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# TOWARDS SUSTAINABLE CHILD HEALTH AND DEVELOPMENT: A SCOPING REVIEW OF INSTRUMENTS ASSESSING PARENTAL KNOWLEDGE, ATTITUDES AND PRACTICES ON CHILDREN'S SCREEN USE

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## INTRODUCTION

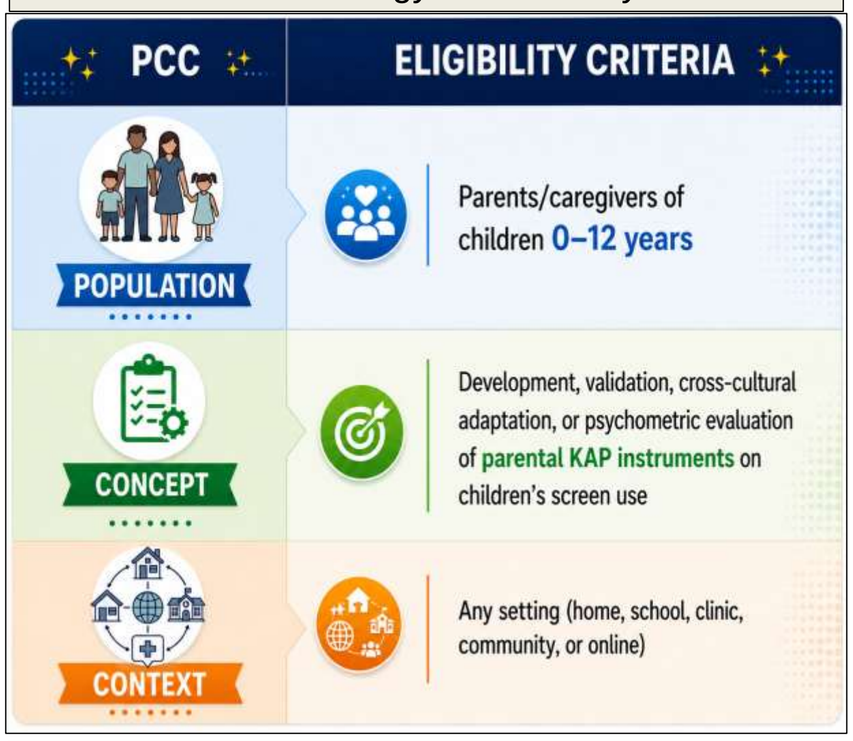
- Digitalization has increased children's exposure to screen-based devices and excessive screen time has become a serious public health concern *(Carson & Janssen, 2012; Muppalla et al., 2023).*
- Despite WHO recommendations, excessive screen use remains highly prevalent, including among Malaysian children *(Barbosa et al., 2020; Canadian Paediatric Society, 2017; Mansor et al., 2021).*
- Parents play a central role in managing children's screen use through supervision, rule-setting, and role modelling *(Morawska et al., 2023; Nikken & Schols, 2015).*
- Existing KAP instruments are conceptually and psychometrically heterogeneous, limiting comparability across studies *(Arippin et al., 2023; Jean-Baptiste, 2021).*

## RESEARCH OBJECTIVES

- To identify existing parental KAP instruments.
- To describe instrument characteristics.
- To evaluate psychometric properties.
- To examine cultural and contextual applicability.

## METHODOLOGY

Below is the eligibility criteria and summary of database search strategy for the study selection :




| Database & Platform | Records Retrieved/ Limits Applied |
|---|---|
| PubMed (NCBI) | • Language: English & Malay<br>• Date: Database inception – April 2026<br>• Full-text article |
| Scopus (Elsiever) | |
| Web of Science (Clarivate) | |

## ABSTRACT

**Introduction.** Existing instruments assessing **parental knowledge, attitudes, and practices (KAP)** regarding children's screen use are **conceptually heterogeneous** and vary in their **psychometric quality**, limiting comparability across studies.

**Methods.** A **scoping review** was conducted following the **Joanna Briggs Institute (JBI)** methodology and **PRISMA-ScR** guidelines. **PubMed, Scopus, and Web of Science** were searched from database inception to **April 2026**. Studies on **instrument development, validation, cross-cultural adaptation,** and **psychometric evaluation** were included.

**Results.** A total of **430 records** were identified, with **16 studies from 11 countries** meeting the inclusion criteria. **Parental practice** was the most frequently assessed domain, whereas **knowledge** and **attitudes** were less commonly evaluated. Recent instruments have evolved beyond **screen-time restriction** to include **active mediation, monitoring, co-use,** and **technical mediation**. Most validated instruments demonstrated **good psychometric properties** (**Cronbach's α = 0.73–0.97**), although several KAP questionnaires lacked **comprehensive construct validation**.

**Conclusion.** Existing instruments remain **conceptually fragmented**, highlighting the need for **standardized, theory-based, culturally relevant, and psychometrically robust instruments** to comprehensively assess parental management of children's screen use.

*Key Words: Digital Parenting; Children's Screen Use; Parental Knowledge; Parental Attitudes; Parental Practices; Sustainable Child Development; Child Health Promotion; Assessment Instrument.*

## RESULT

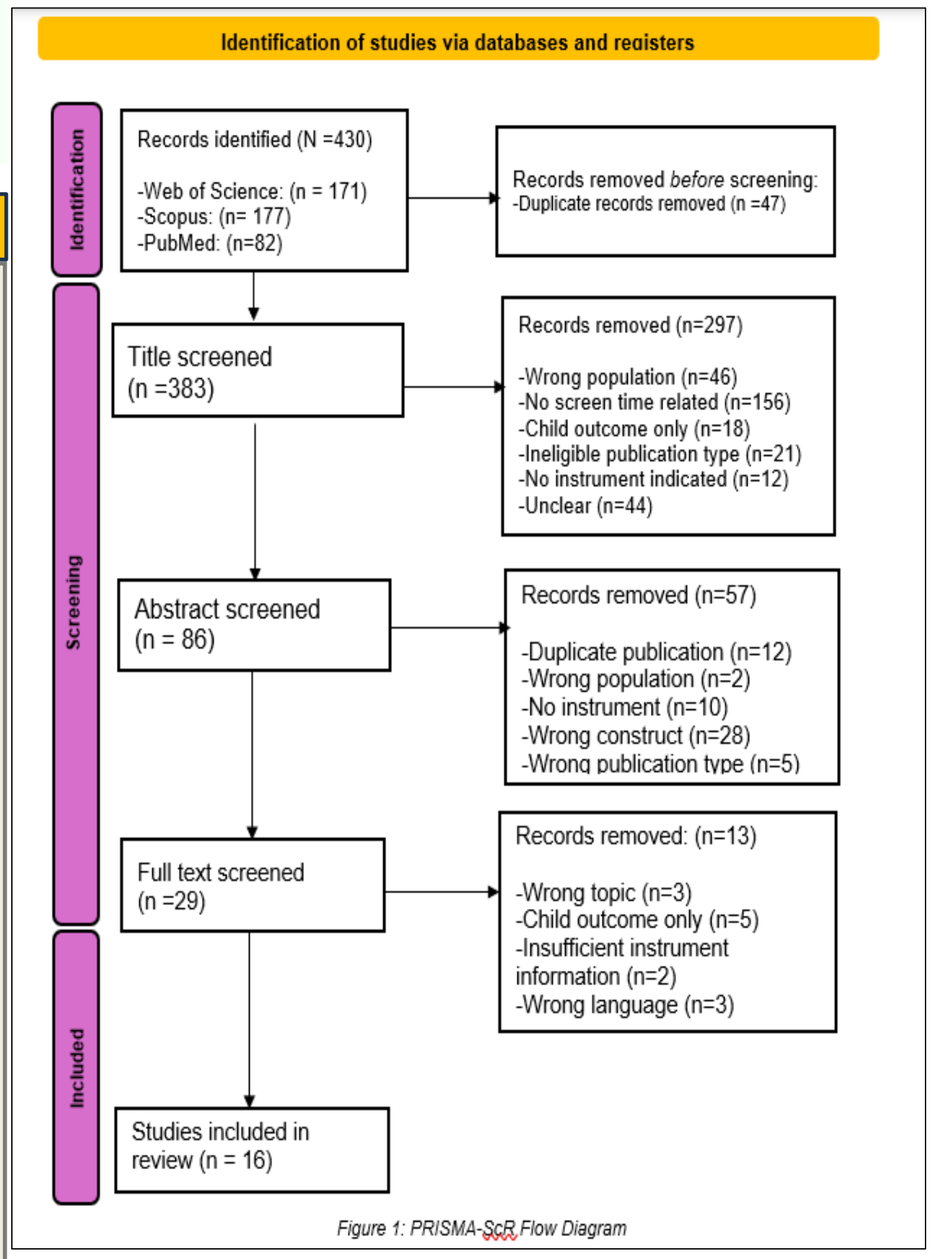
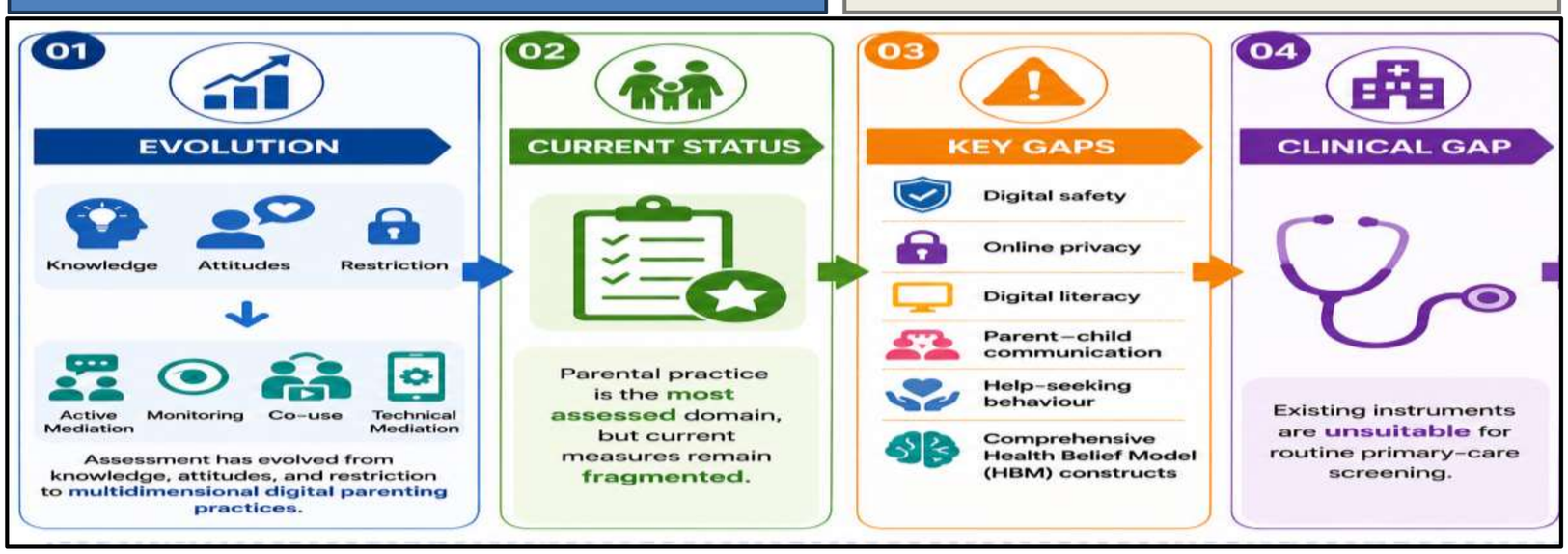



*Figure 1: PRISMA-ScR Flow Diagram*

- ☐ **16 studies** from **11 countries** (2011–2025)
- ☐ **Practice** was the most assessed domain (**15/16** studies)
- ☐ Digital parenting has evolved to include **active mediation, monitoring, co-use & technical mediation**
- ☐ Key gaps: **digital safety, online privacy, rule consistency, help-seeking & HBM constructs**
- ☐ **11/16** instruments reported psychometric validation (**Cronbach's α = 0.73–0.97**)

## DISCUSSION




## CONCLUSION & WAY FORWARD

- Develop standardized, theory-based instruments.
- Incorporate digital safety into parental assessment.
- Strengthen psychometric validation and cultural relevance.
- Support research and primary care practice.
- Develop comprehensive, theory-based instruments with robust psychometric properties, cultural relevance, and digital safety to improve research and primary care.

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