Introduction to Psychology



Y11 Student work book

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What is psychology?

Psychology is the scientific study of the human mind and its functions, especially those affecting behaviour in a given context.

In psychology we study the behaviour of people to help society understand why people do things and how our brain works.

Some examples include;

How does memory work?

Why do some people choice to commit crimes?

Why do some people get mental illnesses and how are they affected by them?

Psychopathology is the scientific study of mental disorders within psychology. In this booklet you will start to gain an understand of how we use psychology to look at mental disorders such as depression.

This is really important as mental disorders can affect anyone and as an example please watch the following documentary on Stephen Fry.

Stephen Fry - The Secret Life Of The Manic Depressive Part 1 https://www.youtube.com/watch?v=uj8hqXd7N A

While completeing this work booklet, use the E-textbook to make notes in the blank spaces and try to complete all activities.

Useful information

shughes@christtheking.notts.sch.uk

www.aqa.org.uk is the exam board web site

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www.illuminate.digital/aqapsych2 User name SCHRIST2

Password STUDENT2

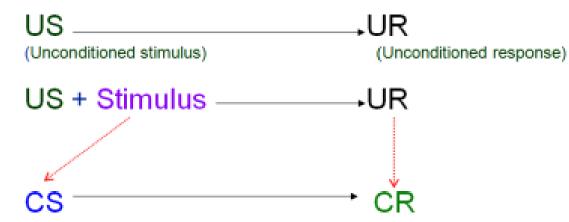
AQA

Realising potential

- Nearly all behaviour is learnt.
 - All behaviour (apart from newborn instinctual reflexes) is learned in some way.
 - We are essentially born 'Tabula Rasa', or blank slates.
- Animals and humans learn in the same ways.
 - Humans are only quantitatively different from other animals.
 - We learn to drive in the same way that a cat learns to use a cat-flap.
 - Therefore animal studies can be used to make generalisations about humans.
- The mind is 'irrelevant'.
 - We cant directly observe what people are thinking.
 - The only measurable data is gained from observing behaviour directly.

Classical Conditioning

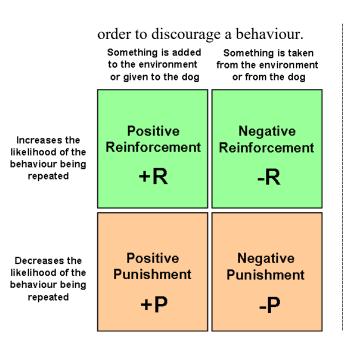
• This is based on the concept that we learn via the association of a neutral stimulus with an already established stimulus response behaviour.



• This is best demonstrated in Pavlov's research with dogs.

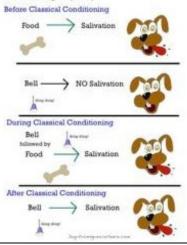
Operant Conditioning

- Behaviours are learned via reinforcement.
 - This is where positive outcomes for behaviour are introduced in order to encourage that behaviour to continue.
 - These can be either positive or negative reinforcers.
- Punishment is also part of Operant Conditioning.
 - Negative outcomes are introduced in

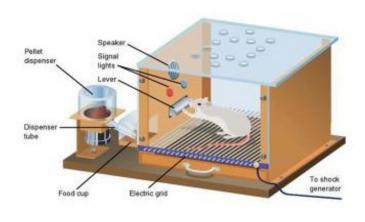


Research





The Skinner Box (OC)



Task: Behaviourism and Gambling

- How can gambling addictions be explained by the principles of behaviourism?
- Consider the following forms of gambling:
 - The Lottery
 - Horse/dog races
 - Fruit machines
 - Online casinos
 - Scratch cards
 - Betting on sports events

Social Learning Theory

Albert Bandura

• Bandura is a social psychologist, who was responsible for the development of the Social Learning Theory (SLT) in the 1960s.

- He agreed that people learn from conditioning, but stated that they also learn by imitating role models.
- He also believed that the traditional stimulusresponse concept of learning was limited.
 - Humans also have a form of cognitive mediation with regards to the stimulus before they respond.

Modelling

- In order for social learning to take place, someone has to 'model' the behaviour to be learned.
 - Individuals who perform this role are referred to as behaviour **models**.
- There are several different types of model:
 - A live model parents, teachers or peers.
 - A symbolic model celebrities, sports stars, or characters from films or TV.

Imitation

- Models provide examples of behaviour that can be observed by the individual and then reproduced in a process known as imitation.
- Research on imitation has shown that, unlike the slow learning process of conditioning, whole patterns of behaviour can be rapidly acquired when a model is present.
- There are several key determinants:
 - The characteristics of the model.
 - The observer's perceived ability to replicate the behaviour.
 - The observed consequences of the behaviour.

Identification

- This refers to the extent to which the observer relates to the model.
 - This is often represented by how similar they are to the model.
- Identification occurs when the observer feels they are similar enough to the model so that they will experience the same outcomes in the observed situation.
- Research suggests that children are much more likely to identify and potentially learn from models who are similar to them.
 - Particularly same-sex models.

Vicarious Reinforcement

 This concept suggests that an individual does not need to experience rewards or punishments directly in order for learning to take place.

- Instead, they can observe the consequences experienced by the model and make judgements based on the likelihood of them experiencing the same outcomes.
 - This is the cognitive process that Bandura claims to differentiate SLT from other forms of conditioning.

Mediation through Cognitive Processes

- For effective learning to take place, cognitive mediational processes need to occur:
- 1. Attention you have to pay attention to the behaviour.
- 2. Retention you need to remember what you saw.
- 3. Reproduction you have to judge whether you are able to reproduce the behaviour.
- 4. Motivation you have to evaluate the consequences of the behaviour.

Task:

- Using available textbooks, summarise Bandura's Bobo doll experiment in the space provided on the next page of the booklet.
 - Make sure to include enough detail to fill all 5 sections:
 - Aims
 - Procedure
 - Findings
 - Conclusions
 - Criticisms
 - For the last section use your evaluation toolkits from the booklet at the beginning of the year to help.
 - For the procedure, you may also include images if this would help you remember the study.

Name of Study: Bandura, Ross and Ross (1961) Social Learning Theory of Aggression

AIMS
PROCEDURE
THOOLD CHE
FINDINGS
CONCLUSIONS
CRITICISMS

Cognitive Approach: Assumptions and the Computer Model What do Cognitive Psychologists do?

- Unlike with the behavioural approach, cognitive psychologists focus on the internal workings of the mind and explains behaviour through cognitive processes.
 - Perception, language, attention and memory.
- Like the behavioural approach, cognitive psychology uses experimental methods to test theories scientifically.
- The workings of the human mind is often compared to the workings of a computer.
 - Input, process and output.

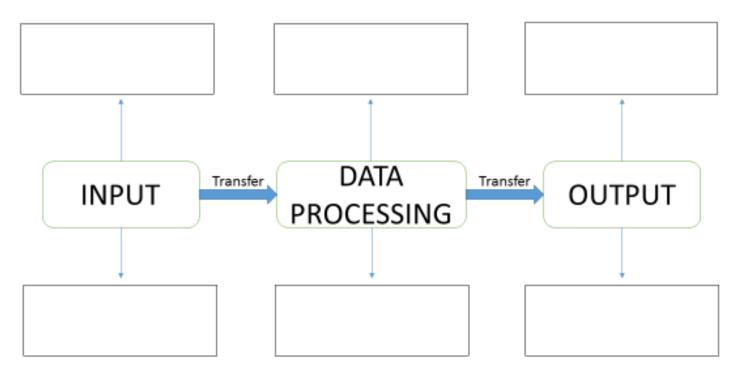
Assumptions

- Our mental systems have a limited capacity.
 - Depending on the task, we can only process so much information at any one time.
- A control system overseas all mental processes.
 - This devotes more processing power to new tasks, leaving less available for everything else.
- There is a two-way flow of information.
 - We take in information from the world, process it, and react to it.
 - We also use our knowledge and experiences to understand the world.

The Computer Model of Information Processing

- During the 1950s and 1960s, computers became more and more prominent in society.
- During this time, psychologists began to draw analogies between the way humans and computers functioned:
 - The **brain** is described as a processor the thing that makes things happen.
 - Some parts of the brain form **networks**.
 - Some parts work sequentially one process must finish before another starts.
 - Some parts can work in **parallel** information travels to and fro along lots of paths at the same time.

The Model



Where the analogy fails...

- Humans are often influenced by emotional and motivational factors.
 - Something that doesn't affect computers.
- Humans have a potentially unlimited, yet unreliable memory, whereas computers have a limited but reliable memory.
- Humans have free will the ability to choose between decisions.
 - Computers are programmed by others to respond in a specific way.

Task:

- While the computer analogy is very popular in understanding brain functioning and cognition, it does have its critics.
- In small groups it is your job to come up with a better analogy for brain functioning, cognition, and human behaviour.
 - You need to create a diagram to demonstrate your analogy.
 - This will be presented towards the end of the lesson.
 - If you are struggling, you can try to improve the existing analogy, although you will be judged more strictly for a lack of creativity.

Biological Approach: Assumptions and Genetics

Assumptions

- 1. Human behaviour can be explained in terms of biological factors.
 - Such as Hormones, Genetics, Evolution and the Nervous System
- 2. If we can explain behaviour using biological factors, then we can also treat it biologically.
 - Such as through the use of Drugs, Surgery or ECT.
- 3. Experimental research conducted on animals can inform us about human behaviour.
 - This is because we share a lot of biological similarities with animals.

Genetics

- Heredity is the passing of characteristics from one generation to the next through genes.
- Genes carry instructions for a particular characteristic.
 - Such as intelligence or temperament.
- How these characteristics develop depends on the interactions of the gene with other genes, and the influence of the environment.
- Evolution theory suggests that, through the process of natural selection, specific genes will be selected because the characteristics they produce are adaptive for the current environment.
- 'Survivors' are more able to pass on their genes, meaning that these characteristics will thrive.

Genotype and Phenotype

- A person's **genotype** is their actual genetic make-up.
 - E.g. the specific genes they have.
- A person's **phenotype** is the way that those genes are expressed through physical, behavioural, and psychological characteristics.
 - E.g. hair colour, eye colour, temperament etc.

Research into Genetics

- Twin Studies
 - Identical twins share 100% of their genes.
 - In theory, if a behaviour had a genetic basis and one twin showed that behaviour, then the other twin would too.
 - Non-identical twins only share 50%

of their genes, so the chances are lower.

- Adoption Studies
 - These types of studies examine the influence of genetics versus the environment.
 - If an adopted child demonstrates a behaviour, it is more likely to have a genetic basis if that behaviour is shared by the biological parent, but not the adopted parent.
 - The opposite applies for the environment.

Example Genetics Research

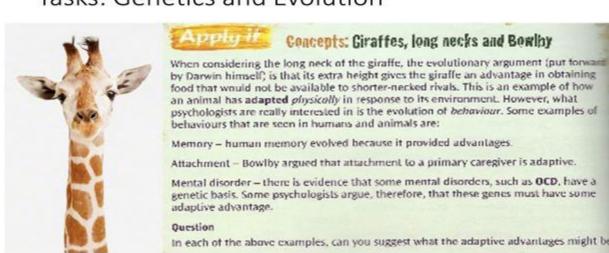
Twin Studies

Method: Results: Gottesman carried out a meta-analysis of approximately 40 twin studies. It was found that having an identical twin with schizophrenia gave you a 48% chance of developing the condition. This reduced to 17% in non-identical twins. Conclusion: Evaluation: The meta-analysis was carried out on field studies, giving the research high ecological validity. Because identical twins share 100% of their genes, it might be expected that both twins would always suffer from the same conditions. The fact that both twins had developed schizophrenia in only about half of the cases means that another factor must also be involved. Identical twins tend to be treated more similarly than non-identical twins, and so the family environment might play a large role.

Adoption studies

MILL SIEPLE	Heston (1966) — An adoption study of schizophrenia
Method:	47 adopted children whose biological mothers had schizophrenia were studied. The control group consisted of 50 adopted children whose biological mothers didn't suffer from schizophrenia. The children were followed up as adults and were interviewed and given intelligence and personality tests.
Results:	Of the experimental group, 5 of the 47 became schizophrenic, compared to 0 in the control group. Another 4 of the experimental group were classified as borderline schizophrenic by the raters.
Conclusion:	The study supports the view that schizophrenia has a genetic basis.
Evaluation:	Interview data can be unreliable and affected by social desirability bias . However, interviews are a good way of getting data in a naturalistic way . The adopted children whose mothers didn't suffer from any conditions might have not shown any symptoms of schizophrenia yet — it can't be completely ruled out.

Tasks: Genetics and Evolution



Key Studies

In Key Studies, we aim to provide in-depth accounts of some of the most important classic studies in psychology.



a necessary prerequisite for validity, the implications of Rosenhan's results for the traditional psychiatric classification of mental disorders are very serious indeed.

Virtual insanity?

The hypothesis was tested in two different ways.

The major experiment involved people pretending to be mentally ill by complaining of auditory hallucinations (pseudo-patients). Eight psychiatrically 'normal' people (a psychology student, three psychologists, a paediatrician, a psychiatrist, a painter-decorator and a housewife) presented themselves at the admissions office of 12 different psychiatric hospitals in the USA. They complained that they were hearing voices saying 'empty', 'hollow' and 'thud' (auditory hallucinations). These

This pretence constituted the independent variable, while the dependent variable was whether or not they were admitted to the hospital on the strength of these symptoms and the particular diagnostic label used when admitting them (such as 'schizophrenia'). This part of the study also involved a large measure of participant observation. After they had been admitted, the pseudo-patients kept written records of how the ward as a whole operated, as well as how they themselves were treated.

In a second experiment, members of a teaching hospital were told about the findings of the first study, and were warned that some pseudo-patients would be trying to gain admission during a particular 3-month period. Each member of staff was asked to classify new patients as being either imposters or genuine. This false information was the manipulated independent variable, and the dependent variable was the number

of patients who staff subsequently suspected of being pseudo-patients.

The diagnosis

In the first experiment, all eight pseudopatients were admitted - in seven cases with a diagnosis of 'schizophrenia', in the other 'manic depression' - after which they stopped claiming to hear voices. They were eventually discharged with a diagnosis of schizophrenia (or manic depression) in remission, as they no longer showed any signs of illness. The only people who were at all suspicious of their true identity were some of their 'fellow' patients, who claimed, for example, 'You're not crazy. You're a journalist, or a professor [referring to the continual note-taking]. You're checking up on the hospital'. It took between 7 and 52 days (the average being 19) for them to convince the staff that they were well enough to be allowed home.

In the second experiment, 193 patients were admitted during the experimental period, of whom 41 were confidently judged to be imposters by at least one member of staff, 23 were suspected by one psychiatrist, and a further 19 were suspected by one psychiatrist and one other staff member. All were genuine patients!

Rosenhan's conclusions

According to Rosenhan, 'It is clear that we cannot distinguish the sane from the insane in psychiatric hospitals....' He also concluded that psychiatric hospitals represent a special environment in which everything the patient says and does is interpreted in terms of the diagnostic label used when the patient is admitted. For example, nursing staff described one pseudo-patient's note-taking as 'writing behaviour', a term meant to convey the abnormality of this behaviour. 'Writing behaviour' is an expression that would never be used outside the hospital setting. This represents a form of labelling. Psychiatric labels stick in a way that (other) medical labels do not. Rosenhan argues that mental illness is a purely social phenomenon, the consequence of a labelling process.

Evaluating Rosenhan's study

Spitzer (1976) notes that the diagnosis 'schizophrenia in remission' is extremely rare. As well as those of his own New York hospital, Spitzer examined the records of discharged schizophrenic patients for 12 other US hospitals, and found that in 11 cases, 'in remission' was either never used



The Golden Remedy ._ or Electrical Panacea.

Nineteenth-century satire on an electrical treatment for madness.

or was used for only a handful of patients each year. From this, he concluded that Rosenhan's pseudo-patients were given a discharge diagnosis, which is rarely given to real patients with an admission diagnosis of schizophrenia, and that the diagnoses were consequently a function of their behaviours, and not, as Rosenhan claims, of the setting (a psychiatric hospital) in which the diagnoses were made.

In other words, the hospital psychiatrists successfully recognised that there was something odd or unusual about the pseudopatients. Far from showing that psychiatrists cannot be 'trusted' to identify people with genuine mental disorders, Rosenhan's study suggests that mental health professionals can actually distinguish schizophrenic (psychotic) from non-psychotic individuals with surprisingly high levels of accuracy (Lilienfeld 1995).

According to MacLeod (1998), labelling theory is an example of a theory that reflects the practices of a particular time and place. For example, the theory seems to be especially applicable to involuntary hospital admissions. When research was conducted in the 1960s in the USA (e.g. Scheff 1966), a full 90% of all psychiatric hospital admissions were involuntary. Later research in the UK (Bean 1979) found that only 18% of psychiatric patients were involuntary. The figure for the USA is also likely to have fallen in that time.

If the effects of labels like 'schizophrenia' are so powerful, why were the real patients not deceived by them? It seems that the actual behaviour of the pseudo-patients had more

influence than the diagnostic labels assigned to them by observers' perceptions (Lilienfeld 1995). It is possible to see 'through' or 'past' the labels.

Finally, Spitzer (1976) points out that Rosenhan, as a professor of law and psychology, should know that the terms 'sane' and 'insane' are legal, not psychiatric terms. No psychiatrist ever makes a diagnosis of sanity or insanity.

References and further reading

Bean, P. (1979) 'Psychiatrists' assessments of mental illness', *British Journal of Psychiatry*, Vol. 135, pp. 122–28.

Lilienfeld, S. O. (1995) Seeing Both Sides: Classic Controversies in Abnormal Psychology, Brooks/Cole Publishing Co.

MacLeod, A. (1998) 'Therapeutic interventions' in Eysenck (ed.) *Psychology: An Integrated Approach*, Addison Wesley/ Longman Ltd.

Rosenhan, D. L. (1973) 'On being sane in insane places', *Science*, Vol. 179, pp. 250–58.

Scheff, T. J. (1966) Being Mentally Ill: A Sociological Theory, Aldine.

Spitzer, R. L. (1976) 'More on pseudoscience in science and the case for psychiatric diagnosis', *Archives of General Psychiatry*, Vol. 33, pp. 459–70.

Richard Gross has taught A-level psychology for over 20 years and is a regular contributor to PSYCHOLOGY REVIEW. He has written a number of books, including Psychology: the Science of the Mind and Behaviour (4th edn, 2001).

ENCE AND SOCIETY

Robert's School Phobia

Robert was an underweight eight year old who had always been very reluctant to go to school. Every school night he ate little and even that was vomited up later. He twitched and became more and more anxious as the evening wore on. When he couldn't get to sleep he would cry, and his mother would come and sit with him and tell him comforting stories.

In the morning, Robert got up early and paced up and down, or sat in a corner occasionally rushing to the toilet to be sick. When it was time to go to school he had to be pushed out of the house, though often his tears and complaints of feeling



unwell led his mother to relent and allow him to stay at home – it didn't matter greatly as the boy was unlikely to get much out of school in the state he was in.

If he did go to school, there was some solace in the fact that his mother would visit the school at playtime bringing him milk and cookies. She came because that was part of the 'deal' about going to school, but also because she would otherwise worry about Robert.

Robert surprisingly got on quite well with the other children and was well liked, despite crying on the way to school and often acting like a baby. He was good at athletics and quite bright. He did not like being away from home for anything – he did not go to play at friends' houses. However, it wasn't just being away from home that caused the problem, Robert was simply terrified of school. His sorrowful walk to school in the mornings resembled that of a convicted murderer on his way to the gallows.

Deviation from Social Norms		
Failure to Function Adequately		
Deviation from Ideal Mental Health		

Clinical Characteristics of Phobias

Diagnosing Mental Disorders

- There are several methods psychologists use to diagnose mental disorders:
 - DSM
 - ICD (Used by the UK)
- They include a list of symptoms which can be used as a tool for diagnosis.
- Classifications allow data to be collected about a disorder.
 - This helps develop new treatments and medication.

Types of Phobias

- Specific phobias A fear of a specific object or situation.
 - Animal type
 - Natural environment type, e.g. heights
 - Blood/injection/injury type
 - Situation type, e.g. Claustrophobia (enclosed spaces)
 - Other'
- Social phobias Extreme concern about one's own behaviour and the reactions of others.
- Agoraphobia with panic attacks Involves a great fear of open or public places.

Behavioural Characteristics

- Avoidance of any social situation because they cause anxiety.
 - This happens especially if someone has a social phobia or agoraphobia.
- Altering behaviour to avoid the feared object or situation.
 - Including trying to escape if it is encountered.
- General restlessness and easily startled.

Cognitive Characteristics

- These relate to the thought processes that occur.
- Thoughts often tend to be extremely irrational.
 - They often resist rational arguments to the contrary.

- A recognition that the fear is excessive.
 - Not always present in children.
 - Helps distinguish phobias from delusional mental illnesses, such as schizophrenia.

Emotional Characteristics

- A marked and persistent fear of an object or situation.
 - Likely to be excessive and unreasonable.
- Feelings of anxiety and panic.
 - Especially in social situations.
- Emotions often tend to be out of proportion to the actual 'threat/danger' posed.

Tasks

- In small groups, try to sort the fears listed on the right into the different types (and subtypes) of phobias.
 - Some phobias can be classified in more than one category.
- Complete the diagnosis activity in your booklets.
 - Make sure to highlight the behavioural, cognitive, and emotional characteristics in different colours.

Fear of being robbed.
Fear of books.
Fear of darkness.
Fear of death or dying.
Fear of drinking.
Fear of going to bed.
Fear of growing old.
Fear of horses.
Fear of hospitals.
Fear of long words.
Fear of mice.
Fear of mirrors.
Fear of the number 13.
Fear of ridicule.
Fear of school.
Fear of shellfish.
Fear of snakes.
Fear of spiders.
Fear of taking medicine.
Fear of wild animals.

Which of these people has a phobia? What type of phobia do they have? What do you notice that helps you make your judgment?

• Dave never complains, even when he wants to. If he even thinks about complaining to someone about something his face flushes and he starts sweating. He is worried that if he complains everyone will think that he is making a fuss over nothing and that he is being awkward or stupid. He puts up with terrible service in shops and restaurants and at work some people treat him badly and take advantage of him because he doesn't protest. This makes Dave feel even worse and he is thinking about leaving his job, even though he is good at it.

- Steve is terrified of sharks. He is afraid that if he goes into the sea a shark will attack and kill him. Steve knows that there are no dangerous sharks in the waters around Britain but he is still scared of going in the water. Steve works as a quantity surveyor in Birmingham.
- Helen experiences grave anxiety whenever she leaves the house. If she goes further than the
 end of her drive she is gripped with fear. Often, when she is away from home she has 'turns'
 during which her heart starts pounding, she fears that she is dying and sometimes feels as if she
 has become separated from her body. She worries a lot about having a 'turn' whilst she is out.
 The fear recedes when she enters her house and closes the door.

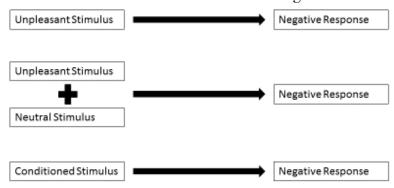
The Behavioural Approach to Explaining Phobias

Behavioural Assumptions Regarding Phobias

- Phobias are acquired through learning from the environment.
 - Classical Conditioning
 - Operant Conditioning
 - Social Learning
- The Two Process Theory looks at the different stages of a phobia:
 - Acquisition/Initiation
 - Maintenance

Acquisition of a Phobia

• This occurs via Classical Conditioning.



• The best known example of this is the Little Albert experiment (Watson & Rayner, 1920)

Maintenance of a Phobia

- This occurs via Operant Conditioning.
- Approaching the feared object or situation elicits a conditioned anxiety response.
- In this instance the normal instinct would be to retreat from the situation.
 - This causes a reduction in the anxiety.
- This acts as a form of negative reinforcement, which encourages the person to avoid the object/situation entirely.

Social Learning

- Phobias may also be acquired via modelling the behaviour of other people.
 - For example, seeing a parent responding to a spider with extreme fear and anxiety.
 - This may cause a similar response from the child
 - The behaviour appears rewarding as the fearful person gains the attention of others.
- Mineka et al. (1984)
 - Monkeys in separate enclosures, but visible to each other.
 - One monkey is bitten by a (non-venomous) snake and the second monkey witnesses it's fear response.

• When shown a snake, the second monkey reacts with extreme anxiety.

Evaluation

- The two process theory ignores cognitive factors.
 - It fails to take into account the impact of irrational thoughts, which are a major characteristic of phobics.
- Deterministic
 - Not everyone who is bitten by a dog will develop a phobia of dogs.
 - More likely due to the Diathesis-Stress model.
 - We may be genetically predisposed to develop certain fears, but they will only manifest when triggered by some sort of experience.
- Behavioural therapies have been very effective in treating phobias.
 - Suggesting that they may have a behavioural origin in the first place.

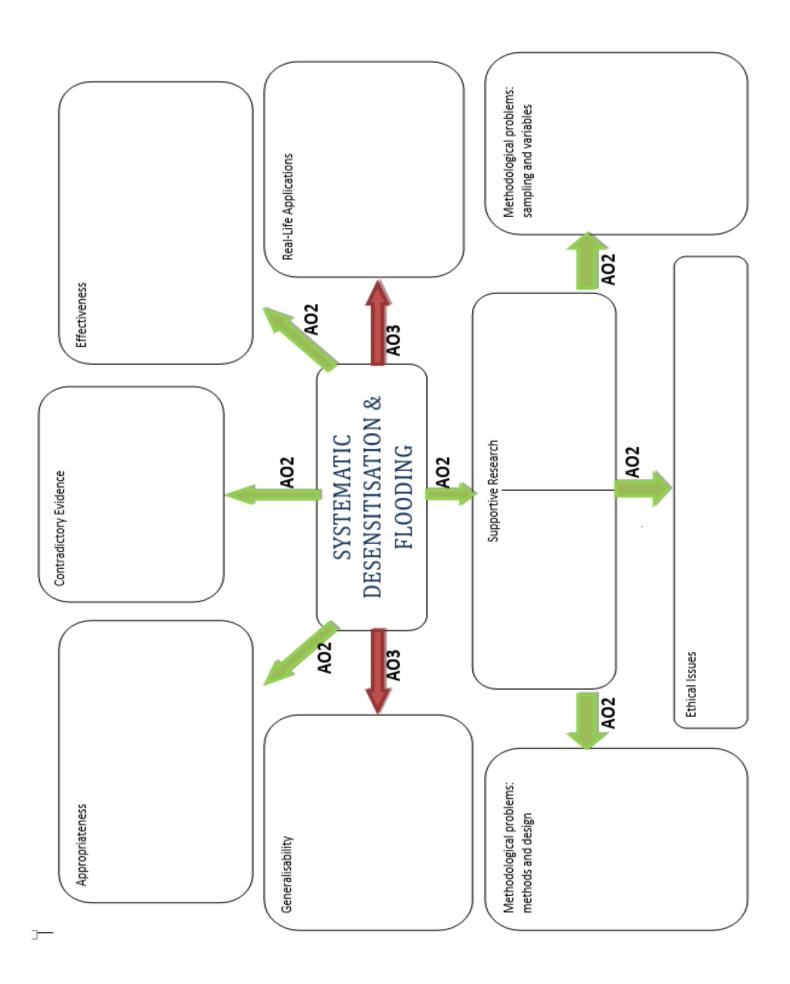
Tasks:

- Read the information on page 144 of your textbooks.
- Use this information to complete the table summarising the Little Albert research (Watson and Rayner, 1920).
- Include details on the following:
 - Procedure
 - Findings
 - Conclusions
 - Evaluation (use your evaluation toolkit to help with this)
- Complete the 'Apply it' task after the table in your booklet.

Name of Study: Watson & Rayner (1920) – Little Albert

PROCEDURE

FINDINGS
CONCLUSIONS
CONCEDEDIONS
EVALUATION



Task:

- Read the summary of the study by Beck et al. (1974).
- Highlight the key components of the study and annotate in the margins.
- Fill in the details in the 'Evaluation/Commentary' box.

Beck et al (1974)

Aim: To understand cognitive distortions in patients with depression

Method: Clinical interviews with patients undergoing therapy Sample: 50 patients diagnosed with depression. 16 men and 34 women. Most middle/upper class of at least average intelligence. Approach: Cognitive

Procedure

An independent design. Patients were compared to a group of 31 non-depressed patients undergoing therapy. They were matched for age, sex and social status.

Face to face interviews and retrospective reports of patients' thoughts before and during the therapy session. Some patients kept diaries of their thoughts and brought them to the therapy session.

Records were kept of the non-depressed patients verbalisations.

Results

Certain themes appeared in the depressed patients that did not appear in the non-depressed. These were low self-esteem, self-blame, overwhelming responsibilities, anxiety caused by thoughts of personal danger and paranoia.

Depressed patients had stereotypical responses to situations, even when inappropriate (eg feeling inferior if a passer by did not smile at them). Depressed patients regarded themselves as inferior in intelligence, attractiveness compared to others in their social/occupational groups.

These distortions tended to be automatic, persistent and involuntary.

Conclusions:

Even in mild depression patients have cognitive distortions that deviate from logical thinking.

Evaluation/Commentary:

Depression – there's an app for that!

http://www.theguardian.com/science/sifting-the-evidence/2013/dec/05/shiny-app-iphone-treating-depression-from-your-smart-phone



Can a mobile phone app really help alleviate depression? Illustration by Alex Bertram-Powell

Earlier this year I <u>wrote about</u> some research I was involved in, which reduced aggressive behaviour in young offenders by manipulating their perception of ambiguous facial expressions.

A similar principle is behind a new app, called <u>HappyPlace</u>, which has <u>been developed</u> as an attempt to combat low mood).

Past research has suggested that depression may be partly caused or maintained by biased ways of

thinking, particularly around the processing of ambiguous faces. Consider walking down the street, and seeing a friend. They catch your eye, but they have a blank facial expression as they do so. On a good day, you might think nothing of it. On a bad day, you might see the blank face in a completely different way; a sign of their indifference, or worse, towards you.

This kind of negative framing of the things around you, in particular the faces of others, could lead to a vicious cycle. If you think people are being negative towards you, it will change how you react towards them, which in turn will affect their response to you. The concept behind the HappyPlace app is that this misinterpretation of faces could be 'corrected' by getting people to reappraise emotional faces, and using feedback to teach them to err on the side of positivity in ambiguous cases.

Evidence is accumulating that a simple emotional face recognition task with biased feedback may be effective in reducing low mood, and not just in the short term. Reversing the vicious circle might be enough to lift mood, and initiate a virtuous cycle. Smile and the world smiles back, as the saying goes.

The app shows people composite merged faces whose expressions fall in various places along a continuum from 'happy' to 'sad'. The faces appear in a random order, and the user is forced to say whether each one is happy or

sad, even for the ambiguous ones which are made up of practically equal levels of happy and sad. Peoples' boundaries don't always fall in the same place, but the app assesses your individual boundary.

Then the user sees a load more of these faces, and after answering whether they're happy or sad, the app this time gives feedback on the answer. But the feedback is slightly biased. The faces just on the 'sad' side of the user's personal boundary are classified as 'happy' by the app, so when the user says they're sad, the app tells them that they're wrong.

In a <u>pilot study</u> this biased feedback seemed not only to shift a person's boundary point on the task itself, but to positively affect their mood too. The pilot data did not reach statistical significance, although the data were suggestive enough to warrant the study to run on a larger scale, which is happening at the moment. This is why it has been rolled out as an app that can be downloaded from the Apple Store (at the moment there is no Android version, although the makers have said if there is interest they will commission one).

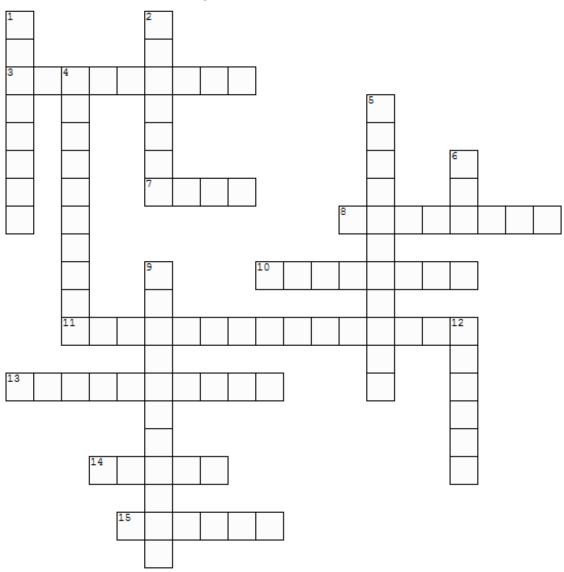
That this potential treatment for depression can be provided by an app could be hugely beneficial. Depression is notoriously hard to treat. For some, SSRIs can be life-transforming, although there is a <u>delay of a couple of weeks</u> before their effect is seen. However, they are not effective for all depression sufferers. Some people might need therapy, which is not only time and resource heavy, but often requires weeks or months on a waiting list due to high demand. A smartphone app is very cheap to implement, both in terms of price to the user, and in terms of use of NHS resources.

If a person can use their phone to lift their mood, they may not need as many GP appointments and consultations to improve their condition. Perhaps even more importantly, it can be a way of preventing a descent in to a vicious cycle of negativity while on a waiting list and awaiting treatment.

This kind of outsourcing of healthcare to apps is becoming more common. There are apps that can allow you to monitor your diet, which can be important to understand digestive illnesses or allergies. Your phone can record your daily exercise levels, take your pulse, or even measure your blood pressure. Why not use it to treat depression? Or at the very least help people manage their mood while waiting for appointments, and attempt to prevent a downward spiral of emotion misinterpretation.

Psychopathology

Complete the crossword below



Across

- 3. Neurotransmitter linked to OCD in low enough levels.
- 7. Drug used to treat OCD symptoms.
- **8.** Neurotransmitter linked to OCD in high enough levels.
- **10.** Form of treatment that involves significant exposure to feared object.
- **11.** Characteristic of abnormality according to the failure to function definition.
- Types of thoughts that result in depression.
- **14.** Negative _____ three types of negative views.
- **15.** Mary _____, psychologist behind 'deviation from ideal mental health' definition.

Down

- Psychologist responsible for 'Being Sane in Insane Places'.
- **2.** Two _____ theory of phobias, according to the Behaviourist approach.
- **4.** Cultural _____ criticism of most definitions of abnormality.
- **5.** Value used to determine genetic links to behaviour.
- **6.** American method for diagnosing mental disorders.
- 9. Definition of abnormality _____ infrequency.
- **12.** A framework of negative experiences that lead to depression.