


# Unit 1 Overview..What you should know..

## PYA1- HUMAN MEMORY.



### SHORT TERM & LONG TERM MEMORY.

<u>Processes</u>	<u>What does this mean?</u>	<u>LTM</u>	<u>STM</u>	<u>Differences between LTM &amp; STM.</u>
<b>Encoding</b>	The way in which information is changed when stored.	<b>Baddeley</b> (semantic coding) <b>Other research:</b> Focus upon <b>factors</b> that affect encoding i.e. age and nature of stimulus.	<b>Baddeley</b> (acoustic coding) <b>Other research</b> Focus upon <b>factors</b> that affect encoding i.e. age and nature of stimulus.	<b>LTM = <i>Semantically</i></b> info is represented by meaning. <b>STM = <i>Acoustically</i></b> info enters through sound.
<b>Capacity</b>	The <b>amount</b> that can be held in your memory.	<b>Computer analogy.</b> RAM  ROM	<b>Jacobs</b> (serial digit) <b>Other research</b> Chunking and word length.	<b>LTM =</b> potentially <i>unlimited</i> . <b>STM = 7 +/- 2</b> (Magic no.7)
<b>Duration</b>	How <b>long</b> a memory lasts.	<b>Bahrck et al</b> (Recall of yearbook) <b>Other research</b> Shepard (1967) picture recognition.	<b>Peterson &amp; Peterson.</b> (Trigram recall) <b>Other research</b> Sebrechts et al 4 seconds	<b>LTM=</b> potentially <i>unlimited</i> . <b>STM = 18-30 seconds.</b>

You should also know at least two models of memory this proves useful for two reasons

- (a) You need to know two models for the exam (obviously!)
- (b) By knowing two or three (if you have enough room upstairs to cope with it all!!) you can use them to evaluate the opposite model in terms of usefulness etc.

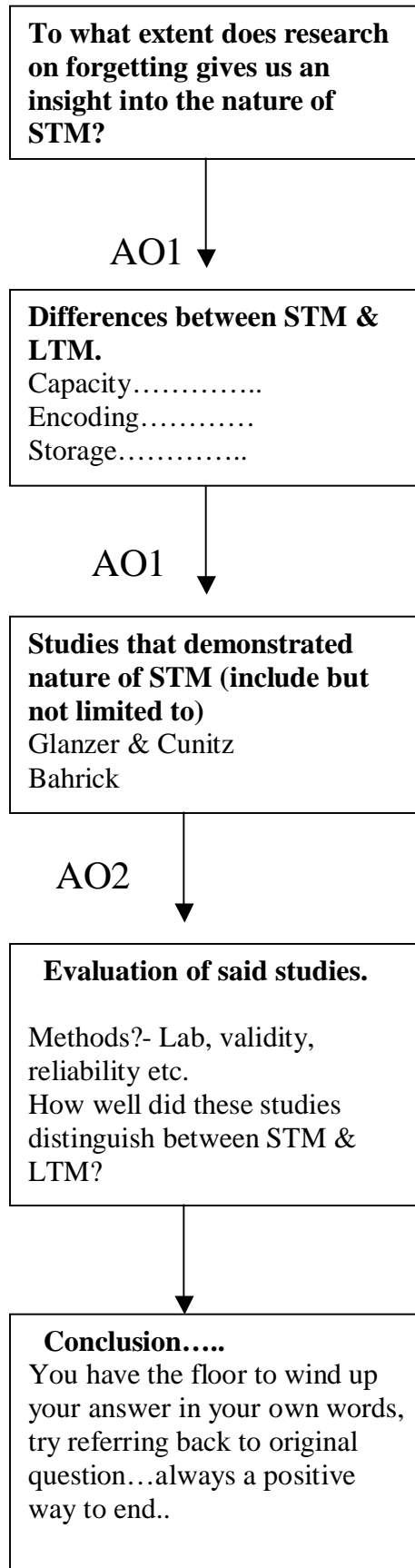
**MULTI STORE MODEL VS LEVELS OF PROCESSING.**

	<b>AO1</b>	<b>AO2</b>
MULTI STORE (MSM) Atkinson & Shiffrin. (1968)	<p><b><u>3 distinct stores</u></b></p> <ul style="list-style-type: none"> <li>➤ <b>Sensory Memory</b></li> <li>➤ <b>STM</b> (limited capacity short duration)</li> <li>➤ <b>LTM</b> (potentially unlimited capacity &amp; duration)</li> <li>➤ Information (if it is attended to) travels from the <b>SM</b> to the <b>STM</b> through rehearsal.</li> <li>➤ There is a direct relationship between rehearsal in STM and memory in LTM</li> </ul> <p>Draw diagram if this helps, so long as you explain your diagram.</p>	<ul style="list-style-type: none"> <li>➤ Supporting evidence comes in the form of brain scanning (PET) these techniques have shown prefrontal cortex works when completing a immediate task (STM) hippocampus is active in LTM.</li> <li>➤ Credible examples of above patient HM or Clive Wearing, could perform STM activities but could not lay down long term memories.</li> <li>➤ Too simplistic, memory is a complicated process.</li> <li>➤ How would this model explain the existence of different LTM e.g. episodic, procedural etc, if there is only one LTM?</li> <li>➤ <b>Supporting research:</b> Glanzer &amp; Cunitz (1966) Primacy &amp; Recency.</li> <li>➤ <b>Sperling (1960)</b> Sensory store</li> </ul>

<p>LEVELS OF PROCESSING (LOP) Craik &amp; Lockhart (1972)</p>	<p>Memories are created by processing rather than rehearsal</p> <ul style="list-style-type: none"><li>➤ Some information is processed more deeply and that if the information is processed deeply it more likely to be remembered.</li><li>➤ LOP suggests there are <b>two</b> ways information is encoded: <b>(1) <i>Deep encoding leads to lasting memories.</i></b></li><li>➤ <b>(2) <i>Information can be re-circulated at a lower level in the primary memory.</i></b></li><li>➤ The staple component of the LOP model is: <b><u>The deeper you process information the better the recall/memory.</u></b></li></ul>	<p>This model leaves itself open to the criticism of it being a <b>circular</b> argument. (Think chicken &amp; the egg- which came first?) Does deeper processing produce better recall or does better recall lead to deeper processing. ????????????????????????????????</p> <p>The stimulus you are required to recall makes a great deal of difference Morris et al (1977).</p> <p><b><u>Supporting Research:</u></b></p> <p>Craik &amp; Tulving (1975) <b>Depth.</b> Asked Q &amp; A. some shallow questions some deeper questions P recalled better in deeper processing question</p> <p>Tyler et al (1979) <b>Effort.</b> Anagrams..... Psychology and gsyolphco</p> <p>Eysenck &amp; Eysenck (1980) <b>Distinctiveness</b> Saying a word or reading...recall better for distinction e.g. D-O-G or 'DOG'</p>
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## Theories of forgetting

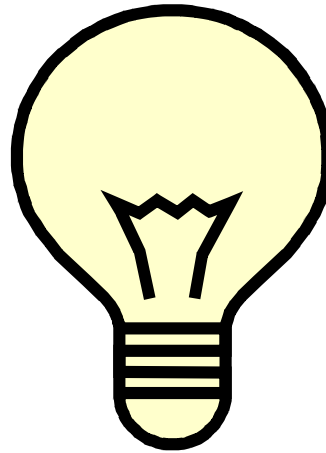
Type of forgetting.	STM	LTM	Supporting Research.	Criticisms.
<b>Decay-</b> A gradual deterioration of /fading away of information.			Peterson & Peterson. <i>Nonsense trigrams.</i>	How can one be sure decay has even taken place? Why do we have long term memories?
<b>Displacement-</b> Existing information being displaced by newer information.		x	Shallice (1967) <i>Serial probe experiment.</i>	
<b>Retrieval failure/Cue dependent.</b> Lack of cues available to retrieve information. Cues may originate internally (State) or externally (Context).	x		Godden & Baddeley (1967) <i>Divers under water (context dependent)</i>  Goodwin et al (1969) <i>Alcohol consumption (state dependent)</i>	Methodological issues. Much research carried out in lab- not like everyday life.
<b>Interference.</b> Old information interferes with new information (PI) <b>Proactive interference</b> New information interferes with old (RI) <b>Retroactive interference</b>	x			Limited explanation of forgetting- only viable when certain conditions are present.



## Emotional factors in forgetting

### AO1- Flashbulb Memory:

An individual retains a detailed and enduring recollection of the context in which they first heard about a personally important event.



Where were you when you heard about 9/11 or the death of Princess Diana?

What were you doing?

Who were you with?

### AO2-Supporting research

Brown & Kulik (1977) APFCC.

### AO2-Other research-

Johnson & Scott- Experiment staged fight.

Conway et al (1994)- Mrs Thatcher resignation.

### AO2-Criticisms of flashbulb memories

Emotion can lead to poor recall- emotion alone cannot be the leading factor in FB's if this was the case how would repression be explained?

Are FB any different to other memories?- other research has found little support for the idea of FB's.

### AO1 Repression

A way of dealing with memories that the ego finds too difficult to deal with, the memory becomes placed deep in the unconscious where it cannot be readily available. The memories that are suppressed are normally events such as child abuse, bereavement or any other traumatic event.



### AO2-Supporting research

Williams (1994) APFCC.

### AO2-Other research-

Myers & Brewin (1994) Personality types- Repressors.

Cases studies into (PTSD)  
post traumatic stress disorder.

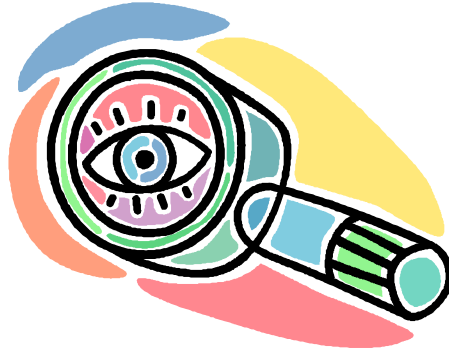
### AO2-Criticisms of Repression.

Biased samples.  
Ethical considerations.  
Methodological problems.

Arguments <b>for</b> repression	Arguments <b>against</b> repression.
1. Williams (1994) High proportion of women did not recall abuse when interviewed 20 yrs later.	1. Holmes (1990) review of 'evidence' suggest no support for existence of repression
2. WWII veterans PTSD	2. False memory syndrome.

## EYEWITNESS TESTIMONY

Evidence given in court by a person who has witnessed a crime to help identify the perpetrator.



Loftus suggested that leading questions effected the recall of the event witnessed.

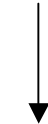
When the car smashed into the tree Vs. When the car hit the tree.  
Same sentence but with differing implications, by using the word smashed there is a hint that speed was greater.

APFCC Loftus and Palmer (1975)

Hint: Findings created these criticisms:

- (1) Findings not related to real life (what method was used?) **AO2**
- (2) Demand characteristics (why might the Participant change their behaviour?) **AO2**

**(Further research Check page 35 of text-book)**



Buckhout (1980)



Loftus (1974)

## **Factors that influence accuracy of EWT**

(1) **Memory for detail**- We can accurately describe race, gender clothing etc but less accurate when describing weight height other distinguishing features.

(2)

**A**mount of time- longer the time observed.....

**D**istance- closer the distance.....

**V**isibility-clearer the visibility.....

**O**bstructions-fewer obstructions.....

**K**nown the more familiar....

**A**ny other reason...

**T**ime....shorter the time between the event and recollection.....

**E**rrors...the more inaccurate the witnesses statement is.....

Accuracy is improved under these conditions.

## **RECONSTRUCTIVE MEMORY**

Fragments of stored information are put back together during recall and the gaps are filled in by our beliefs (schemas) to produce a narrative that



makes sense to us.

APFCC -War of ghosts (Bartlett)

Criticisms AO2- Not true to life (why?)

Not well controlled (why?)

Reconstructive memory supported by research such as:

(1) Carmichael (objects)

(2) Cohen (1981) Confirmatory bias.

Written by Lana Crosbie

What influences reconstructive memory?????

**Stereotypes-**Allport and Postman (1947) showed whites ambiguous pictures of blacks and whites interacting. Prejudiced individual's stories about the pictures often suggested that the whites and blacks were arguing or fighting with one another, and they usually blamed the black for starting the dispute.

**Interviewing Techniques-** Verbal cues- (Tone of voice)

Non-verbal cues (NVC)- (Facial expressions).

These may distort the witness's version of an event.