

**SCREENING COGNITION IN YOUNG PEOPLE**

**THIS TOOLKIT WILL HELP YOU TO SCREEN FOR COGNITIVE DIFFICULTIES IN YOUNG PEOPLE PRESENTING WITH MENTAL ILL-HEALTH.**

**WHY SCREEN?**

Young people experiencing mental ill-health are at risk of cognitive impairment.

While not all young people experiencing mental ill-health will be affected, for those who are, cognitive difficulties can make everyday tasks challenging. These difficulties may persist even following symptom remission and can negatively impact functional recovery, increasing the risk of longer-term disability.<sup>1,2</sup>

It's therefore important for you to screen all young people presenting with mental ill-health for cognitive difficulties as part of your routine clinical assessment, including those without a diagnosis.

**PLEASE NOTE** that the cognitive screening toolkit has not been validated for use with Aboriginal and Torres Strait Islander young people. The tool does not take into account important cultural considerations. For concerns with cognitive difficulties in Aboriginal or Torres Strait Islander young people please seek secondary consultation.

**AIMS**

This toolkit will support you to apply cognitive screening to your broader clinical assessment frameworks - that is biopsychosocial and clinical care. You may choose to adopt this screening toolkit:

- as a guide to support screening for cognitive difficulties with any young person presenting with mental ill-health;
- as a model to build confidence in incorporating cognitive needs as a consistent aspect of care;
- if there is an indication of cognitive difficulties - either recent or longstanding - that requires further exploration;
- to assist in exploring and identifying cognitive strengths; and
- at a systems or organisational level to ensure routine cognitive screening in individual practice, across teams and across a service.

**PLEASE NOTE** This screening toolkit is designed to help raise possible areas of concern that should be investigated further using validated diagnostic tools and processes. It should not be used as a diagnostic tool.

**WHAT'S IN THIS TOOLKIT?**

This toolkit is divided into two parts.

**PART ONE CHECKLIST FOR RISK OF COGNITIVE IMPAIRMENT IN YOUNG PEOPLE**

This is a checklist that considers a young person's developmental history, and factors that are known to increase the risk for cognitive difficulties or impairment. This can prompt you to enquire about subjective cognition (Part two), or it can be used as a standalone tool. It can also be incorporated into a broader biopsychosocial assessment.

**PART TWO SUBJECTIVE COGNITIVE AND ACADEMIC ABILITIES**

This part helps you to explore subjective cognitive and academic abilities with a young person. While the information may be presented with example scripts to inform understanding, they are provided as a prompt and do not necessarily need to be asked verbatim. Clinical judgement and individual therapeutic style are still encouraged.



**PLEASE NOTE:** This toolkit and checklist (and other formal cognitive screening tools that you can access in the community) do not replace the need for a comprehensive diagnostic assessment. This toolkit can provide an initial indication as to whether a young person is at-risk of, or has some areas of cognitive difficulty that may require further formal screening or assessment. It may also determine how central cognitive well-being is to a young person's presentation, therapeutic plan and symptomatic and functional recovery.

Use your clinical judgement to appropriately adapt this toolkit to suit the needs of the young person, and ensure that interpretation of results takes into consideration multiple influences on performance. For example, recognising that a young person may perform poorly if they are asked questions in English (when they prefer to communicate in another language, use professional interpreters when working with people from culturally and linguistically diverse backgrounds) or if they have missed large periods of schooling (for example, if they have been in a refugee camp). The [How to support young people with speech, language and communication needs reference guide](#) introduces concepts for you to consider.

## PRACTICE PRINCIPLES OF COGNITIVE SCREENING

To make cognitive screening useful for young people, ensure that it:



- is a meaningful process in which young people understand the value of screening, including the relationship between their cognition, functioning and personal goals;
- is within an early intervention model (the earlier, the better);
- uses clear, easy to understand processes and language;
- is not conducted when a young person is acutely unwell;
- is not conducted when a young person is under the influence of substances;
- is conducted with an awareness of the impact of psychotropic medication – for example, benzodiazepines;
- incorporates breaks or is completed over multiple appointments if necessary;
- uses recovery and strengths-focused language;
- is a collaborative process that is personalised, individualised and engaging;
- addresses critical assumptions and beliefs by normalising and educating on the commonality of cognitive difficulty in relation to mental ill-health;
- takes into consideration the young person's environment and context (for example, acknowledging situational factors, English as a second language, cultural differences or perceived performance stress);
- considers various forms of information collection, including family, carers, education systems and others; and
- considers the role of objective and subjective information gathering.



## **PART ONE** **CHECKLIST FOR RISK OF COGNITIVE IMPAIRMENT IN YOUNG PEOPLE**

This checklist is designed to assist clinicians to gather information about factors that may impact cognition and whether further cognitive screening or comprehensive assessment (for example, neuropsychological assessment) may be indicated. **This checklist is not a diagnostic tool.**

This information could be gathered using external sources such as the young person's caregiver, school, health professionals and medical records.

Do not administer the checklist with the young person if they are acutely unwell or intoxicated.

<b>BIRTH AND EARLY DEVELOPMENT</b>			
<b>Premature birth</b> (prompt: <37 weeks gestation; please state weeks)	Yes	No	Not asked/ unknown
<b>Birth complications</b> (prompt: e.g. not breathing? stay in neonatal intensive care unit - reason, length?)	Yes	No	Not asked/ unknown
<b>History of prenatal substance exposure*</b>	Yes	No	Not asked/ unknown
<b>History of developmental delay</b> (prompt: any concerns identified around developmental milestones prior to, or once attending school? e.g. with fine/gross motor skills or speech?)	Yes	No	Not asked/ unknown
<b>LEARNING AND EDUCATION</b>			
<b>Level of schooling completed</b> (prompt: describe the reason for leaving school if prior to completing secondary/high school; ascertain whether regular or irregular attendance and any school refusal)	Yes	No	Not asked/ unknown
<b>School supports</b> (prompt: any repeated grades; modified learning plan or teacher's aide; special school attendance)	Yes	No	Not asked/ unknown
<b>History of learning, academic or intellectual difficulty</b> (prompt: suspected or formal diagnosis and details)	Yes	No	Not asked/ unknown
<b>History of other developmental condition such as ADHD or autism spectrum disorder</b> (prompt: suspected or formal diagnosis and details)	Yes	No	Not asked/ unknown
<b>Family member history of learning difficulties</b> (prompt: ask about siblings, parents, any history of difficulty with learning, reading or writing, ADHD, or other, and whether suspected or formally diagnosed)	Yes	No	Not asked/ unknown

<b>Psychometric testing</b> (prompt: describe the nature – cognitive/intellectual/neuropsychological, behaviour, personality, report outcomes, diagnoses, obtain copies if possible)	Yes	No	Not asked/ unknown
<b>Specialist assessment or formal intervention/remediation</b> (prompt: ascertain whether medical [e.g. paediatrician, psychiatrist, neurologist], psychologist, speech pathology, occupational therapy, or other, and describe findings and outcome)	Yes	No	Not asked/ unknown
<b>History of behavioural difficulties</b> (prompt: describe onset and nature [e.g. impulsive, verbally or physically aggressive], whether present at home, school, with friends)	Yes	No	Not asked/ unknown
<b>PSYCHOSIS, SUBSTANCE USE AND MEDICAL HISTORY</b>			
<b>History of psychotic symptoms</b> (prompt: describe history of positive psychotic symptoms, disorganised thought/behaviour; suspected negative symptoms)	Yes	No	Not asked/ unknown
<b>History of early or heavy substance use</b> (prompt: describe substances used and pattern of use)	Yes	No	Not asked/ unknown
<b>History of neurological condition or acquired brain impairment</b> (prompt: nature of condition [e.g. head injury, seizures or epilepsy, tumour, etc.], treatment/intervention required [e.g. hospitalisation, specialist review, medication, surgery], describe cognitive and behavioural symptoms)	Yes	No	Not asked/ unknown
<b>History of genetic or other medical condition</b> (prompt: suspected or diagnosed, presence of cognitive, behavioural, emotional symptoms)	Yes	No	Not asked/ unknown
<b>History of trauma*</b>	Yes	No	Not asked/ unknown

If possible and consent is provided by the young person, please obtain copies of reports that may be relevant to cognition (for example, past cognitive assessments, school reports, speech and language reports...)

\*These questions should only be asked if the rater has appropriate training and access to support and referral.

## NO

**IF ALL RESPONSES INDICATE 'NO' MONITOR RISKS AND CONTINUE TREATMENT PLAN.**

## YES

**IF RESPONSES INDICATE A 'YES' TO ONE OR MORE ITEMS THE FOLLOWING ACTIONS MAY BE CONSIDERED DEPENDING ON CLINICIAN CONFIDENCE OR AVAILABLE RESOURCES:**

- discuss at clinical team review;
- discuss with neuropsychologist for secondary consultation (if available);
- conduct objective cognitive screening; and
- conduct or refer for objective cognitive or neuropsychological assessment.



## **PART TWO** **SUBJECTIVE COGNITIVE AND ACADEMIC ABILITIES**

Part two of this toolkit is designed to help you have a conversation with young people about their subjective cognitive and academic functioning. This may assist you to better understand the young person's experiences of cognitive symptoms that are common, but not always explored.

### **HOW DO I HAVE THE CONVERSATION?**

Subjective cognitive and academic difficulties are commonly experienced in conjunction with mental ill-health. It is important to discuss this with young people – research shows they don't always make the link between their cognitive and mental health difficulties. Instead, young people may interpret their cognitive difficulties as being core to who they are, which can affect self-beliefs.

The questions in part two of this toolkit are designed to gauge a sense of the young person's experience of cognition over time and in relation to their mental health condition. The tool is designed to be used in a flexible way – not all questions need to be asked. Please tailor the questioning to the young person's abilities and needs. For further information on tailoring your language to meet the needs of young people, please refer to the [How to support young people with speech, language and communication needs \(SLCN\) in mental health settings reference guide.](#)

Part two is subdivided into two sections. The first section provides a guide to the general lines of questioning that can be helpful to gain an understanding of the young person's experience, pattern over time, and perceived impact of their cognitive functioning. The text in italics represents specific questions or phrases you could use. The text not italicised represents instructions or things for you to think about.

The second section provides questions to help you explore specific domains of cognitive and academic functioning, if desired.

Example scripts are provided as a prompt to help you think about how you might introduce or explain concepts using your own clinical judgement and therapeutic style. They do not need to be repeated verbatim.



## SECTION A GENERAL EXPLORATIVE QUESTIONS

- **INTRODUCTION:** *'I'd like to have a chat to you about your experience of your thinking skills, also called cognitive function. For example, cognitive functions include concentration or ability to focus, remembering things such as conversations or life events, learning new skills and making decisions.'*

- **SUBJECTIVE EXPERIENCE:** *'Do you have any worries about your thinking skills?'*

(If young person struggles to respond, try these prompts: *Some young people report difficulties with XXX - is this something you can relate to? Tell me about that? I have noticed/family member has noticed you sometimes struggle with XXX - what do you think about that?'*)

- **TIMELINE:** **The goal of this section is to determine whether subjective cognitive problems fluctuate with symptoms or whether there may be an underlying cognitive issue that is more pervasive (either premorbid or continuing issue despite remission).**

*'Has there been a change in your thinking skills? How long has this been happening for?'*

(Prompt: *If so, what type of change? When did you notice the change? Does anything make it better or worse? You mentioned XXX - tell me about when you first noticed that difficulty? Is XXX only present when you are unwell or has it been there for longer?'*)

- **IMPACT:** **If the young person describes subjective cognitive difficulties, explore the impact this has had on their mood, self-beliefs and functioning.**

(Prompt: *How does this make you feel about yourself? Is this upsetting or distressing for you? Some young people say that school or work is harder because of XXX - what is your experience? Do thinking difficulties impact other areas of your life, like your relationships?'*)

- **STRENGTHS:** *'So far we have focused a lot on areas of difficulty, tell me about some things you are good at? What thinking skills have you used to help you with that?'*

(If young person has trouble coming up with strengths, prompt with: *'I've noticed you are very good at XXX - what do you think about that? What have other people said you are good at? What comes naturally to you?'* If young person describes functional activity, talk about the thinking and behavioural skills required to participate successfully.)

## SECTION B COGNITIVE AND ACADEMIC DOMAINS THAT COULD BE EXPLORED IN FURTHER DETAIL

Cognition is a broad term that encompasses a range of specific thinking skills. Presentations can vary significantly, as such, it is important to explore a broad range of cognitive and academic skills during screening and assessment. It may also be important to acknowledge that cognitive difficulties, while often evident in educational settings, may present across a range of activities of daily living.

### 'ARE YOU ABLE TO...' (COGNITIVE SKILLS)

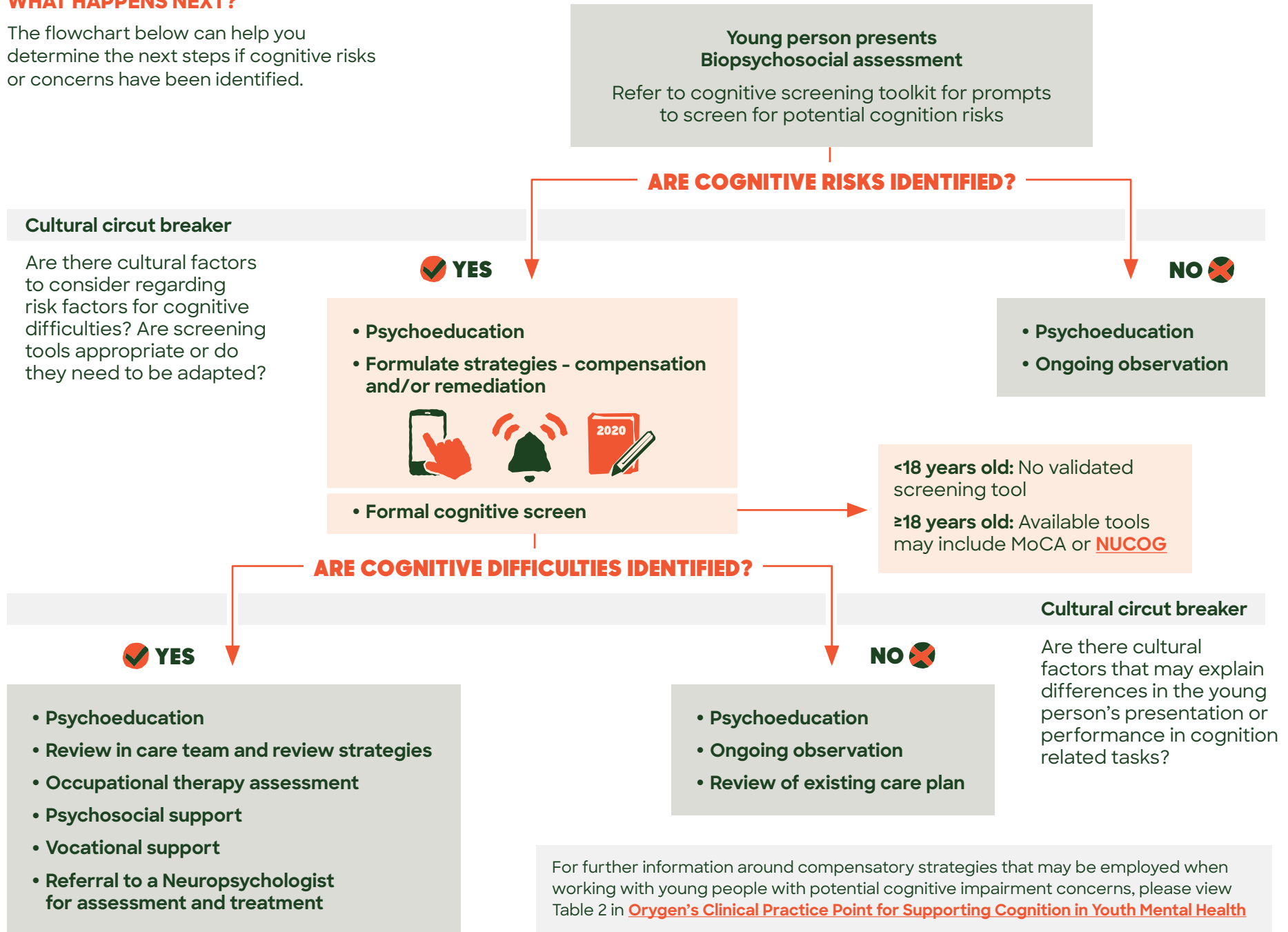
- Focus without distraction?
- Concentrate over time?
- Think quickly?
- Remember things people say or things you hear (for example, TV show/movie, conversations, teacher instructions, etc.)?
- Understand what people say?
- Clearly communicate your thoughts (for example, finding the right word or expressing yourself)?
- Plan future activities (for example, going to the movies, study schedule)?
- Prioritise things that are important or need to be done (for example, assignments, appointments, chores)?
- Solve problems?
- Make decisions?
- Think of alternative solutions?
- Think before you act (impulse control)?

### 'ARE YOU...' (ACADEMIC SKILLS)

- A confident reader? Has this changed recently?
- A confident writer? Has this changed recently?
- Confident with numbers? Has this changed recently?

## WHAT HAPPENS NEXT?

The flowchart below can help you determine the next steps if cognitive risks or concerns have been identified.



## CONCLUSION

Cognitive difficulties can have considerable impact on young people. They can influence functional recovery, as well as being linked to other factors that may influence symptomatic recovery such as insight, medication adherence, substance use and participation in therapy.<sup>3</sup>

Early identification of cognitive impairment will guide appropriate treatment and support functional recovery. It is therefore a critical part of clinical care.



## DEVELOPED BY

Dr Kelly Allott, Associate Professor and Clinical Neuropsychologist

Dr Shayden Bryce, Research Fellow and Clinical Neuropsychologist

## CONTRIBUTORS

Jody Kamminga, Krista Monkhouse, Melinda Benson (Drug and Alcohol Clinical Services Hunter New England Local Health District)

Nikki Ridley (South-East Sydney Local Health District)

Caroline Fisher (Royal Melbourne Hospital)

## LINKS TO OTHER RESOURCES

Further information on cognition

[Fact sheet - Introduction to cognition and mental health](#)

[Fact sheet - Cognition and psychosis](#)

[Clinical practice point - Supporting Cognition in Youth Mental Health](#)

[Mythbuster - Cognition and Mental Health: Sorting Fact from Fiction](#)

[LMS package - Practical strategies for coping with cognitive difficulties](#)

[Video - NUCOG in practice](#)

[Orygen content - Neurodevelopmental disorders](#)

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## REFERENCES

1. Santesteban-Echarri O, Paino M, Rice S, González-Blanch C, McGorry P, Gleeson J, et al. Predictors of functional recovery in first-episode psychosis: A systematic review and meta-analysis of longitudinal studies. *Clinical Psychology Review*. 2017;58:59-75.
2. Lee R, Hermens D, Scott J, O'Dea B, Glozier N, Scott E, et al. A transdiagnostic study of education, employment, and training outcomes in young people with mental illness. *Psychological Medicine*. 2017;47(12):2061-2070.
3. Early Psychosis Prevention and Intervention Centre. In: Australian clinical guidelines for early psychosis (2nd edn). 2010. Melbourne: Orygen Youth Health Research Centre.

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[ORYGEN.ORG.AU](http://ORYGEN.ORG.AU)

### ORYGEN LTD

35 POPLAR ROAD  
PARKVILLE VIC 3052  
AUSTRALIA

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