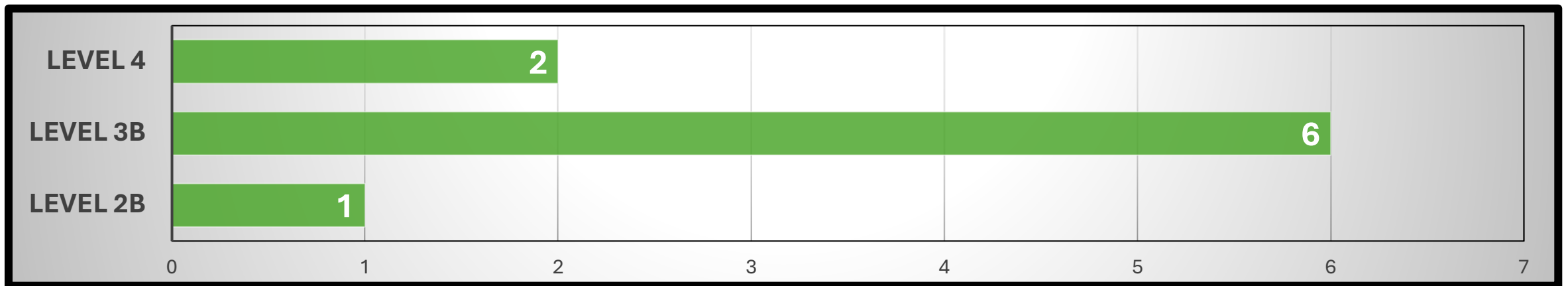
Behaviour and regulation (emotional and self) interventions:



Alternative seating:



Other School-Based Interventions:



Key findings:

Evidence Levels:

Determined using Levels of Certainty from U.S. Preventative Services Task Force (Grade definitions, 2018)

- Handwriting: **Moderate** (Tier 1 – whole class)
- Behavior & Emotional Regulation: **Low–Moderate** (Tier 3 – small group or individual with identified diagnoses)
- Alternative Seating & Other OT SBOT interventions: **Low**
- **Over half of studies = Tier 1 (whole-class)**, reflecting cost-effectiveness & OT availability
- Research concerned with **client-related factors and the impact on performance within educational settings**
- **limited link** to academic achievement and educational occupations
- Lack of studies focused on learners with **physical disabilities** and **mental health** challenges such as **anxiety** and **depression**

Implications for practice

1

Tier 1 Interventions Dominate: Most SBOT interventions occur at the whole-class level, led primarily by teachers, with OTs in a supporting capacity. The focus is mainly on writing and emotional regulation.

2

Collaboration Needed: There is a clear need for more collaborative approaches between teachers and OTs to enhance learner participation and inclusion.

3

Broader Outcome Measures: OTs are encouraged to add outcome measures like student satisfaction, self-esteem and quality of life to more fully understand intervention impacts.

4

Research Frameworks: Instead of relying solely on traditional evidence-based medicine frameworks, the field should use more inclusive, client-focused models that better capture OT outcomes. ↓

5

Research Gaps: There's a need for more research in middle and high school environments, and for a clearer definition of the OT's role within schools to support evidence-based practice.

Considering precision occupational therapy (Schaaf, R. C. 2025)

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Thank You

www.wits.ac.za/therapeuticssciences

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