Screen for Child Anxiety Related Emotional Disorders (SCARED)

41-item self-report measure for 8–18-year-olds

The Screen for Child Anxiety Related Emotional Disorders (SCARED) is a 41-item self-report measure designed to assess anxiety disorders in children and young people aged 8–18 years over the past three months. This second version of the original measure includes 5 subscales aimed at assessing panic/somatic symptoms, generalised anxiety, separation anxiety, social phobia and school phobia.

	Internal consistency		Test-retest reliability	Validity	Sensitivity to change
Psychometric features	✓ (Scale)	✓ (Subscale)	?	✓	✓

	Brevity	Availability	Ease of Scoring	Used in the UK
Implementation features	✓	✓	×	✓

*Please note that our assessment of this measure is based solely on the English self-report version of the SCARED, for children and young people aged 8–18 years. The other versions of this measure were not assessed and therefore it should not be assumed that they would receive the same rating.

What is this document?

This assessment of the Screen for Child Anxiety Related Emotional Disorders (SCARED) has been produced by the Early Intervention Foundation (EIF) as part of guidance on selecting measures relating to parental conflict and its impact on children. To read the full guidance report and download assessments of other measures, visit: https://www.eif.org.uk/resource/measuring-parental-conflict-and-its-impact-on-child-outcomes

- **The SCARED is comprised of five subscales, but the internal consistency results for the social phobia subscale has been found weaker when compared to that of the combined subscales. Consequently, we recommend using the SCARED total score rather than the individual subscale scores.**
- **We found insufficient evidence to establish that the SCARED has good test-retest reliability over short periods of time.**
- **For children aged 8–11 years, the developers recommend that a clinician be present during administration, to explain the questions to the child. Alternatively, it is recommended that the child respond to the questions with an adult present in case there are any queries or concerns.**
- **Given that the SCARED assesses anxiety disorders over the past three months, we warrant caution when evaluating short interventions lasting less than three months.**
- **The SCARED is intended for use by trained clinicians.**

About the measure

Author(s)/ developer(s)	Publication year for the original version of the measure	Publication year for the version of the measure assessed	Type of measure
Birmaher, B., Khetarpal, S., Cully, M., Brent, D., & McKenzie, S.	1997	1999	Child self-report.

Versions available	There are three other versions of this measure available, including the original 38-item version, a shortened 5-item version (to be used in primary care and other community settings), and a 66-item version which has been renamed SCARED-Revised (or SCARED-R). Each of these also have slightly distinct versions for either the parent or child to complete.
Outcome(s) assessed	This measure has been designed to assess child anxiety disorders.
Subscales	There are five anxiety subscales: panic/somatic symptoms, generalised anxiety, separation anxiety, social phobia and school phobia.
Purpose/primary use	This measure was originally designed to be used in clinical and community settings as a screening instrument for child anxiety disorders.
Mode of administration	This measure can be completed in person or online.
Example item	'When I feel frightened, it is hard to breathe.'
Target population	This measure was originally developed for children aged 8–18 years.
Response format	3-point Likert scale (0 = 'Not True or Hardly Ever True', 1 = 'Somewhat True or Sometimes True', 2 = 'Very True or Often True').

Strengths & limitations	Strengths: • The SCARED is a valid measure with good internal consistency and it is sensitive to change in short interventions. • It is a free measure (available at: https://www.pediatricbipolar.pitt.edu/sites/default/files/SCAREDChildVersion_1.19.18.pdf). Limitations: • We found insufficient evidence to establish that the SCARED has a good test-retest reliability over short periods of time. • According to our review, it does not appear that the SCARED has UK cut-off scores. • There are some restrictions over who can purchase the SCARED. • The SCARED is intended for use by trained clinicians.
Link	https://www.pediatricbipolar.pitt.edu/resources/instruments
Contact details	Boris Birmaher: birmaherb@upmc.edu
Copyright	Based on our review of the evidence, it appears that the developers did not provide information on copyright. The key reference (included below) should be cited when using the measure.
Key reference(s)	Birmaher, B., Brent, D.A., Chiappetta, L., Bridge, J., Monga, S., & Baugher, M. (1999). Psychometric properties of the Screen for Child Anxiety Related Emotional Disorders (SCARED): A replication study. *Journal of the American Academy of Child & Adolescent Psychiatry, 38*, 1230–1236.

Psychometric features in detail

Internal consistency

✓ (Scale)

The developers examined the scale's internal consistency and reported that the alpha coefficient values were approximately 0.90 (Birmaher et al., 1999). The precise values were not reported in the published paper. The study was conducted in the US with a sample of 190 children attending a mood/anxiety disorders clinic (92 males and 98 females, aged 13.8 ± 2.5 years; 135 white, 43 African American, and 11 Hispanic).

✓ (Subscales)

We found two papers (Birmaher et al., 1999; Jastrowski Mano et al., 2012) reporting good internal consistency for all the subscales of SCARED.

Birmaher et al. (1999) examined the subscales' internal consistency and reported that all alpha coefficient values ranged between 0.78 and 0.87. As before, the precise values of each subscale were not reported.

Jastrowski Mano et al. (2012) reported good internal consistency for all scales except for the School Phobia subscale (alpha = 0.59). The study was conducted with a sample of 349 children (69% female; 79% Caucasian, age range 8–18 years, mean age = 14.21, SD = 2.54) who presented to a multidisciplinary pain clinic at a large Midwestern hospital for treatment of chronic pain.

Test-retest reliability

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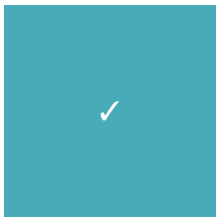
Although from our review we found some evidence of the reliability of the SCARED, this evidence is not sufficient for us to establish that the SCARED has a good test-retest reliability over a short period of time (< one month).

In Behrens et al. (2019), a subset of participants (359 children) were included in a test-retest analysis if they had completed a second administration of the SCARED five days to 15 weeks after the first administration. The authors reported an intraclass correlation coefficient of 0.62 for the whole scale. This study was conducted in the US with a sample of 1,092 youth aged 7–18 years.

In Birmaher et al. (1997) 88 children completed the measure on two different occasions ranging from four days to 15 weeks apart (median time: five weeks, 79% completing the SCARED within eight weeks of the original date of completion). The authors reported ICCs of 0.86.

Validity



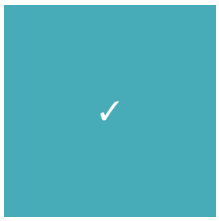
We found two papers assessing the validity of the most recent English version of this measure (that is, the second 41-item version).

Jastrowski Mano et al. (2012) reported that SCARED has good validity values (CFI = 0.992, RMSEA = 0.042). The study was conducted with a sample of 349 children (69% female; 79% Caucasian, age range 8–18 years, mean age = 14.21, SD = 2.54) who presented to a multidisciplinary pain clinic at a large Midwestern hospital for treatment of chronic pain.

Boyd et al. (2003) conducted a confirmatory factory analysis with the 41-item English version of the measure and reported low validity values (CFI=0.59, a TLI = 0.56, and a RMSEA = 0.08). Their study was conducted with a sample (n = 111) of African American students aged from 12–19 years (mean age = 15.67, SD = 1.21). The sample, however, was not representative of the UK population: 35% of the students were living below the poverty level, and most students (75%) lived in single-parent households.

Monga et al. (2000) examined the 38-item English version and reported that the measure showed significant correlations with the child trait subscales of the State–Trait Anxiety Inventory for Children (STAIC) ($r = 0.73$, $p \leq 0.0001$) and with the child state subscale of the STAIC ($r = 0.37$, $p \leq 0.0001$). This study was conducted in the US with a sample of 295 children aged between 9–18.9 years (mean age = 14.4 ± 2.3 years). 57% (n = 168) were female, 85% (n = 250) Caucasian, and 14% (n = 40) African American.

Sensitivity to change



There is evidence that the SCARED can detect changes after participation in short cognitive behavioural interventions for children.

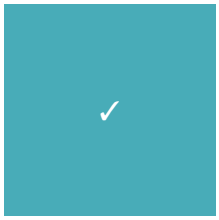
Cohen et al. (2011) reported that the SCARED detected changes between pre-test and follow-up (SCARED: Change score (95%CI) = 1.31 -8.96 $p < 0.01$). This study was an RCT carried out in the US on the Trauma-Focused Cognitive Behavioural Therapy programme (lasting eight weeks) designed to aid children and families in managing negative feels from traumatic experiences. This study was conducted with a sample of 124 children between the ages of 7–14 and mothers where the mean age was 9.64 and 50.8% of participants were female, additionally 76.6% of mothers reported experiencing intimate partner violence for a duration greater than five years.

Ginsburg et al. (2012) reported that the SCARED detected changes between pre-test and post-test (Change score: -3.73 (95% CI: -5.32, -2.13), $t(62) = -4.76$, $p < 0.0001$). The study was an RCT conducted in the US to examine the effectiveness of a cognitive behavioural treatment (CBT, 3 to 13 sessions) in inner city schools. This study was conducted with a sample of 32 volunteer youth (mean age = 10.28 years, 63% female, 84% African American) seen in school-based mental health programmes.

Please note that the first study showing evidence of sensitivity to change was conducted with samples with age ranges of 7–17 (the measure should be used with children aged 8–18 years).

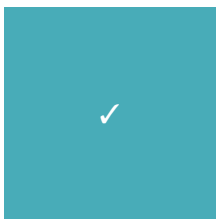
Implementation features in detail

Brevity

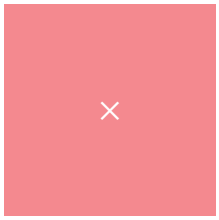
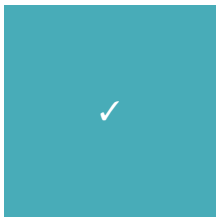


This measure has 41 items and according to the developers, it can be completed in 10 minutes.

Availability



This measure is free to use and does not require a clinical licence to be used. It is available at: https://www.pediatricbipolar.pitt.edu/sites/default/files/SCAREDChildVersion_1.19.18.pdf

Ease of scoring 	This measure has simple scoring instructions involving basic calculations. It is intended for use by trained clinicians, presumably because of the nature of what is being assessed. Scoring instructions can be found at: https://www.pediatricbipolar.pitt.edu/sites/default/files/SCAREDChildVersion_1.19.18.pdf. The individual item scores are summed up, with resultant scores ranging from 0 to 82. Higher scores are indicative of greater anxiety. According to the developer, a total score of ≥ 25 may indicate the presence of an anxiety disorder. The developer has also assigned other cut-off scores that may be indicative of panic disorder, generalised anxiety disorder, separation anxiety disorder, social phobic disorder and significant school avoidance symptoms. It is not clear if there is any information about the cut-offs of the SCARED for the UK population, there are, however, cut-offs for the US population.
Used in the UK 	The SCARED has been used in several UK impact evaluation studies, one of which was the IMAGINE trial (Pile et al., 2018) and the other an assessment of the Penn Resilience Programme (Challen, 2012). The measure has also been used in several UK studies published in peer reviewed journals (Neal et al., 2016, Perrin et al., 2019, Trzaskowski et al., 2012, Waszczuk, Zavos, & Eley, 2013).
Language(s)	As far as we are aware, the developers did not translate the SCARED into other languages. The measure has however been translated into other languages by people other than the developers, including into Dutch, French, German, Italian, Portuguese, Spanish, Arabic, Chinese and Thai.

Of potential interest...

The developers reported that the parents' scores were more highly correlated with the scores of the adolescents (>12 years old) than with the scores of the children (9–12 years old) (Birmaher et al., 1999).

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