GCSE Psychology

2024

AQA

Paper 1

Topic	Included	Not Included
Memory	Types of memory x 3 Murdock Reconstructive theory • Interference • Context • False memory	How memories are encoded Multi – store model of memory Bartlett War of the ghosts
Perception	Monocular depth cues Binocular depth cues Gregory Gilchrist and Nesberg – food Bruner and Minturn – ABC/123	Gibson Sensation/perception Illusions Not culture / emotion
Development	Everything	Nothing
Research Methods	Everything	Nothing

Paper 1: Cognition and behaviour

What's assessed

- Memory
- Perception
- Development
- Research methods

Students will be expected to draw on knowledge and understanding of the entire course of study to show a deeper understanding of these topics.

How it's assessed

- Written exam: 1 hour 45 minutes
- 100 marks
- 50% of GCSE

Questions

- Section A: multiple choice, short answer and extended writing (25 marks)
- Section B: multiple choice, short answer and extended writing (25 marks)
- Section C: multiple choice, short answer and extended writing (25 marks)
- Section D: multiple choice, short answer and extended writing (25 marks)

Paper 2

Topic	Included	Not Included
Language	Functions of animal /human Communication Von Frisch Bee study Definitions of verbal and non Verbal Darwin's theory Yuki's emoticons	Piaget Sapir Whorf Native Americans And colours Eye contact Body language Personal space
The Brain	Fight or flight and autonomic nervous system James-Lange theory of emotion Neurons Synaptic transmission Brain structure Localised function Penfield study Scanning techniques	Structure of the nervous system Hebb's theory Tulving's gold study
Psychological Problems (Mental Health)	Characteristics of mental health Psychological explanation of depression (nurture) Aversion therapy Self management programmes Reductionism and holistic approaches	Biological explanation (nature – serotonin) Cultural variations, stigma Effects of mental health Characteristics of depression
Social Influence	All Included	

Paper 2: Social context and behaviour

What's assessed

- Social influence
- Language, thought and communication
- Brain and neuropsychology
- Psychological problems

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- Section C: multiple choice, short answer and extended writing (25 marks)
- Section D: multiple choice, short answer and extended writing (25 marks)

Paper 1 - Memory

3.1.1 Memory

Content	Additional information
Processes of memory: encoding (input) storage and retrieval (output)	Different types of memory: episodic memory, semantic memory and procedural memory. How memories are encoded and stored.
Structures of memory	The multi-store model of memory: sensory, short term and long term. Features of each store: coding, capacity, duration. Primacy and recency effects in recall: the effects of serial position. Murdock's serial position curve study.
Memory as an active process	The Theory of Reconstructive Memory, including the concept of 'effort after meaning'. Bartlett's War of the Ghosts study. Factors affecting the accuracy of memory, including interference, context and false memories.

Different Types of Memory

Episodic memory: unique memories which are concerned with personal experiences or events

Procedural memory: our memory for carrying out complex skills

Semantic memory: memories which are concerned with general knowledge rather than personal experience

0 1 . 2 Which **one** of these is a description of episodic memory? Shade **one** box only.

A A memory of a personal experience ⬭

B A memory that lasts for a few seconds ⬭

C Remembering factual information ⬭

D Remembering how to do something ⬭

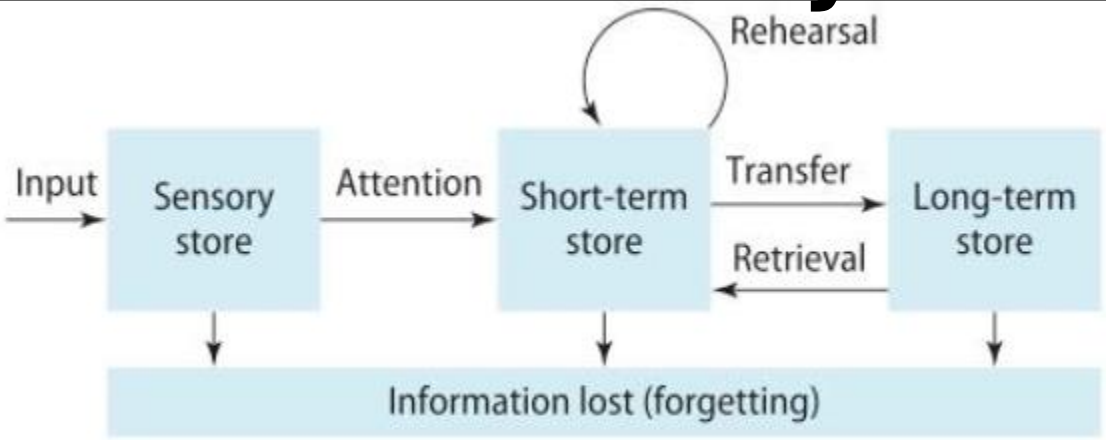
[1 mark]

The Processes of Memory

FLOW OF INFORMATION

- ENCODING – changing the information so it can be stored
- STORAGE – Holding the information in the memory
- RETRIEVAL – recovering the information from storage

Multi-Store Memory Model



A *The flow of information through the multi-store model of memory*

Memory store	Coding	Capacity	Duration
Sensory	The same way in which it is received from the senses	Very limited	Less than one second
Short-term	Mainly acoustic	Approximately seven bits of information	Up to thirty seconds
Long-term	Mainly semantic	Unlimited	Unlimited

Features of each store

Capacity: how much information can be stored

Coding: the way that information is represented to be stored

Duration: how long information can be stored for

Murdock (1962) Curve Study:

1. PRIMACY EFFECT – we remember more things from the start of a list
2. RECENCY EFFECT – we remember more things form the end of the list
3. SERIAL POSITION EFFECT – the position of words in a list will effect how likely it is to be remembered

4. This shows evidence of the long term memory store (primacy) and short term memory store (recency)

Murdock's Serial Position Curve Study

Murdock (1932) AIM

Wanted to see if memory of words was effected by the number of words someone had to remember

Murdock METHOD

Created word lists randomly selected from 4000 most common English words
103 students took part in groups listening to 20 word lists varying in length from 10 words to 40
After each list they had to recall the words

Murdock RESULTS

The likelihood of recall was related to the position of the word in the list
Higher recall for the first words in the list than those in the middle – known as the primacy effect
Higher recall for the final words in the list. This was called the recency effect

Murdock CONCLUSION

The results demonstrated the serial position effect. The position of the word in a list effects recall. Recency is strongest.
The results support the multi store model of memory. The first words are remembered because they have been rehearsed longest and are therefore in the long term memory. The more recent are well remembered because they are still in the short term memory store. The study illustrates the action of the multi store model of memory.

Murdock EVALUATION (1932)

P: A weakness was that the research method used was artificial
E: This was a laboratory experiment, participants may have changed there behaviour due to this environment The task was also artificial, it involved remembering lists of words, memories do not always involved lists
C: Therefore we can not rely on these results

The Theory of Reconstructive Memory

1. What is the reconstructive theory of memory?

People remember overall meaning of events but reconstruct parts. Memory acts as an active process, not like a machine.

2. Why is memory inaccurate?

We only store fragments of memories and add them together. This can lead to memories changing

3. How do we reconstruct memories?

We change things before we record them in the long term memory

4. What are social and cultural influences?

Our cultural expectations makes us record things differently and change things in our memory

5. What is effort after meaning?

We focus on the meaning of events

Afterwards we make the EFFORT to interpret them

Strength

- It is based on a more realistic method (bartlett)
- Not just lists of words
- Therefore we can rely on it more

Weakness

- Not all memories are inaccurate
- People don't always reconstruct, the theory doesn't explain why
- Therefore we cant rely on it

Bartlett's War of the Ghosts Study

Bartlett (1932)

Memory as an active process

Aim:

To see how memories are reconstructed and if affected by culture

Method:

Read a story to participants named "The War of the Ghosts"

Asked to re-tell the story as accurately as they could, this was known as serial reproduction

This was shared with other participants and repeated, each time known as a protocal

Results:

Participants shortened and changed each time, Missed bits out, changed things according to culture, Canoes became boats, Recalled versions became very fixed

Conclusion:

We don't remember details. We change memories to fit in with what we already know.

We reconstruct versions of events

Strength

P: It is based on a more realistic method

E: Not just lists of words (like Murdock's)

C: Therefore we can rely on it more

Weakness

P: Not all memories are inaccurate

E: People don't always reconstruct, the theory doesn't explain why

C: Therefore we cant rely on it

Factors Affecting the Accuracy of Memory

3 factors are.....

Interference, Context, False Memory.

- Research tell us that new learning can cause people to recall previously learned information less accurately. It also shows that original learning can also decrease the accuracy of recently learned information.
- Recall of information will be improved if it occurs in the same context that learning takes place. When the recall context is different from the learning context, recall will be less accurate.
- People can remember things that didn't happen often because these things have been implanted or remembered differently from the way they really happened. This makes the recall less accurate in both cases.

3.1.2 Perception

Content	Additional information
Sensation and perception	The difference between sensation and perception.
Visual cues and constancies	Monocular depth cues: height in plane, relative size, occlusion and linear perspective. Binocular depth cues: retinal disparity, convergence.
Gibson's direct theory of perception – the influence of nature	The real world presents sufficient information for direct perception without inference. Role of motion parallax in everyday perception.
Visual illusions	Explanations for visual illusions: ambiguity, misinterpreted depth cues, fiction, size constancy. Examples of visual illusions: the Ponzo, the Müller-Lyer, Rubin's vase, the Ames Room, the Kanizsa triangle and the Necker cube.
Gregory's constructivist theory of perception – the influence of nurture	Perception uses inferences from visual cues and past experience to construct a model of reality.
Factors affecting perception	Perceptual set and the effects of the following factors affecting perception: culture, motivation, emotion, expectation. The Gilchrist and Nesberg study of motivation and the Bruner and Minturn study of perceptual set.

Sensation and Perception

Sensation is physical stimulation of the 5 sense receptors by the environment (detection of a stimulus).

Perception is organising and interpreting your senses/sensory information of the world around us and giving it meaning (interpreting a stimulus).

Sensation

Whenever we smell a fresh flower, taste sweet chocolate, stroke an animal's fur, hear a baby cry or watch a firework explode, we are experiencing a **sensation**. Sensations are processed by sense receptors: our five senses (eyes, ears, sense of smell, taste and touch) which allow us to experience the world around us. In order to understand sensations, though, our brain needs to work out what they mean, and this is where perception comes in.

Perception

Perception is the organisation and interpretation of sensory information. It is the combination of the information received by a sense receptor, such as the eye, and the brain's interpretation of what that information means.

For example, how do we know what to do with a chair when we see one – to wear it, eat it or sit on it (clue: it's the last one). It is the brain's job to first process information received by the eye and then work out what the chair is for. The brain might use past experience – of what one would normally do with a chair – to help it to do this.

The difference between sensation and perception

The difference between sensation and perception might be summed up as the difference between 'feeling' and 'thinking'. Sensation is our body's way of detecting a stimulus in the environment, such as light waves (vision) or sound waves (hearing). Perception is how our brain organises and interprets these sensations.

Having said that, not all psychologists think there is such a straightforward difference between sensation and perception

Visual Cues and Constancies

Visual Cues – Information about movement/distance
Visual Constancies – Seeing the object as the same from different angles and distances.

Both give us information about movement and distance to prevent us bumping into things and help us perceive the objects we see.

Monocular Depth Cues

Occlusion: Obscured object = further away MONOCULAR

Relative size: Smaller objects = further away MONOCULAR

Height in plane: Higher up = further away MONOCULAR

Linear perspective: Parallel lines getting close = further away MONOCULAR

Binocular Depth Cues

Retinal disparity: Bigger the difference = further away BINOCULAR

Convergence: Harder eyes work = closer the object is BINOCULAR

Gibson's Direct Theory of Perception – The Influence of Nature

- Perception is the same as sensation.
- The information around you is all the brain needs to perceive the world around you.
- We don’t fill in the gaps.
- Perception happens directly.
- Our optic array (everything we can see at one time) gives us enough information.
- Known as bottom up processing (start with what is front of you, not looking back at what you’ve learnt.
- Our perception is INNATE.
- We do not learn to perceive the world around us.
- No need for experience to help us.

Motion Parallax

- A monocular depth cue.
- Gibson thought it was a vital part of perception
- Objects that are moving faster are closer to you
- Shows how easily our senses can perceive directly.

Gibson's direct theory of perception: a bottom up theory of perception, we perceive the world directly using just the pieces of sensory information we gain using our eyes. This has evolved in all animals to help them best interact with their environment

No need for Inferences: Gibson thought our senses provide all the information we need to accurately make sense of the world. The potential uses of objects, what he called their **affordance** can be perceived directly. There is no need to rely on inferences, assumptions based on past experience to interpret sensory information.

Visual information: complex information about light, texture and detail all comes from the environment, this allows accurate judgements about features such as distance and movement.

Influence of Nature: Gibson thought accurate perception is innate not learnt, coming about from evolution. Animals with the best/ most accurate perception had the best evolutionary advantage.

Role of motion parallax: a monocular depth cue from the environment that helps us to perceive movement. Objects closer to us appear to move faster than objects that are further away.

EV / A03	We experience perception as fast and accurate, with an ability to respond quickly to stimuli. This is better explained by Gibson's direct theory as it does not require an extra level of mental processing.
EV / A03	Gibson's theory suggests we have all the information we need to perceive the world accurately from our senses, because of this Gibsons theory struggles to explain how we are fooled by visual illusions.
EV / A03	Gibson was correct in suggesting we gain a large amount of information directly from the environment in perceiving the world. These features of the how vision works had been missed by other researchers.
EV / A03	Gibson's suggestion of “affordances” that we can automatically perceive the use of objects is criticised by many researchers. Many of the things we use in day to day life we have learnt how to use, requiring the use of stored knowledge.

Explanations for Visual Illusions

Misinterpreted Depth Cue = Depth cues help us perceive distance. Some illusions trick us into misinterpreting a depth cue and applying size constancy incorrectly

Size Constancy = Our brains perceiving images as a constant size, even if they appear to grow or shrink
Some illusions make our brains apply size constancy incorrectly

Ambiguous Figures = A types of illusion that shows two possible interpretations of the same image, the brain can't decide which to choose.

Fiction = A type of illusion that causes the brain to see something that is not there.

Examples of Visual Illusions

Ponzo illusion: We perceive horizontal lines that are higher up to be longer
Explanation: A misinterpreted depth cue.

Muller-Lyer illusion: The lines all look a different length. Outgoing fins at the end of line make seem different length.
Explanation: A misinterpreted depth cue

Rubin's Vase: You see a figure of a face and a vase. The brain alternates between the two
Explanation: It is and ambiguous figure. There are two interpretations, the brain can't decide which is Correct, also same as **Necker Cube**

Ames room: Room is the shape of a trapezoid. People see different sizes even though they are the same.
Explanation: Misinterpreted depth cue (size constancy)

Kanizsa triangle: Kanizsa triangle creates illusion of shape of a triangle that isn't really there
Explanation: Fiction: Seeing something that isn't there.

Gregory's Constructivist Theory or Perception

- We use past experiences to interpret the world around us
- The brain helps us guess what is happening
- We construct the world around us
- Perception is a process of construction

Inference

- We take information from in front of us and draw conclusions
- Other things we know helps
- Helps our brain fill in the gaps
- We sense someone is smiling and the brain infers that they are happy

Visual Cues

- Visual cues help our perception
- Usually, accurate
- Can interpreted things incorrectly
- Mistaken hypothesis: brain draws the wrong conclusions
- Explains how illusions work

Past Experience – The Role of Nurture

- We learn perception from experience
- It improves as we get older
- Not innate

AO3: Evaluation (weakness)

Point: A weakness I that it can't explain examples of innate perception

Explanation: The visual cliff experiment proves perception is innate

Conclude: Therefore we cannot rely on Gregory's theory

AO3: Evaluation (strength)

Point: A strength is that it is proved by how different cultures interpret things differently

Explanation: Shows evidence that perception is not INNATE and develop through experience

Conclude: Therefore we can rely on this theory

Evaluation (weakness)

Point: A weakness is that visual illusions don't prove that perception is learnt

Explanation: Illusions are designed to trick, they don't prove how perception helps us with

everyday sensations

Conclude: Therefore we cannot rely on this theory that perception is learnt

Factors Affecting Perception: Culture

Hudson's Study:

Aim: To find out if people from different cultures interpreted information in pictures differently

Method

means of answering questions about how culture affects perception.

Hudson showed 2D drawings to people from different cultures and educational backgrounds. Native black South Africans who were schooled or unschooled and white Europeans who were either schooled or unschooled.

The drawings showed an antelope, an elephant and a man with a spear (as shown left). In each of these drawings the spear is pointing at both the antelope and the elephant, but depth cues suggest what is is actually being aimed at.

Hudson asked participants in his study three questions: (1) What do you see? (2) What is the man doing? (3) Which is nearer the man, elephant or antelope?

Results

In the picture on the left most of us, because of the *height in plane* and *relative size* of the elephant, would probably say, 'the antelope'. However, Hudson found that many people replied, 'the elephant'.

Both black and white schooled participants were more likely to perceive depth than unschooled participants.

White schooled participants were more likely to perceive depth than black schooled participants.

Conclusions

The results suggest that cultural differences affect perceptual set because people from different 'cultures' use depth cues differently when perceiving 2D drawings.

One cultural difference between the participants was their schooling. Presumably those individuals who had more schooling had more exposure to 2D images and had learned to interpret such images.

Another cultural difference was race. In South Africa at the time of Hudson's study white children generally had more access to books and magazines at home and therefore were more likely to develop the ability to interpret 2D images.

This study also shows that at least some aspects of perception are learned. This supports Gregory's constructivist theory.

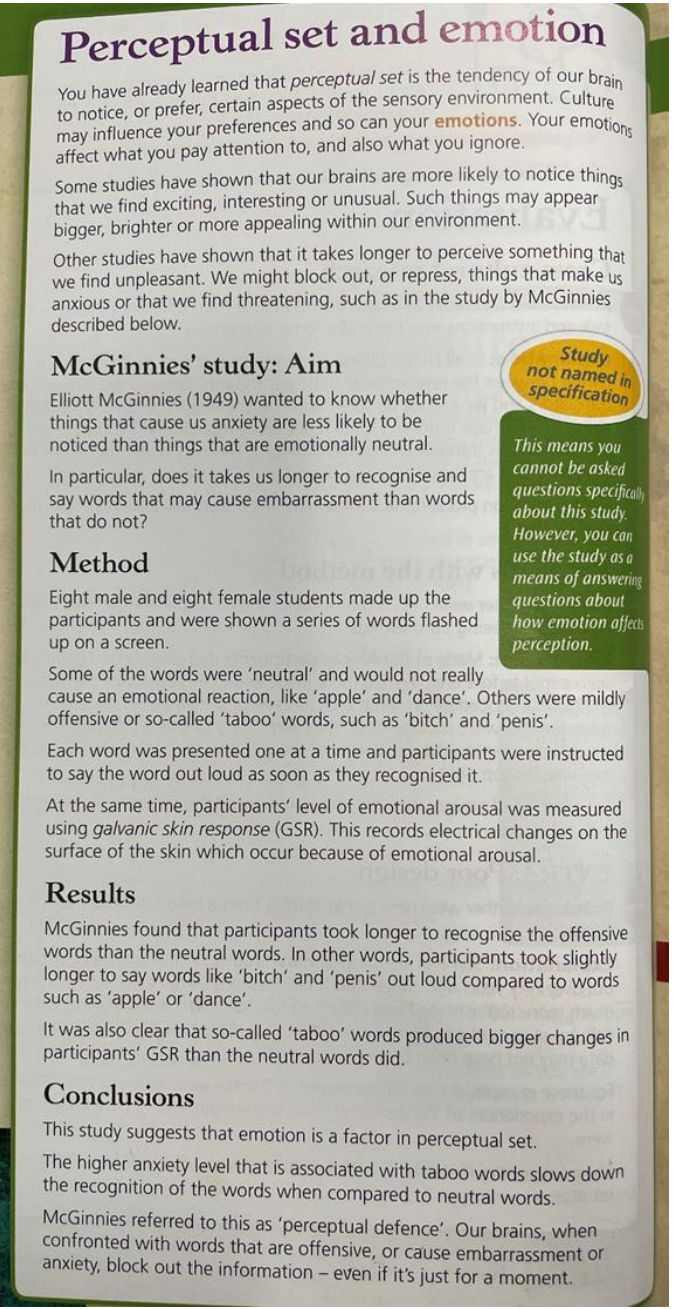
Weakness:

P – People from different cultures is that the task and instructions may not make sense of them.

P – Some participants may have been confused by seeing 2D drawings.

P – Studies from a long time ago may be poorly designed.

Factors Affecting Perception: Emotion



Perceptual set and emotion

You have already learned that *perceptual set* is the tendency of our brain to notice, or prefer, certain aspects of the sensory environment. Culture may influence your preferences and so can your **emotions**. Your emotions affect what you pay attention to, and also what you ignore.

Some studies have shown that our brains are more likely to notice things that we find exciting, interesting or unusual. Such things may appear bigger, brighter or more appealing within our environment.

Other studies have shown that it takes longer to perceive something that we find unpleasant. We might block out, or repress, things that make us anxious or that we find threatening, such as in the study by McGinnies described below.

McGinnies' study: Aim

Study not named in specification

This means you cannot be asked questions specifically about this study. However, you can use the study as a means of answering questions about how emotion affects perception.

Elliott McGinnies (1949) wanted to know whether things that cause us anxiety are less likely to be noticed than things that are emotionally neutral.

In particular, does it takes us longer to recognise and say words that may cause embarrassment than words that do not?

Method

Eight male and eight female students made up the participants and were shown a series of words flashed up on a screen.

Some of the words were 'neutral' and would not really cause an emotional reaction, like 'apple' and 'dance'. Others were mildly offensive or so-called 'taboo' words, such as 'bitch' and 'penis'.

Each word was presented one at a time and participants were instructed to say the word out loud as soon as they recognised it.

At the same time, participants' level of emotional arousal was measured using *galvanic skin response* (GSR). This records electrical changes on the surface of the skin which occur because of emotional arousal.

Results

McGinnies found that participants took longer to recognise the offensive words than the neutral words. In other words, participants took slightly longer to say words like 'bitch' and 'penis' out loud compared to words such as 'apple' or 'dance'.

It was also clear that so-called 'taboo' words produced bigger changes in participants' GSR than the neutral words did.

Conclusions

This study suggests that emotion is a factor in perceptual set.

The higher anxiety level that is associated with taboo words slows down the recognition of the words when compared to neutral words.

McGinnies referred to this as 'perceptual defence'. Our brains, when confronted with words that are offensive, or cause embarrassment or anxiety, block out the information – even if it's just for a moment.

Perceptual Set = A tendency for the brain to notice or prefer some things over others

Elliott McGinnies study

Aim: To see if anxiety could make you less likely to notice things

Method: Gave participants Taboo and Neutral words to shout out.

Measured response through a GSR (galvanic skin response) measuring emotional changes in the skin. Also measured length of time to say the word

Results: Taboo words took longer and created bigger GSR

Conclusion: Higher anxiety slows down perception Called it 'perceptual defence' our brains block out information when we are anxious

A strength is…….

Point: It used a reliable method to measure anxiety

Explain: The technology is more accurate than a rating scale

Conclusion: Therefore we can rely on this

A weakness is…

P: Participants may have behaved differently than normal

E: The task was artificial. The equipment could have caused stress

C: Therefore, we can't rely on it

Factors Affecting Perception: Motivation

Gilchrist and Nesberg:

Aim: Wanted to see if food deprivation can affect perception
Method: Two groups.
One deprived of food for 20 hours and control group (not hungry)
Shown 4 slides of meals for 15 seconds each
The picture was shown again but dimmer.
Participants had to adjust the lighting to make it look the same
Results: Participants perceived the food to be brighter if they were deprived of food. The control group didn't
Conclusion: Being hungry affects perception. Hunger is a motivating factor of perception
Evaluation (PEC): Artificial……low in ecological validity..Real life is not just pictures……Therefore… Unethical to starve?

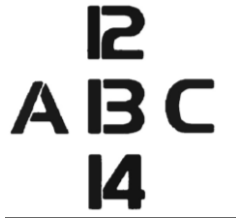
Factors Affecting Perception: Expectation

Bruner and Minturn's Study:

Aim: Wanted to see if EXPECTATION was important in perceptual set
Method: Used an ambiguous figure that could be read as the letter B or number 13
Used and independent groups design. Participants were shown either a sequence of numbers or letters.
Results: Each sequence had the same ambiguous figure in the middle
Participants had to draw and report what they saw in the middle.
Conclusion: The group who had a sequence of letters were more likely to see a B.
The group who had a sequence of numbers were more likely to see a 13.
Suggests expectation influences perceptual set . By changing the context of an image you can change the way it is perceived.
Evaluation: It used an independent groups design (PEC)
The task was artificial (PEC)

Perceptual set: The brains tendency to notice some sensations over others

Expectation influences perceptual set



3.1.3 Development

Content	Additional information
Early brain development	A basic knowledge of brain development, from simple neural structures in the womb, of brain stem, thalamus, cerebellum and cortex, reflecting the development of autonomic functions, sensory processing, movement and cognition. The roles of nature and nurture.
Piaget's stage theory and the development of intelligence The role of Piaget's theory in education	Piaget's Theory of Cognitive Development including concepts of assimilation and accommodation. The four stages of development: sensorimotor, pre-operational, concrete operational and formal operational. Application of these stages in education. Reduction of egocentricity, development of conservation. McGarrigle and Donaldson's 'naughty teddy study'; Hughes' 'policeman doll study'.
The effects of learning on development	Dweck's Mindset Theory of learning: fixed mindset and growth mindset. The role of praise and self-efficacy beliefs in learning. Learning styles including verbalisers and visualisers. Willingham's Learning Theory and his criticism of learning styles.

Early Brain Development

Brain Stem - Autonomic Functions
What: Sensory function. Autonomic functions
How: Connects to spinal cord and carries motor and sensory nerves to the rest of the body. Controls automatic functions like food digestion and heartbeat.

Cerebellum - Movement
What: Co-ordinates movement and balance, involved in language and emotion
How: Co-ordinates senses with motor activity. Known as the little brain and is one of the last to reach maturity

Thalamus - Senses
What: Sends signals about senses
How: The hub of information located deep inside the brain
Receives sensory signals from other areas of the brain and sends them around the brain.

Cortex - Thinking
What: Controls all thinking and processing
How: The thin outer layer of the brain, different areas link to thinking, hearing, seeing and movement

The Role of Nature and Nurture in Early Brain Development

Nature
We develop based on what we inherit
Studying TWINS can help test this theory. Identical twins found to have a similar IQ
Genetically similar, any differences in development prove NATURE/NURTURE debate

Nurture
We develop based on the world around us. Our experiences and Upbringing are bigger influences. Even whilst in the womb....
Smoking whilst pregnant proven to effect child development
Infections when pregnant can affect child development
Voices of mothers can be recognised by babies directly after birth

Piaget's Theory

Piaget theory: The way children think changes as they get older (cognitive development)

Schemas
- Our mental representation of our knowledge of the world
- Building blocks of information
- We add to them as we develop

Assimilation
Adding new information to an existing schema

Accommodation
Receiving new information that changes our understanding
so a new schema is formed

Evaluation
S: Lots of supporting evidence. Many further studies been done to prove the theory
W: Can't be generalised. First based on Middle class children from Switzerland

Piaget's Theory of four stages of development

Sensorimotor stage (age 0-2) • Object permanence: looking for objects out of sight
Pre-operational stage (age 2-7) • Lack conservation and egocentrism: no logical thought
Concrete operational stage (age 7-11) • Logical thought: Develops here but struggle to think in abstract terms
Formal operational stage (age 11+) • Child can now think logically with abstract ideas

Application to Education of the Four Stages of Development

Readiness: You can't teach children certain things until they are ready.

Learning by discovery: Teachers need to challenge schemas through assimilation and accommodation

Individual learning: Teachers must teach the individual, not just the group, as children develop through the stages at different rates

Sensorimotor Stage: Sensory stimulation, toys that squeak and squeeze

Pre-Operational Stage: Learning by play, experimentation and discovery. Helps reduce egocentrism

Concrete Operational Stage: Give concrete materials to use practically. Cooking to help develop logic.

Formal Operational Stage: Scientific activity and discussion of the ideal world

Piaget's Theory: Conservation

CONSERVATION: The ability to realise that quantity or volume remains the same even when appearance changes.

McGarrigle and Donaldson 'naughty teddy study'

Aim: Wanted to see if a deliberate changes could affect children's ability to conserve
Method: 80 children from Edinburgh. Used children aged 4-6. Had to say which row of counters were bigger.
The naughty teddy was used to accidentally change the size of the rows
Results: When the change was deliberate 41% conserved
When the change was accidental 68% conserved
Conclusion: Proved that Piaget's original research didn't show everything children can do.
Children can conserve at an earlier age.
Evaluation:
Can't be generalised: Primary school children all came from the same school.
Extraneous variables: The teddy may have distracted the children and meant the children just weren't looking, not that they were conserving

Piaget's Theory: Egocentrism

Egocentrism: Children under 7 only see the world from their own point of view.

Hughes' 'Policeman doll study'

Aim: wanted to test Piaget's theory of egocentrism

Method: Used a test that would make more sense to children

Children aged 3 ½ - 5 had to hide boy doll from two policeman

(draw the policeman doll test here).

Results: 90% could do it. Younger children found harder when task was more complex

Conclusion: Most 4 year olds are not egocentric. Piaget underestimated what children can do

P: It made more sense to the children

E: They understood it more so it was a better test

C: Results are more valid

P: Unconscious hints of the correct answer

E: Researchers gave cues by mistake to help the children

C: Results validity effected

Dwecks Mindset Theory of Learning

This theory is about success and why some people succeed and others fail. It is based on motivation and can be used to explain how students can learn successfully. Do we succeed due to effort or talent?

Mindset

The theory suggests all students have different mindsets, or sets of assumptions about their Abilities that influences their success. The two mindsets are called a FIXED mindset or a GROWTH mindset

Growth Mindset

A belief that even the most basic abilities can be improved by effort. People with a growth mindset regard failure as a challenge.

Fixed Mindset

A belief that achievement is due to innate ability. If you can't do something there is no point trying harder because you simply do not have the ability. You give up if you fail

A continuum

People are not usually one or the other, often they are a mixture. You can have a fixed mindset for somethings but not others

Point: Evidence proves the theory

Explanation: Research shows students taught to have a growth mindset improved more than those not taught to have a growth mindset.

Conclusion: This means growth mind set can help improve performance

Praise and Self-Efficacy

Praise

Makes people perform better.
Increases self esteem and motivation.
Must be honest sincere and deserved.
Dweck thinks praising effort is more effective than praising performance.

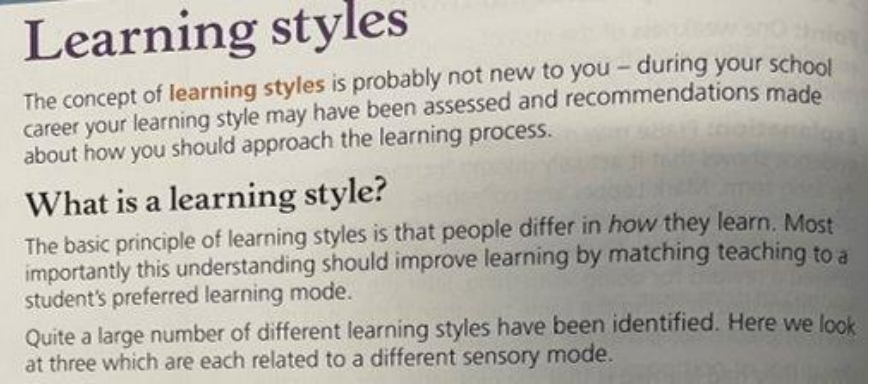
Self-efficacy

Your understanding of your own ability.
Knowing how good you are at something.
Affected by what others say.
Affects how motivated you are.
If things go wrong having high self efficacy means you will try harder to improve

Evaluating Praise and Self-Efficacy

Point: Praise destroys motivation
Explanation: Research shows that praise destroys people's internal Motivation. When praise isn't offered motivation disappears
Conclusion: This tells us that praise is not always a good thing

Point: Evidence supports the importance of self-efficacy
Explanation: Research shows that low self-efficacy can damage performance. Known as the stereotype threat.
Conclusion: It tells us what can damage performance



Learning styles

The concept of **learning styles** is probably not new to you – during your school career your learning style may have been assessed and recommendations made about how you should approach the learning process.

What is a learning style?

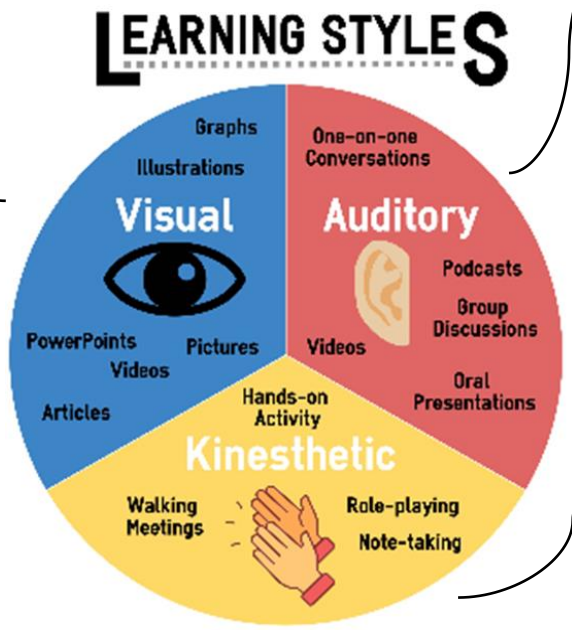
The basic principle of learning styles is that people differ in *how* they learn. Most importantly this understanding should improve learning by matching teaching to a student's preferred learning mode.

Quite a large number of different learning styles have been identified. Here we look at three which are each related to a different sensory mode.

Learning Styles

Verbalisers -
Someone who prefers to deal with information in terms of words.
Gather and process information through reading and hearing (auditory).

Visualisers -
Someone who prefers pictures rather than words.
Represent information through diagrams and mindmaps.



Kinaesthetic learners -
Someone who prefers touch.
Prefer direct experience through active exploration of environment by making and experimenting things with physical activities.

Willingham's Learning Theory

Huge critic of learning styles theory
Thought educational ideas should be based on evidence

Praise: Research shows it needs to be unexpected or will affect motivation in future
Memory and Forgetting: Research shows how it can be improved to help learning
We should practice retrieving information more than storing it
Self-regulation: Research shows that controlling impulses can (marshmallow test) can lead to better academic performance
Neuroscience: Research shows that patterns in brain waves can show dyslexia and allow children to receive extra help earlier

Evaluation
S: it is based on scientific research, we can trust his conclusions.
S: It can be applied to the real world. Teachers can use the ideas in the classroom

3.1.4 Research methods

Content	Additional information
Formulation of testable hypotheses	Null hypothesis and alternative hypothesis.
Types of variable	Independent variable, dependent variable, extraneous variables.
Sampling methods	Target populations, samples and sampling methods and how to select samples using these methods: • random • opportunity • systematic • stratified. Strengths and weaknesses of each sampling method. Understanding principles of sampling as applied to scientific data.
Designing research	Quantitative and qualitative methods: • the experimental method (experimental designs, independent groups, repeated measures, matched pairs, including strengths and weaknesses of each experimental design) • laboratory experiments • field and natural experiments • interviews • questionnaires • case studies • observation studies (including categories of behaviour and interobserver reliability). Strengths and weaknesses of each research method and types of research for which they are suitable.
Correlation	An understanding of association between two variables and the use of scatter diagrams to show possible correlational relationships. The strengths and weaknesses of correlations. Computation of formulae is not required.
Research procedures	The use of standardised procedures, instructions to participants, randomisation, allocation to conditions, counterbalancing and extraneous variables (including explaining the effect of extraneous variables and how to control for them).
Planning and conducting research	How research should be planned, taking into consideration the reliability and/or validity of: • sampling methods • experimental designs • quantitative and qualitative methods.
Ethical considerations	Students should demonstrate knowledge and understanding of: • ethical issues in psychological research as outlined in the British Psychological Society guidelines • ways of dealing with each of these issues.

Formulation of Testable Hypotheses

Theory: an idea about how to explain human behaviour

Aim: A statement about what you will test to prove a theory

Variable – any 'thing' that can vary or change within an investigation.

Hypothesis – A clear, precise, testable statement that is written at the beginning of an investigation. It states the relationship between the variables being investigated.

Null Hypothesis – A statement of no relationship (correlation or difference) between variables.

Alternative Hypothesis – states a relationship (correlation or difference) between variables. It is called 'alternative' as in alternative to null hypothesis

Types of Variables

Variable – any 'thing' that can vary or change within an investigation.
Independent variable (IV) - The thing that is varied in an experiment; either deliberately changed by the experimenter or varies naturally. There are different levels of IV – which are called *conditions* of the experiment.
Dependent variable (DV) - The thing that the researcher measures in an investigation. Any changes in the DV should depend on the IV and the IV alone.
Extraneous variable - something other than the independent variable that can affect the dependent variable. If it is not controlled, the researcher cannot know what truly caused the change in the DV.

Research Procedures

Standardised Procedures - Using the exact same methods and procedures for participants in research to help remove bias and increase validity.

Ways to standardise procedures:

Standardise instructions - Give the same instructions to all participants

Random Allocation - Using chance to decide the conditions PARTICPANTS go into (who goes first, or who goes into which condition)

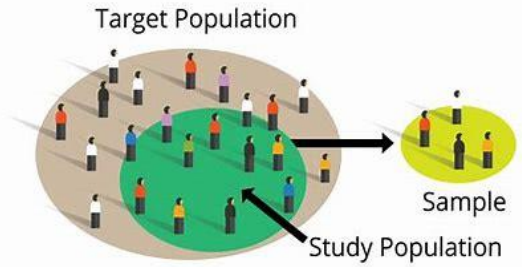
Randomisation - Using chance to create an order for a procedure (what order the words go in)

Counterbalancing - a way to even out the order participants complete both conditions of the experiment. Deals with order effects when using repeated measures experiment design.

E.G – 1 group of participants do condition A first then condition B

Other group of participants do condition B first then condition A

Sampling Methods



Target Population – The group that the researcher is interested in studying from which a smaller sample is selected.

Sample – A subset of the target population which aims to be representative of that population.

Sampling method – The system ued to produce a sample.

Random -

Description: All members of the target population having an even chance of being in the sample.

How: All TP names in a hat then pick out number needed for the sample

Opportunity -

Description: Selecting people who are willing and available at the time.

How: Choosing the first people that come along.

Systematic –

Description: Selecting every Nth person on a list of the target population.

How: Putting all members of the TP in a list then choosing the Nth from the list until you have the number you require

Stratified sampling -

Description: Selecting participants in proportion of their frequency in the target population.

How: Work out the % of the sub groups in the target population. Create a sample that reflects these %.

Reliability – concerns that consistency of a measurement. Every time a thing is measured the result should be the same – unless the thing itself has changed.
Validity – concerns whether a result is 'true' or real and if it can represent everyday life.

Sampling Methods Evaluation

Opportunity: Evaluation
S: Is quicker than others, can guarantee consent and easy to do.
W: Can cause bias, be unrepresentative and then make research hard to generalise
Random: Evaluation
S: Removes any bias
W: Takes longer, participants may not consent.
Systematic: Evaluation
S: Removes any bias.
W: Takes longer, participants may not consent, may not be representative.
W: May still be slightly bias.
Stratified: Evaluation
S: Most representative
W: Very lengthy and time-consuming process.

Quantitative Method – Using data that can be counted, usually given as numbers

Designing Research

Qualitative Method – Using data that is expressed in words and is non-numerical

Experimental Methods:

Independent groups - description

This involves separate groups for each level of the independent Variable. One group is known as the CONTROL GROUP (nothing is changed). The other is known as the EXPERIMENTAL GROUP (something is changed).

Repeated measures - description

This involves all participants are involved in all conditions of the experiment. All participants create to sets of results which are compared.

Matched pairs - description

The same as independent groups except participants are matched according to ability. One of each pair are allocated to a different group of the experiment. Can involve using twins.

Independent groups - evaluation

Advantage – it has no order effects

Disadvantage – it has participant variables

Repeated measures - evaluation

Advantage – it has no participant variables

Disadvantage – it has order effects

Matched pairs - evaluation

Advantage – it has less participant variables than normal independent groups

Disadvantage – still has some participant variables, pairs take longer to find (twins)

Participant variables – a weakness of independent groups, an advantage of repeated measures

These are the individual differences between participants that could potentially affect the DV and affect validity of results.

These can be extraneous variables and should be controlled.

Participant variables can be dealt with through RANDOM ALLOCATION. This removes bias from how participants are allocated to their groups but using chance to decide which conditions participants take part in. E.G. pull names out of hat for condition A and condition B.

Order effects – a weakness of repeated measures, an advantage of independent groups

When participants are tested twice it can affect their scores. They could improve through the practice or do worse through the

boredom of repetition. This can make the results less valid. These can be extraneous variables and should be controlled.

Order effects can be dealt with by COUNTERBALANCING. Half of the participants complete condition A first then condition B second. The other half complete condition B first then condition A second.

Types of Experiments

Lab Experiments – a method of research where variables other than the IV and DV are controlled.

Advantages	Disadvantages
• Easy to identify cause and effect as can control EVs • Can be standardised and repeated	Artificial, lack ecological validity Demand characteristics – as know they are in experiment it effects behaviour so results misleading

Field Experiments – experiments in a natural setting, the IV is still manipulated by the researcher.

Advantages	Disadvantages
• Higher in ecological validity than a lab	• Artificial if participants know, unethical if they don't

Natural Experiments – experiments in a natural setting, the IV is not manipulated by researcher, it occurs naturally

Advantages	Disadvantages
• Highest in ecological validity	• Lots of extraneous variables, hard to establish cause and effect

Survey methods: Interviews

Interview – An interaction between an interviewer and an interviewee.
Structured Interviews - Pre-set questions asked in the same order. Can not be added to. Usually closed questions.
Unstructured Interviews - Interviewer can change the questions they ask based on the responses of the interviewee. Each person will answer a different set of questions.
Semi-Structured Interviews – Interviewer has questions that have been decided in advance but will also ask follow-up questions at certain points.

Structured - evaluation
W: Lack detail, cannot explain further.
S: Easier to compare results than unstructured interviews

Unstructured
W: Data is difficult to analyse
W: Hard to compare results than structured interview
S: Can get more detailed answers than structured

Survey methods: Questionnaires

Open Questions – One that invites respondents to provide their own answer rather than select one of those provided. Tends to produce qualitative data.
Closed Questions – one that has a fixed range or possible answers. They produce quantitative data.

Questionnaires - Evaluate

W: Results are hard to generalise
S: Ethical – know they are taking part
W: Only certain people always do them
S: Quick way to gather lots of data
S: Open Qs can get info about thoughts and feelings
S: Can be sent to 1000s so results can be generalised
W; May not answer questions truthfully due to Social desirability bias
0r mood at the time making results invalid and misleading
S: Closed questions can be easily analysed and compared
W: Unethical if results aren't anonymous
W: Some people refuse to do them
W: May misinterpreted questions
W: Participants need to be able to read and write
S: Ethical – allows anonymity

Easier to compare answers

Give information about thoughts and feelings

Give more detail

Harder to compare

The Case Study Method

CASE STUDIES: In depth investigations into one person or group

How case studies are conducted.....

- Interview
- Look at life records
- Observations
- Test – personality scale

S: They can be used to study rare and unusual behaviour

W: Conclusions can be subjective not objectivive

W: The findings are hard to generalise

S: Can be used to challenge or support theories

W: They cannot be replicated with others

W: They can be unethical

S: They provide rich and detailed information

Observations – Watching and recording behavior

Carrying out an observation
Agree behaviour categories
Decided when and where
Record data as a tally chart

Inter-observer reliability
How much you can rely on what observers see in an observation.
More than one observer
Observe same behaviour INDEPENDENTLY
Use the same record sheet to record
Use the same location, time, period of time
Compared results to check for similarity

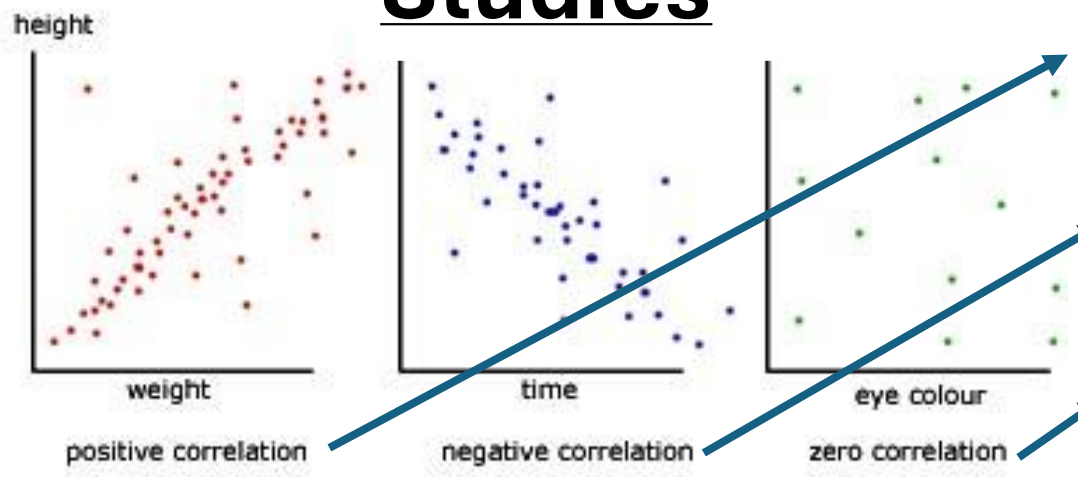
Categories of behaviour: The separate actions that are recorded as examples of target behaviour (what you want to observe)
Makes it clear what to observe
Increases consistency and agreement between observers

Observations – advantages and disadvantages
S: High ecological validity
W: Unethical if don't know being observed
S: Records real behaviour
W: Observers can make a mistakes
S: Record things people do regularly
W: Doesn't explain why things happen
W: If aware being watched they may change behaviour

Correlation method

Correlation Studies

Correlation - A way to spot the relationship between two variables



ositive correlation - as one variable increase so does the other

Negative correlation - as one variable increase the other decreases

Zero correlation - no relationship between variables

P.E.C

S: Allows you to see if there is a relationship between two variables

W: Does not establish cause and effect

S: Can be used when the study could be unethical (smoking)

W: Needs lots of data to be effective which is hard to come by

SCATTER GRAPHS – 4 marks

- TITLE – must always use the terms – 'scatter graph to show the relationship between….' (1 mark)
- AXIS Labeled (1 mark)
- Drawn with a ruler (1 mark)
- Accurate to the type of correlation, and say what this correlation is (1 mark)

Ethical Issues

Ethical issues are points of concern about what is morally right and wrong. A conflict between the rights of participants and the goals of the research

1. Do not name participants or share personal information. RESPECT

2. Get written permission from participants based on exactly what they will be doing. Ensure from a parent/carer if participants are young or vulnerable. RESPECT

3. Give people the right to withdraw at any time. RESPECT

4. Provide a briefing and debriefing so participants know what will be happening RESPECT

5. Only carry out research when qualified and follow correct procedure at all times. COMPETENCE

6. Follow health and safety rules and don't do anything that will harm participants. RESPONSIBILITY

7. Offer counselling to support with any impact of the research. RESPONSIBILITY

8. Do not lie about the results or what you will be doing in the research INTEGRITY

3.1.4.1 Data handling

Content	Additional information
Quantitative and qualitative data	The difference between quantitative and qualitative data.
Primary and secondary data	The difference between primary and secondary data.
Computation	Recognise and use expressions in decimal and standard form: use ratios, fractions and percentages, estimate results, find arithmetic means and use an appropriate number of significant figures.
Descriptive statistics	Understand and calculate mean, median, mode and range.
Interpretation and display of quantitative data	Construct and interpret frequency tables and diagrams, bar charts, histograms and scatter diagrams for correlation.
Normal distributions	The characteristics of normal distribution.

Types of Data

Qualitative Data – Information that is expressed in words and not numbers (although qualitative data can be converted to numbers for the purpose of analysis)
Quantitative Data – Information that can be counted, usually given in the form of numbers or tallies.
Primary Data – Information that has been obtained first hand by the researcher for the purposes of a research project.
Secondary Data – Information that has been fathered by someone other than the researcher before the current investigation. Such second-hand data might include results from other psychological studies or official records such as government statistics.

Quantitative Evaluation:

S: easy to analyse

W: lacks depth and detail

Primary Data Evaluation:

S: Suits your aims

W: Hard to gather

Qualitative Evaluation:

S: has depth and detail

W: hard to analyse

Seconday Data:

S: Easier to gather

W: Might not suit all your aims

Computation

Decimals

Fractions

Ratios

Percentages

Finding the arithmetic mean

Standard Form

Significant figures

Estimate

A way to represent fractions out of 10, 100, 1,000, etc. In the number 36.02 the digit 2 represents two hundredths.

36.02 and 3.62 both have two decimal places. 36.351 has three decimal places, i.e. number of digits to right of the decimal point.

A decimal is another way of writing a fraction.

0.12 is 12 out of 100 ($\frac{12}{100}$).

To reduce to lowest form, identify a number that divides evenly into the top and bottom part of the fraction (called the highest common factor).

Ratios are another way to express a fraction.

8 out of 10 did better in the audience condition = $\frac{8}{10}$ or $\frac{4}{5}$

2 out of 10 did better in the no-audience condition = $\frac{2}{10}$ or $\frac{1}{5}$

Expressed as a ratio this would be 8:2 which can be reduced to 4:1

Fractions out of 100.

12% means 12 out of 100. It is the same as 0.12 or $\frac{12}{100}$ or $\frac{3}{25}$.

Just the same as the mean: add up all the scores and divide by the number of scores there are.

Mathematical shorthand to represent very large or small numbers.

1. Move the decimal point left or right to obtain a value between 1 and 10, e.g. 3.28 or 9.6, rounding off may be necessary.
2. Work out how many times you moved the decimal point to the right or the left.

e.g. 3,280,000 can be written as 3.28×10^6 or 3×10^6

0.0000328 can be written as 3.28×10^{-5} or 3×10^{-5}

Another way to deal with very large or very small numbers.

Round large numbers to the nearest thousand, ten thousand, hundred thousand, etc. … or nearest tenths, hundredths, etc.

2 significant figures:

32,462 becomes 32,000

0.003256 becomes 0.0033

(Note: zero does not count as a significant figure.)

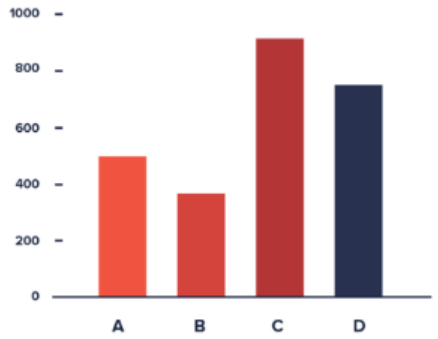
This is a rough calculation.

Descriptive statistics

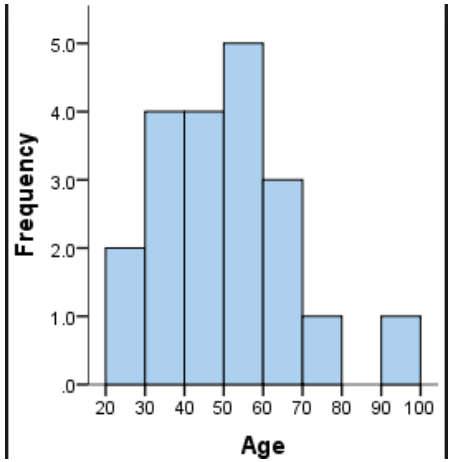
Mean - This tells us who scores higher or lower on average
Median - Tells us the middle score
Mode - This tells us what is the Most common result
Range - This tells us if there is a big or small variation in scores. A big range means participants are very different. A small range means participants are very similar

Mean Evaluation:
A: Very easy to calculate
D: Easily distorted by an extreme score
Mode Evaluation:
A: Very easy to calculate
D: Not representative of all scores
Median Evaluation:
A: Not effected by extreme scores
D: Not effected by all scores
Range Evaluation:
A: It represents all scores
D: Easily distorted by an extreme score

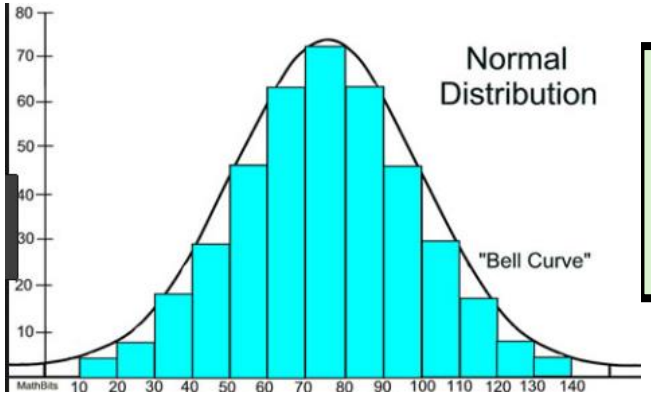
Displaying Data



Bar Chart: X-axis is not continuous. Bars can be in any order. Bars do not touch



Histogram: X-axis is continuous Data starts at zero. All categories shown. Bars touch



Normal distribution: A type of histogram. Has a symmetrical spread of frequency. The middle represents the mean, median and mode

SCATTER GRAPHS – 4 marks

- TITLE – must always use the terms –'scatter graph to show the relationship between….' (1 mark)
- AXIS Labeled (1 mark)
- Drawn with a ruler (1 mark)
- Accurate to the type of correlation, and say what this correlation is (1 mark)

3.2.1 Social influence

Content	Additional information
Conformity	Identification and explanation of how social factors (group size, anonymity and task difficulty) and dispositional factors (personality, expertise) affect conformity to majority influence. Asch's study of conformity.
Obedience	Milgram's Agency theory of social factors affecting obedience including agency, authority, culture and proximity. Explanation of dispositional factors affecting obedience including Adorno's theory of the Authoritarian Personality.
Prosocial behaviour	Bystander behaviour: identification and explanation of how social factors (presence of others and the cost of helping) and dispositional factors (similarity to victim and expertise) affect bystander intervention. Piliavin's subway study.
Crowd and collective behaviour	Prosocial and antisocial behaviour in crowds: identification and explanation of how social factors (social loafing, deindividuation and culture) and dispositional factors (personality and morality) affect collective behaviour.

Conformity

Conformity description
A change in behaviour or opinion as a result of group pressure

Social factors: people and environment around you.

Dispositional factors: something about you, your personality or temperament

Personality: Burger and Cooper research. Showed participants a cartoon and had to rate its how funny it was. A confederate gave their scores loudly.
Participants with an external locus of control gave a similar rating to the confederate more often.
Proves people with an external locus of control Personality conform MORE

Locus of control: Your level influence over what happens to you
Internal locus of control: You are in charge of what happens to you
External locus of control: You don't influence what happens to you

Expertise: Lucas et al research. Found that in maths questions people who rated themselves as good at maths were LESS likely to conform

Anonymity: In Asch's research when participants got to write their answers and other could not see they conformed LESS

TASK Difficulty: In Asch's research when the lines were more similar people conformed MORE.

Conformity Research

Conformity description

A change in behaviour or opinion as a result of group pressure

Factors affecting conformity

Size of group, familiarity of task, difficulty of task, confidence

Conformity study description

Asch (1951) – lines experiment

Asch wanted to investigate how people responded to group pressure. In the study, participants were shown sets of lines on a card and asked to say which lines matched in length. The rest of the group were confederates and told to answer incorrectly. The results showed that participants gave the wrong answer in 32% of the trials (and 74% at least once). He concluded that they gave the wrong answer to fit in with the group even though they knew they were wrong.

Conformity study Evaluation

Conducted in a lab, may behaved unnaturally, consequences may be different to normal life – ecological validity.

Experiments allow to control extraneous variables. Asch could manipulate factors to prove different things e.g the more confererates gave the wrong answer the Increased rate of conformity.

Use of confederates is unethical as it deliberately misleads people.

Conformity study practical implication

The research tells us why people smoke when other in peer groups do, tells us why people might give the wrong answer in class.

OBEDIENCE: how we respond to a direct order from a authority figure

Obedience

Milgram's Agency Theory: Social factor

AGENCY: If you act as an individual or as an 'agent' for others

What causes an AGENTIC STATE?

AUTHORITY: Individuals perceived to have authority cause an 'agentic shift', a move from an autonomous state to an agentic state

CULTURE: The beliefs and expectations around us, the social norms it involves

PROXIMITY: The distance you are (proximity) to the consequences. If you are closer to the consequence it will increase a sense of personal responsibility and decrease

EVALUATION of agency theory
Why is there not 100% obedience then?
P: The theory does not explain why some people are not obedience.
E: Not all people in Milgram's experiment gave lethal shocks
C: Therefore we can not rely on agency theory as it doesn't tell us everything

Obedience

Adorno's theory: People with an authoritarian personality are more obedient DISPOSITIONAL FACTOR. Based on a personality questionnaire called the F:scale test

Authoritarian personality: People with a strong respect for authority.

- Had parents who were strict and cruel
- Look down on those they feel are of lesser status
- Disliked jews
- Were resistant to change
- Hold traditional beliefs
- Stick rigidly to beliefs
- Obedient to higher authorities

Cognitive style: People with an authoritarian personality have a particular way of thinking

See things as either black or white

Believe in things as good or bad

Hold rigid stereotypes

Childhood

Strict parents only show love for certain behaviour

This is internalised and expected of others

Makes them hostile towards parents

Scapegoating Dislike of parents is taken out on others

Evaluation It is based on a questionnaire called the F:scale test – questionnaires lack validity because....

Therefore...

Pro social behaviour

Behaviour which is beneficial to other people, and not necessarily the helper

Social factors

Presence of others: people help less when others are around (diffusion of responsibility)

Cost of helping: People don't help because it may cause them problems.. Make them late etc

Dispositional factors

Similarity to the victim: people help more often when they are similar to the victim, help less when different

Expertise: People help more when they are experts, nurses etc. less when they feel they lack expertise

Factors affecting Pro social behaviour

Collective behaviour

Is the actions that happen when people are part of a group/what people do when they are part of a group.

Social factors

Deindividuation: Changing behaviour due to a loss of personal identify in a crowd. Take on the behaviour of others, often anti-social behaviour

Social loafing: Letting other in the group do all the work

Culture: Some cultures work harder in groups (China) some do not (USA) collectivist vs indivdualistic

Dispositional factors

Personality: people with internal locus of control are less likely to change behaviour in groups. People with external locus of control are more likely to change behaviour to take on social norms

Morality: People with strong principles of right and wrong are less likely to change behaviour when in large groups

Factors affecting Collective behaviour

Pro social behaviour research

Piliavin's subway study: Pro socialbehaviour

Aim

Wanted to see if bystander behaviour was different in a real life setting

Method

4 students board a New York City subway at the same stop. One member plays the victim and collapses on the floor. The other students observe who stops to help. In one condition the victim appeared to be drink.

In the other condition the victim appeared to be disabled with a black cane. 2 researchers observed and the other acted as a model who stepped into help eventually. 103 trials took place in total

Results

The person with the cane was helped 95% of the time. The drunk person was helped only 50% of the time.

People also took longer to help the drunk person. The number of people present did not matter.

Conclusion

Characteristics of the victim determines whether they receive help

Evaluation

S: High in ecological validity: real life setting

W: City centre setting: might only apply to this environment.

3.2.2 Language, thought and communication

Content	Additional information
The possible relationship between language and thought The effect of language and thought on our view of the world	Piaget's theory: language depends on thought. The Sapir-Whorf hypothesis: thinking depends on language. Variation in recall of events and recognition of colours, eg in Native American cultures.
Differences between human and animal communication	Limited functions of animal communication (survival, reproduction, territory, food). Von Frisch's bee study. Properties of human communication not present in animal communication, eg plan ahead and discuss future events.
Non-verbal communication	Definitions of non-verbal communication and verbal communication. Functions of eye contact including regulating flow of conversation, signaling attraction and expressing emotion. Body language including open and closed posture, postural echo and touch. Personal space including cultural, status and gender differences.
Explanations of non-verbal behaviour	Darwin's evolutionary theory of non-verbal communication as evolved and adaptive. Evidence that non-verbal behaviour is innate, eg in neonates and the sensory deprived. Evidence that non-verbal behaviour is learned. Yuki's study of emoticons.

PIAGET

Schemas: we develop mental structures of understanding about the world.
Assimilation – adding to an existing schema.
Accommodation – new information that changes our understanding so a new schema is formed.

Language depends on thought: We match language to knowledge we develop FIRST. Language develops after they have developed the correct schema for the word.

Evidence in young children: Can repeat words like parrots but have no understanding of meaning. Language only exists when they have Thought and reach the correct stage of cognitive development

Language develops in stages: Sensorimotor
Pre-operational stage: Rapid progress made in language but it is egocentric

When you can think logically language changes: At the Concrete operational stage: more logical thinking, thought starts to DECENTRE (not just your own point of view) and language develops

Sapir-Whorf Hypothesis

Thinking depends on language
Language comes first, thought comes after.

STRONG version = language determines thought.
If you don't have the words for something there is no way to think about it (ESKIMOS and SNOW)

WEAK version = language influences thought.
Language influences the way we think, but does not completely determine it. (we can think about different types of snow without the words)

Which is better?
Sapir-Whorf prefer the weaker version. We have limited memory for things we have no words for

Frank Boas: Eskimos in their language have 27 words for snow so can think in many ways about snow.
We have one word for snow so can't think about snow in the same way.
Language determines thought.

Variation in recall of events and recognition of colours

THE HOPI

Described as a timeless language

Language has no words for time passing

This influences the way they think about time

Whorf based this conclusion from meeting one individual

Carmichael picture study

Suggests language influences memory

The language used with the pictures affected what people saw and recalled

THE ZUNI

Only had one word for shades of yellow and orange

Couldn't distinguish between these colours

Couldn't recognise and recall the colours as well as English speakers

Might not have understood the tasks when they were tested

Limited functions of animal communication

- Survival

Alarm calls. Vervet monkeys make specific sounds to tell other monkeys that predators are nearby. Can be non verbal: Rabbits pin ears back

- Reproduction

Male peacocks stretch out chest and feathers in a display to attract females. Ability to do this well is passed onto offspring

- Territory

Rhinos communicate via scent marking to tell others not to invade… they spread poo. Safer method than fighting.

- Food

Bees use a dance to tell others where food is. Ants leave a pheromone (chemical smell) trail for tohers to follow to food

- Plan ahead and discuss the future

Humans can talk about things that are not present, or might happen in the future or to help plan. Animals use communication for the present only

- Creativity

Animal communication is a closed system. Communication only refers to very specific events. Humans can combine communication to create a wide variety of messages

- Use multiple channels

Humans can use a range of systems to communicate. Spoken words, written messages, hand signals etc. Animals tend to use a single channel only.

Von Frisch Bee study

Aim

To find out how bees communicate information to each other

Method

He observed bees behaviour. He changed the environment to see how they responded including putting food at different distance from the hive. He made over 6000 observations over 20 years.

Result

Found that bees tell other bees where sources of pollens are. They do this through sequences of movements or 'dances' that pass on different signals. There are two types of dance.....waggle dance and round dance

60% of the bees who observed the dance went to the food source, presumably because they understood the dance

Conclusion

Proved that bees have a sophisticated form of animal communication

P: Made an important contribution to .....
E: Took years of meticulous recording. Won a .....
C: Proves how ..... this research is

P: Doesn't take into account .....
E: The noise bees make could have been part of the.....
C: Means we can't say bees ..... only through this dance

Properties of human communication not present in animals

1. **Plan ahead and discuss future events**

Displacement: Human communication about things that are not present or haven't happened yet.

Animals talk in the present, about food sources or predators.

2. Creativity

Animal communication is a closed system.
Gestures, sounds and movements refer to specific events only, cannot create new meaning.

Human communication is an open system.
Humans combine words and can create new sentences and ideas.

3. Single versus multiple channels

Different channels can be used for human communication e.g. verbally, written, sign language, social media

Animals use single channels for communication e.g. ants can only use pheromones.

Definitions of verbal and non-verbal communication

Verbal communication
Exchanging information using words, spoken or written
Non verbal communication
Exchanging information without the use of words eye contact, body language and other sounds, tone of voice

NVC: Eye Contact Functions

1. Regulating Flow of Conversation

Eye contact helps conversations flow.
Provides feedback of listeners level of interest and emotional state

2. Signalling Attraction

- Shows our attraction to someone.
- Eye contact increases when we are close to someone or talking to someone we like

3. Expressing Emotion

Use expression to show how intense their emotion is that they are feeling.

Body language

Open and Closed Posture

The way someone positions their body during social interaction.

Open Posture: relaxed posture (without arms/legs being crossed), suggesting someone is listening in a social interaction and is in agreement with what someone else is saying

Closed Posture: having arms/legs crossed, suggesting the person is disagreeing with what is being said or is annoyed.

Postural Echo

E.g. people getting on well, friends do this.

Postural Echo: a similarity or mirroring of body positions by people in a social interaction. Suggests that two people are getting on well and are friends towards each other

Touch

e.g. handshake, high five, slapping someone on the back.
Expresses friendship or shows dominance.

Factors Affecting Personal Space

Gender: The characteristics of women, men, girls and boys are socially constructed i.e. created by social/cultural groups

Culture: refers to the beliefs and expectations that surround us. We are not conscious of living in a culture (our environment), yet it influences us.

Status: **your rank within a s**ocial or professional position e.g. headteacher has high status, teacher has lower status

Darwin's evolutionary theory – NVC is innate and inherited not learnt

"The genes for any behaviour that improves an animal's chance of survival will be selected and passed on"

Therefore genes are naturally selected

NVC is evolved and adaptive- how does it link to NVC?

Animals are adaptive and pass on any characteristics that increase

chance of survival. NVC that are beneficial (adaptive) are naturally

Comparison with humans – how does it compare to humans?

Opening eyes wide as surprise has evolved from animals to help us find an escape. This is passed on in humans.

Serviceable habits

Wrinkling nose and bearing teeth are adapted from animals but now SERVE a different purpose.

Darwin's evolutionary theory of non verbal communication: Description

Darwin's evolutionary theory of non verbal communication: evaluation

RESEARCH - strength

Paul Ekman
Identified 6 primary emotions associated with the same facial expression all over the world, means they are UNIVERSAL, Must be genetic
Therefore Darwin must be right

RESEARCH - strength

Newborn baby research
Babies know to make eye contact and how to smile
Shows this NVC must be innate
Therefore Darwin must be right

RESEARCH - weakness

Cross cultural research,Shows many different cultures have different types of NVC, e.g gestures
Therefore Darwin theory maybe wrong as it can't explain this

Evidence that non verbal communication is learned

Contact Vs Non contact cultures
Contact cultures found non contact cultures as snobby and rude. Non Contact cultures found contact cultures to be overbearing. **Shows NVC is learned**

Gestures
Hand signals are different in different countries
In Hindu it is not acceptable so they point with their thumbs
Shows NVC is learned through cultures

Social learning theory
Hall research suggests this is how **NVC is learned**
You observe and imitate people you identify with

Evidence non verbal behaviour is learned: Yuki's study of emoticons

Aim: Wanted to see if Japanese and American cultures interpreted emoticons differently

Method: 95 Japanese students
118 American students
Showed emoticons that had different combinations of happy, sad or neutral eyes / mouths.
Had to rate how happy they thought each emoticon was. 9 = very happy 1 = very sad. Then worked out the average score

Results: Japanese gave higher rating to emoticons with happy eyes (3)
Americans higher rating to emoticons with happy mouths (6)

Conclusion: Suggests that Japanese and American people interpret facial expressions Differently. Suggests the differences are due to cultural norms and expectations

EVALUATION P, E, C
Only uses two types of emotion
Artificial – emoticons not real faces

P: emojis not real

E: people from different cultures might respond differently to real faces

C: Therefore we cannot rely on the research

3.2.3 Brain and neuropsychology

Content	Additional information
Structure and function of the nervous system	The divisions of the human nervous system: central and peripheral (somatic and autonomic), basic functions of these divisions. The autonomic nervous system and the fight or flight response. The James-Lange theory of emotion.
Neuron structure and function	Sensory, relay and motor neurons. Synaptic transmission: release and reuptake of neurotransmitters. Excitation and inhibition. An understanding of how these processes interact. Hebb's theory of learning and neuronal growth.
Structure and function of the brain	Brain structure: frontal lobe, temporal lobe, parietal lobe, occipital lobe and cerebellum. Basic function of these structures. Localisation of function in the brain: motor, somatosensory, visual, auditory and language areas. Penfield's study of the interpretive cortex.
An introduction to neuropsychology	Cognitive neuroscience: how the structure and function of the brain relate to behaviour and cognition. The use of scanning techniques to identify brain functioning: CT, PET and fMRI scans. Tulving's 'gold' memory study. A basic understanding of how neurological damage, eg stroke or injury can affect motor abilities and behaviour.

The Autonomic nervous system

Structure of the Autonomic nervous system

It has two divisions called, Sympathetic and Parasympathetic, that work in opposition to keep the body balanced (homeostasis)

Function of the Autonomic nervous system

Sympathetic division: represents state of arousal, coping with stress

Parasympathetic division: Counteracts the sympathetic actions to return the body to Normal

Sympathetic

- Increases heart rate
- Inhibits saliva production
- Contracts rectum
- Increases breathing rate
- Dilates pupils
- Inhibits digestion

Parasympathetic

- Constricts pupils
- Stimulates digestion
- Decreases breathing rate
- Decreases heart rate
- Relaxes rectum
- Stimulates saliva production

Fight or flight response

Brain detects threat (Hypothalamus)
Tells the Sympathetic division to act
Hormones (adrenalin) released from adrenal glands
Fight or Flight response kicks in
Heart pumps
Energy is given to confront the danger (FLIGHT)
Or escape the danger (FLIGHT)
Once danger passes the Parasympathetic division returns the body to normal
Can be called ‘rest and digest’

The James Lange theory of emotion

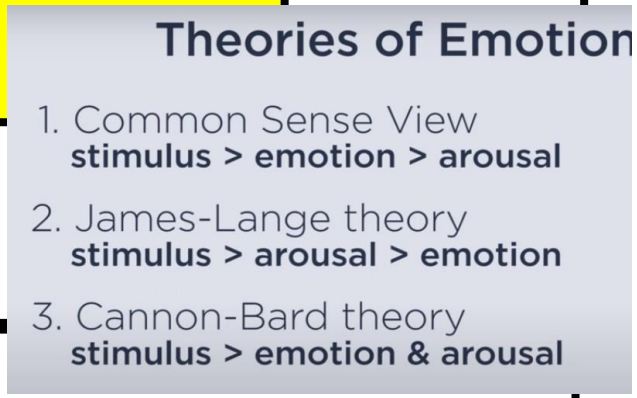
Physiological arousal FIRST EMOTION

Physiological arousal comes FIRST.. An EVENT makes sympathetic ANS kick in and cause AROUSAL e.g heart rate increases

Emotion comes second The brain INTERPRETS the physiological change and Emotion is the result... fear, anger, love

Title: James - Lange theory of emotion
Description (4 clear points)
Evaluation (using PEC)

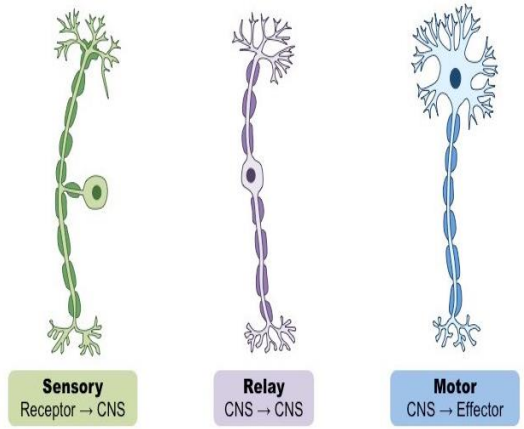
- We see a spider....
- Our muscles tense, heart pounds
- Interpret this as fear
- We run away



No physical changes = no emotion
If you stand up and everyone stares at you and no physical change then no emotion. Physical changes cause the emotion

Cannon-Bard Argues against the theory
Some emotion comes first
Gives embarrassment as an example
We blush and feel embarrassed at the same time

Types of Neurons



Sensory Neurons

Send electrical messages from the PNS (from **five senses: sight, hearing, taste, smell, and touch)** to the CNS (brain)

Have long dendrites and short axons E.G – tells your brain something is hot (fire)

Relay Neurons

Connect sensory neurons to motor neurons, allow them to communicate

Have short dendrites and short axons. E.G – connects sensory neuron message to motor neurons that something feels hot

Motor Neurons

Send electrical messages from CNS to muscles and Glands. Makes muscles move.

Have short dendrites and long axons. E.G – moves muscles based on sensation that something is hot

How neurons communicate

Neurons communicate via SYNAPTIC TRANSMISSION
The Synapse is the area at the end of each neuron
Gap to the next neuron is call the synaptic cleft

Tiny sacs called vesicles contain neurotransmitters molecules

Neurotransmitters release: These travel across the cleft to pass on messages between neurons. These are always chemical messages between the neurons

Neurotransmitters reuptake: Changing the neurotransmitter back from a chemical to an electrical signal to pass along the neuron

- Neurons FIRE to pass on messages. They become charged to send an impulse
- Excitation: Some neurotransmitter chemicals such as ADRENALIN make the neuron MORE likely to fire.
- Inhibitory: Some neurotransmitter chemicals such as SERATONIN make the neuron LESS likely to fire.

Hebb's Theory of Learning and Neuronal Growth

Hebb's theory: Learning creates new connections between neurons

The brain is plastic: it can change and develop, synaptic connections become stronger the more used

The brain adapts: at any time or age

Cell assemblies: During learning cells group together in 'assemblies' which work better together and re-wire the brain as learning takes place

Engrams: A trace left by learning, can become stronger with practice

Hebb's theory: EVALUATION

P:The theory is scientific

E:It is based on objective evidence that can be seen

C: Gives validity to the theory

S: Can be applied to education

W: It's reductionist. Reduces learning to brain cells. Ignores the environment

Brain Structure and localised function

The frontal lobe: at the front. Thinking, planning, movement.

Temporal lobe: lower middle. Hearing and language

The Parietal lobe: next to frontal lobe. Sensations such as touch, heat, pressure

Occipital lobe: back of brain. Vision

Cerebellum: Little brain above spinal cord. Attention, language, movement

Motor area: frontal lobe, movement

Somatosensory area: Parietal lobe, sensation

Auditory area: Temporal lobe, damage can cause deafness

Language area: Temporal and frontal, 2 parts

Visual area: Occipital lobe, receives signals from eyes

Broca's area: Producing speech

Wernicke's area: Understanding speech

Penfield's study of the INTERPRATIVE CORTEX

Aim: Wanted to be able to describe the responses caused by electrically stimulating parts of the brain

Method

He electrically stimulated the brain of patients with epilepsyusing a surgical technique called the Montreal procedure. Over 30 years on more than 1000 patients

Results

Stimulation to the temporal lobe created twoResponses; Experiences:
Patients reported that they were re-living past events. Interpretations:
When other parts of the temporal lobe were stimulated patients reported strong emotions and the feeling of déjà vu. They were hallucinating.

Conclusion

This area, called the INTERPRATIVE CORTEX, is the part of the brain that is responsible for interpreting memories and stores our feelings

Evaluation

P: Used a very precise method.
E: It isolated specific areas of the brain that he could repeat again and again.
C: Created a map of the brain that benefited neuroscience for years to come
Sample?
Why not 100%

What cognitive neuroscience is
How it relates to behaviour
How it relates to cognition
How it relates to mental health

Neurological damage
Localisation
Effects of stroke
Motor ability
Behaviour

The study of the structure and function of the brain. Studying what each part of the brain is for.

Studying how each part of the brain influences **behaviour** e.g.Frontal lobe: movement, Temporal lobe(amygdala): emotion

Tells us about different mental processes E.G. that different types of memory are stored in different parts of the brain

Helps explain mental health problems. E.g low levels of the neurotransmitter serotonin links to depression

How different areas perform different functions and damaging them can affect these functions

Bleeding on the brain. Can prevent certain areas from working

Damage to the frontal lobe can affect movement on the opposite side of the body to the side of the brain damaged

Damage to frontal lobe can affect the way you act. E.g Phineous Gage became more aggressive.

Scanning techniques

Type of brain scan	How it works	Advantages	Disadvantages
CT	Large doughnut shaped scanner X-rays of the brain Takes images of different angles of brain Combine to show a detailed picture	Higher quality than normal x-rays Useful for revealing tumours	Only still images Exposes you to radiation
PET	Inject patient with radioactive substance. Brain activity then shown on a computer screen	Shows brain in action Shows localised function when performing a specific task	Expensive Difficult to interpret Unethical
fMRI	Measures changes in blood oxygen levels. Produces a 3D image that is shown on a computer screen	Shows brain in action Clear images No radiation	Expensive Patient must be completely still Time delay between activity and image

The study

Named study in specification

Endel Tulving (1989) was interested in what goes on in the brain when people are processing **episodic** and **semantic memories**, such as the examples in the childhood memory on the left.

Tulving did not believe that *long-term memory* was just one big storage unit. He thought that memory was split up into different parts or types, and that these were linked to different areas of the brain. He set out to test this idea using a form of *PET scan* (PET scans are discussed in detail on the previous spread). In this case the *radioactive* substance was gold.

Tulving's study: Aim

Tulving's aim was to see whether thinking about *episodic memories* produced blood flow in different parts of the brain than thinking about *semantic memories*.

Method

Tulving's research involved six volunteers, including himself and his wife. Each participant was injected with a small amount of radioactive gold. Once this substance was taken up by the brain, active brain areas would show up on a PET scan using gamma rays.

Each participant performed eight trials: four episodic and four semantic in a random order. This was a repeated measures design as the same participants were taking part in all of the tasks.

- The episodic tasks involved thinking about personal experiences, such as holidays the person had been on as a child.
- The semantic tasks involved things like recalling historical facts from memory.

On a signal, the participant would begin thinking about the topic, whilst blood flow in their brain was monitored on the scan.

Results

Tulving found clear differences in blood flow patterns for three of the six participants.

When participants thought about semantic memories, there was greater concentration of blood flow towards the back of the brain (the *posterior cortex*).

When participants thought about episodic memories, there was greater concentration of blood flow towards the front of the brain (the *frontal lobe*).

Conclusions

Tulving's study suggests that episodic and semantic memories are separate forms of long-term memory. It also seems likely that these types of memory are located in different parts of the brain.

This would support the idea that memory has a biological basis, and that different types of memory are localised in different areas of the brain.

Stretch and challenge

Tulving

1. How was gold involved? Injected
2. Why did he use gold? It is radioactive
3. How many trials took place? 8
4. How many were in the sample? 6
5. What experiment design was used? Repeated measures
6. Where did blood flow increase for sematic memories? Back of brain
7. Where did blood flow increase for episodic memories? Front of brain
8. Did this prove that the brain contains one LTM or separate LTM stores?

separate

- Aim
- Method
- Results
- Conclusion
- Evaluation

Tulving Evaluation 1
Point: Small sample.
Explain: Only six participants including himself. Differences only seen in 3 participants
Conclude: The results were inconclusive and can't be generalised

Tulving Evaluation 2
Point: Scientific evidence.
Explain: The evidence from brain scans can't be faked
Conclude: We can be sure it is unbiased

Neurological damage

Localisation: How different areas perform different functions and damaging them can affect these functions

Neurological damage

Effects of stroke: Bleeding on the brain. Can prevent certain areas from working

Neurological damage

Motor ability: Damage to the frontal lobe can affect movement on the opposite side of the body to the side of the brain damaged

Neurological damage

Behaviour: Damage to frontal lobe can affect the way you act. E.g Phineous Gage became more aggressive.

3.2.4 Psychological problems

Content	Additional information
An introduction to mental health How the incidence of significant mental health problems changes over time	Characteristics of mental health, eg positive engagement with society, effective coping with challenges. Cultural variations in beliefs about mental health problems. Increased challenges of modern living, eg isolation. Increased recognition of the nature of mental health problems and lessening of social stigma.
Effects of significant mental health problems on individuals and society	Individual effects, eg damage to relationships, difficulties coping with day to day life, negative impact on physical wellbeing. Social effects, eg need for more social care, increased crime rates, implications for the economy.
Characteristics of clinical depression	Differences between unipolar depression, bipolar depression and sadness. The use of International Classification of Diseases in diagnosing unipolar depression: number and severity of symptoms including low mood, reduced energy levels, changes in sleep patterns and appetite levels, decrease in self-confidence.
Theories of depression Interventions or therapies for depression	Biological explanation (influence of nature): imbalance of neurotransmitters, eg serotonin in the brain. Psychological explanation (influence of nurture): negative schemas and attributions. Use of antidepressant medications. Cognitive behaviour therapy (CBT). How these improve mental health, reductionist and holistic perspectives. Wiles' study of the effectiveness of CBT.
Characteristics of addiction	The difference between addiction/dependence and substance misuse/abuse. The use of International Classification of Diseases in diagnosing addiction (dependence syndrome), including a strong desire to use substance(s) despite harmful consequences, difficulty in controlling use, a higher priority given to the substance(s) than to other activities or obligations.
Theories of addiction Interventions or therapies for addiction	Biological explanation (influence of nature): hereditary factors/genetic vulnerability. Kaij's twin study of alcohol abuse. Psychological explanation (influence of nurture): Peer influence. Aversion therapy. Self-management programmes, eg self-help groups, 12 step recovery programmes. How these improve mental health, reductionist and holistic perspectives.

Characteristics of mental health

Characteristics of mental health :Maria Jahoda: 'mental health indicators'

- Self attitude: self esteem + identity
- Personal growth and self evaluation
- Integration
- Autonomy: independence, self control
- Accurate perception of reality
- Mastery of environment

Too much focus on what is 'illness'
Not enough focus on what is mental 'health'
Jahoda: Better to look for a lack of 'health indicators'

Anxiety 4.7 in 100
Depression 2.6 in 100
Eating disorders 1.6 in 100
1 in 2 will suffer at some stage

2007 = 24% accessing treatment
2014 = 37% accessing treatment
More women treated than men
By 2030 estimated that 2 million more will have problems than in 2013

Low income mental health probs = 27% men
Higher income mental health probs = 15% men
Big city living isolation and loneliness = depression

Hearing voices is seen as mental health problem to some cultures. India / African cultures see it as a positive experience
Anorexia = rare outside the western world
Penis retraction anxiety = only in Asia

Maria Jahoda: 'mental health indicators'
Self attitude: self esteem + identity
Personal growth and self evaluation
Integration
Autonomy: independence, self control
Accurate perception of reality
Mastery of environment

Signs of problems include
Difficulty sleeping / getting up in the mornin
Difficulty socialising
Much harder to diagnose than physical illnesses

Too much focus on what is 'illness'
Not enough focus on what is mental 'health'
Jahoda: Better to look for a lack of 'health indicators'

Stigma = mark of disapproval or disgrace
Labels for mental health create negative stereotypes
Mental illness = something to fear
Change to mental health = something you can change and improve, more positive

Damage to relationships

- Effects ability to talk to others
- Depression leads to focus on yourself
- Breakdown of relationships with family friends
- Isolates people as makes them avoid social situation due to fear of judgment

Difficulties coping with day to day life

- Can't get dressed, socialise, clean house
- Distressing to others

Negative impact on Physical wellbeing

- Body react to stress/anxiety by producing cortisol
- Cortisol prevents the immune system working properly
- Makes illness more likely

Need for more social care

- Tax money needed to pay for basics to help others
- Society must take responsibility
- System must help people learn skills to look after themselves

Increased crime rates

- 4 times higher risk of violence amongst people with mental health problems
- Myth suggests it is worse than it is
- Only 1 in 20 violent crimes link to mental health
- Can be explained by addiction and low standards of living

Damage to relationships

- Effects ability to talk to others
- Depression leads to focus on yourself
- Breakdown of relationships with family friends
- Isolates people as makes them avoid social situation due to fear of judgment

Clinical depression

Depression is a diagnosed medical condition. Not just 'feeling a bit depressed'

Sadness and depression

Sadness is a normal emotion. Depression is feeling sad about everything that stops the ability to function

Unipolar depression

Experiencing one emotional depressed state

Bipolar depression

Alternating between two moods. Depression and mania. Mania is an exaggerated feeling of intense well-being and a belief that the world is their for the taking. Also involves period of feeling normal

Learning activity:
1. Describe the biological explanation of depression – 4 clear points
2. Evaluate the biological explanation of depression - strength and weakness. PEC

Electrical messages passed between neurons.
Serotonin is a neurotransmitter that links to depression.

Stimulates postsynaptic neuron
High levels improve mood
Low levels means less stimulation and low mood

IT IS ALL PHYSICAL
IT IS ALL NATURE
IT IS CHEMICAL
IT IS NEUROTRANSMISSION

Memory, sleep, appetite.
All are characteristics of depression.

Genetics = low levels of serotonin
Diet = low levels of tryptophan, an ingredient of serotonin

- Scientific theory.
- Research has found a lower level of serotonin in people with depression.
- Proves a link between serotonin and depression

P: A strength is…
E: This is because..
C: Therefore…

- Could be other things than serotonin
- Some people with low serotonin don't have depression
- Suggests neurotransmission explanation isn't enough on its own

- Faulty thinking
- Negative schemas
- Attributions
- Nurture
- Seligman research

GUIDED PRACTICE

Cognitive approach – the way we think. Faulty thoughts ignore positives, feeling hopeless, glass half empty

Schemas = mental frameworks containing ideas and experiences. Negative schemas about yourself interpret everything negatively

Attribution means explaining causes of behaviour. Seligman proposed some people have a negative attributional style. Negative internal, stable and global attributions = depression

We learn to have a negative attributional style. You learn to give up trying = **learned helplessness**

Antidepressants: Medication to treat Depression
AKA: SSRIs
- Selective
- Serotonin
- Reuptake
- Inhibitor

(SSRIs).

Types of SSRIs

There are currently 8 SSRIs prescribed in the UK:

- citalopram (Cipramil)
- dapoxetine (Priligy)
- escitalopram (Cipralex)
- fluoxetine (Prozac or Oxactin)
- fluvoxamine (Faverin)
- paroxetine (Seroxat)
- sertraline (Lustral)
- vortioxetine (Viibryd)

Selective serotonin reuptake Inhibitor (SSRI).

Low serotonin causes depression. SSRIs try to increase serotonin

Presynaptic neuron

Serotonin is stored in vesicles of the transmitting neuron. Electrical signals cause their release.

Reuptake

Normally, serotonin passes back to the presynaptic neuron and is broken down and reused.

SSRIs block the reuptake so more serotonin is left in the synaptic cleft

Synaptic cleft

Serotonin passes the signal across the cleft to postsynaptic receptors

Psychological explanation of depression (4 clear points using below)

Cognitive approach – the way we think. Faulty thoughts ignore positives, feeling hopeless, glass half empty

Schemas = mental frameworks containing ideas and experiences. Negative schemas about yourself interpret everything negatively

Attribution means explaining causes of behaviour. Seligman proposed some people have a negative attributional style. Negative internal, stable and global attributions = depression

We learn to have a negative attributional style. You learn to give up trying = **learned helplessness**

EVALUATION Strength: Supported by Seligman research. Seligman showed that…This supports the idea that…

Evaluate the psychological explanation of depression (use PEC)

A strength of the Psychological theory of depression is that it is supported by research by Seligman. He demonstrated that dogs would eventually give up trying to escape electric shocks. This supports the idea that helplessness is learned, and people become depressed because they learn to react to challenges by giving up.

Therapy for depression: Nicola Wiles study

Aim: Wanted to test a HOLISTIC approach to treating treatment resistant depression. CBT + Medication.

Method: 469 patients. Randomly put participants into two groups and treated them for depression.

1. Usual care (antidepressants)
2. Usual care + CBT (12-18 sessions)

Beck Depression Inventory (BDI) used to measure symptoms before and after

Results: After 6 months more than a 50% reduction in symptoms was shown in

1. Usual care = 21.6% of participants
2. Usual care + CBT = 46%

After 12 months group two continued to show greater recovery

Conclusion: CBT + medication is more effective at reducing depression

Evaluation:

P: Well designed study- scientific
P: Incorrect self evaluation of depression levels – BDI
P: Real world use – can help
P: Participant variables – I.G

Evaluation:

(P) A strength/weakness is
(E)This is because..
(C) Therefore..

Reductionist Vs Holistic

INDEPENDENT PRACTICE

Side effects

Effectiveness

- Nausea, dizziness, weight loss or Gain, anxiety, suicidal thoughts
- Makes people stop using them
- Reduces effectiveness

- Questionable evidence of how well it works
- Asbert research suggests Serotonin levels NOT different in people with depression
- Any evidence of effectiveness maybe a placebo effect

- Reduces theory to a biological one ONLY (nature)
- Ignore influences of nurture
- HOLISTIC approach is best which addresses and treats both

Cognitive: Focusses on the way people think
Tries to change negative, irrational thinking that causes depression.

Behavioural activation: targets behaviour changes. Encourages patients to do one activity a day that makes them feel like they've accomplished something.
Aims to create positive emotions.

Therapists use 'disputing': Therapists argue against irrational thoughts. "where is the evidence that"
Hopes to create more rational thinking and self-liking

Client keeps a thought diary.
Record automatic thoughts.
Then rate how much they believe in them.
Then record a more rational response.
Then rate this one.

Learning activity: Title: CBT description

1. Describe how CBT works as a treatment for depression (4 clear points)

Focusses on the way people think
Tries to change negative, irrational thinking that causes depression.

Behavioural activation: targets behaviour changes. Encourages patients to do one activity a day that makes them feel like they've accomplished something.
Aims to create positive emotions.

Disputing is used: Therapists argue against irrational thoughts. "where is the evidence that"
Hopes to create more rational thinking and self-liking

Client keeps a thought diary.
Record automatic thoughts.
Then rate how much they believe in them.
Then record a more rational response.
Then rate this one.

GUIDED PRACTICE

INDEPENDENT PRACTICE

Learning activity **Title: CBT Evaluation**

1. Describe how CBT works as a treatment for depression
2. Evaluate how CBT works as a treatment for depression

Cognitive Behaviour Therapists Client

Long lasting
Not for everyone
Holistic

P: A strength / weakness is
E: This is because…
C: Therefore…

Addiction = Compulsive behaviour that is pleasurable that eventually becomes harmful

Dependence =
- A characteristic of ADDICTION
- When you can't live life without something
- When stopped you experience problems (withdrawal)
- Becomes ADDICTION when includes pleasure

Addiction characteristics =

Metal health problem
Compulsive
Harmful
Pleasure

Dependence
Withdrawal
Tolerance

Diagnosis= ICD-10 International classification of diseases
Lists characteristics
Must have 3 or more present together

Characteristics needed to diagnose =

- Strong desire to use
- Persistent despite harm
- Difficulty controlling
- High priority
- Withdrawal
- High tolerance

Misuse = Not following the rules of the substance

Abuse = Using it to get high or escape

Kaij's twin study

Wanted to see if addiction to alcohol could be hereditary. Used twins to test

Identified male twins registered with the temperance board (for people with alcohol problems) in Sweden. Interviewed twins and relatives.
48 monozygotic, 128 Dizygotic twins took part

61% MZ twins were both Alcoholic
39% DZ twins were both Alcoholic

Genetics makes you more vulnerable to Alcoholism as more of the identical twins, who have more similar genetics, were both alcoholics.
Also proved genetics not totally to blame as results were not 100% for MZ twins

P: Flawed design

E: Participants had alcohol problems, not necessarily addiction

C: Means the results lack validity

P: Lacks control – what about other factors.. Family or social?

A strength/weakness is that…
This is a strength because…
Therefore….

P: Problems with the sample

P: Other research has found the same thing

Biological theory of addiction

Hereditary: Research suggests addictions are moderately to highly inherited

Genetic vulnerability: Some genes make you more vulnerable to addiction but do not act alone. Require nurture and experiences to act as a trigger

Genetics makes you more vulnerable to Alcoholism as more of the identical twins, who have more similar genetics, were both alcoholics. Also proved genetics not totally to blame as results were not 100% for MZ twins

The "Diathesis-stress" explanation

Multiple genes are involved in addiction
Certain genes make you more vulnerable (diathesis)
Such as creating low levels of serotonin (nature)
Combined with stress full experiences (nurture)
Can lead to problems like depression / addiction

Describe the psychological explanation of addiction

Nurture: The influence of experience on us

Peer influence: Those around us who are equal in terms of age or education and their impact on our behaviour

Social learning theory: Bandura found that we learn how to behave by watching and imitating. We are more likely to imitate if rewarded or identify with the person we see

Social norms: The rules of behaviour.
We look to others to see what they are.

This tells you what is acceptable for your groups.

Social identity theory: You identify with your social group.
You want them to accept you, so you behave like them.

Opportunities for addiction: Peers provide opportunities for addictive behaviour. Peers may give instruction of what to do.
This can lead to addiction.

RESEARCH:

- Real world applications: Challenging social norms has found to be successful
- Over 40 studies have found a correlation between smoking and peer influence
- Maybe genetics influences selection of peers

Self management treatments for addiction

Mental health topic revision questions to focus on .....

- Describe and evaluate an example of a self help therapy for addic

Individuals help themselves, no therapist is involved

They follow a 12 step programme that involves giving control to a higher power

Participants must admit and share guilt for what they have done

Recovery is a lifelong process

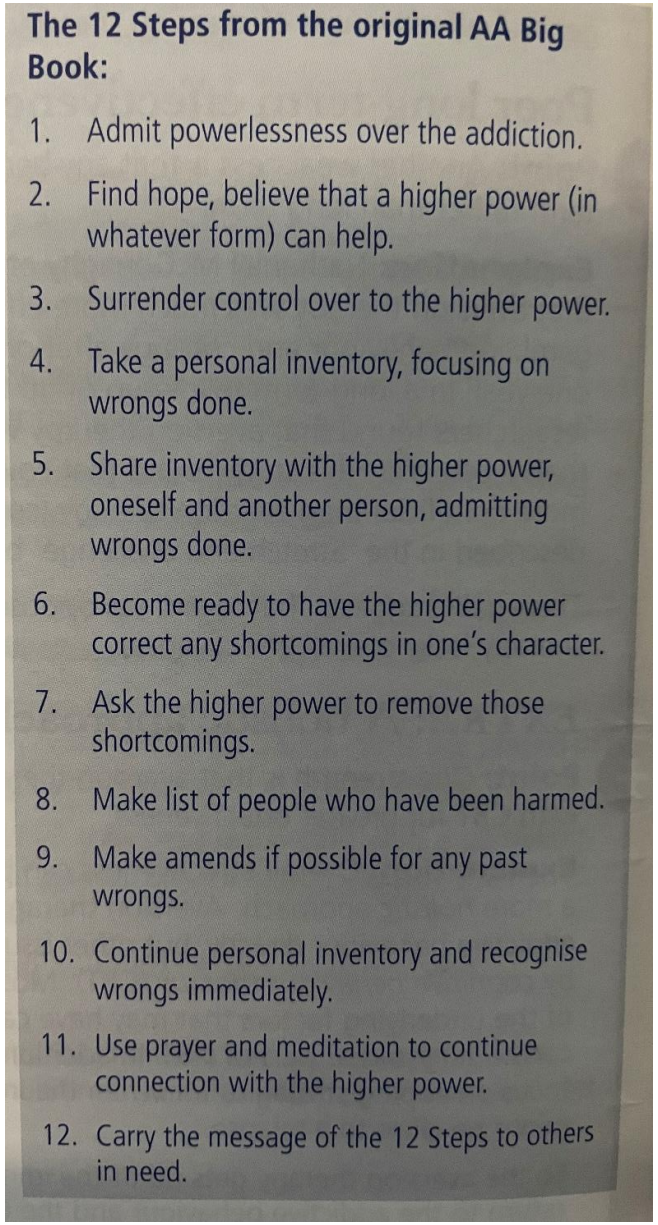
Participants attend self help groups where peers support each other. Lead by a recovering addict. E.G Alcoholics anonymous. Gambling anonymous.

Evaluation

33% of 8000 remain sober for over 10 years

Many drop out.

IT looks at the whole person, better than reductionist aversion therapy.



The 12 Steps from the original AA Big Book:

1. Admit powerlessness over the addiction.
2. Find hope, believe that a higher power (in whatever form) can help.
3. Surrender control over to the higher power.
4. Take a personal inventory, focusing on wrongs done.
5. Share inventory with the higher power, oneself and another person, admitting wrongs done.
6. Become ready to have the higher power correct any shortcomings in one's character.
7. Ask the higher power to remove those shortcomings.
8. Make list of people who have been harmed.
9. Make amends if possible for any past wrongs.
10. Continue personal inventory and recognise wrongs immediately.
11. Use prayer and meditation to continue connection with the higher power.
12. Carry the message of the 12 Steps to others in need.

- How can aversion therapy treat alcoholism?
- How can aversion therapy treat gambling?
- How can aversion therapy treat smoking?
- Is it effective?
- Does it work long term?
- What is a more holistic approach?

Aversion therapy

Description

Based on classical conditioning
Learning through association
Learn to associate the addiction with something unpleasant.
You then avoid the addiction

Antabuse = vomit, disgust so avoid alcohol
Electric shocks pain, so avoid gambling
Smoke filled room = sick/disgust so avoid smoking

Evaluation

It works at first but research has shown that later patients go back to old behaviour

It can be unpleasant so patients stop taking part

Better if not used in isolation. Combined with therapy (CBT) it can be successful in the long term. (holistic)

Self help therapy:

Individuals help themselves, no therapist is involved

Self help therapy:

They follow a 12 step programme that involves giving control to a higher power

Self help therapy:

Participants must admit and share guilt for what they have done

Self help therapy:

Recovery is a lifelong process

Self help therapy:

Participants attend self help groups where peers support each other. Lead by a recovering addict. E.G Alcoholics anonymous. Gambling anonymous.