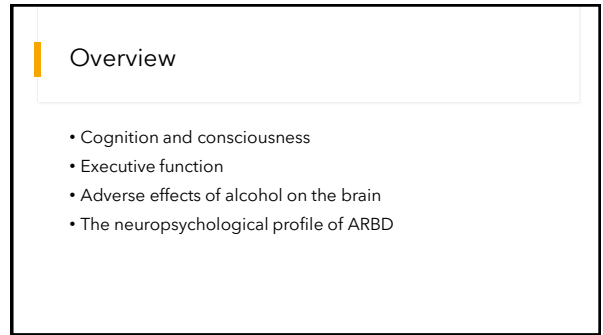


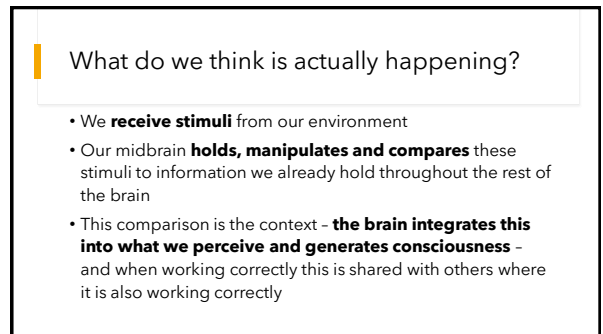
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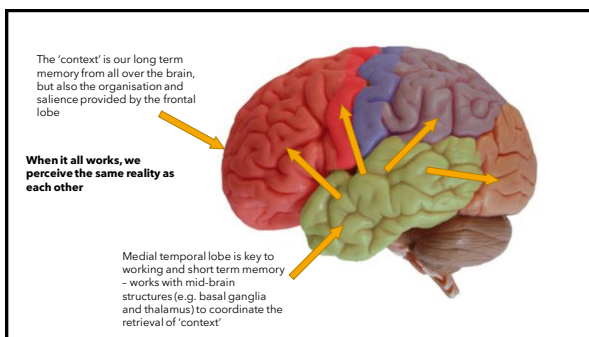
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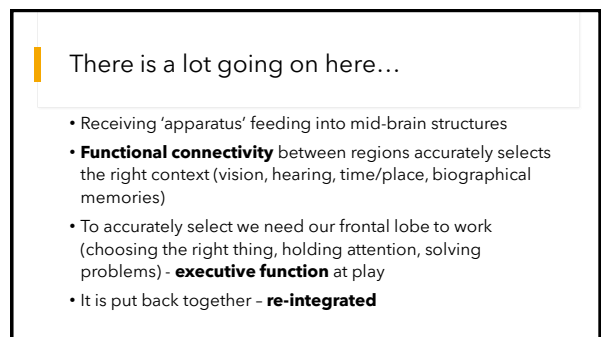
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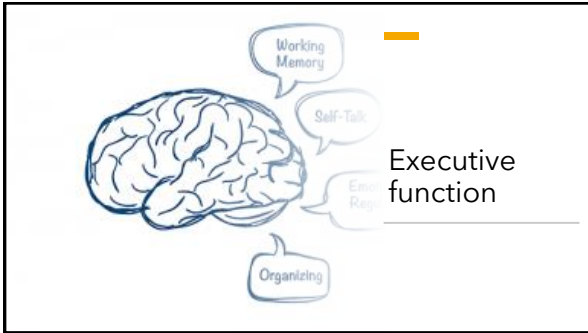
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7

Executive function

- **The frontal lobe is anatomically key**, along with its functional connections to the mid-brain and visual cortex
- **Concentration** - choose what to focus on
- **Cognitive inhibition** - choose what to tune out
- **Response inhibition** - restraint; mitigates impulsivity
- **Cognitive flexibility** - shifting between tasks
- Together, **reasoning, planning** and **problem-solving** are possible

8

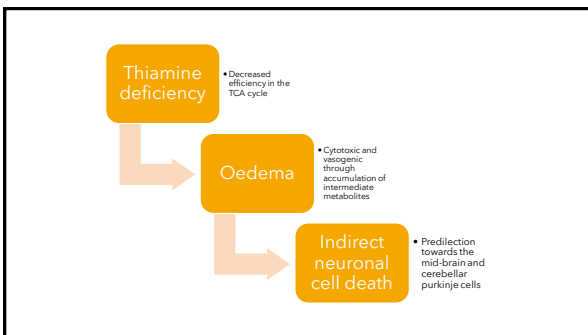
Executive **dys**function

- **Goal/task directed behaviour** becomes difficult
- **Set-shifting** (changing focus/tasks) is limited
- **Planning and sequencing** is effortful
- **Impulsivity**
 - Aggression
 - Emotional dysregulation
 - Repetitive behaviours
 - Problematic gambling
 - Self-harm

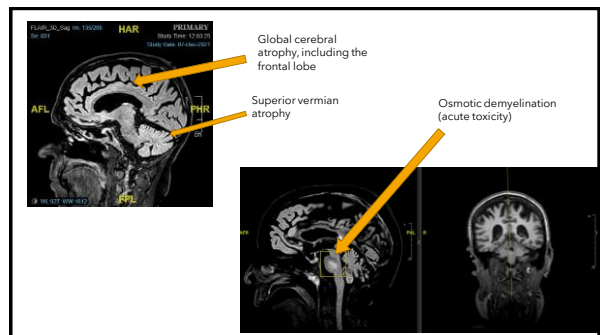
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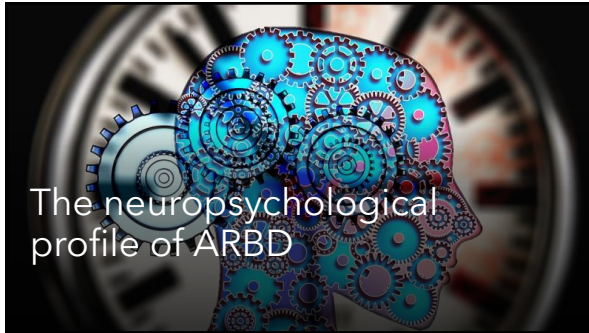
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13

What do we see?

- **Plausibility** - which largely comes from a relatively spared working memory that responds to structure and cues
 - Must be mindful of how questions are asked
 - Plan these ahead and test over time
 - Where possible, test in different settings
- **Anterograde amnesia**
 - Learning of new information is poor when re-visited later
 - e.g. An intellectual and informed discussion about the harms of drinking, accepting their difficulties when pointed out; no recollection of the conversation after 30 minutes, and appraisal of drinking returns to being poor

14

What do we see?

- **Executive dysfunction**
 - Harder to test at the bedside
 - **Trail-making test** in the MOCA
 - **Clock-drawing** and **lexical fluency** in the mini-ACE and ACE-III
 - Can use more specialised tests, such as the **Frontal Assessment Battery** or **Frontier Executive Screen**
 - **Occupational therapy**-led assessments (e.g. meal preparation)
 - **Perseveration** owing to impulsivity (e.g. closed and leading questions may get 'yes' for everything; repeat later constructing the opposite narrative)

15

What do we see?

- **Confabulation**
 - Only in c. 20% of the more severe cases of ARBD (~Korsakoff's Syndrome)
 - View as a **failure of context re-integration** - stimuli is misinterpreted and the wrong context is pulled through from the long term memory stores. The result is often a fanciful and slightly grandiose interpretation of reality

16

Summary

- Consciousness is physiologically and anatomically complicated (actually a mystery) - **a lot can go wrong**
- In ARBD, new memories struggle to be encoded, and function now is impaired particularly by the **executive dysfunction**
- This may not be readily apparent, as the **working memory is relatively spared**
- **Reversibility is possible with abstinence** - it is hardly ever a write off

17

Thank you

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18