

Common Measures in Mental Health Science: Revised Children's Anxiety and Depression Scale-25 (RCADS-25)

Background

In June 2020, the National Institute of Mental Health and Wellcome [reached a landmark agreement](#) to require the use of a common set of measurement tools in the research they fund. Since then, the International Alliance of Mental Health Research Funders has supported a wide group of funders and journals to join the effort, supported by an expert advisory board.

The [fundamental mission](#) of the Common Measures in Mental Health Science initiative is to ensure that research leads to tangible improvements in the lives of people who experience mental health issues. Given the current, fragmented landscape of mental health data, there is a need to take pragmatic action to make mental health research easier to compare, communicate and interpret.

In the interest of transparency and collaboration, we are sharing the anonymised notes from the discussions that the Common Measures in Mental Health Science Advisory Committee (CMA) had on RCADS-25 on January 27 and 28, 2022.

The CMA were asked to share

- a. Their views on the concepts that underlie the questions in the RCADS-25
- b. Their views on how well these concepts are captured by the questions
- c. Their experience of using these questions with different populations
- d. What they thought might be missing and needed to get core concepts

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The overall performance of RCADS-25 across contexts

The nature of the questions

As an overall summary, questions in RCADS-25 seem to be more direct, compared to GAD-7 and PHQ-9.

This measure operates differently than the others as each question has cross-references to others (they are not 25 independent questions) across domains of generalised anxiety and depression.

It's a concern that the factor structure is not consistent across different studies. The RCADS-47 has a six-factor structure, and we can sub-scale scores for each sub-disorder, but for the RCADS-25 they've retained only three items for each of the anxiety sub-disorders and the ten major depression items. So, the possibility to have the sub-scale bias per disorder is removed and it's just then the overall internalizing or anxiety and depression scores.

The timeframes used

What "sometimes" actually means in the possible answers is a significant issue.

An issue, especially the absence of a reference or recall period.

All other proposed common measures use a 14-day reference period.

The time-temporal reference frame is of particular importance in clinical trials.

Some investigators are possibly adding a time frame when collecting data.

Other instruments in paediatric contexts are also not specifying time frames.

Most psychiatric disorders are fluctuating. It's an arbitrary choice to claim that a specific period matters.

People may be responding with different time anchors to the same questions so aggregating the data might be complex.

Cultural transferability

Cultural transferability is an issue with a reasonable number of questions, which is being looked into in the translations.

In a review of 95 studies for youth depression clinical trials, RCADS-25 has only been used once.

In cultures, such as Japan, that are oriented to ritual, this is particularly impressed on children, and this would have an impact on the questions geared at OCD from a Westernised perspective. There are huge variations in how cultures deploy supernatural threats or not, and this has an impact on how children respond to such questions.

General concerns

OCD is considered an anxiety disorder in this context; there is no clear item about suicidality; results have to be converted to t-scores to decide whether someone is in the clinical range or not and this might be a skill-related issue for clinicians or some researchers.

RCADS-25 guidance should include why certain questions are asked e.g. is it to identify syndromes that you hypothesise are distinct and unique? Or is it to identify dimensions that you believe are cross-cutting?

There are some concerns about sensitivity to change for RCADS-25 but studies haven't necessarily been done.

The set of these questions as a whole works across generalised anxiety and depression definitions but looking at them individually there may be specific underlying issues, compared to just viewing the whole as an assessment of a type of hopelessness.

Views on the concepts that underlie RCADS-25 questions

Response scale: *never / sometimes / often / always*

1. I feel sad or empty

Unsure that “sad” and “empty” is precisely the same concept.

Questions using abstract concepts, such as “empty” can be misinterpreted by young people, especially in different cultural contexts.

“Empty” is an issue in language translations.

It is also age-dependent to a certain extent, e.g. 6-7 year-olds would not be able to relate to this in the same way as 11-12 year-olds.

When working in Nepal and Japan, there were a lot of cultural disconnections so cross-cultural validation should be considered.

2. I worry when I think I have done poorly at something

Seems reasonably clear.

3. I would feel afraid of being on my own at home

Seems reasonably clear.

Interesting that it is expressed in a conditional way (“would feel”).

More targeted at younger kids who are likely not at home on their own very much. With older children, research often transitions to other measures.

There’s an assumption that home may be unsafe – local context is important, especially in urban settings.

4. Nothing is much fun anymore

A fairly straightforward single concept.

5. I worry that something awful will happen to someone in my family

Fairly clear.

6. I am afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds)

Unclear how these examples translate into different cultural contexts. Examples that could change in different languages.

There are Urdu and Persian translations to check.

7. I worry what other people think of me

This seems a relatively clear statement.

Though, in certain cultures, it is the norm to worry about what others think.

8. I have trouble sleeping

This is fairly clear, although different kids will interpret “trouble” in different ways, and parents and kids may have different answers.

It's interesting that in the instructions that fits under depression but not anxiety, because it would cross over to both subscales.

9. I feel scared if I have to sleep on my own

A clear statement.

There is an issue with the cultural transferability of this question and in contexts where children sleep with their whole family in the same room for a very long time, that might be very scary, but not indicative of anxiety.

10. I have problems with my appetite

A child could interpret it in two ways: “I don’t want to eat when my family thinks I should be eating”, or “I think I’m eating too much”. Unclear if in this context this is as important. This way of asking is more complicated than asking about problems eating too much or too little.

There might be literacy issues here too if an 8-year-old knows what appetite means.

11. I suddenly become dizzy or faint when there is no reason for this

Somewhat confusing question.

It would want to come into panic.

There used to be a stronger focus on somatic items.

12. I have to do some things over and over again (like washing my hands, cleaning, or putting things in a certain order)

Could be a clear question.

The issue would be if kids take it literally, in contexts such as COVID-19 the parents may be asking them to wash their hands repeatedly. There might be an interpretation issue.

13. I have no energy for things

A concept that hasn’t been directly asked before.

14. I suddenly start to tremble or shake when there is no reason for this

Somewhat related to #11, on the somatic symptoms.

15. I cannot think clearly

The statement is easy to interpret but difficult to respond to.

Some kids may take these cognitive questions as related to how they are in school, such as their attention in class.

16. I feel worthless

Related in some ways to #7.

Somewhat of an abstract concept and a literacy demand. For questions related to worthlessness, in research with Aboriginal communities, this is taken out because it's culturally insensitive to ask this kind of question. Through colonialism and intergenerational trauma, there is a feeling of worthlessness already and it may not be appropriate to ask this question in this way.

17. I have to think of special thoughts (like numbers or words) to stop bad things from happening

This is OK.

Cognitive interviewing with children responding to these questions would be interesting to explore how children with no symptoms interpret these questions.

18. I think about death

Not a direct question about suicidality. Potential ethical response issue on positive responses. Because it is in the anxiety subscale, it is probably exploring death anxiety more than suicidal ideation. If a child has gone through a bereavement, they're going to be thinking about death quite often. This is why it is important to ask directly about suicidality.

This is another item that also crosses over to depression symptoms even though it is on the anxiety subscale.

Kids would have many reasons to think about death, also depending on their development stage.

19. I feel like I don't want to move

Somewhat linked to #13.

20. I worry that I will suddenly get a scared feeling when there is nothing to be afraid of

The expression of worry can vary. Children might ignore the first few words.

Another interesting question for cognitive interviewing.

There's a question on whether a line should be drawn between asking about worrying about a symptom or feeling the symptom (e.g. panic attack), but possibly they are getting at the same thing.

21. I am tired a lot

No major concerns.

22. I feel afraid that I will make a fool of myself in front of people

This gets to the question of whether social anxiety disorders are cross-culturally invariant.

The wording is not expressed in a way that kids would use.

Social anxiety is not culturally invariant. In cultures, such as Japan, that are oriented to ritual, this is particularly impressed on children, and this would have an impact on the questions geared at OCD from a Westernized perspective. There are huge variations in how cultures deploy supernatural threats or not, and this has an impact on how children respond to such questions.

23. I have to do some things in just the right way to stop bad things from happening

Fairly similar to #17.

#17 focuses more on the cognitive elements of how you are thinking.

24. I feel restless

Fairly straightforward, except potentially a literacy issue.

25. I worry that something bad will happen to me

No concerns were expressed except cultural context where such fear is justified.