

Student workbook

Section 1: Nature/Nurture Worksheets

1.1 Defining the nature/nurture debate

The nature/nurture debate has developed over many years and considers the relative influence that both genetics and the environment have on behaviour. Read the following introduction to the debate and then write your definition of the debate.

In 1859 Charles Darwin published 'On the origin of species' where he suggests that all human traits are passed down from one generation to the next. Since then many scientists have researched particular traits that are physical such as height, metabolism and even the incidence of cancer. This led to the hypothesis that psychological traits may also be traced to genetic factors and that such behaviours can be predicted if we understand the genetic cause of them more.

Further to this idea, evolutionary psychologists believed that behaviour was adaptive and that behaviour passed down to the next generation was therefore beneficial through natural selection. These psychologists, known as nativists, believe that all behaviour is caused by your genetic predisposition including behaviours that don't appear from birth. Just as Plato claimed that "children do not learn anything new but recollect knowledge that has previously lain dormant" many psychologists believe in maturational theories which assume that all behaviour is innate but some behaviour is revealed slowly over time as an individual develops.

On the other hand, those favouring nurture as an explanation for behaviour believe taking an empirical approach is important and that behaviour should be observed in order to understand the cause. Researchers behind this position in the debate believe that the mind is 'tabula rasa' when an individual is born as they are effectively a blank slate with no existing behaviours.

Behaviourism investigates how the environment causes behaviour by manipulating variables in the environment to see the effect on behaviour. The implication of taking this position is that all behaviour is learnt and therefore behaviour can be shaped if you can understand the variables within the environment that caused it.

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Can you describe the nature/nurture debate in...

50 words:

10 words:

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1.2 Read all about it!

You have been recruited to write a two page spread for the Sixth Form newsletter to explain the nature/nurture debate to non-psychology students.

There are three key objectives:

- You **must** include a clear definition of the opposite positions in the debate (nature and nurture).
- You **should** include examples of at least one behaviour and how each extreme would explain the behaviour is caused.
- You **could** explain the limitations with adopting either position and the implications for society if we believe behaviour is caused by solely nature or nurture.

Planning:

Title of article?

Remember this needs to be catchy and grab the reader's attention

Example of behaviour?

Aggression? Intelligence? Phobias?

What is this behaviour?

Research for this behaviour?

Nature	Nurture

Implications?

1.3 All a matter of perception: which side of the debate do you favour?

Perception is an area of psychology that has been contested in terms of the causes. Researchers who favour the nature argument believe that perceptual abilities are something individuals are born with, whilst others believe that whilst we are born with some abilities to perceive the world we develop a huge amount using our senses.

Blakemore and Cooper (1970) investigated the impact of early visual experience in kittens to determine the extent to which visual functioning was already programmed in the brain.

Task: Read about this research and the background research from the OCR core studies guide <http://www.ocr.org.uk/Images/183326-guide-to-core-studies-2.pdf> (pages 41-45) and record below evidence for nature and for nurture.

Nature	Nurture

Reflection question: To what extent can visual perception be attributed to nature?

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1.4 Arrange the areas and perspectives

Read the following statements and arrange the different areas and perspectives along the nature/nurture debate line.

The social area assumes all behaviour is caused by the perceived or actual presence of others in our environment.

The cognitive area assumes that all behaviour is caused by cognition and processes in the mind.

The developmental area assumes that behaviour is caused by progression through stages of development which are largely innate.

The biological area assumes that behaviour is caused by physiological processes such as brain function and hormone levels that are ultimately dictated by genetics.

The individual differences area assumes that everyone is unique and that there are many factors that contribute to an individual's behaviour.

The behaviourist perspective assumes that all behaviour is learnt and acquired through experience and interaction with the environment.

The psychodynamic perspective assumes that behaviour is driven by unconscious desires and the conflict between different parts of personality (the id, ego and superego).

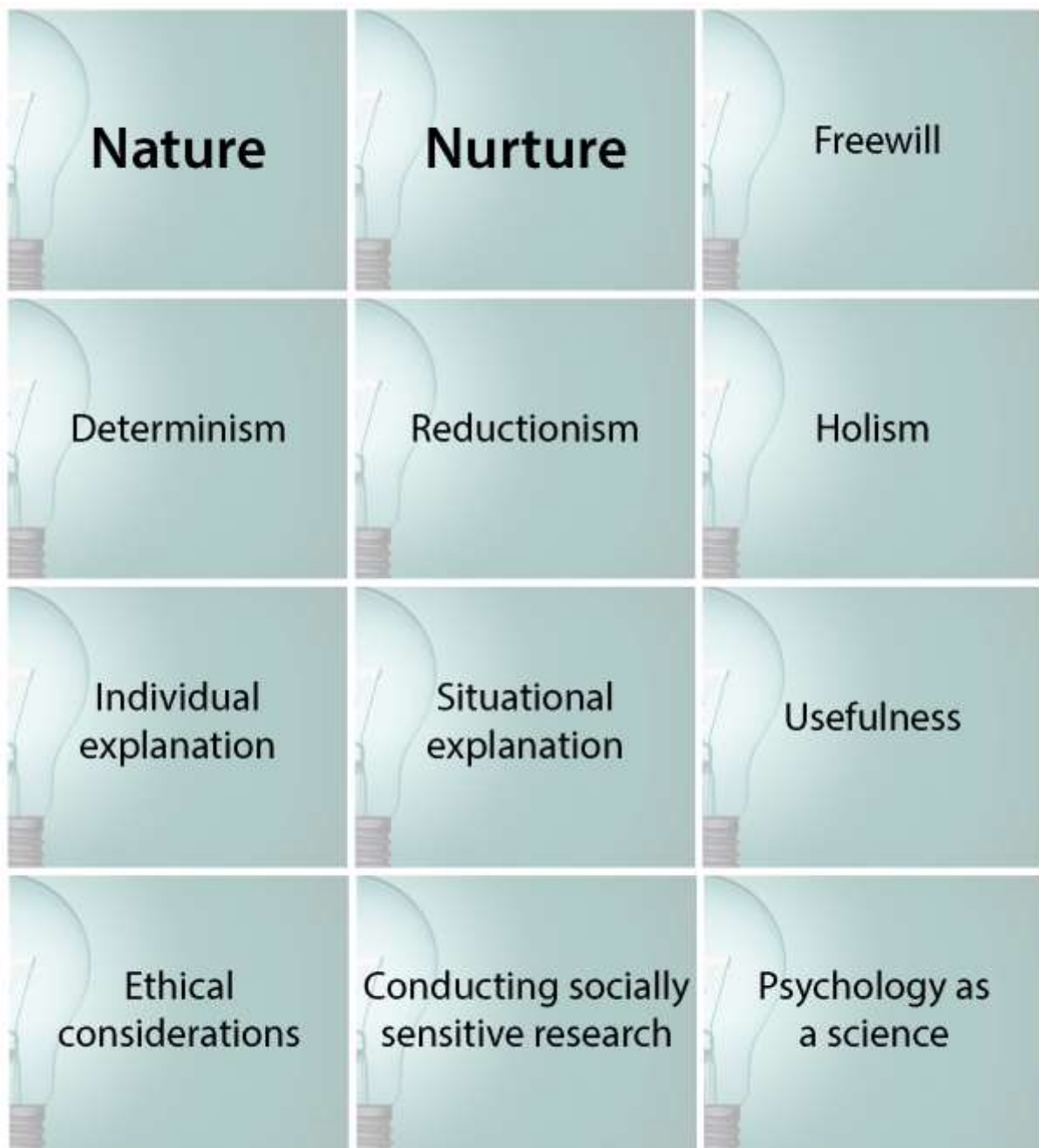
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1.5 Dissecting debates

You need to understand how different debates interact with one another and where they do not. Use the following cards to match up cards that are similar.

You can then:

- Write a short explanation of why they are similar.
- Give examples of research to show how they interact.
- Suggest a criticism of each collection of positions in differing debates.



1.6 Real life applications of using the nature side of the debate

Aim: To understand the applications of the nature position in the nature/nurture debate.

Once research is conducted it often leads to real life applications such as therapies, treatments, interventions or further research.

Discuss each of the following pieces of research in terms of:

- Their key findings
- What applications may be provided for this behaviour using the findings
- Any concerns you have about the applications including ethical issues, socially sensitive research, effectiveness and the methods utilised to gain the findings

Moral development was researched by Kohlberg (1968) who suggested children develop morality through universal stages prescribed in his maturational theory.

Autism was researched by Baron-Cohen et al (1997). Baron-Cohen believes individuals are born with a key cog, 'theory of mind', missing and that this in turn affects behaviour.

Anxiety was researched by Fazy & Hardy (1988) who believed physiological arousal causes anxiety in sport.

Intelligence was researched by Yerkes in 1917 who believed intelligence was innate. His research was revisited by Gould (1982).

Criminality was researched by Raine et al (1997) who suggested that acts such as murder are caused by an abnormality in the killer's brain metabolism.

Mental illness was researched by Gottesman et al (2010) who suggested that there is an incidence of disorders between parents and children.

1.7 Real life applications of using the nurture side of the debate

Aim: To understand the applications of the nurture position in the nature/nurture debate.

Below are some common therapies, treatments and interventions used by researchers who adopt the nurture side of the debate to explain behaviour.

Task: Research each of these and explain how they adopt the nurture side of the debate and how they change behaviour.

Classical conditioning

Systematic desensitisation and flooding

Operant conditioning

Token economy and positive reinforcements

Positive role models

1.8 Researching in the nature/nurture debate

Just as the different areas in psychology favour different methodological choices, the different positions within each debate lead researchers to use different methodology.

Match the cards below (and overleaf) to the appropriate position within the debate.

In pairs, explain why nature and nurture tend to use the methodological choices you have identified. What are the limitations of using such approaches?


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MRI scans




Snapshot



Quasi



Opportunity
sample



Random sample



Volunteer
sample

Section 2: Freewill/Determinism Worksheets

2.1 What is the freewill/determinism debate?

In pairs, discuss the following statements. Do you agree?

- I am responsible for my own behaviour
- Behaviour is caused by factors beyond your control
- Behaviour is predictable

These are some key questions within the freewill/determinism debate.

Determinism is the belief that behaviours are determined by factors outside our control.

Freewill is the belief that our behaviour is a result of our own choice.

Colour the following statements into either **determinism** or **freewill**.

Behaviour can be reduced to cause and effect

Behaviour is hard to define

Behaviour can be investigated scientifically

Behaviour is mechanistic

"The sum of the whole is greater than the parts"

We can collect objective data

The cause of behaviour can be difficult to test

Behaviour is explained in a reductionist manner.

Behaviour can be changed and improved

An individual is responsible for their own behaviour

We can predict behaviour accurately

2.2 Sliding scale task: where do people stand?

Using the key criteria for the two extreme positions in the freewill/ determinism debate rate your chosen study along the continuum.



Behaviour is caused entirely by **predictable and out of your control**

Behaviour is a result of your own decisions.

Complete the table on the next page:

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Criteria to be deterministic	Comments on core study
Looks at cause and effect	
Can collect objective data	
Very scientific	
Reductionist	
Mechanistic	
Isolates variables clearly	

Final verdict

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2.3 Application of the freewill/determinism debate to criminal behaviour

After you have read about the debate 'Neuroscience should transform our understanding of criminal responsibility' make notes below. Remember that for an argument to be convincing it needs to be supported with evidence and you should be able to clarify your points.

Point (for or against)	Evidence	Reason supports argument

Now you have completed your research write an opening speech with your key message and most powerful point.

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2.4 Core studies that adopt a deterministic stance

Task 1: Sort the following studies into hard determinism and soft determinism.

Moray (1959) Auditory attention

Sperry (1968) Split brain study

Freud (1909) Little Hans

Hancock et al (2011) Language of psychopaths

Bandura et al (1961) Transmission of aggression

Milgram (1963) Obedience

Task 2: Compare the methodologies of those that are positioned 'hard determinism' and those positioned 'soft determinism'

Hard determinism	Soft determinism

Task 3: What are the strengths and weaknesses of adopting each of these positions?



2.5 Core studies that favour freewill as an explanation

The different areas of psychology all have different assumptions about what causes behaviour but they do all agree that behaviour can be predicted and that all behaviour can be explained using the same theories regardless of individual differences. Some researchers oppose the idea that we all behave in the same way and that behaviour can be predicted and therefore deterministic. These researchers, called humanists, believe that individuals have freewill and the choice to decide to behave in a particular way and work towards self-chosen goals.

Maslow and Rogers are two key advocates of humanism and propose a number of key ideas about behaviour. Record your research on their main ideas in the table that follows:

Maslow's hierarchy of needs

Self-concept

Why is it important to recognise individuals have freewill?

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2.7 Different areas of determinism

Read the following assumptions for each area and place them along the debate line for freewill/ determinism.

The **social area** assumes that we are social beings who behave due to situational factors in the environment.

The **cognitive area** assumes that mental processes allow us to deal with information but that this is affected by emotional and instinctive factors as well.

The **developmental area** assumes that individuals develop and change over the lifespan and that this can be predicted. Measurement of this can be vague.

The **biological area** assumes genetics determine how a person will behave and that we can accurately predict actions and disorders by looking at genetic codes and how these manifest in a person.

The **individual differences area** assumes that we behave in particular ways due to dispositional factors that can be measured.

The **behaviourist perspective** assumes the environment and reinforcements dictates how we will behave and that experiences lead to predictable outcomes.

The **psychodynamic perspective** assumes that psychic factors can explain actions an individual tasks as well as phobias and fixations.

The **humanist area** assumes that every person is unique and must be assessed by looking at the person's subjective experience and their perception.

The **existentialist area** assumes that to understand a person you must understand their whole experience and what meaning individuals give to their lives to understand their behaviour.

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2.8 Compare the debates

You should be able to understand how each debate is different and similar to other debates. Use the worksheet to define what a deterministic position within the freewill/determinism debate is. Once you have done this choose which other debates relate to a deterministic viewpoint and justify why in the boxes below.

Nature/nurture

Reductionism/
holism

Individual/situational

Usefulness of
research

DETERMINISM

This is...

Ethical
considerations

Psychology as a
science

Remember that
some debates may
be both similar AND
different.

Can you give
examples to support
your claims?

Socially sensitive
research

Section 3: Reductionism/Holism Worksheets

3.1 DSM as a multi-axial tool: how does this fit into the reductionism/holism debate?

Read the following summary of the DSM-IV and then answers the questions that follow.

DSM-IV: This is a multi-axial tool. Clinicians decide whether the disorder is from Axis 1 or 2 and then consider the other three factors on top of this. This is all used to assess the patient's functioning on a scale from 1 to 100. The five axes are:

Axis 1: Clinical disorders (all mental disorders except Personality Disorders and Mental Retardation)

Axis 2: Personality Disorders and Mental Retardation

Axis 3: General medical conditions (have to be related to mental disorders)

Axis 4: Psychosocial and environmental problems (for example with primary school support)

Axis 5: Global Assessment of Functioning (psychological, social and job-related functions are evaluated on a continuum between mental health and extreme mental disorder).

The main categories of clinical disorders (Axis 1) according to the DSM-IV are:

1. Disorders usually first diagnosed in infancy, childhood or adolescence
2. Delirium, Dementia and Amnesic and other cognitive disorders
3. Mental Disorders due to a general medical condition not elsewhere classified
4. Substance-related disorders
5. Schizophrenia and other psychotic disorders
6. Mood Disorders
7. Anxiety Disorders
8. Somatoform Disorders (Disorders with somatic symptoms)

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9. Factitious Disorders (Disorders involving faking e.g. Munchausen)
10. Dissociative Disorders (for example multiple personalities)
11. Sexual and Gender Identity Disorders
12. Eating Disorders
13. Sleep Disorders
14. Impulse Control Disorders not elsewhere classified
15. Adjustment Disorders


Questions:

1. What causes mental illness?

2. How is the cause of mental illness researched?

3. How is mental illness treated?

4. Do you think all the axes of the DSM are required and why?



5. Which areas of psychology favour the use of diagnosis that takes into account factors such as psychosocial and environmental problems?



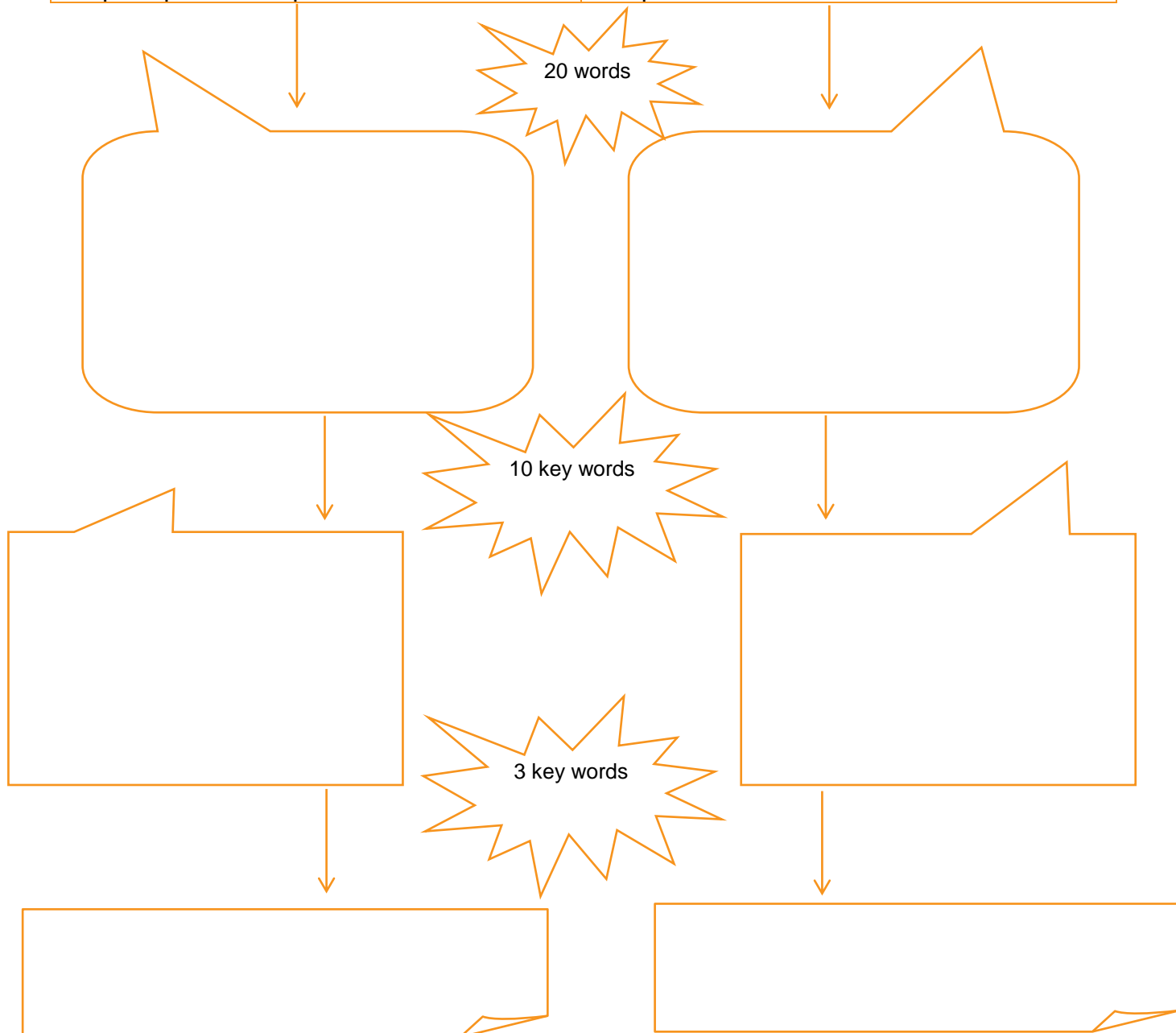
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3.2 Reducing reductionism and holism

Your challenge is to reduce the definitions below to simpler and simpler explanations.

Reductionism is where you break down a behaviour into its constituent parts and analyse the relative contribution that factor makes. This approach to investigating behaviour assumes that parsimony, the scientific principle, should be used and that all behaviour should be explained using the simplest possible explanation.

Holism is where you assume that the 'whole is greater than the sum of its parts' and that in order to understand behaviour you should consider how different factors at each level contribute to behaviour, rather than trying to reduce these further. This position in the debate suggests that behaviour is too complex to be broken down.



3.3 Recognising reductionism

What do the terms reductionism and holism mean?

Reductionism	Holism

Using the definitions for each position in the debate annotate the following core study summaries to identify which side of the debate they favour.

Raine et al (1997) researched the differences in brain activity of two groups to try to identify the cause of criminal behaviour, in this case murder. By using PET scans rather accurate images of the brain function of a group of murderers were gathered and compared to a group of controls.

This research explained that anti-social behaviours can be reduced to brain abnormalities and these can determine behavioural responses. Raine et al found that there were differences in the activation in the cerebral cortex and further to this that there were differences in activity in the subcortical areas.

Whilst Raine et al concluded that their research supported prior findings and suggested that the violent behaviour observed was due to a difference in brain function they also caution readers that they do not know what causes the brain differences and do not remove responsibility from the individuals for their behaviour.

Gould (1982) carried out a review article about the history of intelligence. Previous research has suggested that intelligence is innate and Gould wanted to investigate the validity of this claim further. Whilst this piece of research was not empirical, rather a review of previous research, it aimed to question the objectivity in intelligence testing and the biases that exist in order to challenge the implications that had been created by previous intelligence research.

The evidence of intelligence being innate was found to be flawed by Gould as it appeared from Yerkes intelligence testing that cultural bias invalidated any measure of intelligence Yerkes claimed to have.

Gould highlighted the problematic nature of reducing intelligence to a score and the dangers of ignoring other important contributing factors such as culture and language.

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Rosenhan & Seligman (1989) wrote a book defining dysfunctional behaviour and suggested that particular characteristics (suffering, maladaptiveness, vividness and unconventionality, unpredictability and loss of control, irrationality and incomprehensibility and observer discomfort) define a person's failure to function adequately and suggest these characteristics are typical of dysfunctional behaviour. They suggested that the more of the characteristics a person possessed the more likely it was they would be considered abnormal.

Using this method of diagnosis does lead to biases in diagnosis however as the characteristics are subjective and hard to accurately measure in a person. Instead, a judgement of the person as a whole and their overall behaviour must be considered.

Maguire et al (2000) carried out a quantitative piece of research using correlational analyses to understand the relationship between the structure of the brain and the ability to navigate.

Taxi drivers brains were scanned using an MRI and the images produced were then accurately analysed to identify any relationship there may be. Maguire suggested that the ability to navigate around London may be directly attributed to the grey matter in the hippocampi within the brain.

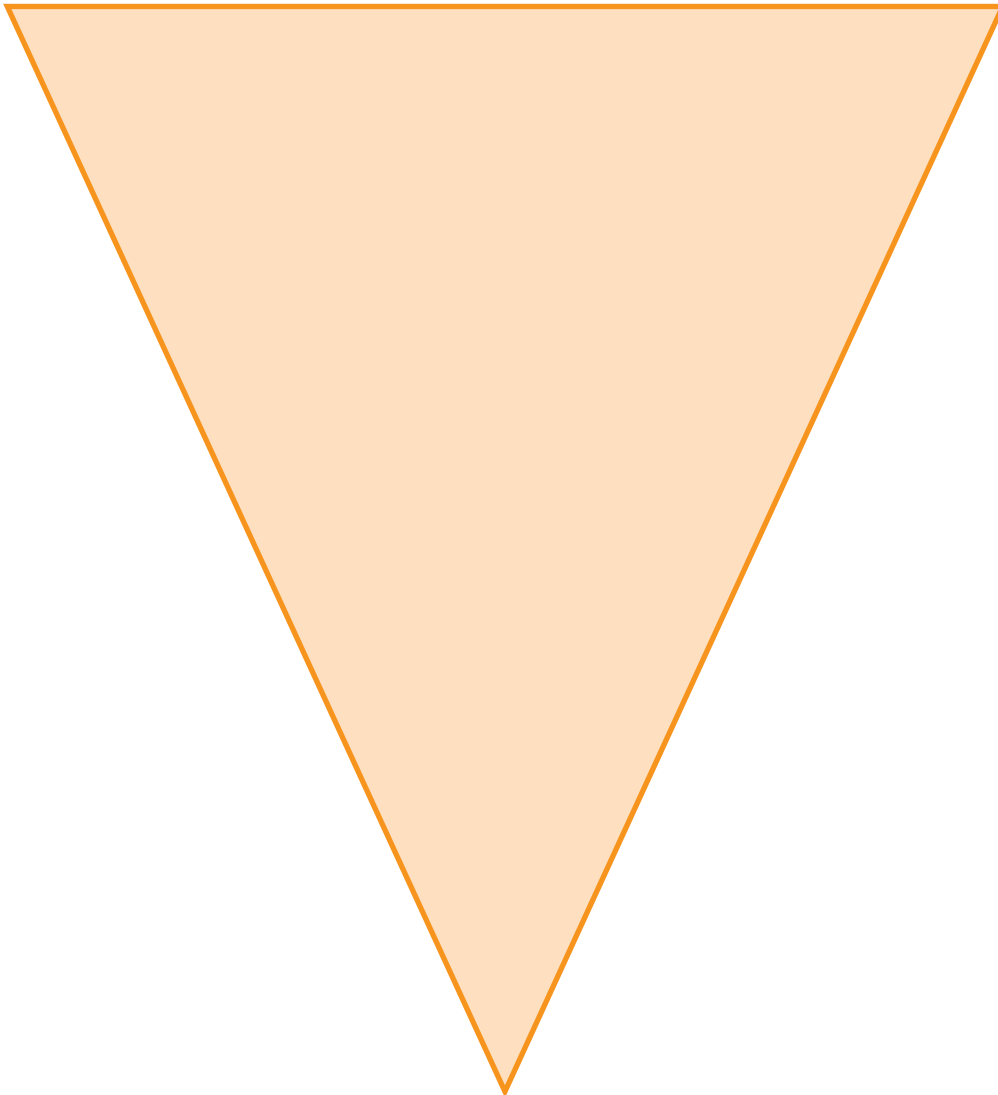
The implications of this study are very interesting as it may suggest that your brain enables you to perform a job more effectively due to specific neural connections that exist.

Challenge: Write up a short summary for your chosen study with key terms to hint at whether it uses a freewill or determinist explanation.

3.4 Pyramid of parsimony

Divide the pyramid below into the different levels of reductionism. You should have the most complex explanations at the top and the most parsimonious explanations at the bottom.

Biological / physics / chemistry / neurobiology / cognitive psychology / social psychology / individual differences psychology / psychodynamic psychology



3.5 Evidence based judgements

Aristotle claimed that 'The whole is more than the sum of its parts.' and many psychologists agree with this statement, believing that human behaviour can only be understood by looking at the interaction between a number of contributing factors as they work together, rather than focusing on the mechanisms of specific factors isolated from human experience.

Use the following information about the cause of offending behaviour to discuss this statement.

Many people believe that one of the most important contributing factors to offending behaviour is a person's upbringing. Farrington (2006) found that most chronic offenders have a convicted parent, delinquent siblings and disrupted families. Farrington believed offenders have several risk factors that predisposed individuals to criminality in later life.

On the other hand cognitive psychologists have found evidence to suggest that offenders rationalise their own behaviour differently and that specific cognitive thinking patterns contribute to the criminal personality. Yochelson and Samenow (1976) found that non-physiological explanations were able to offer opportunities to adjust the behaviour of criminals to change their offending behaviour to more prosocial behaviour.

Biological psychologists also try to find ways to reduce offending behaviour by identifying very specific biological mechanisms that cause criminality. Researchers such as Brunner et al (1993) study the hereditary nature of such behaviour and try to isolate genetic abnormalities crime may be attributed to. Brunner et al found that a disturbance in a gene responsible for the production of MAOA was linked with aggressive behaviour although not every member of the family studied showed such antisocial and criminal behaviour.

1. What reductionist explanations exist for criminality?

2. Is the evidence conclusive? Why?

3. Do the individual explanations account for all criminal behaviour and all instances?

4. Do you agree with Aristotle's claim? Why?

3.6 Ignorance is bliss

In the 1900's the question of what caused intelligence was fiercely debated and researchers gathered data to suggest differing explanations. To understand what causes intelligence many researchers use intelligence tests to isolate particular variables that may contribute to a person's IQ.

A reductionist approach has been taken by researchers such as Binet and Simon (1904), who tried to identify children who were not as intelligent and therefore not able to benefit from ordinary schooling due to their innate inferiority in terms of intelligence.

Yerkes wanted to further the understanding of intelligence and show that psychology really was a science by providing quantifiable and reductionist evidence that intelligence was inherited. Yerkes used army recruits to evidence his ideas and these American recruits included white Americans', 'negroes' and European immigrants.

Yerkes found that the average mental age of white, American, adult males was shockingly low and Yerkes decreed that the country was 'a nation of morons'. This led many eugenicists to suggest that Negroes and the feeble-minded has been interbreeding and lowering the overall intelligence; thus supporting Yerkes belief that genetics alone causes intelligence.

Questions:

1. What reductionist explanation did Yerkes suggest about intelligence?

2. What are the implications of using this reductionist explanation?

3. What other factors may contribute to the intelligence level recorded on the intelligence tests?

4. What do more recent theories of intelligence suggest about the complexity of a sufficient explanation? What implications do these have?

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3.7 Reductionism in psychological areas

Aim: To understand the position different areas of psychology have within the reductionism/holism debate.

Area	Key assumptions about causes of behaviour	How reductionist?
Biological		
Developmental		
Cognitive		
Social		
Individual Differences		
Behaviourist		
Psychodynamic		

3.8 Application of understanding – starter activity

Consider the following example: Mary is a 19 year old girl and is suffering from anorexia. Consider what possible explanations there might be for her condition.

Mary has always been concerned about her appearance and about looking overweight for as long as she can remember. Throughout her teenage years she dieted, even though she was below the average weight for her age. She followed a pattern of binge eating and extreme dieting and was admitted to hospital on a number of occasions. She has been diagnosed as suffering from anorexia.

How would you explain her condition?

Here are four different psychologists' explanations for Mary's condition. Read each one and see which you agree with. Once you have read each explanation see which approach each explanation belongs with.

Dr. Smith

"Mary has the unconscious desire to remain prepubescent, so as not to have to face up to impending womanhood and all of the associated expectations, such as marrying and having children. The weight loss prevents the rounding of the hips and breasts, giving a boy-like appearance and so avoiding womanhood. This is the cause of her anorexia."

Dr. James

"Mary's condition can be explained in biological terms. Evidence strongly suggests that there are biological causes for this disorder. The hypothalamus, which regulates appetite and eating, may be dysfunctional, or chemical neurotransmitters may have a role. For example, serotonin acts upon the hypothalamus to decrease the appetite and this could be implicated in her anorexia."

Dr. Slone

"Mary may be suffering from a 'weight phobia', the results of the impact of life experiences where social norms, values and roles have been learnt. The cultural ideal of a slender female may cause her to have a fear of being fat."

Dr. Jones

"Mary's anorexia can be explained in terms of the social pressures that she is under, for example, she is under pressure from her peers to look slim. It has been found in many non-western cultures including China, Singapore and Malaysia that anorexia is less prevalent. In these cultures food is revered and given great importance."

3.8 Application of understanding

After reading the news article record your responses to the questions below.

What behaviour is being discussed in the news article?

What is the potential cause of behaviour?

How could you investigate this behaviour?

Would this be a reductionist or holistic explanation? Why?

Circle which side of the following debates your explanation takes:

Nature/Nurture

Freewill/Determinism

Individual/Situational

Treatment / Therapy / Intervention / Further research

How ethical is this research?


Is this research socially sensitive? Does this link to how reductionist the explanation is?

How scientific is your approach? Link this to the reductionism/holism debate.

Section 4: Individual/Situational Explanation Worksheets

4.1 Evil

Starter: Draw someone 'evil'



Task 1: Draw a timeline of the research into the causes of evil.

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Task 2: Sort the following cards into individual or situational explanations of behaviour. Then use each explanation to suggest why individuals act in an evil way.

Kohlberg believes that we carry out criminal activity due to moral development. Kohlberg believes that progression through these stages helps people behave in a responsible way.

Why is the use of a stage theory good?

Becker uses the Health Belief Model to explain why an individual may be more likely to carry out a preventative health behaviour.

Can you identify two factors that clearly use a situational explanation of behaviour?

Yochelson and Samenow argue that criminals think differently from law-abiding people. They are said to have particular biases in their thinking which alters their decision-making skills.

What methodological issue is there with this research?

Bandura and Adams believe that self-efficacy determines one's ability to complete a task.

Why is this a positive way of explaining behaviour?

Brunner believes a defect in the MAOA gene leads to mental retardation and may account for why criminal behaviour occurred.

Can you think of a criticism of this?

Watt et al show that by making using an inhaler fun you can encourage a child to administer their medication. This highlights the importance of encouragement and one's environment in shaping behaviour.

Why does this have real life application?

Reicher and Haslam believe that tyranny and 'evil' acts occur due to hierarchical inequalities and group failure.

How can you measure this explanation of behaviour?

Zimbardo believes that evil occurs due to group behaviour.

Should we undertake such unethical research?

Milgram believes people carry out evil acts because of obedience.

Is this a simplistic explanation?

Watson and Rayner believed that behaviour is shaped and that behaviourism can explain all behaviour.

Using the behaviourist perspective - Can you explain how evil may occur?

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4.2 Key principles of the individual/situational debate

Sort the following cards into either **situational** or **individual** explanations of behaviour.



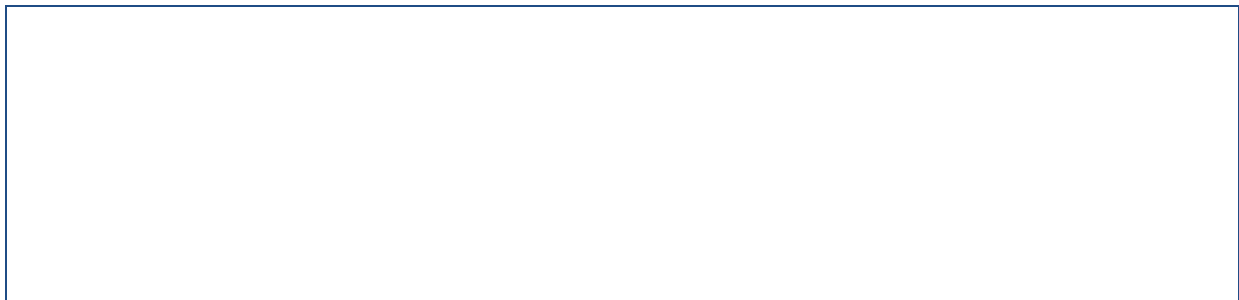
4.3 Anonymous

Your challenge is to explain as many pieces of research in the time limit as possible. The catch is you are only allowed to explain how the piece of research uses either individual or situational explanations of behaviour.

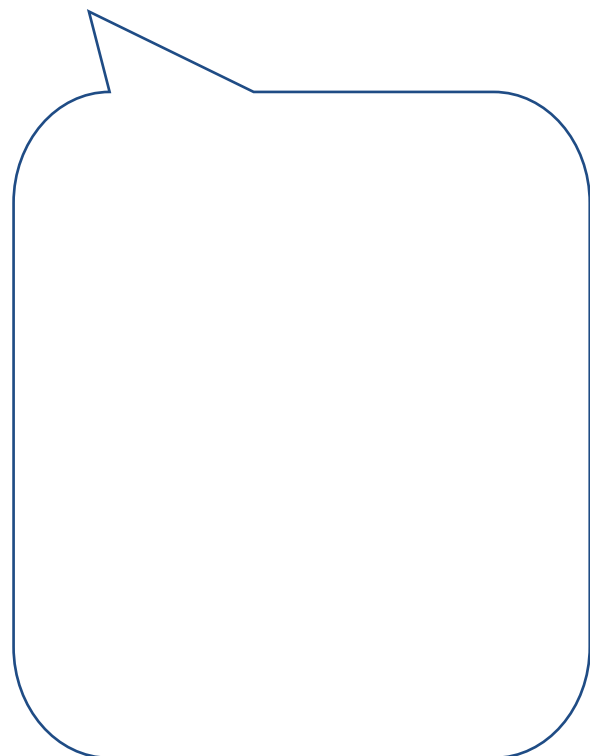
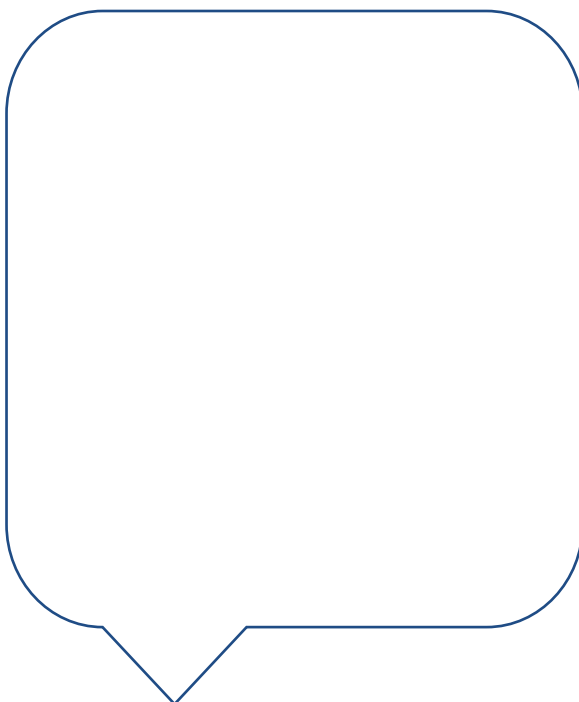
As an example, when trying to describe the research by Milgram you may say the following:

This piece of research explained behaviour by saying people around you cause behaviour and that the position a person is in within a social hierarchy alters how effective they are at influencing your behaviour.

Have a go yourself at guessing which study this is and which side of the individual/situational debate it is.



Script plan for allocated studies:



4.4 Situational explanations? Or excuses?

After reading about Zimbardo's SPE, answer the following questions:

1. What does Zimbardo claim happens when you put 'good people in an evil place'?

2. What are the limitations of the way Zimbardo carried out his research? Do these make the situational explanation less convincing?

3. Would dispositional factors have affected the results of this study? Consider factors such as class, age and gender.

4. Is research investigating situational factors ethical? Why?

5. What can we do about evil behaviour according to Zimbardo's research?
What are the implications of this?

4.5 Interactionism

Whilst many researchers adopt a situational or individual position in this debate many realise that human behaviour is very complex. Interactionism accepts that a lot of human behaviour must be explained by understanding the interaction of both situational and dispositional factors. Researchers that investigate behaviour in this way take a more central position in the situational/individual explanations debate.

Aim: To understand different positions in the individual/ situational explanations debate.

Task: Read the following scenarios and annotate what situational and individual explanations may contribute to the behaviour.

Scenario 1

A young man has previously not been in trouble but he has been arrested for stealing money from the safe at work with his supervisor.

Scenario 2

Aisha, an A Level student, has recently been having real difficulty remembering things and this is starting to worry her.

4.6 Strengths and weaknesses of the individual/situational debate

Aim of the task: To understand the different positions within the debate and their relative strengths and weaknesses.

Task: Read the following extract about the individual/situational explanations debate and then summarise the key strengths and weaknesses.

Researchers have considered various pieces of research that suggest that a person's disposition causes their behaviour and contrasting research that believes that behaviour is a result of the situation a person finds themselves in. The question is which argument is the most convincing when we look to predict behaviour.

Personality is different to mood; we expect individuals' mood to fluctuate and change depending on the time of the day and other factors. When psychologists look for personality traits they are looking for more enduring qualities in a person that signify more than just a bad mood. When we research personality we are looking for behaviour that is consistent and predictable across a range of situations. It is rather useful to be able to isolate the characteristics in an individual that determine their behaviour so that treatments and interventions can be put in place, such as cognitive therapies for offenders. On the other hand, it can be really difficult to distinguish between individual factors and situational factors as human experience is very complex and it is not easy to attribute behaviour to one factor accurately.

By beginning to understand the complex interactions between individual and situational factors, further research can be done to explore the relative contribution of each factor. Often, further research is carried out in laboratory settings to establish higher control than real life but this can lead to lower ecological validity when explaining behaviour. This can then lead to changes in environments such as the workplace that increase pro-social behaviour and reduce the likelihood of anti-social behaviour occurring.

The two opposing explanations of behaviour are seductive and each have useful applications when trying to reduce negative behaviours and improve quality of life however many have said that they are very simplistic when it comes to explaining the complex interactions seen in everyday human behaviour and when assessing an individual's environment, characteristics and relationships. Further to this, many believe that the situational explanation is reductionist as it ignores individual differences that may contribute to behaviour in favour of social mechanisms that are believed to directly affect behaviour.

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Strengths	Weaknesses

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4.7 Rate the research

For the exam you need to be able to select appropriate research to illustrate different positions within each debate. Use the debate line below to rate research as favouring an individual explanation or a situational explanation of behaviour.

Situational explanations suggest that behaviour is determined by factors in the environment that are external to an individual's characteristics or past behaviour.



Individual explanations believe behaviour is determined by characteristics within a person such as personality, IQ, thinking patterns or hormonal levels and that using these behaviour can be predicted.

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4.8 Spot the difference

Read the following statements and then select the most appropriate words from the box to represent how the individual/situational debate is similar and different to other debates.

nature	nurture	freewill	determinism	reductionist	holistic
useful	treatments	therapy	intervention	ethical considerations	
socially sensitive research	scientific	falsifiable	innate	situational	individual

1. Individual explanations of behaviour often assume that behaviour is _____ and that the _____ side of the debate is true.
2. Situational explanations of behaviour are often hard to quantify when explaining how groups, presence of others and social triggers cause behaviour and therefore a more _____ approach is needed.
3. By understanding _____ factors that determine behaviour researchers can develop real life applications such as _____ that focuses on changing factors such as faulty cognitions.
4. The individual/situational debate aims to offer a _____ explanation of behaviour as it aims to establish cause and effect by isolating specific variables.
5. The danger of attributing the cause of behaviour to **individual** factors is that it can lead to _____ as the implications of findings could suggest that a person's race, age, gender or disability, for example, cause behaviours. This can cause social stigmas and discrimination as seen in Gould's research on intelligence.
6. Both sides of the individual/situational explanations debate assume that it is possible to predict behaviour based on specific variables and that people behave in systematic ways which removes the element of _____.
7. Areas of psychology that use individual explanations of behaviour, such as the cognitive area, often use _____ methods that are high in control whereas situational explanations often find it harder to establish such high control.
8. By utilising a _____ explanation researchers assume that the environment determines behaviour and therefore the nurture side of the nature/nurture debate is favoured.

AS and A LEVEL PSYCHOLOGY

4.8 continued

Task: Using the answers in the previous exercise and your own knowledge, compare the individual/situational explanations debate to other debates in the boxes below.

Nature/nurture?

Reductionism/
holism?

Determinism/
freewill?

Usefulness of
research?

INDIVIDUAL/SITUATIONAL
DEBATE

Ethical
considerations?

This is...

Psychology as a
science?

Remember that
some debates may
be both similar AND
different.

Socially sensitive
research?

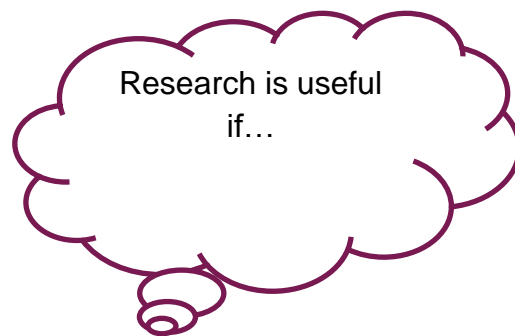
Can you give
examples to support
your claims?

Section 5: Usefulness of Research Worksheets

5.1 Defining usefulness

Aim: To define the principles and concepts of the usefulness debate.

What is the purpose of psychological research?



Usefulness is...

5.2 To what extent...

Aim: To use research to illustrate the different positions within the usefulness debate.

Task: Read the following statements and discuss how useful each piece of research is using the usefulness criteria below.

Usefulness criteria:

High usefulness	Low usefulness
<ul style="list-style-type: none">• progresses understanding of a phenomena beyond previous findings• provokes further research in the field• provides developments for therapies, interventions, preventative action or treatments• is valid so that results are accurate• is generalisable to a wide population	<ul style="list-style-type: none">• lack of new knowledge or understanding shown about phenomena• research lacks internal validity and cannot be sure it is testing what set out to• research cannot be generalised very well or to a wider population• research lacks ecological validity and therefore use in the real world

AS and A LEVEL PSYCHOLOGY

5.3 Dominoes

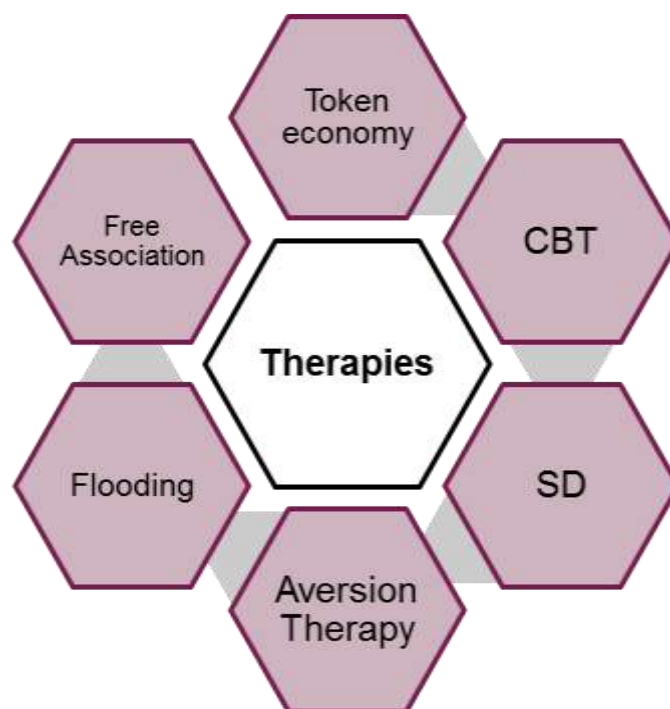
Statement	Usefulness?
Milgram (1963) found that 65% of people obeyed the authority figure to the full 450v when put in a situation where they were led to believe they were testing the learner so learning and punishment could be investigated.	
Loftus and Palmer (1974) found that when asked a leading question about the presence of glass more participants, who were all American students, in the 'smashed' condition than the 'hit' condition reported seeing the glass.	
Grant et al (1998) found that studying and testing in the same environment leads to enhanced performance when giving students material to learn in a laboratory experiment.	
Chaney et al (2004) studied Australian children's health regimens and found that the Funhaler may be useful for the management of young asthmatics but long-term efficacy is not known.	
Casey et al (2011) studied individuals who had previously completed a delay gratification task in the late 1960s. They found that resistance to temptation is a relatively stable individual difference.	

5.4 Different therapies

Aim: To understand the different therapies that can be developed following research that improves the usefulness of research.

Therapies are developed due to the belief that behaviour can be changed and research often investigates the most effective methods of conducting therapies in order to suggest useful improvements to the way people are treated for mental illness, faulty thinking or undesirable behaviour such as offending.

Record below which area of psychology each therapy has been developed from, what the therapy involves and the typical areas of application.



5.5 The usefulness of different areas

Aim: To understand and explain how different areas of psychology fit into the usefulness debate.

Complete the grid below to show how generally each area of psychology is useful and how it is not.

Area of psychology	Social	Cognitive	Developmental	Biological	Individual Differences	Behaviourist	Psychodynamic
Internal validity high or low?							
Furthered research in the field?							
Offers therapies or interventions?							

5.6 Usefulness bingo

Aim: To consolidate understanding of the definition of usefulness and key concepts.

Task: Choose nine words from the key terms below and fill in the bingo grid.

Further research / intervention / psychoanalysis / cognitive therapy / validity / generalisable / ecological validity / flooding / drug treatment / CBT / target population / legal changes

Once you have three in a row, shout “BINGO” and be ready to define your key terms.

Key term	Definition

Challenge: Write a sentence summarising usefulness is less than 20 words using a selection of the key terms above.

5.7 Usefulness continuum

Aim: To select research to illustrate different positions within the usefulness debate.

Task: You are going to form a human debate line and rate your core studies usefulness in comparison to other core studies. To prepare for this you need to come up with key points about why your piece of research is useful.

Core study:

Useful because...

May be less useful because...

Record the three most useful pieces of research here with a justification of why.

5.8 How does usefulness fit into the other debates?

Aim: To understand how useful research is that which favours different positions in other debates.

Each debate has defining principles about how behaviour should be explained and this leads to particular methodologies being used, focused samples and differing approaches to providing treatments or therapies for individuals. You need to be able to comment on the usefulness of the different positions within the debates.

Task: Use the grids below to comment on the usefulness of each extreme position in the debates.

Reductionism/holism debate

Usefulness criteria	Reductionist position	Holistic position
Internal validity high or low?		
Furthered research in the field?		
Offers therapies or interventions?		

Freewill/determinism debate

Usefulness criteria	Determinist position	Freewill position
Internal validity high or low?		
Furthered research in the field?		
Offers therapies or interventions?		

Nature/nurture debate

Usefulness criteria	Nativist position	Nurture position
Internal validity high or low?		
Furthered research in the field?		
Offers therapies or interventions?		

Individual/situational explanations debate

Usefulness criteria	Reductionist position	Holistic position
Internal validity high or low?		
Furthered research in the field?		
Offers therapies or interventions?		

Psychology as a science debate

Before completing this table consider what the two positions are again.

	Psychology is a science position	Psychology is not a science position
Assumptions about behaviour		
Methodologies		
Type of data collected		
Typical therapies		

Usefulness criteria	Psychology is a science position	Psychology is not a science position
Internal validity high or low?		
Furthered research in the field?		
Offers therapies or interventions?		

Section 6: Ethical Considerations

Worksheets

6.1 What are ethics?

Aim: To define the principles of the ethical guidelines set out by the British Psychological Society (BPS).

Complete the table below to define the ethical issues and explain why it is important to uphold ethical guidelines for each one.

Ethical issue	Importance of upholding relevant ethical guidelines
Deception	
Informed consent	
Protection from psychological and physical harm	
Right to withdraw	
Confidentiality	

6.2 How ethical is previous research?

Aim: To explain how research illustrates the adherence of ethical guidelines as well as ethical issues raised.

Use the following grid to record how ethical previous psychological research is. You also need to consider if there is an alternative way to conduct research on the same phenomena that is more ethical.

Research	Ethical issues raised	Reasoning (Why did the researchers do it despite ethical issues?)	Alternative that is more ethical
Milgram (1963) Obedience			
Piliavin et al (1969) Subway Samaritan			
Blakemore and Cooper (1970) Impact of early visual experience			
Freud (1909) Little Hans			

Many researchers carry out a cost-benefit analysis to assess how they can carry out their research to meet their aims and also to ensure that research adheres to ethical guidelines.

Record some general costs and benefits of carrying out unethical research below:

Costs of carrying out unethical research	Benefits of carrying out unethical research

6.3 'Thinking is not optional'

Aim: To apply the ethical guidelines to research and justify decisions about the design of research.

Research has to be approved.

Task: Read the following research proposals and record how it would need to be improved to ensure that it is ethical.

Research proposal	Recommendations for improvements
<p>A hospital wishes to investigate the effect of text reminders on adherence to diabetic regimes. They suggest that they will record blood sugar levels of diabetics who visit the hospital and will send half of them texts whilst the other half doesn't receive any. Once the research period is over they will write to all the individuals they collected data from and inform them of what they have done.</p>	
<p>A researcher wants to investigate anxiety when people don't know what to do in an emergency situation so he proposes to stage an emergency in a busy shopping centre and observe the reactions.</p>	
<p>Previous research has suggested that the brain has plasticity and changes due to experience. A group of researchers have proposed asking 10 people to carry out repetitive tasks focused on developing fine motor skills for six months before comparing their MRI scans to controls.</p>	

Assessment question: Outline how research can ensure informed consent is given. (2)

6.4 Top trumps

Aim: To select appropriate research that demonstrates high levels of adherence to ethical guidelines.

Task 1: In the box below write down the most unethical core study you have looked at. Remember to justify your decision and refer to the ethical guidelines.

Task 2: For each of the following ethical guidelines choose two core studies that have adhered to the expectations well and one that hasn't and record how they achieved this.

Informed consent:

Core study 1 did this because...

Core study 2 did this because...

Core study 3 did not achieve this...

Protection from harm:

Core study 1 did this because...

Core study 2 did this because...

Core study 3 did not achieve this...

Right to withdraw:

Core study 1 did this because...

Core study 2 did this because...

Core study 3 did not achieve this...

Task 3: Write a quick how-to-guide for how to adhere to the three ethical guidelines above with top do's and don'ts.

Ethical guideline	Do's	Don'ts
Informed consent		
Protection from harm		
Right to withdraw		

6.5 Ethical decision making

When making ethical decisions there is often more than one person's perspective to consider. The following stakeholders are often involved; record who they are and what their role is.

Stakeholder	Role
Client	
Participant	
Gatekeepers	
Colleagues	
Parents	
Other stakeholders	

Mind map what each stakeholder may say about the following research in terms of the ethical guidelines and any concerns they may have.

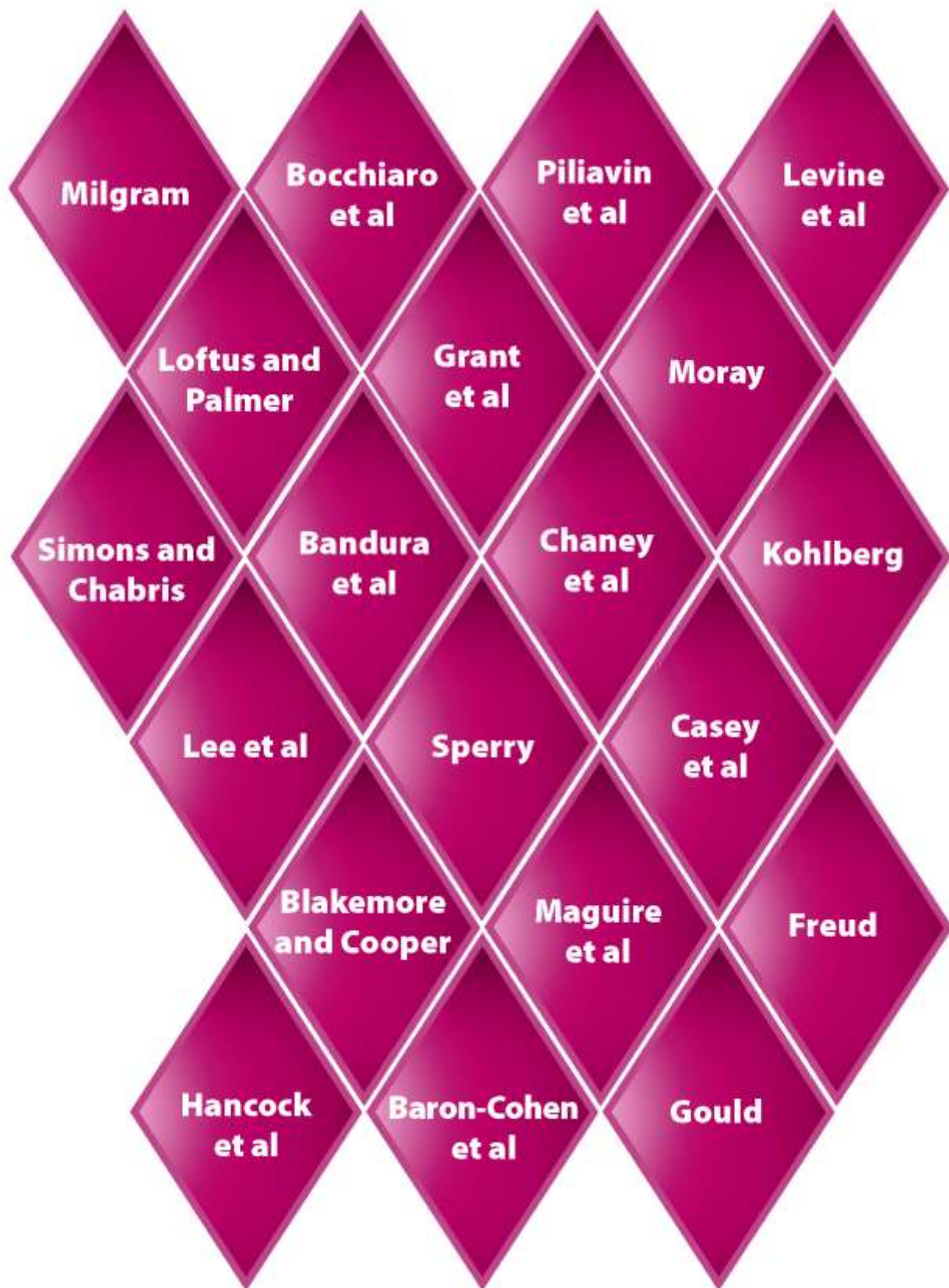
Chaney et al (2004)
Funhaler study

Freud (1909) Little
Hans

6.6 Diamond 9

Organise the core study cards with the most ethical at the top of the diamond and the least ethical at the bottom. Be prepared to justify your choice.





6.7 True or false research task

Aim: To apply an understanding of the ethical guidelines to research scenarios and to assess whether they would have been approved by an ethical committee.

Task: Read the following research scenarios and assess whether they would pass ethical guidelines to be carried out.

Researchers plan to see if they can implant a fictitious memory into a child's memory. They plan to do this by describing the child becoming lost in a shopping mall to the child in interviews.

Ethical?

Researchers want to investigate the importance of attachment in young animals by placing them in isolation for a month at a time to see the effect on psychological wellbeing, particularly levels of depression.

Ethical?

Researchers want to see if men change their urination behaviours when their personal space is entered. They plan to do this by getting people to stand too close to men whilst they urinate and observe it through a periscope.

Ethical?

6.8 Ethics – more than a code?

Ethical guidelines have been developed to support researchers and psychologists in making the right decisions and ensuring they act in an ethical way. Your task is to write a short article to explain what the ethical guidelines are and why they are important to other A Level students when carrying out practical research.

You may want to include the following quotes from the BPS code of ethics.

“The existence of lengthy detailed and prescriptive professional or institutional regulations raises the risk of researchers following the letter, but not the spirit, of the regulations and may in consequence lead to research being carried out that is ethically flawed.”

“Ethics involves risk management.”

“Conflicts of interest between the patient’s autonomy and the ‘greater good’ may happen, making **decisions difficult.**”

“Ethics happens everyday as we relate to our patients, participants and peers.”

Objectives:

You **must** include the following information:

- A brief summary of the six key ethical guidelines
- Examples of how to adhere to at least two of the ethical guidelines
- At least one example of research that has failed to adhere to ethical guidelines and the consequences.

You **should** include the following:

- Reasons that adhering to ethical guidelines may be challenging
- Improvements to research that has ethical issues.

You **could** include the following:

- Top tips for ensuring research is ethical
- Topics that may cause ethical issues with reasoning.

Section 7: Conducting Socially Sensitive Research Worksheets

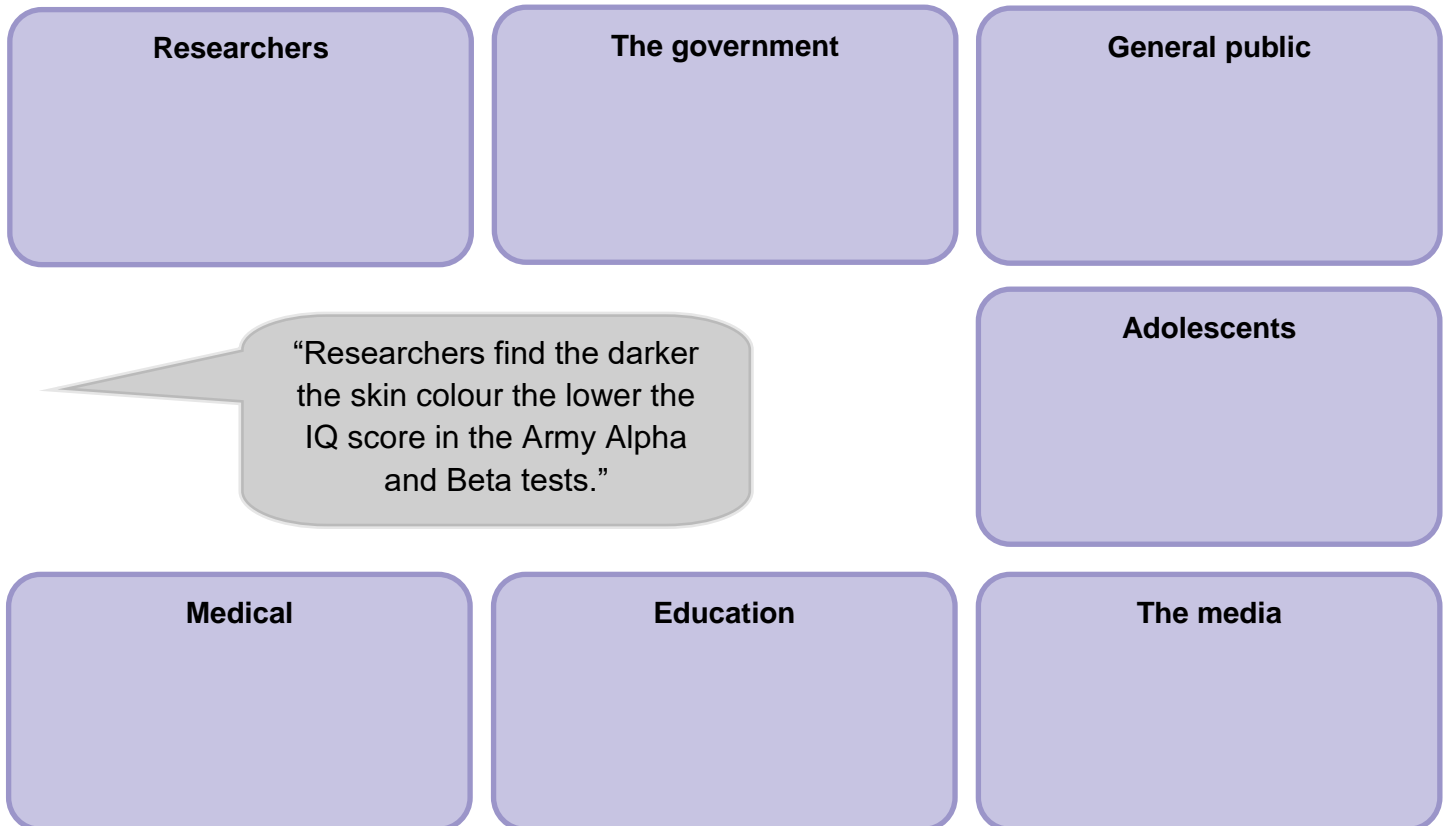
7.1 What are the implications of research findings?

When conducting psychological research those involved need to be aware of the implications of doing so for both those in the research and for wider society.

Psychologists need to be conscious of the implications of researching particular topics that may be deemed controversial, such as the cause of homosexuality, as well as how any findings they may gather could be used in wider society. Often research is used to shape public policy and more informally it feeds the media headlines, both of which can have quite an impact on both individuals and groups in society. It is therefore really important that researchers construct their research carefully and also present the data clearly with focused interpretations.

Read the following headlines and mind map what different stakeholders may wish to do with this information.

Scenario 1:



What really happened?

Scenario 2:

Researchers

The government

General public

“Psychopaths are linked to a variant of the MAOA gene due to associated aggressive traits.”

Adolescents

Medical

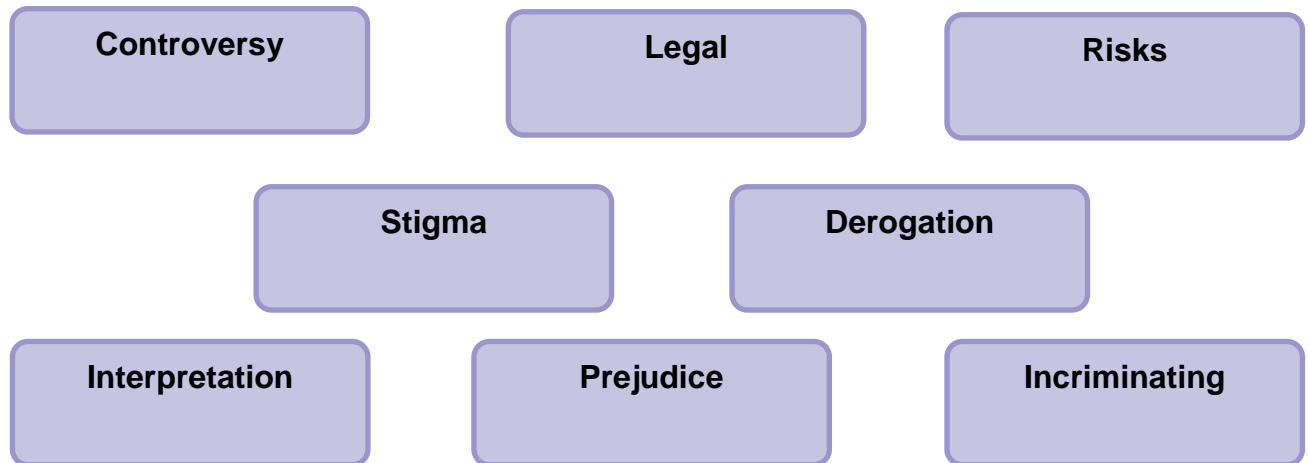
Education

The media

What really happened?

7.2 What is socially sensitive research?

You need to be able to define what socially sensitive research is and give examples of the implications that this type of research causes. Use the key terms below to write a definition of what socially sensitive research is.



Socially sensitive research is...

Conducting socially sensitive research is important because...

7.3 Taboo?

Each area of psychology will explain behaviour using different assumptions and these will in turn affect how socially sensitive a specific piece of research may be.

Complete the following table to show how each area may explain the phenomena and then choose which area may be most socially sensitive with a justification.

Phenomena 1: Researchers wish to find out the cause of alcoholism.

Area of psychology	Potential explanation for phenomena	Potential implications of socially sensitive research
Social		
Cognitive		
Developmental		
Biological		
Individual differences		
Behaviourist		
Psychodynamic		

The most socially sensitive explanation for alcoholism is from the _____ area because...

Phenomena 2: Researchers wish to find out the cause of terrorism.

Area of psychology	Potential explanation for phenomena	Potential implications of socially sensitive research
Social		
Cognitive		
Developmental		
Biological		
Individual differences		
Behaviourist		
Psychodynamic		

The most socially sensitive explanation for terrorism is from the _____ area because...

How do the different debates link to socially sensitive research?

7.4 Factors that affect how socially sensitive research is

Aim: To understand the different factors that affect how socially sensitive research may be.

Whether a piece of research is seen as socially sensitive will depend on the context in which the research takes place. A lot of psychological research takes place as a response to events in society and developments in existing research.

In groups, discuss how each of the following factors would affect how sensitive research on obedience to authority is.

The culture studied

The religion of those studied

The age of those studied

The target population studied

7.5 Cost-benefit analysis

Aim: To understand the applications of conducting socially sensitive research and the implications of not doing so.

Often it can be a really tricky decision for researchers when considering if they should carry out research that is socially sensitive. Researchers have to consider the benefits of researching topics such as genetic explanations of behaviour, aggression or mental retardation as findings of research in these areas has the potential to really improve quality of life and treatments available. On the other hand researchers must be cautious and ensure they have assessed the costs of conducting such research so that it can be planned appropriately and reported accurately to minimise harm.

Consider the costs and benefits of carrying out the research below and discuss the implications of research in this area if it is simply not carried out.

Research	Costs	Benefits	Implications if not researched
Bandura et al (1961) Transmission of aggression			
Milgram (1963) Obedience			
Maguire et al (2000) Taxi drivers			
Hancock et al (2012) Language of psychopaths			

7.6 How ethics and socially sensitive research are linked

Aim: To understand how ethical issues are similar to and different from socially sensitive research as a debate.

All the debates in psychology have similarities and differences and it is important you understand how they relate to one another. Often research that is socially sensitive can lead to significant psychological harm and breaches of the ethical guidelines.

Research is likely to be socially sensitive if it:

- Is researching a highly personal or private experience
- If the research is focused on deviant behaviour
- If the research questions the authority of those in society such as politicians
- If the research questions things which are sacred to those being studied

Why may the factors above lead to psychological harm?

7.7 Socially sensitive research and other debates

Aim: To understand how the socially sensitive research debate is similar and different to other debates.

Complete the boxes to explain which positions in other debates tend to be socially sensitive and why.

Nature/nurture

**Reductionism/
holism**

**Individual/
situational**

**Usefulness of
research**

**Socially sensitive research
is...**

**Ethical
considerations**

**Psychology as a
science**

Remember that
some debates may
be both similar AND
different.

Can you give
examples to support
your claims?

**Determinism/
freewill**

7.8 Socially sensitive research in the news

'Abuse' soldier 'obeyed orders'

A UK soldier accused of abusing civilians in Iraq is a war hero who had been obeying orders, a court has been told.

Soldier 'X' denies several abuse charges at a court in Germany.

The soldier's defence said orders given by commanding officers were to blame for the alleged abuse. The defence blamed a military plan known as Operation Ali Baba for the alleged offences. The court heard that the camp commander responsible for Operation Ali Baba told his troops to catch looters who had been stealing food and "work them hard". The defence told the court: "The whole reason the soldier is in the dock is because he followed orders."

Soldier 'X' has entered a not guilty plea. The court case continues and is expected to last three to four weeks.

Based on an article cited on news.bbc.co.uk (Wednesday, 19 January, 2005)

Discuss the questions below and record your points.

1. What psychological phenomena is being discussed in the article?

2. What area of psychology would explain behaviour in this way?

3. Why may this phenomena be socially sensitive?

4. If the soldier's claims were found to be supported by findings from psychological research in this area, what are the implications?

5. Before a researcher began to investigate this phenomena what would they need to consider as the risks and benefits of conducting such socially sensitive research?

Costs	Benefits

Section 8: Psychology as a Science Worksheets

8.1 What is science?

Aim: To define the key principles of the psychology a science debate.

The BPS describes psychology as:

“...the scientific study of human mind and behaviour: how we think, feel, act and interact individually and in groups.”

Source: BPS website: <http://www.bps.org.uk/psychology-public/introduction-psychology/introduction-psychology>

What does it mean to be scientific?

Scientific research is...

Scientific research is not...

8.2 Is psychology a science? Positions in the debate

Aim: To understand the different positions within the psychology as a science debate.

Each area of psychology researches behaviour differently due to the different assumptions about what causes behaviour. Due to this different areas of psychology can be seen as more or less scientific. Complete the grid below to summarise how scientific each area generally is.

Area	Methods utilised to test assumptions	How scientific? Which criteria does it fulfil?
Social		
Cognitive		
Developmental		
Biological		
Individual Differences		
Behaviourist		
Psychodynamic		

Which area of psychology is most scientific and why?

Which area of psychology is least scientific and why?

8.3 Should psychology be a science?

Aim: To understand the applications of different positions within the psychology as a science debate.

There are many arguments both for and against psychology being a science and the use of it being classed as a science. Read the statements below and consider the implications of each one.

Psychology needs to be based on more than just myths.

Some theories are simply harder to falsify than others.

Karl Popper said Suggested that regardless of whether a hypothesis has been supported by findings up to this point, it may not be supported in the future.

All observations require a prior viewpoint whether theoretical or experienced, so all data is socially manufactured.

If psychology is ever to be supported financially it needs to be seen in the same light as 'hard' sciences such as physics.

Kuhn (1970) suggested that science is not all about conducting experiments but that it has important social and subjective aspects to it.

It is difficult to assess cause and effect when we look at the complexity of human behaviour.

Do the statements above relate to any other debates?

Researchers that favour the holistic side of the reductionism/holism debate agree that 'the whole is greater than the sum of its parts' and that psychology cannot be reduced to scientific explanations of cause and effect. To what extent do you agree with this statement. Use examples to back up your answer.

8.4 Supporting research

Aim: To select research to illustrate different positions within the psychology as a science debate.

You need to be able to assess research from different areas of psychology on a case by case basis and form a judgement about how scientific the research is. Create a quick checklist of key features of scientific research below.

Key features of scientific research:

Now use this checklist to rate the following pieces of research in terms of how scientific they are.

Milgram (1963)
Obedience

Levine et al (2001)
Cross-cultural altruism

Grant et al (1998)
Context-dependent
memory

Moray (1959) Auditory
attention

Chaney et al (2004)
Funhaler study

Lee et al (1997)
Evaluations of lying and
truth-telling

Casey et al (2011) Neural
correlates of delay of
gratification

Blakemore and Cooper
(1970) Impact of early
visual experience

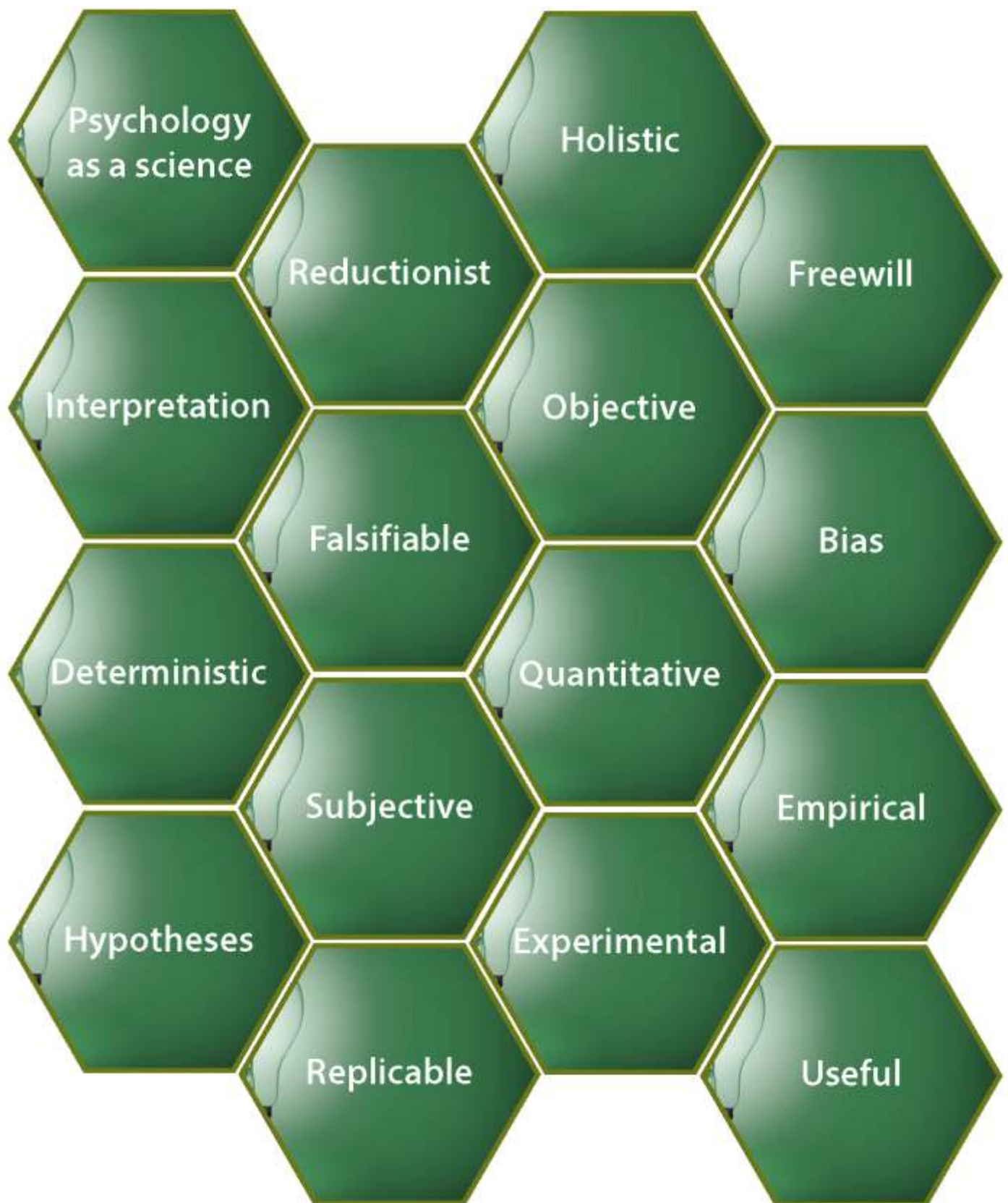
Freud (1909) Little Hans

Challenge: Write a summary of one of the studies not listed above that includes how it does or does not meet the criteria for scientific research.

8.5 Making connections

Aim: To explain the psychology as a science debate is similar and different to other debates.

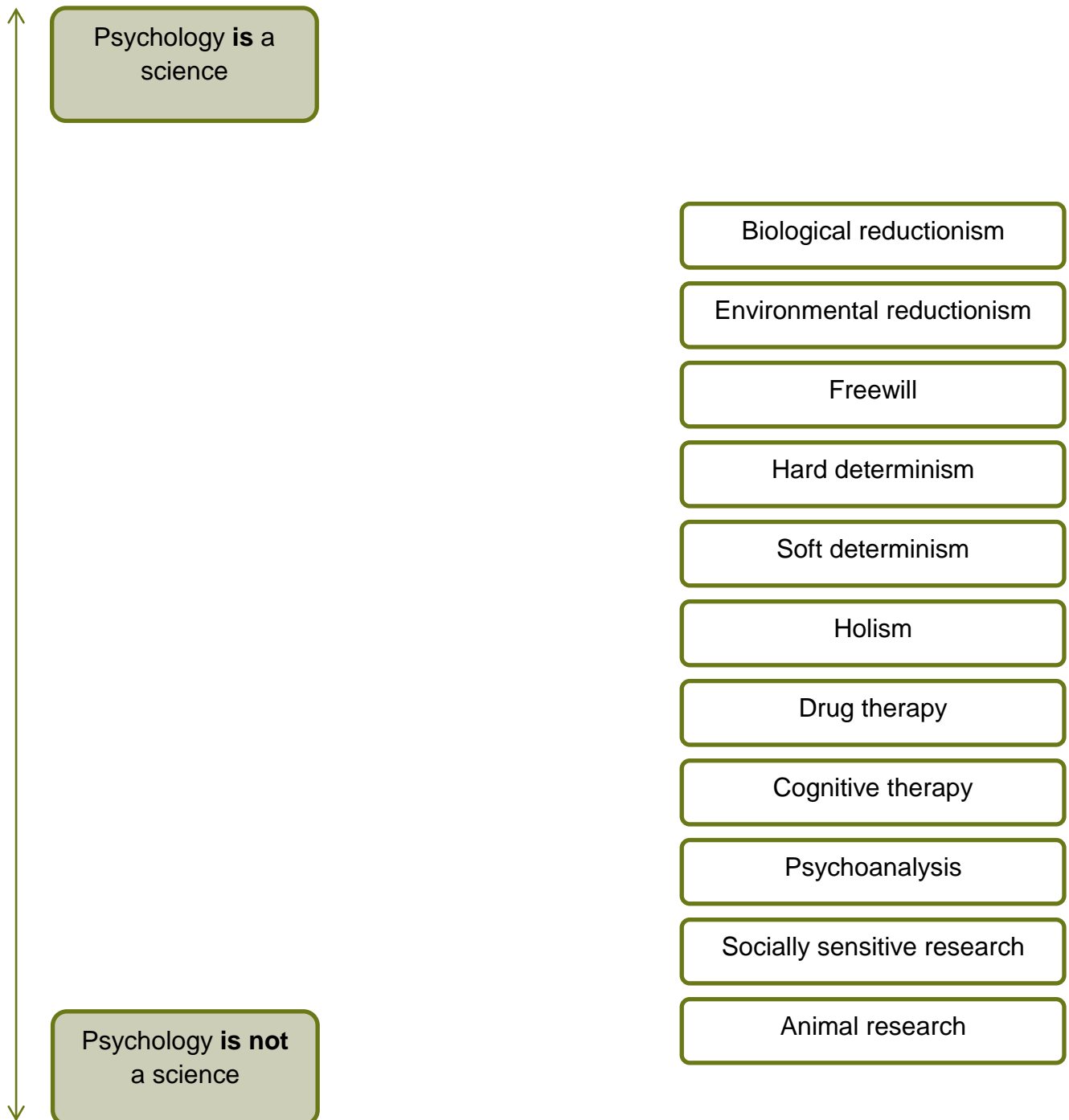
Task: See how many of the hexagons below you can connect. Hexagons can only be placed adjacent to another hexagon if you can explain the link between the two words on the cards. See how many connections you can make at once to explain how different terms interact.



8.6 Is behaviour predictable?

Aim: To explain how the psychology as a science debate is similar and different to other debates.

Task: Fit the positions of the debates below onto the debate line for psychology is a science to show how the debates compare to one another. Remember to justify your choices.



8.7 What is psychology?

Aim: To explain the defining principles of the 'psychology as a science' debate and the applications of the positions within the debate.

The debate of whether psychology is a science has existed for a very long time and it is still a question we ask today. Many students considering studying A Level Psychology may be unclear as to whether psychology is a science and what it is like. Your task is to write a two page article aimed at year 11 students who may be considering studying psychology.

Objectives:

You must:

- Define the psychology as a science debate
- Outline the argument that psychology should be a science
- Explain the benefits of psychology being a science and also the benefits of it not being a science.

You should:

- Include examples drawn from the core studies to support points
- Outline at least two different areas of psychology's positions in the debate.

You could:

- Provide further reading
- Give an example of the implications of psychology being a science for a particular behaviour/phenomena.

8.8 Psychology as a science in other debates

Aim: To understand how the psychology as a science relates to other debates.

Complete the boxes to explain which positions in other debates tend to be similar or different to psychology as a science.

Nature/nurture

Reductionism/
holism

Individual/situational

Usefulness of
research

Psychology is a science
when...

- Empirical
- Objective
- Systematic
- Quantitative
- Replicable
- Experimental
- Falsifiable

Ethical
considerations

Socially sensitive
research

Remember that
some debates may
be both similar AND
different.

Can you give
examples to support
your claims?

Determinism/freewill