

Alcohol and Drug Cognitive Enhancement Program

FACILITATOR MANUAL



Drug and Alcohol Network

Agency for Clinical Innovation

1 Reserve Road St Leonards NSW 2065

Locked Bag 2030, St Leonards NSW 1590

T +61 2 9464 4666

E aci-info@health.nsw.gov.au | aci.health.nsw.gov.au

Produced by: ACI Drug and Alcohol Network, Advanced Neuropsychological Treatment Services and We Help Ourselves.

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Introduction

Approximately 50% of clients accessing alcohol and other drugs (AOD) services have a degree of cognitive impairment (particularly in executive functioning).¹

Individuals that use substances can be exposed to many of the risk factors associated with cognitive impairment. These risk factors include the substance use itself, exposure to overdose, risk of mental health problems and the increased likelihood of risk taking behaviour resulting in falls, accidents, assaults and head injury.²⁻⁴ There is also a higher incidence of early childhood learning disorders in this group.

Interventions that address cognitive impairment aim to improve an individual's ability to plan, organise, set goals, solve problems, make effective decisions and regulate emotions. These capacities are required for the individual to identify the need for and to facilitate positive behaviour change, which is a primary focus of AOD treatment.

Cognitive remediation is an evidence-based intervention that has demonstrated successful functional outcomes for those with acquired brain injury and severe mental illness.⁵⁻⁶

The Alcohol and drug Cognitive Enhancement (ACE) program is a ground-breaking frontline cognitive remediation intervention designed specifically to respond to cognitive impairment and improve outcomes for people seeking treatment for AOD use.

In 2015, a cognitive remediation intervention was successfully implemented with clients in a residential AOD treatment setting (WHOS, Rozelle NSW). Results demonstrated significant improvement in executive functioning, retention in treatment and goal attainment. This intervention included both 'top down' strategy training and 'bottom up' computerised training.

A randomised control trial, completed in 2017, tested the computerised components of the program against the strategy training, and found that the strategy training alone was largely accountable for the improvements. The program was refined and the program length reduced from 24 hours to 12 hours, by removing the computer-based component.

In 2018-19, a stepped wedge cluster randomised control trial was undertaken in a further ten NSW specialist non-government organisation AOD residential treatment services. This proof of concept study aimed to replicate and validate the results of the 2015 pilot using the 12 hour intervention, and to further develop the program and accompanying suite of resources. Results of this randomised control trial indicated the majority of the participants had clinically significant impairments in executive functioning at baseline and there was a large reduction in cognitive impairment in those that completed the program.

The intervention

The *ACE Screening Tool* and *Brief Executive Function Assessment Tool (BEAT)* have been designed to help clinicians identify clients with cognitive impairment. Even if these tools are not administered or the client does not have impaired cognitive functioning, the ACE program has been shown to be beneficial to clients.

The cognitive remediation program consists of twelve, one hour, individual modules. These modules are designed to be completed in a sequential fashion (starting from week one), however services are encouraged to modify the delivery of the modules if this better suits the facility.

Introduction (continued)

Strategies

The activities and techniques delivered in the ACE program are based on strategies evidenced in the literature for acquired and non-acquired brain impairment.

Self-alert training

O'Connell RG, Bellgrove MA, Dockree PM, et al. Self-alert training: volitional modulation of autonomic arousal improves sustained attention. *Neuropsychologia*. 2008;46:1379-90. doi: 10.1016/j.neuropsychologia.2007.12.018

Goal management training

Levine B, Schweizer TA, O'Connor C, et al. Rehabilitation of executive functioning in patients with frontal lobe brain damage with goal management training. *Front. Hum. Neurosci.* 2011;5. doi: 10.3389/fnhum.2011.00009.

Time pressure management

Fasotti L, Kovacs F, Eling PATM, Brouwer WH. Time pressure management as a compensatory strategy training after closed head injury. *Neuropsychol. Rehabil.* 2000;10:47-65. [http://refhub.elsevier.com/S0376-8716\(17\)30265-X/sbref0095](http://refhub.elsevier.com/S0376-8716(17)30265-X/sbref0095)

Multifaceted treatment of executive dysfunction

Spikman JM, Boelen, DHE, Lamberts KF, et al. Effects of a multifaceted treatment program for executive dysfunction after acquired brain injury on indications of executive functioning in daily life. *J. Int. Neuropsychol. Soc.* 2010;6:118-29. doi: 10.1017/S1355617709991020.

Time estimation and production

Barkley RA, Edwards G, Laneri M, Fletcher K, Metevia L. Executive functioning, temporal discounting, and sense of time in adolescents with attention deficit hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD). *J Abnorm Child Psychol* (2001) 29: 541. doi: 10.1023/A:1012233310098

Mental contrasting and implementation intentions

Duckworth AL, Grant H, Loew B, et al. Self-regulation strategies improve self-discipline in adolescents: benefits of mental contrasting and implementation intentions. *Educ. Psychol. UK.* 2011;31:17-26. doi: 10.1080/01443410.2010.506003.

Problem-orientation training with stop and think strategy

Rath JF, Simon D, Langenbahn DM, et al. Group treatment of problem-solving deficits in outpatients with traumatic brain injury: A randomised outcome study. *Neuropsychological Rehabilitation*, 13(4), 461–488. doi: 10.1080/09602010343000039

Room set-up and equipment

The room set-up should support and enable group interactions.

- A circular seating arrangement is more conducive to sharing ideas openly and equally. It allows all participants an unobstructed view of each other, the facilitator, the visual monitor and any other teaching aids.
- Ensure participants have a hard surface (desk, clipboard, etc.) upon which to write notes and participate in the program activities.
- Select a room or dedicated space that can be used consistently, and that has ample space for the required number of seats and desks.
- Ensure a comfortable room temperature to optimise learning and focus.
- Minimise distractions as much as possible. Consider alternative arrangements for activities that may occur outside and near to the room, and establish a group agreement around expected behaviour during the sessions.
- Ensure that you have a working and compatible computer or laptop, facilities to present PowerPoint slides (e.g. projector, television, HDMI or other cables), additional resources, as per the session plan, and access to a whiteboard, black board, or butchers paper.
- Write key messages on a board and display at the front of the room before commencing each session.

Planning and preparation

Planning and practicing are equally important. By planning your session you become aware of what you need to do to deliver the session. By preparing and practicing, you build readiness, confidence and competence to deliver the material.

This program is designed to be delivered with a lead facilitator and co-facilitator. Allowing ample time for planning and preparation together and individually is essential when leading or supporting facilitation of this program.

Things to consider

Planning		Preparing and practicing	
Participant			
	Consider your participant profile, their level of experience and knowledge base, their expectations, etc.		Anticipate any questions that the participants may ask and possible responses.
	Anticipate any challenges, opportunities, and potential solutions before they arise.		
Communication			
	Executives and managers understand, support and promote the program, and prioritise the inclusion of the program in service activities.		Promote and discuss the program regularly and consistently in appropriate forums.
	Staff of the service understand the aims of the program, are familiar with the program timetable and lead facilitators, and promote the program to clients. They support clients participating in the program as required.		
	Participants understand the aims of the program and are familiar with program timetables and where to seek further information or support.		
Facilitators			
	Identify facilitators that have skills in group facilitation, building a therapeutic alliance with participants, and delivering new material.		Read this manual and test your understanding of the key messages.
	Ensure consistency of facilitators for the duration of the program as far as possible. Consider backfill, annual leave and other commitments or contingency arrangements.		Review the PowerPoint slides and slide notes.
	Consider using a clicker for ease of presenting. The person presenting should control the clicker.		Decide examples that you will use for each session, who will facilitate each section and how you will support each other.
			Practice the delivery of the module and activities with your co-facilitator.
			Practice clicking through the slides before delivery to become familiar with the animations and activities.

Planning and preparation (continued)

Planning		Preparing and practicing	
Time			
	Schedule the program in the service timetable.		Allow adequate preparation time before each module. Schedule time to practice with your co-facilitator and individually in the lead up to, the day prior and the morning of the session.
	Ensure the ACE facilitators are rostered to deliver the program.		If you need more information on a topic you may choose to do extra research if you feel this would be useful.
Technology, Equipment and Resources			
	Source the technology, equipment and resources required for each module as detailed in this manual. At a minimum this will include a computer or laptop and equipment to show PowerPoint slides (e.g. projector, TV with HDMI, clicker, cables).		Check that you have all of the technology, equipment and resources that you need to deliver the session.
	Ensure access to a whiteboard or butchers paper and markers.		Test the technology and make sure everything works as expected.
			If activities require additional resources such as a podcast or radio broadcast, ensure these are cued and ready to be played.
			Ensure the laptop is charged.
			PowerPoint slides are downloaded to the laptop or on a USB.
			Ensure that you have the 'Presenter view' function enabled on the PowerPoint application, or that you have your notes printed and on-hand.
The space			
	Select a dedicated space that can be used consistently.		
	Ensure ample seating is available and participants have a writing surface.		

Post session reflection

After each session, spend some time with your co-facilitator to reflect on what went well, and any issues or challenges that can be addressed or improved upon.

Consider using a Group Session Rating Scale or facilitating a discussion with participants on how the delivery of the program could better meet their needs and expectations.⁷

Group facilitation

Facilitation is a process by which people are assisted to learn, explore and change their behaviour. The main task of the facilitator is to present information in a way that is engaging, accessible and easy to understand. This also includes having the skills and structures in place to respond to the needs of the group, and identify challenges and opportunities.

Group agreement

It is important to establish a group agreement at the beginning of the program and revisit these at the beginning of every session, or as needed during the session. The ACE program is designed to be interactive, and it is important that everyone feels that they can be involved in the discussions, games and activities equally.

Facilitate a discussion to establish a group agreement that supports learning together.

These are examples that could be included in the agreement.

- Be respectful and remain courteous.
- Advise a staff member before leaving the group.
- Be punctual.
- One voice at a time.
- What is said in the group remains in the room.

Engagement

Building a therapeutic alliance with the participants is of utmost importance. Establishing and maintaining trust and connection with participants is critical to them remaining engaged and feeling heard and valued. When participants feel comfortable and heard, they are more likely to remain engaged in the program and improved retention is closely linked with improved outcomes.

Examples of engagement strategies

- Ask the group to identify examples, explore concepts and share with the group what they know about the topic.
- Make it fun.
- Bring energy into the room.
- Leave adequate time for discussion.
- Facilitate and promote reflection.

It is important to ensure participants are encouraged to actively participate. You may wish to consider the following.

- Remind participants that no-one has all the answers and that, as a facilitator, you are just as keen as the participants to learn.
- State that the expertise is spread throughout the room (participants are at least experts in their own lives).
- Respond to all contributions as being valuable and find a way to positively reinforce responses.
 - There is no such thing as a silly question. Try reframing it as an interesting or genius question.
 - If a response is not quite the one you were seeking to illicit from the group, try responding with:
 - “that’s true, and what is another ...?”
 - “that’s a very good example of ... AND what is a ...?” (return to original question).
- Ask open ended questions and encourage discussion.
- Encourage all voices to be heard and regulate the tendency for a small number of participants to make the majority of contributions.

Group facilitation (continued)

Preparation for managing challenges

The examples and activities described throughout the ACE program are designed as a practical way to build understanding of the strategies and key concepts. There is potential for participants to experience difficulty with the content which can lead to feelings of frustration or overwhelm. Allow time for the participants to reflect upon the purpose of the exercises and the key concepts.

Another strategy to manage this is to ask the participants to use what they know about the different parts of the brain and their experience to describe why they are feeling overwhelmed, what strategies they could use to overcome or manage these feelings/ behaviours right now, and what they could do differently next time.

Example

- Planning a party or being invited to a party are real-life situations that will come up from time to time. By having a plan for that situation, participants will be better prepared to respond and make better decisions.
 - Ask: What part of the brain are you using when you are feeling challenged or uncomfortable in this situation?
 - Answer: You are responding from the limbic system (past experiences). You are likely to be invited to a party or event where alcohol will be consumed (by others) and you will need to be prepared. For example, if someone offers you a drink, you could respond by asking for a soft drink instead.

Powerpoint modules

The PowerPoint slides are designed to make this easy for you. Before you run the group, click through the slides alongside this session plan and review PowerPoint notes to ensure that you understand the context of the session and the information intended to be included with each slide. Clicking through it by yourself first will help you to know what to expect when you run the group. In addition to the things to say, the PowerPoint slides have instructions or notes in square brackets [].

Icons

Icons are used on the slides to indicate activities.



Brainstorm or group discussion



Open participant workbook

Brainwork tasks

There are simple homework tasks for participants to complete for each module to create an opportunity to practice what they have learnt between sessions, enhance learning and to build skills.

To avoid participants experiencing negative feelings towards homework and its association with their schooling experiences, homework is referred to as 'brainwork' in the ACE program and accompanying resources.

The participants will be asked to predict future behaviour by circling how closely they think they will come to completing the task. At the next session, the participants will be asked to circle how much of the task they actually completed.

Brainwork will not be marked, though you may briefly check the participant's notebooks or workbooks (at your discretion) to ascertain the amount of brainwork completed. Brainwork is an exercise designed to help build participant insight into their ability to predict whether they achieve a goal they set out to achieve.

During the program, there will be opportunities for facilitators to help participants to reflect on why they may not have completed their brainwork, any barriers perceived to completing the task, and reflect on whether this relates to any other areas of their lives. Participants should expect to see some improvement in their ability to predict their behaviour and ability to complete a task.

Brainwork tasks (continued)

The scoring

- At the end of each session, brainwork instructions are provided and the participants will be asked to predict future behaviour by circling how close they think they will come to completing the task. Their prediction is recorded on the '**Brainwork prediction form**' located in the participant workbook.
- Where it says **predicted outcome**, circle 3, 2, 1, or 0 depending on how much of the brainwork task participants think they will do. There is a description on the **Brainwork prediction form** for each module of what each of these scores means in practical terms.

Description	Actual outcome	Predicted outcome	Actual minus Predicted
Got the notebook	3	3	
Took an action towards the goal of getting the notebook but did not get it	2	2	
Thought about getting the notebook	1	1	
Did nothing towards the goal of getting the notebook	0	0	

- At the next session, the participants will be asked to circle how much of the task they actually completed. Again, where it says **actual outcome**, participants will circle 3, 2, 1 or 0 depending on how much of the brainwork task they actually did.

Description	Actual outcome	Predicted outcome	Actual minus Predicted
Got the notebook	3	3	
Took an action towards the goal of getting the notebook but did not get it	2	2	
Thought about getting the notebook	1	1	
Did nothing towards the goal of getting the notebook	0	0	

- Then, simply subtract the **predicted outcome** score from the **actual outcome** score to get a final score between -3 and +3.

Description	Actual outcome	Predicted outcome	Actual minus Predicted
Got the notebook	3	3	
Took an action towards the goal of getting the notebook but did not get it	2	2	
Thought about getting the notebook	1	1	-2
Did nothing towards the goal of getting the notebook	0	0	

- If the final score is:
 - negative (-3, -2, -1), participants overestimated their ability to do the task
 - positive (+3, +2, +1), participants underestimated their ability to do the task.

The closer the final score is to zero, the better participants are at predicting future events.

- Participants will realise in future sessions why their ability to predict their own behaviour is an important skill.
- Always complete the brainwork prediction form at the end of every module before participants leave the room.

Brainwork tasks (continued)

Strategies for responding to participants

Strategies for responding to participants who continue to **under or over estimate** their ability to complete brainwork tasks.

- Discuss any barriers.
- Discuss strategies to overcome these barriers.
- Reflect on whether they overestimate or underestimate their ability to complete tasks in other areas of their lives (e.g. attending appointments, paying bills, arriving on time to meet friends or to work, cleaning their living space). Are the same barriers present?
- Ask: how might underestimating affect other people (e.g. if you always show up late to meet friends, if you always overpromise but under deliver at work).
- Ask: how might underestimating your abilities affect you personally (e.g. do you feel confident to start and finish a task).

Strategies for responding to participants that repeatedly **do not attempt**, or estimate that they will not attempt, brainwork tasks.

- Link to recovery. If you do not have a plan, and do not use strategies learned in treatment, you are less likely to be successful in your recovery.
- The more effort you put in, the more you will get out.
- By failing to plan, you plan to fail.
- You are responsible for your behaviour.

Module 1: Introduction and brain basics

Focus

The three levels of the human brain, the key functions of each, and how they work together to produce behaviour.

Key messages

- Understanding how the brain works helps us understand our behaviour and how to change it.
- Learning exercises and strategies helps strengthen brain functions that can be weakened with substance use.

There are three levels of the brain.

Reptilian brain

The most primitive level of the brain. It processes basic instincts. Its functions help us stay alive.

Limbic system

The next level of brain evolution. It processes emotions. Its functions help us interact and bond.

Neocortex

The most recent level of brain evolution. It processes thoughts. Its functions allow abstract thought, helps us plan and make decisions, and processes and manages information from other areas of the brain.

Preparation

The brainwork task requires you to pre-determine a place and window of time for participants to collect their notebooks (e.g. Saturday from 1-4pm). You will need to make sure that the notebooks are dropped off at the designated place and are ready for collection.

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker

Brainwork tasks

- Get a notebook

Session time

60 mins.

Module 1: Introduction and brain basics (continued)

Session plan

1. Introduce the program (slides 2-4, 3 mins)

- This 12 session program is designed to give participants the tools and strategies needed to improve brain function.
- ‘Executive’ brain functions are like the management team of your brain.
- They process and manage information and help us plan and make decisions.
- Drugs and alcohol often suppress or weaken these functions.

2. Group agreement (slide 5, 3 mins)

- The program is designed to be interactive and it is important that everyone feels that they can be involved in the discussions, games and activities.
- Facilitate discussion to establish group (ground) rules that supports learning together.

3. Introduce the ‘reptilian brain’ and its functions (slides 6-8, 5 mins)

- The human brain has evolved by building new, more complex layers on top of existing ones. The most primitive part of our brain is the ‘reptilian brain’.

The reptilian brain

- Processes basic instincts and very primitive emotions, and also directs movement.
- Allows *pre-programmed* behaviour in response to certain stimuli (triggers) e.g. objects or smells. The triggers can be internal (like hunger) or external (like a predator).
- Moves animal closer to what is ‘good’ for it (*food, water, sunlight, a mate*) and away from what is ‘bad’ for it (*threat of being squashed, attacked or eaten*).
- Maintains basic survival needs, allows awareness of the present moment only.
- Is responsible for the four F’s: feeding, fighting, fleeing, and fornicating (mating).

4. Introduce the limbic system and its functions (slides 9-12, 6 mins)

- Unlike reptiles, mammals are ‘warm-blooded’ and have body hair; give birth to live young (reptiles lay eggs); feed and care for their young, and tend to live in groups.
- In short, they are more social animals.
- The limbic system evolved to process more complex emotions, which allows bonding, e.g. infant-mother, and helps navigate group and social behaviour.
- Evolved from and is connected to the reptilian brain.
- Still moves us toward what is good and away from what is bad for us, but now also moves us in social terms, e.g. towards or away from other people, guided by emotions.

Reflection task – group discussion (slide 12, 3 min)

- Ask participants to think about ‘when have emotions moved you towards something good or away from something bad?’ and allow for group discussion.

Module 1: Introduction and brain basics (continued)

5. Introduce the neocortex and its functions (slides 13-14, 12 mins)

- Neo = new (from Latin), cortex = covering (from Greek).
- Humans have the largest neocortex of all animals.
- The neocortex consists of four lobes, each with specific functions.

Occipital lobe

- allows you to see and process visual information (i.e. what you see).

Parietal lobe

- processes sensory information (what you feel via your skin, e.g. surface textures, temperature, moisture).
- brings this information together to work out what is happening in the environment around you.

Temporal lobe

- process hearing, memory and meaning.

Frontal lobe

- biggest lobe, making up one third of the neocortex.
- brings together all information from the rest of the brain to work out what action to take next.
- regulates emotions and behaviour, and is where 'thinking' happens.

Summing up

- The back of the brain processes 'what is happening now' (what you hear, see, feel) and 'what has happened before' (memory and meaning).
- The front of the brain processes 'what should I do next'.

6. Tying it all together and self-reflection (slides 15-19, 12 mins)

- Acting on environmental triggers (reptilian brain) or emotions (limbic system) may protect you in the here and now, but may prevent you from achieving a future goal.
- The frontal lobe helps manage responses to the environment or emotions to move you towards your goals.
- This program aims to strengthen frontal lobe functions to help override unhelpful responses and move towards what you want out of life.

Reflection task – group discussion (slide 18)

- Ask participants to think about 'when have emotions moved you towards something bad or away from something good?' and allow for group discussion. (Page 2 of the participant workbook)
- Summarise 'the three brains'.

7. Brainwork (slides 20-21, 10 mins)

- Get a notebook.
- Tell participants when to pick up notebooks and in what window of time they will be available.

Brainwork prediction form

- Ask participants to turn to page 37 of the participant workbook.
- Explain **Homework prediction form** (detailed instructions are on slide 21).
- Ask participants to predict future behaviour by circling how close they think they will come to completing the brainwork task.
- Next time, participants will be asked to circle how they actually did with completing the brainwork task.

Module 2: Learning and memory

Focus

How we learn, and how our brain works to remember the things we learn.

Key messages

- Learning can happen consciously or subconsciously, depending on how information is processed.
- Automatic memory works through subconscious processing.
- Episodic memory works through conscious processing.
- Prospective memory refers to how well we can remember to do things in the future.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Spare notebooks for participants that did not collect it for their brainwork task
- Red coloured items (such as a red marker or wear red items of clothing)

Brainwork tasks

- Practice expansion strategies. Apply strategies to the information in today's session (page 3 of the participant workbook)

Session time

60 mins.

Module 2: Learning and memory (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-4, 10 mins)

- Discuss questions and answers about the three areas of the brain (slide 2).
- Review on brainwork. Ask participants to circle their outcome, and subtract their predicted number.
 - Who overestimated how likely they were to make progress on this task? (A negative number)
Who underestimated it? (A positive number).
 - Ask participants to reflect on their ability to predict their own behaviour.

2. Group agreement (slide 5, 1 mins)

- Facilitate discussion to revisit the group agreement (ground rules) that supports learning together.

3. Session overview (slide 6, 1 min)

- Emphasise that this session will use practical examples using games to apply learnings. These games are designed to be fun, though some people in the group may find them more challenging than others.

4. Counting games (slides 7-53, 10 mins)

- Ask participants to turn to the **Counting game worksheet** (page 4 of the participant workbook).
- For counting games, it is important to explain clearly what is to be counted, these sets of 20 slides are set to change at a rate of one slide per second, so the group only sees each slide very quickly.
 - Answer any questions about the task before you start.
 - **Game 1 (slides 8-27):** count how many words contain the letter 'A'.
 - **Game 2 (slides 30-50):** count how many words describe living things, or a part of a living thing (e.g. a brain).
- For the following surprise games, it is important that the participants are only given one minute to do each task and that participants do the task on their own, without talking to each other. (Results of this task will be discussed later in the session.)
- Score each game and record the score on page 4 of the participant workbook.
- Introduce the following two surprise tasks.
 - **Surprise 1** (slide 52): write down as many words as you remember from the first counting game where you counted the letter 'A', including words you remember that did not contain the letter 'A'.
 - **Surprise 2** (slide 53): write down as many words as you remember from the second counting game where you counted words for living things, including words that were for non-living things.

Module 2: Learning and memory (continued)

5. Types of memory 1 – automatic (slides 54-59, 7 mins)

- There are two types of automatic memory (implicit and procedural) – ‘automatic’ because no conscious effort is required.

Implicit memory

- Remembering something from previous experience, even though you might not remember the experience in full or be aware of what it is you are remembering.
- Might be more like a feeling than a clear memory (e.g. a two year old who sees pet dog maul a pet chicken might develop a fear of dogs, but may not remember this event).

First to mind (slide 56-58).

- Ask participants to quickly, without thinking, write down the first
 - food that comes to mind (practice round), then
 - colour that comes to mind (most participants should write ‘red’).
- Show participants slide 58, a list of words from the first counting game: all of these words are associated in some way with the colour red, but few people would have noticed this at the time.
- This type of memory is based on subconsciously connecting things in the mind (e.g. participants might have connected using alcohol or other drugs to a bus route, a particular area, or a thought or feeling, etc. so they get cravings when on that bus, in that area or having that thought or feeling).
- Facilitators can increase the likelihood of participants choosing ‘red’ by wearing red clothing, writing with a red marker or adding red items into the room or environment where the session is being delivered.

Procedural memory (slide 59)

- Learning a skill, sometimes called ‘muscle memory’.
- Also based on connections in the mind but between movements, often in a sequence
- Relies on ‘doing’ rather than ‘thinking’ e.g. riding a bike or learning to drive.

6. Types of memory 2 – episodic (slides 60-63, 5 mins)

- ‘Episodic’ because it is about remembering episodes (e.g. events, conversations) in your past.
- Unlike automatic memory, episodic memory requires conscious effort, and involves three processes.

Encoding

- If info held in memory or paid attention to for more than a few minutes, at least some is saved.
- This is the ‘active learning’ part of episodic memory.
- Crucial to being able to ‘remember’ something in the future, e.g. putting money in the right account, filing something in a way that makes sense, or spelling a contact’s name correctly: needs some effort and thought or it’s going to be hard to find again.

Storage

- How well something is kept (protected and maintained) over time.
- If encoded (saved) well, and maintained well, things should be easy to find when needed.

Retrieval

- Being able to recall (find) the right information at the right time.
- Just like encoding (saving) something in memory properly makes it more likely you can retrieve (find) it later, encoding and storage are no good if you can’t retrieve information when you need it.
- Having a tip-of-the-tongue moment means something has gone wrong in retrieval.

Module 2: Learning and memory (continued)

7. Types of memory 3 – prospective (slide 64, 1 min)

- This type of memory is about 'remembering to remember' something in the future.
- A bit like setting a reminder on your phone, but using your own brain instead.

8. Tying it all together (slides 65-67, 7 mins)

- Refer to diagram on page 3 of the participant workbook.

Automatic memory

- subconscious responses or using skills in the present comes from subconscious connections learned automatically through past experiences or skills practice.

Episodic memory

- consciously remembering something in the present comes from actively encoding (i.e. saving, learning or paying attention to) it in the past.

Prospective memory

- intending to do something in the future (and ideally remembering to do it).
- Automatic and episodic memory mainly draw on the limbic system, while prospective memory mainly uses the frontal lobe.

Activity – memory test results (slide 66).

- Reflect on the results of the Surprise games.
- Who remembered more, less or the same number of words from the 'A' game than the 'living things' game? Most people should remember more from the second list.

Expansion (slide 67)

- The second game required participants to think more deeply to work out whether to count a word or not.
- In other words, the words were 'encoded' better and therefore easier to find.
- Talk through the expansion strategies on this slide, and on page 3 of the participant workbook, as a way to remember important things more easily in the future.

9. Brainwork (slide 68, 5 mins)

- Practice expansion strategies (page 3 of the participant workbook)
 - Participants are to apply strategies to the information in today's session.
 - Instructions for brainwork are given on slide 68.

Brainwork prediction form (page 37 of the participant workbook)

- Ask participants to predict future behaviour by circling how close they think they will come to completing brainwork task this week.
- Next time, participants will be asked to circle how they actually did with completing the brainwork task.

Module 3: Attention

Focus

The types of attention and activities to practice paying attention.

Key messages

- Focused attention and divided attention are the two types of attention we use 'in the moment'.
- Divided attention takes much more effort, but exercises and strategies exist for improving all types of attention.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Radio or online podcast
- Marker or Post-it note

Brainwork tasks

- Tick off attention strategies: go through the attention strategies from the worksheet and mark which have been helpful in the past and which might be helpful in the future.

Session time

60 mins.

Module 3: Attention (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-4, 8 mins)

- Questions about three types of memory (slide 2).
- Discuss brainwork using questions on slide.
- Ask participants to turn to the **Memory strategies worksheet** (page 6 of the participant workbook). Discuss the internal (in your mind) and external (using tools outside yourself) memory strategies.
- Check in on brainwork prediction. Are participants getting better at predicting their behaviour?

2. Introduction to attention (slides 5-128, 8 mins)

- ‘Paying’ attention: attention is just like money.
- We only have so much we can spend, so if we spend all of it in one place, we can’t use it somewhere else.
- The following tasks will give the participants a hands-on example of this.

Attention task 1 – counting game (slides 6-66)

- Counting slides with a black square in the top right corner of the grid.
- There are 60 slides for this game. They will change at a rate of one slide per second.
- Participants can use their fingers or paper and pen to count if they want to.
- Sum up, and ask participants to reflect on how they made sure to pay attention where they needed to.
- Give the participants a short rest between tasks.

Attention task 2 – counting game (slides 67-128)

- Same task but counting slides with a red square in the bottom right corner of the grid
- There are 60 slides for this game too: again, they will change at a rate of one slide per second.
- This time, the facilitator says ‘focus’ whenever the word appears on the slide.
- Sum up, and ask participants to reflect on whether being told to focus made the task easier or harder.

3. Different types of attention (slides 129-133, 8 mins)

- Four types of attention are described: each are useful in different ways.

Focused attention (slide 130)

- This was demonstrated in the first two counting games.
- Refers to where attention is aimed (e.g. attention was focused in the relevant corners in games).
- Can be shifted or captured by sudden events around us, or within us, e.g. if we suddenly feel pain.
- There are a range of things we could pay attention to every moment, and other things or people competing for our attention (e.g. children, media and advertising, our partner, friends and family).
- This makes our attention very valuable so we need to take care where (on who or what) we focus it to make sure we are not distracted from what is most beneficial to us longer term.

Sustained attention (slide 131)

- Ability to stay focused on one thing for a period of time (e.g. mowing a large lawn, studying for exams, or holding the spotlight on the star on stage).
- To sustain attention, need to stay alert and to push through boredom.
- But also need to take breaks and/or shift tasks regularly as there is a limit to this type of attention.

Attention span (slide 132)

- How much information a person can take in at a time.
- ‘Information’ includes what we see or read, what we hear or is said to us, and sometimes what we can feel, taste, and smell too.
- The broader our ‘spotlight’, the broader the range of information we take in, but not in much detail.
- The smaller our ‘spotlight’, the more focused our attention and the less kinds of information we can take in but the more detailed the information will be.

Module 3: Attention (continued)

Divided attention (slide 133)

- Ability to focus on more than one thing at a time.
- This is much more difficult to do, especially if:
 - we are tired, in which case we will generally bring our attention back to only one thing, or
 - there is too much information to take in, in which case we often get overwhelmed and cranky.

4. Exercises for attention (slides 134-198, 16 mins)

Divided attention task – counting game (slides 134-195)

- Similar to tasks before but this time counting two things: grids with exactly three black squares, or grids with only one red square, or both three black squares and a red square; squares can be anywhere in the grid.
- There are 60 slides for this game too. They will change at a rate of one slide per second.
- Sum up, and ask participants to reflect on type of attention used (divided attention) and whether they found it harder than the previous tasks.
- Give the participants a short rest between tasks.

Attention training task (slide 196, 12 mins)

- Refer to the **Attention training technique activity** (page 23 of this document)
- Before starting, you will need the radio tuned to a spoken word program (e.g. ongoing news broadcast, talkback show, interview program) or a podcast (played through laptop ideally) with the volume low but still able to be heard a little by everyone.
- Draw a dot on the board or stick something (e.g. a Post-it note) to the wall.
- Finally, read the attention training exercise to the group slowly as if it were a guided meditation, but not so slow that it sounds unnatural, and follow the instructions, including the reflection question at the end.

Group discussion (slides 197-8)

- ‘Thinking about all the exercises and different types of attention, why do we need attention? What does it help us do?’ (Some answers on slide 197).
- Tasks you can do yourself to ‘sharpen your attention’.
- These draw from the exercises from this session, including practicing attention switching and telling ourselves to ‘focus’.
- Discuss and suggest others that can be used from the **Attention strategies worksheet** (page 7 of the participant workbook).

5. Brainwork (slides 199-200, 5 mins)

- Tick off attention strategies
- Instructions for brainwork are given on slide 199.
- Ask the participants to turn to the **Attention strategies worksheet** (page 7 of the participant workbook).
- Participants are to go through attention strategies from the worksheet and mark which have been helpful in the past and which might be helpful in the future.
- Participants should write an example of when they have used the strategy in the past or describe a situation where they would use it in the future. Participants should write these examples in their notebooks.

Brainwork prediction form (page 37 of the participant workbook)

- Complete as in last session, to review next session.

Module 3: Attention (continued)

Attention training technique

Instructions

Before starting this exercise, you will need a radio or other device that plays spoken word (e.g. a news broadcast, podcast or talkback radio show).

- “Words in inverted commas are to be read out.”
- {Words in curly brackets are alternatives, read the correct one, amend as appropriate.}
- **[Words in square brackets and bold italics are action instructions].**

Activity

“I would like you to focus your gaze on a dot that I have placed on the {wall or board}. Throughout the exercise try to keep your head in the same position. You may keep your eyes open or close them. I’m going to ask you to focus your attention on different sounds inside this room and outside of this room. I will ask you to focus your attention in different ways. It doesn’t matter if thoughts and feelings come into your mind. The aim is to practice focusing your attention no matter what you might become aware of.”

“To begin with, focus on the sound of my voice. Pay close attention to that sound. No other sound matters. Try to give all of your attention to the sound of my voice. Ignore all of the other sounds around you. You may hear them but try to give all of your attention to the sound of my voice. Focus only on the sound of my voice. No other sound matters. Focus on this one sound.

“Now turn your attention to the sound I am making as I tap on the {desk or clipboard, etc.}”

[Tap at the rate of about two taps a second.]

“Pay close attention to that sound, for no other sound matters (pause). Try to give all of your attention to the tapping sound (pause). Closely monitor the tapping sound (pause). If your attention begins to stray or is captured by another sound, refocus on the tapping sound (pause). No other sound matters. Give this one sound all of your attention (pause). Continue to monitor this sound and if you are distracted return your attention to it (pause).”

[Keep tapping and turn on the radio or podcast.]

“Now focus your attention on the sound of the {radio or podcast}. Focus on the sounds of the {voices or music}.

Pay close attention to that sound only. Try to give all of your attention to it (pause). Closely monitor for changes in the sounds on the {radio or podcast} (pause). You may even be able to make out what they are saying. If your attention begins to stray or is captured by a sound elsewhere, refocus on the radio. No other sound matters. Give all of your attention to the radio and what you might hear there. Continue to monitor and if you are distracted return your attention to it (pause).”

[Keep tapping and keep the radio on.]

“Now focus your attention on sounds that you might hear outside of this room. Focus on the space outside of the room only. Pay close attention to that space and try to detect sounds that might occur there **[if there are specific sounds, the therapist draws attention to them]**. Even if there are no sounds keep your attention on that space. Try to give all of your attention to it (pause). Closely monitor for sounds there (pause). If your attention begins to stray or is captured by a sound elsewhere, refocus on that place. No other sound matters. Give all of your attention to that place and what you might hear there. Continue to monitor and if you are distracted return your attention to it (pause).”

“Now that you have identified and practiced focusing on individual sounds and locations I am going to ask you to quickly shift your attention between them as I call them out (pause). First, focus on the tapping sound, no other sound matters (pause). Switch your attention and focus on the space outside of the room (pause). Pay close attention to the sounds outside, no other sound matters. Now turn your attention to the sound of the tapping, no other sound matters (pause). Turn your attention again this time to the sound of the radio (pause). Now switch and focus on the sounds outside (pause). Now focus on the tapping (pause), now on the sound of the radio (pause).”

“Finally, I want you to expand your attention. Make it as broad and deep as possible.”

“Try to absorb all of the sounds and all of the locations that you have identified at the same time. Try to focus on and be aware of all the sounds both inside and outside of this room at the same time (pause). In your mind count the number of sounds that you can hear at the same time (pause). Try to hear everything simultaneously. Count the number of sounds you can hear this way.”

“This concludes the exercise. How many sounds were you able to hear at the same time?”

Module 4: Goals and plans

Focus

Planning to achieve goals, and the role of the frontal lobes.

Key messages

- The frontal lobes are the key part of the brain that allows for planning for the future and setting goals.
- Both the goals set and plans to achieve them need to be specific to be effective.
- Executive functions ((located in the frontal lobe) help us manage our behaviour to stick to our plans and achieve our goals.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker

Brainwork tasks

- Define your goal and plan using the goal menu worksheet

Session time

60 mins.

Module 4: Goals and plans (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-4, 10 mins)

- Review questions about types of attention (slide 2).
- Review the three levels of the human brain and how each part impacts our behaviour.
 - Reptilian brain = present moment = responding only to the here and now, based on instincts.
 - Limbic system = past experience = responding to emotions, based on meaning in the past.
 - Neo-cortex = future goals = using thoughts to manage instinct and emotion to guide behaviour.
- All these functions are important – they keep us alive (reptilian brain), keep us connected (limbic system), and keep us focused on what we want for our future (neo-cortex). Our frontal lobes help us to keep this all in balance.

2. Frontal lobes (slides 5-6, 15 mins)

- Allow participants some time to look at the rotating images of the brain with the frontal lobes in red.
 - Note the relative size of these lobes (if you like, point out the reptilian brain and the limbic system).
- This part of the brain is still developing into our 30s, meaning there is a lot of time in which it is still vulnerable.
 - The good news is that our brains adapt fairly easily so we can still change how well our frontal lobes work, even after our mid-30s, and that is what most of the rest of this program will focus on.
- Because our frontal lobes are future-focused, they can help us think into the future, which allows us to set goals, and to make plans to achieve those goals.
 - They can also help manage emotions and instincts so we can behave in ways that are in line with our goals and plans.

3. Goals and plans (slides 7-16, 25 mins)

- This section is designed to involve a lot of group discussion. Encourage this as much as possible, particularly with the **GAP** slides.
- Facilitators may take a flexible approach to the activities in this section by choosing to omit an example or replace it with an alternative example. Consider the time restraints, and sensitivities of the participants. Tips for responding to some of the examples are included in the notes section of the slides.
- For goals and plans to be useful, both need to be 'specific', which means they need to have enough detail so that it is clear:
 - what needs to be done and when, and
 - how to know the goal has definitely been achieved.
- Encourage participants to make the goals and plans in the examples as specific as possible.
- If the PLAN is not specific enough, there is a risk the goal will not be achieved.
 - If any part of the plan is not related to the goal, it will take longer to achieve that goal.
- If the GOAL is not specific, it is difficult to make a specific plan to achieve that goal.
 - The strength of the plan often depends on the strength of the goal.
- Longer term goals and plans are best if they can be measured and have a timeframe attached, e.g.
 - GOAL = buy a motor cycle worth \$1,200 in one year
 - PLAN = save \$100 each month for twelve months.

Module 4: Goals and plans (continued)

- Short term goals might use a plan with a little more creativity and will likely also weigh up:
 - emotions (e.g. being embarrassed about asking to go to leave to make a coffee in the middle of a group), with
 - instincts (e.g. REALLY needing to make a coffee to avoid falling asleep),
 - in order to come up with a plan that achieves the immediate goal (even if it's a bit sneaky).

4. Brainwork (slides 17-18, 10 mins)

- Define your goal and plan
 - Ask the participants to turn to the **goal menu** (page 9 of the participant workbook).
 - Instructions for brainwork are given on slide 17 and on the worksheet.
 - The brainwork is to be completed on page 10 of the participant workbook.
- **Brainwork prediction form (page 37 participant workbook)**
 - Complete as in last session, to review next session.

Module 5: Time horizons and the Executive team

Focus

Practicing our ability to think into the future, and exploring how far ahead we can think.

Key messages

- Different conditions, such as mental illness or substance use, can impact how far we can think into the future.
- Practicing thinking far ahead can help us 'expand our horizons' as to what is possible.
- The Executive functions or team members help us manage our impulses and emotional responses to better set goals for the future, make plans and solve problems.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Smart phone with stopwatch (one for the facilitator)
- Whiteboard or butchers paper and markers

Brainwork tasks

- Short and long term costs and benefits worksheet for the goal set in the last session

Session time

60 mins.

Module 5: Time horizons and the Executive team (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-3, 5 mins)

- Questions about goals and plans (slide 2).
- Check in on brainwork prediction. How did participants go with setting themselves and expanding on a goal?

2. Ability to think ahead (slides 4-9, 10 mins)

- Stories and Reflection Task Instructions are to be read aloud as they appear in the PowerPoint Notes i.e. word for word.

Story task (slides 4-8)

- Ask the participants to turn to the **Complete the story worksheet** (page 11 of the participant workbook).
- Introduce the first story task to the group (information on slide 4) and tell participants they will have 90 seconds to finish the story on their worksheet.
- Once they complete the first story, tell the participants there will be three more stories, and repeat instructions. Give participants 90 seconds per story.

Reflection (slide 9)

- Ask participants to reflect on the time period over which their stories took place.
- Ask them to write the time period for each story next to it on their worksheet, then allow discussion.

3. How we think about time (slides 10-12, 15 mins)

- Using the picture, discuss the idea of a horizon (what is a horizon? what can you see on the horizon?).
- Use this idea as a frame for thinking ahead as far as you can in time (vs seeing ahead as far as you can in the space in front of you).
 - E.g. the picture shows horizon in terms of space, we want to talk about the same in terms of time.
- The story tasks are one way psychologists use to measure a person's time horizon.

- Different conditions impact on the ability to think ahead in different ways (slide 11).
- Substance use can reduce time horizons, meaning people lose the ability to think very far ahead in time.
- This shortening of time horizons changes the kind of goals people can set.
- Focus becomes much more on the short term and people become unable to set long term goals.
- People can even lose a mental framework for thinking about longer term goals.
- Time horizons can be stretched to overcome this.

4. Stretching time horizons (slides 13-16, 15-20 mins)

Stretching time horizon task (slide 13-14)

- Ask the participants to turn to the **Stretching your time horizon worksheet** (page 13 of the participant workbook).
- When introducing this worksheet you can acknowledge that these examples may not be relevant for their particular circumstances. Participants do not need to answer any questions that are not relevant or not comfortable for them. You can work with participants on coming up with different questions.
- Talk the participants through the first few questions, as on slide 14.
- Give the participants approx. three mins to complete the task.
- Reflect on how easy or difficult that task was for people in the group.

Short and long term cost and benefit task (slides 15-16) (10 mins)

- Introduction to the exercise is on slide 15.
- Do this task as a group using a whiteboard or butchers paper to write the group's ideas, using slide 16 as a guide.
- Participants can also copy this into their workbook. (Page 12 of the participant workbook)

Module 5: Time horizons and the Executive team (continued)

Possible responses to the group activity are displayed in the table below.

Short term		Long term	
Costs	Benefits	Costs	Benefits
pain	muscles might feel stronger/ harder	costs money	more energy
costs money	might be able to breathe better	costs time	look better
have less energy for other things	may sleep better the following night	have to change your routine	feel better
you sweat			more motivated
you smell			healthier
it's inconvenient			helps you achieve other goals
It's uncomfortable			fit better in clothes
less sleep if you need to get up early to exercise			get better at the sport or exercise(s)
need to change your routine			

Sum up and group discussion

- Being able to think further into the future can help ground us a little when cravings, anxiety or other emotions make us want to act in the here and now. Keep trying to increase your time horizon.
- Thinking ahead even three months can help us see an upside to pushing through the discomfort.
- This is just one strategy to help with tackling things that trip us up in our recovery or other goals.

5. Executive functions (slides 17-18, 5 mins)

- ‘Executive’ brain functions are like the management team of the brain.
 - They process and manage information.
 - They help us to set targets, plan ahead, come up with strategies, and make decisions.
 - They also help keep everything under control (or try to).
- This is also what the frontal lobes do.
 - They process and manage information from the back of the brain.
 - They look to the future in deciding what to do next and what to work towards.
 - They send this information to the back of the brain to help make that happen.

6. Introducing the ‘executive team’ (slides 19-20, 4 mins)

- This is setting up for following sessions, introducing a new member of the ‘executive team’ each time.
- Each of these brain functions helps us manage our reptile brain impulses and our limbic system emotional responses to set goals for the future, make plans and solve problems to get there.
- The executive functions are introduced here in the same order in which they develop in the brain.

7. Brainwork (slides 21-22, 3 mins)

- Building on previous brainwork – goals and plans
 - Instructions for brainwork are given on slide 21.
 - Ask the participants to turn to the **Short and long term costs and benefits worksheet** (page 15 of the participant workbook).
 - Participants are to complete this worksheet for the goal they set themselves last session.

Brainwork prediction form (page 38 of the participant workbook)

- Complete as in last session, to review next session.

Module 6: The Self-reflector

Focus

Understanding self-reflection – the pros and cons, and how to use it to our benefit.

Key messages

- Self-reflection gives us a sense of our own identity and our own goals, separate from other people.
- It also makes us aware of what others think about us, which we 'internalise' to monitor ourselves.
- One thing we need to be aware of is how we manage our own time.
- Knowing our own weaknesses around time estimation means we can allow ourselves extra time to do things well.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- A co-facilitator or helper, with a calculator
- Smart phone with stopwatch (one for the facilitator)
- Whiteboard or butchers paper and markers

Brainwork tasks

- Complete posture awareness worksheet

Session time

60 mins.

Module 6: The Self-reflector (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-3, 5 mins)

- Questions about last session (slide 2).
- Check in on brainwork prediction. Are the participants getting better at predicting their behaviour?

2. Self-Reflector (slides 4-6, 6 mins)

Quick tasks

- **Task 1 (slide 5):** ask the participants to snap their fingers as fast as they can from the time you say 'go' until you say 'stop', and to count how many times they snap their fingers.
 - Say 'go'. After 10 seconds say 'stop', and ask them to write down or call out the number. Note: this is a trick to get the participants to do the next game quickly and without thinking.
- **Task 2 (slide 6):** ask the participants, with the pointer finger (the finger next to their thumb) of the same hand to write a capital 'E' on their forehead as quickly as they can, then say 'go'.
- Reflect: which way did they write the E? (slide 6)
 - So they can read it from their perspective (pic on left) OR so that others can read it (pic on right)?
- People who wrote it the way other people could read it tend to value what other people think more.
- People who wrote it the way they read it tend to value their own thoughts the most.
- This is only a problem if someone is at one extreme or the other, most people are aware of both what they think and what others think and simply value one more than the other.

3. Development of the Self-reflector (slides 7-11, 8 mins)

- The awareness of both perspectives is part of the Self-reflector and is the first executive function to develop in childhood.
- Develops between the ages of 8 months and 18 months, about the time a child starts to be able to play the 'peek-a-boo' game. Before this, if something disappears from a child's sight, they think it doesn't exist anymore.
- Being able to play this game shows they are developing a sense of themselves as separate from the rest of the world, as they realise things that disappear still exist even if they can't see them.
- They can then start to realise that other people (animals or objects) have different goals to them.
- Knowing we have a 'self' that is separate from other people means we can develop 'Self-awareness'.
- Self-awareness means we can begin to self-monitor, i.e. we can check in and be aware of:
 - what is happening inside of us (what we are thinking, feeling, needing, doing ...)
 - what is happening around us (who is around, if they can see me, what they might think ...).
- Self-monitoring allows us to weigh up what we are doing or want to do with what other people might think of that and adjust our behaviour.
- If we are too sensitive to what other people think, and don't value our own needs enough, we might not ever do what we want to do.
- If we are too focused on what we want to do, and don't care about what others think, we might get what we want (or think we want) but we risk getting into trouble or alienating ourselves.
- Finally, self-awareness and self-monitoring help us work out whether we have the things we need in order to do what we want to do, and the

Module 6: The Self-reflector (continued)

thing we need most is enough TIME to do things.

4. Time estimation (slides 12-14, 15 mins)

- We need to be able to work out how much time something takes to know how much time we need. This means we need to be good at estimating how much time has passed while doing something.

Time interval estimation task (page 35 of this document, slide 14)

- Good planning and preparation with your co-facilitator is recommend for this activity.
- Review the instructions given on slide 13 for this activity.
- Plan with your helper or co-facilitator which one of you will count how many people clap before, at the time, and after the time interval, and which one will record the results in the table below.
- Sum up - you will notice two trends.
 - The time difference will get bigger for longer time intervals.
 - Most people will underestimate time.
- Ask participants to imagine how far off they'll be at 10 minutes, or an hour, and what that might mean.

5. Time management (slides 15-17, 10 mins)

- A little stress helps us do something well, because this often means that it matters to get it right or get it done in time.
- Not enough stress and we will pay attention to the other things that need our attention.
- Too much stress and we will not be able to concentrate enough to do that thing well.
- Leaving things until the last minute puts us under too much stress, so we need to use what we know about our time estimation skills to make sure we give ourselves enough time.
- We also need a strategy to keep us focused on the task we are doing, in case we get distracted.

6. Brainwork (slides 18-20, 5 mins)

Posture awareness

- Ask the participants to turn to the **Posture awareness worksheet** (page 17 of the participant workbook).
- Instructions for brainwork are given on slide 19.

Brainwork prediction form (page 38 of the participant workbook)

- Complete as in last session, to review next session.

Module 6: The Self-reflector (continued)**Time interval estimation**

Start with 45 seconds then move to 2 seconds, then 15 seconds, etc. as per the tables below.

45 seconds

Before 45 seconds	45 seconds	After 45 seconds

2 seconds

Before 2 seconds	2 seconds	After 2 seconds

15 seconds

Before 15 seconds	15 seconds	After 15 seconds

60 seconds

Before 60 seconds	60 seconds	After 60 seconds

4 seconds

Before 4 seconds	4 seconds	After 4 seconds

12 seconds

Before 12 seconds	12 seconds	After 12 seconds

Module 7: The Inhibitor

Focus

Understanding inhibition – how it can help us and how to develop it.

Key messages

- Managing temptation or other impulses is a skill we first learn as a child from others' prompts.
- As we grow in adolescence, these prompts from others are not enough and need to come from within us.
- Being able to 'put the brakes on' our own emotional reactions and impulsive responses helps us navigate life more successfully.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Individually wrapped chocolates, enough for two per person. Preferably red Lindt chocolates, for people with allergies or intolerances to dairy or cocoa, use another kind of sweet treat.

Brainwork tasks

- Complete posture diary worksheet

Session time

60 mins.

Module 7: The Inhibitor (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-4, 10 mins)

- Questions about previous session (slide 2).
- Check in on brainwork prediction. Are the participants getting better at predicting their own behaviour? Make sure everyone understands how to do this. How did people do with the task?
 - Discuss the task and what happened when people noticed they were slumping.
 - We often start to tell ourselves what we have heard others say, like an echo now coming from us.
 - This is how a lot of our ‘executive skills’ develop.

2. Introduce the Inhibitor (slide 5, 1min)

3. Managing temptation (slides 6-8, 5 mins)

Temptation task set-up (ongoing throughout the session)

- Introduce the experiment with the information on slide 6 and 7.
- Place one treat in front of each person in the group.
- The children in the example used a range of strategies to avoid the temptation of eating the marshmallow (slide 8).
 - Ask the participants to turn to the *Temptation tempering tactics worksheet* (page 19 of the participant workbook).
 - Encourage the participants to use these or come up with their own strategies, briefly discuss if helpful.

4. Development of the Inhibitor (slides 9-18, 15 mins)

- Once children develop a sense of self as separate to the rest of the world, they realise that others may want different things to them. They then realise that their wants and needs can’t always be met immediately, and sometimes not at all.
 - This is when things our parents tell us, like ‘sit up straight’ or ‘no, you need to wait’ can start to become things we tell ourselves as well.
 - When we can put the brakes on us slouching or running ahead, we are using our Inhibitor.
- In adolescence, changes in the body and in the brain are preparing us for adulthood and these childhood ‘brakes’ are not powerful enough anymore.
 - We need to develop our own internal braking system, and that takes lots of practice, sometimes up until our early 30s! (Review practising ‘braking’ behaviour on slide 18).
 - We can use the Self-reflector to be aware of and monitor our behaviour as others may see it, then adjust our behaviour, using the ‘brakes’ in our frontal lobes.

Module 7: The Inhibitor (continued)

5. Using the Inhibitor (slides 19-23, 10 mins)

End temptation task (slide 19)

- Give one more chocolate to each person BUT ONLY to the people who have managed temptation and not eaten theirs already.

Group discussion (slide 20)

- Ask the participants what tactics they used to manage the temptation to eat the chocolate.
- Write tactics on a whiteboard, encourage participants to copy any they think might be useful into the **Temptation tempering tactics worksheet** (page 19 of the participant workbook).
- Using these tactics can help in a range of areas of life, increasing our chances of physical health, emotional wellbeing, and achieving success.
- To do this we often need to put the brakes on, or inhibit (slides 21-22):
 - emotional reactions
 - coming from our limbic system
 - based on things from our past, which keep us focused on the past and present moment.
 - behavioural responses
 - driven by our 'reptilian brain'
 - triggered by things in our environment or learned through habit.
- These reactions distract us or pull our attention away from what we want to be or do in the future.
- When we feel ourselves react strongly or being pulled to do something on the spur of the moment, one simple technique to make sure we stay on track with our future goals is to stop and think. (slide 23)

- STOP whatever you are doing and whatever you are thinking.
- THINK ahead by asking yourself a few basic questions, starting with the phrase 'If I do what I feel the urge to do right now...'
- a. what will the consequences be?
- b. how will it affect me and how will it affect other people?
- c. what impact will this have on who I want to be/ what I want to do in the future?
- Ask the participants to turn to the **Stop and think technique worksheet** (page 20 of the participant workbook). Ask the participants to complete this worksheet while thinking about a goal they have set. They should first ask themselves the question "If I do what I feel the urge to do right now..."

6. Brainwork (slides 24-25, 5 mins)

- Posture diary
- Ask the participants to turn to the **Posture diary worksheet** (page 21 of the participant workbook).
- Instructions for brainwork are given on slide 24.

Brainwork prediction form (page 38 of the participant workbook)

- Complete as in last session, to review next session.

Module 8: The Visualiser

Focus

Understanding visualisation – what it is and how we can use it to help us achieve goals.

Key messages

- The Visualiser helps us re-create a picture in our mind of something that has happened or imagine something we want to happen in the future.
- It uses our visual working memory to hold a picture in our mind.
- We can use that picture to practice something or imagine a future that we want and what we need to do to make that happen.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker

Brainwork tasks

- Complete posture diary worksheet
- Take five minutes to deeply visualise your goal four times before the next session

Session time

60 mins.

Module 8: The Visualiser (continued)

Session plan

1. Review content and brainwork (slides 2-3, 10 mins)

- Questions about last session (slide 2).
- Check in on the participants' goal and plan from two weeks ago. How is everyone doing?
- Work through the questions on slide 3 with the group.

2. Introducing the Visualiser (slides 4-9, 10 mins)

- This executive function allows us to recreate an image in our mind of something that has happened.
 - We can relive or re-experience a past event, and our actions, in our mind.
 - This keeps that memory 'alive'.
- It also helps us to keep an image in our mind of something or someone.
 - This means that, if they disappear from our view, we can spot them again easily, or
 - we can go to where we imagine they would be, based on where they disappeared, or where they said they would be.
- This is called our 'visual working memory', because we are actively holding pictures in our mind in real time, rather than encoding and storing them to retrieve later, like we learned about in Session 2.
- The Visualiser also allows us to imagine something that has not yet happened but that we would like to happen.
 - Sports players or dancers often use this to practice difficult movements.
 - We can use it too, to imagine a future that is different from our present, and plan to get there.
- Visualisation (seeing something in our mind's eye) happens in two lobes, the parietal and occipital lobes.
 - From Session 4: the back parts of our brain process information from our five senses (what we see, hear, feel, smell, and taste) and our memories.
 - The frontal lobes of our brain, where the 'executive functions' sit, manage and make sense of all of this information and then tells the back of the brain what to pay attention to.
 - The frontal lobe has many connections with the back part of the brain that processes what we see so it has fast access to and can quickly feed information back to that part of the brain.
- The Visualiser works through our visual working memory, to imagine or relive things in real time.
 - Being able to do this for things we want in the future is only possible because our neo-cortex, and particularly our frontal lobes, allows us to imagine something that has not yet happened.
 - We then need to be able to go through in our mind, or mentally practice, the steps we need to take to get there.

Module 8: The Visualiser (continued)

3. Visual working memory: Shape task (slides 10-19, 5 mins)

- Ask the participants to turn to the **Visual working memory exercise worksheet** (page 23 of the participant workbook).
- Introduce task (instructions are on slide 10): this is a test of people's visual working memory but will also help strengthen it, just like building up muscle.
 - Say to the group: "While the first exercises seem may seem easy, they are designed to get harder, and not everyone will get the answers correct. That's OK, as the exercise is designed to give you a practical example in how you use your working memory."
- Click with the mouse or press the down arrow for the shapes to start flashing.
- Once each of the shapes have flashed, say 'now' and allow a few seconds for the participants to write their answers (do not let them write before this) then move to the next slide.
- This numbers the shapes in order: participants can self-score how many they got in the right order.
- There are four rounds, increasing by one shape each time.
- At the end, check in to see how well the participants did: those that did well will find visualisation easier, those who did less well can strengthen this executive function with more practice.

4. Using visualisation (sides 20-22, 12 mins)

- Research shows visualisation can help us succeed at skill-based tasks, for example:
 - Three groups of basketballers were tested on how many free throws they could get in the hoop, then:
 - group 1 - practiced free throws every day
 - group 2 - visualised themselves making free throws each day
 - group 3 - did nothing.
 - 30 days later they were tested again on how many free throws they could get in (results: slide 19). Those who visualised themselves getting the ball in the hoop had improved just as much as those who actually practiced each day.
- This also works in the moment, e.g. just before taking a winning shot, or when you're about to do something difficult like make a speech or take a test. It allows you to mentally practice beforehand.

Visualisation task (slides 21-22)

- Ask the participants to turn to the goal menu (page 9 of the participant workbook).
- Read out the instructions on slide 19, then slide 21, allowing at least five mins to do this task.
- After the participants have had time to fully picture their goal in their mind, ask them to open their eyes and go the **Visualisation exercise worksheet** on page 24 of their participant workbook. Ask them to take five minutes to use words or pictures to answer the questions related to their goal.
- Discuss how easy or hard that was for them.

Module 8: The Visualiser (continued)

5. Review of the Executive team (slide 23, 3 mins)

- Recap the three members of the 'executive team' introduced so far.

Self-reflector

- helps us see ourselves as separate to other people, with our own goals that are different to theirs, to monitor our own behaviour, and to manage our time to achieve our goals.

Inhibitor

- helps us put the brakes on doing or saying things we will regret, by helping us manage instinctive urges from our reptilian brain, and emotional responses from our limbic system.

Visualiser

- helps us imagine a different future, and how we can make that happen.
- Question for the group: how might these three work together to help you create that future?

6. Brainwork (slide 24-25, 5 mins)

- Continue *Posture diary worksheet* (page 21 of the participant workbook).
- Visualise your goal.
- Ask the participants to turn to the **Visualisation exercise worksheet** (page 24 of the participant workbook).
- Instructions for brainwork are given on slide 23.

Brainwork prediction form (page 38 of the participant workbook).

- Complete as in last session, to review next session.

Module 9: The Self-talker

Focus

Understanding how we use self-talk to help us achieve our goals.

Key messages

- Talking ourselves through situations or problem solving can help us stay focused on what we need to do.
- What we say to ourselves can affect our emotions as well as behaviour so we need to make sure our self-talk is helpful and positive.
- We can use self-talk alongside visualisation to help us plan ahead and overcome obstacles.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Radio, laptop, or smart phone with podcast

Brainwork tasks

- Complete posture diary worksheet
- Identify difficult situations and accompanying positive self-statements and coping thoughts

Session time

60 mins.

Module 9: The Self-talker (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-3, 6 mins)

- Questions about last session (slide 2).
- Check how well the participants did at predicting their own behaviour for brainwork.
 - Is everyone getting better at this?

2. Introducing the Self-talker (slides 4-9, 12 mins)

- Visualising something we want to do or something we want to achieve helps us make our goal clearer and even practice for it. Self-talk can help us get through the process in real time.
 - E.g. we can talk ourselves down, talk ourselves through something, talk a problem through aloud.
- Talking to yourself is actually a normal healthy thing to do!

Number task (slides 8-9)

- Ask the participants to turn to the **Talk yourself out of it worksheet** (page 26 of the participant workbook).
- Introduce task (instructions are on slide 8): this demonstrates to the participants the usefulness of rehearsing numbers in the mind to remember them.
- For each condition, read each line of numbers out at a speed of one number per second, then wait the number of seconds given, then say 'GO' and allow a few seconds for the participants to write down the numbers (do not let anyone write before you say GO).

For the next round, play a podcast or radio talk program (not music) at the same volume or slightly higher as your voice during the task, even while the participants are writing the numbers. The sound will provide interference to make the task harder. Move to the next slide and let the participants score themselves on how many they got right, then discuss how they managed to do the task (some may have had to stop themselves talking out loud).

3. Content of self-talk (slides 10-12, 6 mins)

- Our self-talk is almost always on, and what we say to ourselves can affect our feelings and behaviour.
- We need to make sure our self-talk is helpful to feeling and behaving in ways that get us closer to our goals, and that it stays constant.
- It can help to repeat in our mind a few positive statements that we know are helpful.
- Ask the participants to turn to the **Positive self-talk and coping thoughts worksheet** (page 27 of the participant workbook) and discuss one or two examples of difficult situations and coping thoughts or positive self-statements to help with them.

4. Mental contrasting (slides 13-15, 6 mins)

- Contrasting is about noticing differences.
- When working towards a goal, we need to notice the difference between that future goal and our current reality to work out what we need to change or what is getting in our way.
 - We tend to assume this will be straightforward but it rarely is.
 - We can visualise the main obstacle that could get in our way so it's less likely to catch us off-guard.
- **Example:** our goal might be to eat healthy food.
 - The main obstacle that might come up, preventing us from getting where we are now to that goal, is people offering us unhealthy snacks.
 - Ask the participants to turn to the **Mental contrasting worksheet** (page 28 of the participant workbook), then picture the goal they visualised for brainwork and work through the questions to identify and visualise the main obstacle.

Module 9: The Self-talker (continued)

5. If-then plans (slides 16-21, 10 mins)

- Having visualised the obstacle – where, when and how it might play out – we can make an if-then plan to deal with it.
- Ask the participants to turn to the **If-then plan worksheet** (page 29 of the participant workbook), and follow instructions on slides 19-20.
- We can use our Self-talker to repeat this plan in our head, as well as to remind ourselves of the plan when the obstacle comes up.
- Writing it down means we can use our Visualiser to help as well, but we can also visualise putting the plan into action and how we will feel after overcoming that obstacle.
- Encourage the participants to practice doing this so it becomes habit.

6. Brainwork (slides 22-23, 5 mins)

- Continue **Posture diary worksheet** (page 21 of the participant workbook).
- Positive self-statements and coping thoughts
- Ask the participants to turn to the **Positive self-talk and coping thoughts worksheet** (page 27 of the participant workbook).
- Instructions for brainwork are given on slide 23.

Brainwork prediction form (page 39 of the participant workbook)

- Complete as in last session, to review next session.

Module 10: The Emotion regulator

Focus

Learning to manage and harness our emotions to use them to our advantage.

Key messages

- Feeling overwhelmed can prevent us from engaging with what we need to do and lead to impulsive behaviours.
- Planning and organising can protect us from feeling overwhelmed.
- Emotions move us away from what's bad for us and towards what's good for us, so focusing strongly on our future goals can shift our emotional reaction to move us towards things that are aligned with our goal.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Smart phone with stopwatch
- Whiteboard or butchers paper and markers

Brainwork tasks

- Complete posture diary worksheet
- Identify situations where having strong goals helped to modify emotions

Session time

60 mins.

Module 10: The Emotion regulator (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-3, 6 mins)

- Questions about the last session (slide 2).
- Check how well the participants are doing at predicting their own behaviour now.

2. About emotions (slides 4-6, 5 mins)

- We have six primary emotions (pictured), and a range of more complex emotions.
- Ask the participants if they can identify these emotions from the images on slide 4.
 - Write these on the board, or on butcher's paper, as they are called out.
 - Top row left to right are: anger, fear, disgust.
 - Bottom row left to right are: surprise, happiness, sadness.
- As discussed in an early session, emotions move us toward things that are good for us and away from things that are bad for us, but mainly in the present (functions of primary emotions on slide 6).

3. Overload and overwhelm (slides 7-9, 10 mins)

Find a word task (slide 7)

- Ask the participants to turn to the *Find a word worksheet* (page 31 of the participant workbook). Solution on page 51 of this document.
- Allow one minute to complete this activity.
- Explain the task.

Image copy task (slide 8)

- Ask the participants to turn to the *Image copy task worksheet* on page 32 of the participant workbook.
- Explain the task.
- Allow one minute to complete this activity.

- Each of the tasks have been designed to be overwhelming to show that feeling overwhelmed can make it harder to solve problems or do a task. Who in the group felt overwhelmed by the tasks?
 - Feeling overwhelmed can lead to either freezing up and not doing or engaging with anything, or almost the opposite of impulsive, repetitive behaviour.
 - Finding ways to reduce that overwhelm is important.

4. POP technique (slides 10-12, 15 mins)

- Einstein proposed that space and time were connected through the space-time continuum.
 - We need to manage our time and space (environment, tools, etc.) so we don't get overwhelmed.
- To do that we use the POP technique, which stands for Prioritise, Organise, Plan.
 - Ask the participants to turn to the *Pop technique worksheet* (page 33 of the participant workbook).
 - Slide 12 explains this technique.

Small group task

- In pairs or small groups (up to four people), ask the participants to work through the POP technique using the practice form for the scenario on slide 12.
- Allow five mins, then discuss as a large group.

Module 10: The Emotion regulator (continued)

5. Make your emotions work for you (slides 13-18, 7 mins)

- Emotions and instincts often feel like they are reactions to the world around us but they can be shaped by our future goals, particularly where those goals are important and give us a strong focus.
 - Emotions towards other people, events, and other things can change depending on our goals.
- Example: Sally and the Oreo shake (slides 14-15).
 - Without a strong goal, Sally was simply happy to drink something that tasted good.
 - Sally developed a strong health goal, which meant her emotion towards the shake changed.
- Example: Simon and the football coach (slides 16-17)
 - Without a strong goal around playing football, Simon was angry when the coach shouted at him.
 - Simon developed a strong athletic goal, meaning his emotion towards his coach changed.
- The different parts of our brain can be used together to work towards something we want to achieve.
 - The Visualiser can help us connect more strongly to our goals by making them seem more realistic and helping us practice to get there.
 - The Self-talker can help keep us focused on what we need to do while we work towards our goals, helping us problem solve and plan with an If-Then strategy.
- Having strong goals and a focused strategy can make our emotions help us react positively toward things that move us closer to our future goal, rather than simply things that are pleasant right now.

6. Brainwork (slides 19-20, 5 mins)

- Continue *Posture diary worksheet* (page 21 of the participant workbook).
- Emotion modification
 - Ask the participants to turn to the **Emotion modification worksheet** (page 34 of the participant workbook).
 - Instructions for brainwork are given on slide 19.

Brainwork prediction form (page 39 of the participant workbook)

- Complete as in last session, to review next session.

Module 10: The Emotion regulator (continued)

Find a Word Solution

The word search grid contains the following words highlighted:

- EGG** (blue outline, row 1, columns 1-3)
- CAKE** (green outline, row 1, columns 10-13)
- APPLE** (purple outline, row 1, columns 6-10)
- BANANA** (orange outline, row 2, columns 1-6)
- BISCUIT** (red outline, row 2, columns 1-7)
- BEETROOT** (yellow outline, row 2, columns 10-16)
- CHOCOLATE** (black outline, row 2, columns 11-16)
- JAM** (red outline, row 3, columns 1-3)
- MEAT** (green outline, row 3, columns 4-7)
- SOUP** (yellow outline, row 3, columns 10-13)

3	4	5	6	7	8	9
EGG	CAKE	APPLE	BANANA	BISCUIT	BEETROOT	CHOCOLATE
JAM	MEAT	LEMON	CARROT	PEANUTS		
	SOUP					

Module 11: The Player

Focus

Introducing the importance and usefulness of play.

Key messages

- Playing is a fun way to learn the skills we need to survive and thrive.
- As adults, we use play to develop the skills we need to solve adult problems.
- Following logical steps to solve problems (and make decisions) helps us develop high-order thinking skills.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker
- Box of Lego bricks
- Whiteboard or butchers paper and markers

Brainwork tasks

- Apply steps 1-4 of the problem-solving guide to a specific problem or decision the participant needs to deal with currently.

Session time

60 mins.

Module 11: The Player (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-4, 10 mins)

- Questions about last session (slide 2). How well do participants feel they are doing at predicting their behaviour?
- Review the five executive team members introduced so far. Ask the participants what each does.

2. About play (slides 5-11, 15 mins)

- Lego task (7 mins)
 - This activity gives participants an opportunity to demonstrate and familiarise themselves with the various aspects of problem solving:
 - a. generating ideas
 - b. choosing a set of those ideas
 - c. actioning those ideas
 - d. monitoring to determine how this solved the problem i.e. achieved the task.
- Play can be defined in different ways. Brainstorm with group how they would define it.
- We will use the definition on slide 6; using this definition, most living creatures play in some way.
 - Animals (slide 7): practise skills needed to hunt and fend off rivals, therefore play is about physical competition.
 - Children (slide 8): practise skills needed to perform adult roles, therefore play is about use of language and social skills. They often mimic the roles they see played by people of the gender they identify with.
 - Adults (slides 9-10): practise skills to solve problems, therefore play is about things like knowledge, strategy, creativity, and/or physical skills or achievements.
 - E.g. crosswords and sudoku puzzles are about mental skills (language and mathematics), which help us to do well in everyday life.
 - What games do people in the group like to play?
- Comparing children's play to adults' play (slide 11), we can see there are many similarities, and only mild differences in terms of the focus.

Module 11: The Player (continued)

3. Problem solving process (slides 12-15, 20 mins)

- There is a general pattern we follow when we solve problems, even if we aren't aware of it.
1. First, we need to know what the problem is.
 - Sometimes it is not obvious; we can use mental contrasting, visualisation and self-talk to help us.
 2. Next we come up with ways to tackle the problem.
 - If we have dealt with something similar in the past, it can help to remember what we did then.
 - We also need to be mindful of what might be different this time.
 3. Once we have come up with some possible solutions, we compare the pros and cons of each.
 - Sometimes it might seem that no option is better than any of the others; in this case we might think about which cons we are happiest to deal with, or consider all the options equally good.
 4. Either way, we need to choose one of the options, back our decision, and do it.
 - If it's not something that has to happen right away, we can use an if-then plan to prepare for putting it into action.
 5. We need to keep a check on whether that solution is working.
 - There is no point persisting if it's not.
 6. We can always try another solution if the first one (or the second or the third) doesn't work.
 - We may have to adjust our options slightly or come up with new ones if things have changed.
 - Adapting to new circumstances shows we have mental flexibility which is a useful skill to practise

Work through an example (slide 14)

- Ask the participants to turn to the **Problem solving worksheet** (page 35 of the participant workbook).
- Follow the instructions in the PowerPoint notes.
- Remind participants of why mental flexibility is important.
- This process can also be used for decision-making (slide 15).
- Both are higher level thinking skills because they make use of all the basic skills we have talked about so far, like attention and memory.
- Higher level thinking skills use these in complex ways to juggle a lot of information at once.
- Practicing this process can help build these higher level skills.

4. Brainwork (slides 16-17, 5 mins)

- Ensure **posture diary** from module 7 is completed.
- Problem solving
 - Instructions for brainwork are given on slide 16.

Brainwork prediction form (page 39 of the participant workbook)

- Complete as in last session, to review next session.

5. Preparing for Module 12

- Module 12 is the final one of the program and is a chance to revise and reflect on concepts learnt. An option for doing this is to ask participants to present a concept learnt or an exercise to the group.
- If doing so, this should be discussed and organised in Module 11. You could ask participants themselves to nominate what they would like to present back to the group, or you could prepare a worksheet with the concept or exercise and hand this out.

Module 12: Revision

Focus

Review of all the modules and skills learned.

Preparation

Resources required

- Laptop, with PowerPoint slides either saved to the hard drive or on a USB drive
- TV or projector, with cables to connect to laptop
- Hand-held clicker

Session time

60 mins.

Module 12: Revision (continued)

Session plan

1. Review content and brainwork from previous session (slides 2-3, 5 mins)

- Questions about last session (slide 2).
- How much of the brainwork did everyone complete? And how good were they at predicting how much they would do?

2. Brainwork review (slides 4-5, 10-20 mins)

- Review posture diary task from two weeks ago using *Brainwork prediction form*.
- Ask the participants to turn to the *Brainwork prediction progress summary worksheet* (page 40 of the participant workbook).
- Using all the *Brainwork prediction forms*, ask the participants to plot their 'actual minus predicted' score for each brainwork task on the worksheet (the slide animation shows them how).
- This will show whether people have got better at predicting their own behaviour over time.
- Ask the participants to reflect on their own graph with the group if they feel comfortable to do so.

3. Review of all sessions (slides 6-17, 30-40 mins)

- For this session, you will be asking the participants to talk about what they remember from the modules.
- The approach to revision is not intended to be prescriptive. You may choose to revise the key messages in any way that allows for maximum engagement of participants.
- There are a number of ways to engage participants to make revision a fun and enjoyable experience. You may choose to select one or more of the following approaches.
 - Ask participants to volunteer information they learned in each session, and write their answers on a whiteboard or butchers paper.
 - Ask participants to share examples they used in the last 11 sessions. 'What was something that stuck with you or worked well for you in the last 11 sessions?'
 - Participants can present information back to facilitators and the group. This will need to have been discussed in Module 11.
 - Another of your choosing.
- Prompts can be found on most slides to help focus on the main information from each session and suggestions are also made below.
- You are welcome to add your own; try to spend no more than three to four minutes on each topic so you have enough time to cover everything.

Module 12: Revision (continued)

Executive team

- Revise the six members of the Executive Team
- You will cover these in more detail later.

Three brains

- Ask the participants to name the three brains (reptilian, limbic, neocortex).
- Which of these is mainly responsible for emotion? Behaviour? Thoughts?

Memory

- Automatic memory (implicit and procedural).
- Episodic memory (encoding, storage, and retrieval).
- Prospective memory (remembering to remember in the future).

Attention

- Types of attention: focused attention, sustained attention, attention span, divided attention.

Goals and plans

- Goals and plans need to be specific (i.e. have enough detail so we know whether or not we are on track and whether or not we have achieved our goal).

Time horizons

- How far ahead is your time horizon (i.e. how far into the future can you imagine)?
- How do you stretch your time horizon?

Executive team

Self-reflector

- Helps us check and adjust our behaviour.

Inhibitor

- Helps put the brakes on unhelpful behaviours.

Visualiser

- Helps us imagine a different future.

Self-talker

- Helps us stay committed to our goals and plans.

Emotion regulator

- Helps prevent us from becoming overwhelmed, and use our emotions to move us closer to our goals.

Player

- Helps us learn skills to survive and thrive.
- Slide 17 is meant to represent the participants sailing off into the future with all the strategies, tools and knowledge they have learned to help them achieve their life goals and recovery goals.

4. End the program

- End the program by thanking everyone for their attention and hard work over the course of the program. Remind them that the skills and strategies learned improve with practice and encourage participants to check back through their workbook and revise concepts into the future.
- You may wish to present participants with a certificate or end with a cake or some treats to share.

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The Agency for Clinical Innovation (ACI) is the lead agency for innovation in clinical care.

We bring consumers, clinicians and healthcare managers together to support the design, assessment and implementation of clinical innovations across the NSW public health system to change the way that care is delivered.

The ACI's clinical networks, institutes and taskforces are chaired by senior clinicians and consumers who have a keen interest and track record in innovative clinical care.

We also work closely with the Ministry of Health and the four other pillars of NSW Health to pilot, scale and spread solutions to healthcare system-wide challenges. We seek to improve the care and outcomes for patients by re-designing and transforming the NSW public health system.

Our innovations are:

- person-centred
- clinically-led
- evidence-based
- value-driven.

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Our vision is to create the future of healthcare, and healthier futures for the people of NSW.

