



Knowledge Organiser: Year 10

Psychology; PERCEPTION

Sensation and perception

1

Sensation = Physical stimulation of the five senses processed by sense receptors

Perception = Brain interpreting and organising the sensory information

The difference between sensation and perception

= Sensation is the detection of a stimulus whereas perception is interpreting what it means

Theories of perception = Perception theories differ. Gregory sees a difference between sensation and perception. Gibson does not.

Explaining Visual illusions

3

Size constancy (objects perceived as constant size despite size on retina changing with distance)

*Ames room

Misinterpreted depth cues (objects apparently in the distance scaled up by brain to look normal size, causes visual illusions)

*Ponzo illusion

*Muller-Lyer illusion

*Ames room

Ambiguous figures (Two possible interpretation of image. Brain can't decide which is correct)

*Necker cube

*Rubin's vase

Fiction (Seeing something that is not there)

*Kanizsa triangle

Gibson's direct theory- Evaluation

4b

Real-world meaning:

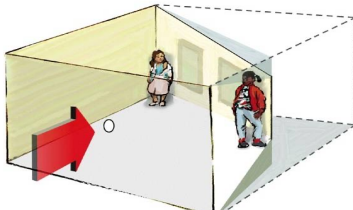
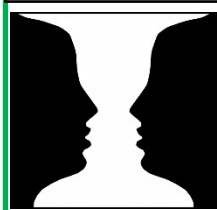
Research was on 2nd World War pilots, so relevant to daily life

Theory struggles to explain visual illusions:

Perception is seen as accurate but illusions trick the brain, so theory is incomplete

Support for the role of nature:

Gibson and Walk showed few infants crawl off a visual cliff, so are born with depth perception



Visual and constancies

2

Cues = Information about movement, distance etc.

Constancies = Seeing object as the same from different angles and distance

Binocular depth cues = TWO EYES

Retinal disparity: Difference between the view of the left and right eye gives brain information about depth and distance

Convergence: Eyes point closer together when an object is close. Muscles work harder so know distance and depth

Monocular depth cues = ONE EYE

Height in plane: Objects higher up appear further away

Relative size: Smaller objects appear further away

Occlusion: If one object obscures part of another object, it is seen as closer

Linear perspective: Parallel lines appear closer as they become more distant

Gibson's direct theory

4a

Perception doesn't draw on past on past experience, in contrast with Gregory's theory.

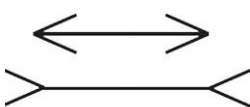
Sufficient information for direct perception:

Sensation and perception are the same. The eyes detect everything we need without having to make inferences

Optic flow patterns: When moving, things in the distance appear stationary and everything else rushes past. Provides perceptual information about speed and distance

Motion parallax: A monocular depth cue. When we are moving past them, closer objects appear to move faster than objects that are further away. Provides perceptual information about speed and distance.

The influence of nature: Perception is inborn not learned



Müller-Lyer Illusion

3



Ponzo Illusion

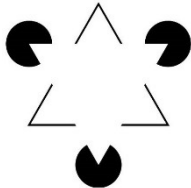
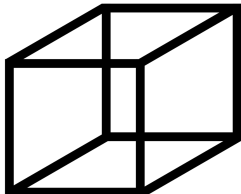
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Psychology; PERCEPTION

<p>Gregory’s constructivist theory of perception</p> <p>Contrast with Gibson’s theory. Proposes that sensation and perception are not the same.</p> <p>Perception as a construction: Brain uses incoming information and information we already know to form a hypothesis/guess</p> <p>Inference: Brain fills in the gaps to create a conclusion about what is being seen</p> <p>Visual cues: Visual illusions occur because of incorrect conclusions from visual cues.</p> <p>Past experience-the role of nurture: Perception is learned from experience. The more we interact the more sophisticated our perception</p>	<p>Gregory’s constructivist theory of perception –AO3</p> <p>Support from research in different cultures: People interpret visual cues differently (e.g. Hudson’s study), showing experience affects perception.</p> <p>Visual illusions: Gregory’s research used 2D visual illusions which are artificial, so theory may not apply to the real world</p> <p>How does perception get going?: Babies have some perceptual abilities (Fantz) so perception can’t be just the result of upbringing</p>
<p>Factors affecting perception (pt.2)</p> <p>MOTIVATION Wanting something increases its attractiveness</p> <p>GILCHRIST AND NESBERG’S STUDY: AIM: To find out if food deprivation affects the perception of food METHOD: Hungry (no food for 20 hours) and not hungry participants shown a slide of a meal. Had to adjust light to level of slide shown. RESULTS: Perceived food as brighter the longer deprived of food CONCLUSION: Sensitivity greater when food deprived. Hunger is a motivating factor that affects perception of food.</p> <p>EVALUATION Support from similar studies: Sanford’s study found similar results which strengthens the validity of the conclusion Ethical issues: Depriving people of food causes discomfort, a case of physical harm Not like everyday life: Participants judged pictures rather than real food so it may not apply to real world</p>	<p>Factors affecting perception (pt.1)</p> <p>CULTURE Social world we live in (culture) affects what our senses pick up.</p> <p>Hudson’s study: The results showed that black and white schooled participants more likely to perceive depth than unschooled participants. White schooled participants are more likely to perceive depth. Conclusion: Different cultures use depth cues differently, so have different perceptual set.</p> <p>EMOTION The tendency for our brain to notice exciting things and block threatening things.</p> <p>McGinnies study: The results showed that participants took longer to say taboo words. Taboo words gave bigger change GSR. Conclusion: Emotion affects perceptual set, in this case perceptual defence.</p>
<p>Factors affecting perception (pt.3)</p> <p>EXPECTATION Beliefs based on past experiences can affect how much we attend to things</p> <p>BRUNER AND MINTURN’S STUDY AIM: To find out if an ambiguous figure is seen differently if context is changed METHOD: Participants shown a sequence of letters or numbers with an ambiguous figure in the middle. RESULTS: Those who saw letters said B. Those who saw numbers said 13. CONCLUSION: Shows expectation is affected by the context the figure is presented.</p> <p>EVALUATION Artificial task: Ambiguous figures are designed to trick perception, so task lacks validity Independent groups design: Participants variables may have caused the difference in results not expectation</p>	



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How do we use Knowledge Organisers in Psychology

How can you use knowledge organisers at home to help us?

- **Retrieval Practice:** Read over a section of the knowledge organiser, cover it up and then write down everything you can remember. Repeat until you remember everything.
- **Flash Cards:** Using the Knowledge Organisers to help on one side of a piece of paper write a question, on the other side write an answer. Ask someone to test you by asking a question and seeing if you know the answer.
- **Mind Maps:** Turn the information from the knowledge organiser into a mind map. Then reread the mind map and on a piece of paper half the size try and recreate the key phrases of the mind map from memory.
- **Sketch it:** Draw an image to represent each fact; this can be done in isolation or as part of the mind map/flash card.
- **Teach it:** Teach someone the information on your knowledge organiser, let them ask you questions and see if you know the answers.

How will we use knowledge organisers in Psychology?

- **Test:** We will do regular low stakes tests to check your ability to retrieve information from memory.
- **Mark our answers:** Once you have done a low stake test you can mark your work using the knowledge organiser.
- **Improve our work:** Once you have finished a piece of work you may be asked to check your knowledge organiser to see if there is any information on it that you could add into an answer.

<u>ASSESSMENT</u>	<u>SECTION ON KNOWLEDGE ORGANISER</u>	<u>DATE</u>	<u>SCORE</u>
Learning Check point			/10
9 mark exam question			/9
MID UNIT			/20
Learning Check point			/10
9 mark exam question			/9
END OF UNIT			/40