

# Retrospective reporting of adverse childhood experiences (ACEs) – a systematic review

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## Introduction

- Exposure to ACEs is linked to severe health problems later in life, including chronic pain & misuse of pain medications [1-4]
- No agreement on a standardised assessment of ACEs in either research or clinical practice
- Lack of involvement of people with lived experience or theoretical framework in questionnaire development

## Aim

Identify all validated ACEs questionnaires for adults and critically evaluate their:

- 1) Psychometric quality
- 2) Content validity from the perspective of people with lived experiences

## Methods

### Search strategy

(PROSPERO (CRD42022299435))

Searches took place from March 2022 to June 2023

**Databases:** MEDLINE, PubMed, PsycINFO, Web of Science, EMBASE, Scopus, CENTRAL, CINAHL

**Search terms:** 'adverse child experiences or negative child experience or childhood adversity or adult survivors child abuse', AND 'questionnaires or measures or survey or scale or instrument', AND 'adult or young adult or student or adolescent'

### Selection phases:

- **1<sup>st</sup> stage** title and abstract screening for self-report measures in adult populations
- **2<sup>nd</sup> stage** abstract screening to identify articles assessing psychometrical properties, e.g. internal consistency, test-retest reliability, factor structure, content validity
- **Full-text screening**
- **Reference list screening**

## Results

14,350 articles identified of which **95 articles** included in the final analyses

**29 different ACE questionnaires identified:** average of 3.4 (median=1) psychometric publication per questionnaire (see Fig. 1)

CTQ [7] was most frequently evaluated (36 articles)

### Cohen's criteria:

- "Well-established" n=9
- "Approaching well-established" n=2
- "Promising" n=18

## Quality assessment

- 1) **Cohen criteria** for categorising evidence-based assessments ranging into well-established, approaching well-established or promising assessments [5]
- 2) **COSMIN criteria** applied to "well-established" & "approaching well-established" questionnaires to assess structural validity, internal consistency, reliability, construct validity, cross-cultural validity, measurement invariance & criterion validity [6]
  - Each criteria gets a rating of sufficient, insufficient, inconsistent or indeterminate
- 3) **Content validity** form, co-designed with & completed by people with lived experience group (PWLE)
  - Covering acceptability, scope, design, and administration of the questionnaires, e.g. "How easy is the language in the questionnaire to read?"
  - 18 items with 6-point Likert scale or Yes/No responses → recoded into representing good, intermediate, poor content validity

### COSMIN:

- Measurement properties assessed across studies were highly variable
- No questionnaire achieved a rating of "sufficient" quality across all the relevant COSMIN categories (see Tab. 1)
- ACE (Felitti) [8] had the highest number of properties rated as "sufficient"
- CTQ- Short Form [9] was the only one to receive ratings of "insufficient" for all published evidence

### Content validity:

- 24 questionnaires rated (see Fig. 2)
- Mean positive rating = 37.9% (11% - 63%) [10,11]

## Conclusion

- Wide range of questionnaires are available
- Psychometrical quality varied widely - no questionnaire received a good rating across all relevant properties
- None of the measures were validated in chronic pain populations
- Need for the co-development with PWLE

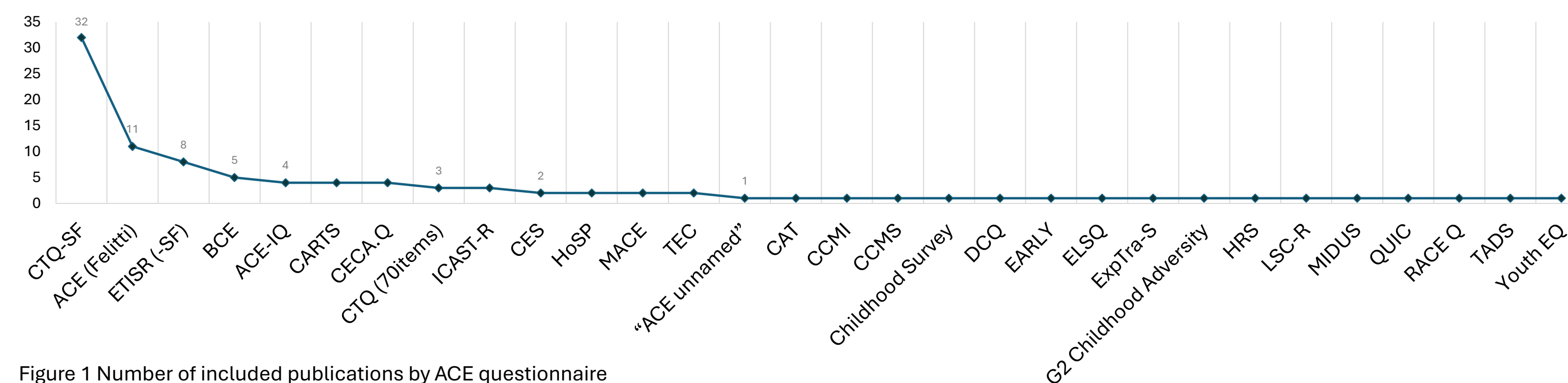


Figure 1 Number of included publications by ACE questionnaire

COSMIN: Measurement Properties	Structural validity	ACE (Felitti) BCE ETISR-SF CES
	Internal Consistency	CECA.Q CTQ (70) CES
	Cross-cultural validity	-
	Measurement invariance	ACE (Felitti)
	Reliability	ACE-IQ CTQ (70) ETISR-SF ICAST-R MACE CES
	Measurement error	-
	Criterion validity	ACE (Felitti) ACE-IQ MACE TEC

Table 1 ACE questionnaires achieving "sufficient" rating by COSMIN measurement property

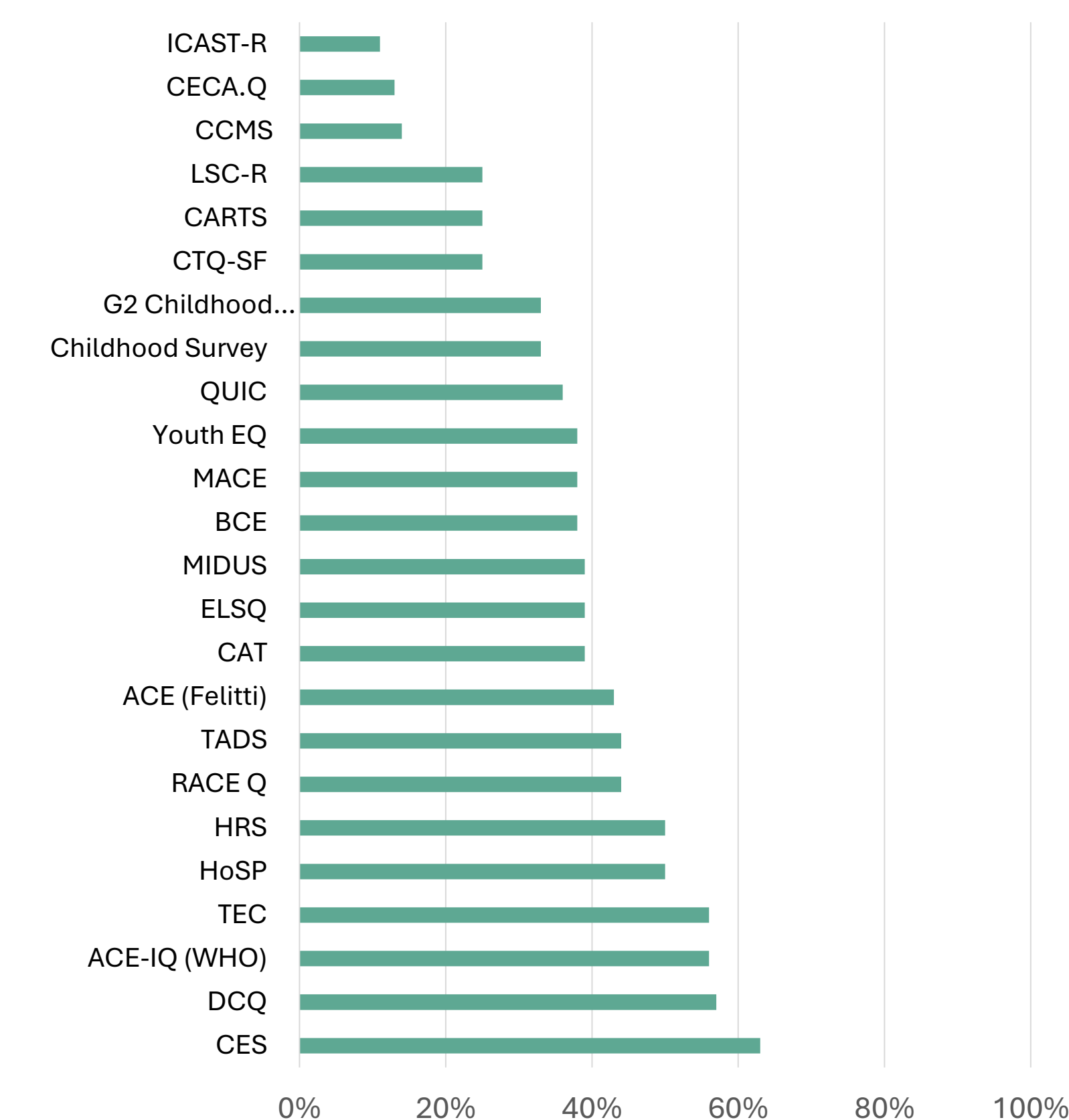


Figure 2 Proportion of content validity criteria rated positively by PWLE

## References

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