FACT SHEET

FOR MENTAL HEALTH CLINICIANS AND COMMUNITY PROFESSIONALS

INTRODUCTION TO COGNITION AND MENTAL HEALTH

Understanding and addressing cognition is an important aspect of clinical practice in youth mental health. This fact sheet will explain the relationship between cognition and mental health, how to identify cognitive difficulties in young people and why it is important.

WHAT IS COGNITION?

Cognition refers to our thinking skills, from judgement and reasoning to memory. It allows us to function and make sense of the world around us.[1] It helps us to plan and execute everything we do, and to communicate with other people.[1,2]

Cognition encompasses:

- neurocognition – mental operations including attention, processing speed, learning, memory and executive functions (for example, problem-solving, planning and decision-making);[3]
- social cognition – the perception, processing and interpretation of social information, including theory of mind and attributional style; and
- metacognition – the awareness or knowledge of one's thinking.

WHAT DOES COGNITION LOOK LIKE?

Cognitive skills are used in every aspect of our daily lives – at school, at work, when we're alone and when we're with others. In fact, you're using cognitive skills reading this document. Cognitive skills are complex, often occur simultaneously, and can change over time. It is also perfectly normal for these skills to fluctuate depending on our environment, for example how much sleep we've had, our diet (including alcohol), exercise, stressors and time of day can all affect our cognition.

COGNITION, INTELLIGENCE AND ACADEMIC SKILLS

It can be tempting to confuse cognition with intelligence or academic skills, but they are not the same thing. Intelligence refers to our overall ability to learn from experience and adapt to our environment,[4] whereas academic skills refer to knowledge about different subjects, such as literature, math and history.[5] While both of these require cognitive skills, they are separate concepts.

COGNITION AND DEVELOPMENT

The brain, including our cognitive skills, undergoes significant development from childhood to early adulthood. Therefore, the environmental and biological factors that affect a young person's social and emotional development will also affect their development of cognitive skills.

WHAT ARE COGNITIVE DIFFICULTIES?

Cognitive difficulties in young people are inferred from behaviour (see Table 1). They are usually detected by tests that compare the young person's cognitive performance to the average performance of their peers across domains. For example, an individual might perform within the average range for their age on a processing speed task but perform well below average on a verbal memory task, which reflects difficulties with verbal memory.

WHAT AREAS CAN COGNITIVE DIFFICULTIES AFFECT?

People with cognitive difficulties sometimes have a reduced ability to manage and adapt to the demands of day to day life, which can significantly disrupt:[6]

VOCATIONAL FUNCTIONING

SCHOOL FUNCTIONING

SOCIAL FUNCTIONING

INDEPENDENT FUNCTIONING

TREATMENT ENGAGEMENT AND RECOVERY

PSYCHOLOGICAL WELLBEING

CO-OCCURRING COGNITIVE DIFFICULTIES AND MENTAL ILL-HEALTH

Cognitive difficulties are experienced in a range of health conditions, including mental health conditions. However, it is important to remember that cognitive difficulties are not experienced by everyone with mental ill-health, and that issues with cognition do not necessarily imply a permanent impairment or mental ill-health.[3]

> 'Our cognition can be affected by mental ill-health, and our mental health can be affected by problems with our cognition. No matter which comes first, cognitive difficulties can affect a young person's engagement with mental health treatment and have a significant impact on their functional recovery.'

Cognitive difficulties were previously considered a secondary symptom of mental ill-health, but we now know that it can also be a primary symptom[5,7,8] and can be present well before a mental health condition emerges.

Difficulties with cognition in the context of mental ill-health can be:

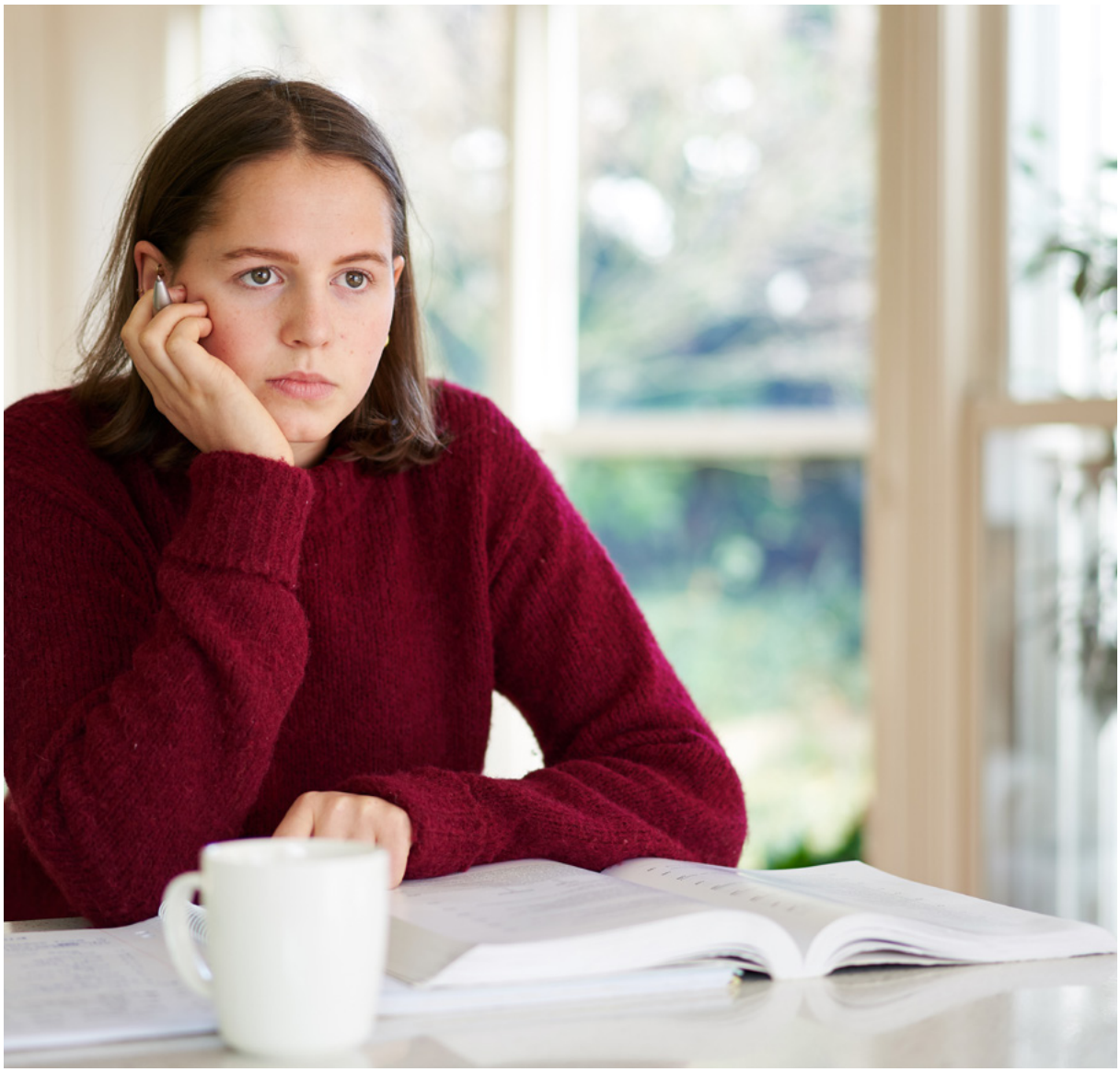
- transient or persistent[3] – the difficulties might occur only briefly (transient), or they might continue even after mental ill-health is in remission (persistent);
- widespread or domain-specific – the young person might experience cognitive difficulties across many areas (widespread), or the difficulties may only affect one area (domain-specific), such as memory;
- persistent or state-related – the difficulties might be present all the time (persistent), or they might only occur when the young person is stressed or acutely unwell (state-related); and
- mild through to severe – a young person may not have developed skills on par with their peers, but have some skill level and the capacity to improve their skills, or they might have difficulty with routine tasks like cooking, making decisions, concentrating or learning.

Cognition and mental health can interact and exacerbate each other. For example, a decline in cognitive functioning (and thus in work or school performance) can affect mood and result in critical self-evaluations.[7] In turn, this can impact mental health. Similarly, experiencing mental ill-health (such as depression) can cause difficulties with things such as learning and memory.

WHY IS IDENTIFYING COGNITIVE DIFFICULTIES IMPORTANT FOR CLINICIANS?

When cognitive difficulties and mental ill-health co-occur, it can make treatment difficult if both factors are not identified. This is because:

1. Cognitive difficulties impact on mental health and vice versa.
2. Mental ill-health and the side-effects of some common psychotropic medications can mask the presence of a cognitive deficit and vice versa. For example, someone may present to a clinician for depression, but the underlying cause may be cognitive difficulties (resulting in poor work or study performance, critical self-evaluations and thus, lowered mood). If depression is treated at face value and this underlying cause is not identified, both issues will likely persevere.
3. Cognitive difficulties are potentially a risk marker of psychosis. Evidence suggests that cognitive difficulties are present early in at-risk people who can later develop a full-threshold psychotic disorder.[3] Identifying cognitive difficulties at this stage may provide valuable opportunities for early intervention.
4. Cognitive difficulties can interfere with treatment. For example, they can impact engagement, focus, understanding, and remembering session content. This can impact the young person's ability to benefit from psychological treatment.[6] Indeed, it appears that executive functions and social cognition are critical for engaging in psychosocial treatments such as cognitive behavioural therapy.[2]
5. Cognitive difficulties disrupt vocational, social and independent functioning, can affect recovery in these areas, and are a significant risk factor for a range of poor functional outcomes.[7] Early identification of cognitive impairment ensures the young person gets early access to the most appropriate treatment, minimising the impact on functioning.



HOW TO IDENTIFY COGNITIVE DIFFICULTIES IN YOUNG PEOPLE

The table below outlines some of the cognitive changes young people with mental ill-health can experience.

TABLE 1: IDENTIFYING COGNITIVE DIFFICULTIES

	EXAMPLES OF AREAS THAT CAN BE AFFECTED BY COGNITIVE DIFFICULTIES	WHAT THE YOUNG PERSON MIGHT TELL YOU	WHAT FAMILY MEMBERS OR SIGNIFICANT OTHERS MIGHT TELL YOU	WHAT YOU MIGHT OBSERVE
Attention	Keeping track of conversations, classwork or reading. Concentrating, ignoring distractions. Doing more than one thing at a time. Staying on task.	'I have stopped reading or watching TV because I can't follow or remember the story.' 'I zone out in class.' 'It's all a bit of a blur.'	'Her thinking seems slower than it used to be.' 'He takes longer to do things.' 'He gets really distracted and can't seem to focus on anything.'	The young person doesn't seem to take in what is discussed in therapy. You find you have to repeat yourself frequently.
Memory	Remembering conversations or details of life events. Learning new skills. Remembering information presented at school or work.	'My memory is like a sieve.' 'I lose my things all the time.' They cannot recall what was discussed in therapy.	'She struggles to remember the things I ask or conversations we've had.' 'I ask them to do a few chores and they do one, but forget the rest.'	They are frequently late or miss appointments. They forget to take their medication. They cannot recall what was discussed in therapy.
Problem-solving, planning, organisation	Seeing the steps involved to achieve a task. Seeing activities through to the end. Sequencing and coordinating tasks (e.g. cooking, getting ready for school/ work). Filling in forms.	'I can't hold down a job because I get too overwhelmed with too many tasks.'	'I have to prompt him and remind him what he has on for the day.'	They are frequently late or miss appointments. They get stuck on one train of thought and struggle to think of alternative solutions during therapy.
Initiation and motivation	Getting started. Planning and initiating daily living tasks, such as getting dressed, showering, getting to school or work. Maintaining motivation and drive. Completing tasks. Making decisions.	'I just can't seem to get started on things.'	Their employer or school reports a decline in their performance. They are skipping classes. They start chores, projects or tasks but do not complete them.	They have difficulty completing therapeutic tasks in between appointments.

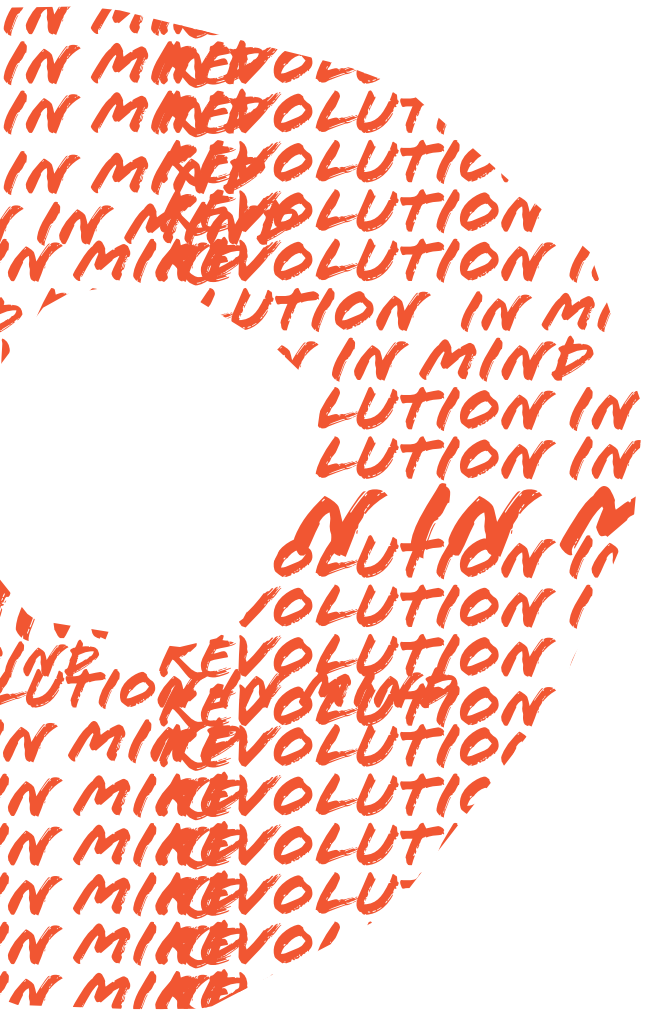
Other signs to look out for in their premorbid history:

- results of previous cognitive/ neuropsychological assessments;
- academic difficulties;
- developmental delays;
- learning difficulties;
- multiple job losses; and
- results of a current formal cognitive or neuropsychological assessment.

CONCLUSION

It is important to ask questions about cognitive difficulties of all young people presenting with mental ill-health as part of your clinical assessment, including those without a diagnosis.

For information on how you can do this and how you can adapt your treatment plan appropriately, see Orygen's Clinical practice point: Supporting cognition in youth mental health.



FURTHER INFORMATION

Clinical practice point: Supporting cognition in youth mental health

Fact sheet: Cognition and psychosis

Mythbuster: Cognition and mental health: sorting fact from fiction

Toolkit for clinicians: Screening cognition in young people

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