

A Level Psychology

Summer 2023 Feedback for Paper 3





Agenda

- Welcome, aims and objectives, agenda, polls
- Paper 3 overview
- Paper 3 feedback
- Delivery strategies, best practice, Edexcel support and information



Polls to get to know the
delegates

Paper 3 overview



Paper 3 overview

Context of 2306 series

Performance summary

Please check the examination details below before entering your candidate information

Candidate surname		Other names	
Centre Number	Candidate Number		
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Pearson Edexcel Level 3 GCE

Monday 5 June 2023

Afternoon (Time: 2 hours)	Paper reference	9PS0/03
---------------------------	-----------------	----------------

Psychology
Advanced
PAPER 3: Psychological Skills

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*

Information

- The total mark for this paper is 80.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*
- The list of formulae and statistical tables are printed at the start of this paper.
- Candidates may use a calculator.

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.



Mark Scheme (Results)

June 2023

Pearson Edexcel
GCE Psychology 9PS0/03
Paper 3: Psychological Skills

Q3(b)



Q3(b)

Up to three marks for application of learning theories to the findings of the anti-littering study (AO2).

Up to three marks for judgement/justification of research evidence in relation to the study (AO3).

Candidates who did well gave clear, accurate application of learning theories to the findings of the study, and then provided evidence supporting or refuting their ideas.

Candidates who did not do well did not offer any AO3 and had limited AO2 application.

3 Anti-littering study

Researchers wanted to understand how norms would be enforced or maintained in real-world contexts. They wanted to see how people would respond to someone violating a social norm in different city locations.

The researchers chose to use littering and selected two city locations to run their study. The cities chosen were New York City in the USA and Bern in Switzerland. The study was conducted at a busy tram/subway stop in each city at the same time of day.

There were two independent variables in the study to investigate littering:

- Place – they compared New York City (a very large city in the USA) to Bern (a small city in Switzerland)
- Disorder – they compared an empty bin with no surrounding litter (clean) with a full bin with lots of surrounding litter (littered).

In all conditions, a confederate walked towards the bin and threw an empty plastic bottle that missed the bin and fell on the floor. The confederate did not pick up the bottle and continued walking.

The researchers observed the reaction of people close by and recorded whether they:

- gave direct sanction (for example, verbally confronting the confederate)
- picked up the litter themselves (norm maintenance)
- had no reaction.

(Source: adapted from Berger and Hevenstone (2016))

The results of the participants' reaction to the confederate in the anti-littering study are shown in **Table 6**.

	Place		Disorder	
	New York City, USA	Bern, Switzerland	Clean	Littered
Participant gave a direct sanction to the confederate	2%	12%	8%	2%
Participant picked up the litter themselves (norm maintenance)	9%	27%	16%	1%
Participant had no reaction to the confederate	88%	61%	76%	97%

- (b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

Q3(b) – candidate response 1

(b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

social learning theory ^{by Albert Bandura} suggests that ~~adult~~ people learn behaviours through the observation ~~and~~ and imitation of role models, who we are likely to identify with. NYC is a large city with a large population, which means that people are more likely to find others who they identify with compared to the people in Bern in Switzerland. This can explain why more people in NYC showed no reaction ^{to littering} (28.1%) than people in Bern (6.1%) because ~~there are more~~ ^{effective} role models in NYC who ~~demonstrate~~ ^{model the} behaviour of ~~being~~ ^{showing} no reaction than in Bern.

Operant Conditioning suggests that we learn through consequences (~~if~~ ~~not~~ positive reinforcement, negative reinforcement, positive punishment, and negative punishment). ~~These~~ ^{consequences} can either strengthen/encourage the repetition of a behaviour (through reinforcement) or discourage a behaviour from happening again (through punishment). ~~These consequences can happen directly or vicariously - through observation of consequences experienced by others.~~ ^{This can happen directly or vicariously - through observation of consequences experienced by others.} This can explain more people in Bern (12.1%) giving a direct sanction to the confederate compared to NYC (2.1%) because ~~most people don't react~~ ^{most people don't react} (82.1%) to

littering in NYC ~~can be~~ ^{can be} ~~given~~ ^{given} ~~in~~ ⁱⁿ ~~direct~~ ^{direct} ~~sanction~~ ^{sanction} ~~to~~ ^{to} ~~littering~~ ^{littering} ~~may~~ ^{may} ~~face~~ ^{face} ~~a~~ ^a ~~negative~~ ^{negative} ~~e.g.~~ ^{e.g.} ~~aggressive~~ ^{aggressive} ~~reaction.~~ ^{reaction.} This discourages the large population of NYC to give direct sanctions as it can be intimidating. This may be the opposite for Bern population; the people who give direct sanctions may usually receive a positive response ^(or positive reinforcement) from people who litter, which enforces other people to give direct sanctions to those that litter ^(imitate the behaviour) because they have seen positive modelling. Lastly, most people are taught ^{good} social ^{and} ^{fractional} behaviours from their parents as they can easily identify with them as role models due to their family status. ^{This} ~~explains~~ ^{explains} participants ^{both being more likely to} giving a sanction to littering and picking the litter up themselves in clean areas than littered areas because they have observed their parents keeping the ~~house~~ ^{house} clean and therefore ~~are~~ ^{are} ~~reproducing~~ ^{reproducing} the same behaviour in the same world as they have the motivation.

Q3(b) – candidate response 1

(b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

A01 - 3 : ^{Stimulus} ^{involvement} ^{in NYC}
A02 - 3 : ^{involvement} ^{in NYC}

social learning theory suggests that ~~people~~ people learn behaviours through the observation and imitation of role models, who we are likely to identify with. NYC is a large city with a large population, which means that people are more likely to find others who they identify with compared to the people in Bern in Switzerland. This can explain why more people in NYC showed no reaction ^{to littering} (28%) than people in Bern (61%) because ~~there~~ there are more and ~~stronger~~ ^{effective} role models in NYC who ~~demonstrate~~ ^{model the} behaviour of ~~being~~ ^{showing} no reaction than in Bern.

Operant Conditioning suggests that we learn through consequences (~~if~~ ~~not~~ positive reinforcement, negative reinforcement, positive punishment, and negative punishment). ~~These~~ ^{These} consequences either strengthen/encourage the repetition of a behaviour (through reinforcement) or discourage a behaviour from happening again (through punishment). ~~These~~ ^{This} can happen directly or vicariously - through observation of consequences experienced by others. This can explain more people in Bern (12%) giving a direct sanction to the confederate compared to NYC (7%) because ~~most~~ ^{most} people ~~don't~~ ^{don't} react (82%) to ~~the~~ ^{the} large population of NYC.

littering in NYC
~~can be~~ ^{can be} given in a direct and therefore anyone who does give as a direct ~~with~~ ^{with} sanction to littering may face a negative e.g. aggressive reaction.

This discourages the large population of NYC to give direct sanctions as it can be intimidating.

This may be the opposite for Bern population; the people who give direct sanctions may usually receive a positive response ^(or positive reinforcement) from people who litter, which enforces other people to give direct sanctions to those that litter (imitate the behaviour) because they have seen positive modelling.

lastly, most people are taught ^{poor} ^{and} ^{fractional} social ~~of~~ ^{behaviours} from their parents as they can easily identify with them as role models due to their family status. ^{This} ~~explains~~ ^{explains} participants ^{both being more likely to} giving a sanction to littering and picking the litter up themselves in clean areas than littered areas because they have observed their parents keeping the ~~house~~ ^{house} clean and therefore ~~reproducing~~ ^{reproducing} the same behaviour in the same world as they have the motivation.

Q3(b) – candidate response 2

(b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

(6)

Learning theories suggest that behaviour is learned. For example, behaviour can be learned through classic conditioning. People in ~~Swiss~~ operant conditioning. This where behaviour is learnt through the consequences of an action. Skinner found that rats were more likely to press the lever when they received a sugar pellet. His findings can explain the results of the anti-littering study. Participants in Bern, Switzerland could have been more likely to pick up the litter than American participants as participants for Bern behaviour could have been positively reinforced. They may have been given a reward after cleaning up when they were younger. This could account for why 27% compared to 9% from the USA picked up the litter themselves. This is supported by Skinner's research.

Social learning theory can also account for the findings. Bandura suggested behaviour is learnt through observation through mediational processes. Participants from New York could have observed their parents ^{and then getting} littering or not picking up other people's rubbish. This could explain why 9% of USA participants didn't have any reaction to the confederate.

the participants have paid attention to this behaviour so therefore have retained this. They can now reproduce the behaviour as they know how to ~~see~~ avoid and walk past the bin. They are motivated to do this, ~~as they~~ they experience vicarious reinforcement as they have seen their parents get praised so they think they will. This is supported by Bandura's Bobo doll studies. He found that children displayed aggressive behaviour after observing a role model hitting a Bobo doll. This supports the idea that the findings from the anti-littering study are due to observation.

As it done by their role model - their parent.

(Total for Question 3 = 8 marks)

What mark should be awarded?

What mark did you give the response?



Q3(b) – candidate response 2

(b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

(6)

Learning theories suggest that behaviour is learned. For example, behaviour can be learned through classic conditioning. People in Smith's operant conditioning study where behaviour is learnt through the consequences of an action. Skinner found that rats were more likely to press the lever when they received a sugar pellet. His findings can explain the results of the anti-littering study. Participants in Bern, Switzerland could have been more likely to pick up the litter than American participants as participants for Bern behaviour could have been positively reinforced. They may have been given a reward after cleaning up when they were younger. This could account for why 27% compared to 97% from the USA picked up the litter themselves. This is supported by Skinner's research.

Social learning theory can also account for the findings. Bandura suggested behaviour is learnt through observation through mediational processes. Participants from New York could have observed their parents littering or not picking up other people's rubbish. This could explain why 97% of USA participants didn't have any reaction to the confederate.

The participants have paid attention to this behaviour so therefore have retained this. They can now reproduce the behaviour as they know how to avoid and walk past the bin. They are motivated to do this, as they experience vicarious reinforcement as they have seen their parents get praised so they think they will. This is supported by Bandura's Bobo doll studies. He found that children displayed aggressive behaviour after observing a role model hitting a Bobo doll. This supports the idea that the findings from the anti-littering study are due to observation.

As it was done by their role model - their parent.

(Total for Question 3 = 8 marks)

Q3(b) – candidate response 3

(b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

(6)

- Social learning theory may explain why participants 8% of the time when there was a clean bin gave a direct sanction to the cigarette as they may have ~~observed~~ their parents as role models told others off for littering when they then returned and initiated. Bandura's Bobo doll experiment supports this as it found on average boys replicate a male role models behaviour with an average 20.5 actions being replicated.

- Operant conditions may explain why participants in Bern Switzerland picked up the litter themselves 27% of the time as positive reinforcement may happen outdoors as children they may be rewarded here with the fear of picking up litter and then they continue to replicate that behaviour. This is also proven by Skinner pigeons who were rewarded each time they moved and anticlockwise when required that behaviour and they continued to repeat the behaviour after positive reinforcement.

- Classical conditioning may account for why people in Bern Switzerland gave a direct sanction to the cigarette 12% of the time as they may associate littering with something negative such as pollution, possibly in Switzerland there are advertisements and that associate littering with the

destruction of Earth and they are unpleasant to look at and as they have picked and moved it as much as possible. This is supported by Bandura's research as he found that the dog found with the sound of the bell will learn to the association of the bell with the dogs salivating each time the bell rings.

What mark should be awarded?

What mark would you give the response?



Q3(b) – candidate response 3

(b) Using research evidence, explain how far learning theories could account for the findings of the anti-littering study.

(6)

• Social learning theory may explain why participants 8% of the time when there was a clean bin gave a direct sanction to the cigarette as they may have ~~observed~~ their parents as role models told others off for littering when they then returned and intakes. Bandura also does support this as it found on average boys replicate a male role models behaviour with an average 20.5 actors being replicated.

• Operant conditions may explain why participants in Bern Switzerland picked up the litter themselves 27% of the time as positive reinforcement may happen outdoors as children they may be rewarded here with the for picking up litter and then they continue to replicate that behaviour. This is also proven by Skinner pigeons who were rewarded each time they moved and anticlockwise when required that behaviour and they continued to repeat the behaviour after positive reinforcement.

• Classical conditions may account for why people in Bern Switzerland gave a direct sanction to the cigarette 12% of the time as they may associate littering with something negative such as pollution, possibly in Switzerland there are advertisements and that associate littering with the

destruction of Earth and they are placed into it and as they to punish and avoid it as much as possible. This is supported by Pavlov's research as food associates the dog sound with the sound of the bell will lead to the ~~association of the bell~~ the dogs salivate each time the bell rings.

Q4



Q4

- 4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

Assessment of Rosenhan and Sherif studies in terms of the issue/debate practical issues in design and implementation using the 'Evaluate' taxonomy (command word)

Assessment objectives assessed:

- AO1 (6 AO1)
- AO3 (10 AO3)

Requires (1) knowledge and understanding; (2) evaluation and analysis to make judgements and draw conclusions

Q4

Marked using levels based
'best-fit' approach using the
level descriptors

Candidates who did well gave
imbalanced responses towards
AO3 and offered accurate and
detailed content

Candidates who did not do well
gave imbalanced responses
towards AO1 and offered
content that lacked accuracy
and depth

Level	Mark	Descriptor
AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 6 marks.		
Level 0	0	No rewardable material.
Level 1	1–4 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	5–8 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	9–12 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	13–16 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Q4 – candidate response 1

4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

The aims of Rosenhan (1973) were to test if diagnosis was reliable, to see if professionals were able to notice fake symptoms in schizophrenia, and to see the effects of being labelled as abnormal.

Rosenhan's study has high generalisability as the ~~post~~ 8 pseudo patients were sent to 12 different hospitals across 5 states of America. This is a practical advantage as the variety of hospitals means that results about diagnosis in institutions were the same throughout many different institutions in America. Also, the hospitals varied in amount of staff, and whether they were public or private, this adds further practical advantages to the generalisability about the reliability of diagnosis.

However, the hospitals in the study were only in America, so this limits the generalisability of the results about diagnosis because America uses the DSM to diagnose schizophrenia, however parts of Europe use the ICD to diagnose. Therefore results about diagnosis in this study are limited only to patients in the USA with schizophrenia. This

is a practical disadvantage because generalisability is limited for this study, reducing the overall validity of the results.

Rosenhan has high reliability, due to using a standardised procedure. All pseudo patients phoned the institutions saying they heard voices saying "empty" "hollow" and "thud." Once they were admitted they stopped showing these symptoms. Each ^{patient} ~~professional~~ followed the same procedure, making the study easily replicable, increasing the test-retest reliability. Other researchers in psychology can replicate the study to find similar results about diagnosis in schizophrenia. This is a practical advantage for psychology as results can be credited through by following the same procedure as ~~on~~ Rosenhan with different participants.

Sherif et al aimed to see how conflict could arise when hostility was introduced and whether superordinate goals could reduce competition.

Sherif's sample consisted of 22, 11 year old

Q4 – candidate response 1 continued

Boys from middle class protestant families in Oklahoma. The generalisability of the study is very limited as the sample is both adnocentric and anphrocentric. The results about competition being caused by hostility and the credibility of Realistic Conflict theory cannot be generalised to the wider population which consists of females and people from other cultures. This is a practical disadvantage as results are limited about competition to a small ammount of the wider population.

The ^{Conclusions} ~~findings~~ of Sherif's study were that superordinate goals such as freeing a truck stuck in the mud, reduced conflict between 2 groups. This was shown when ~~both~~ both teams opted to share a bus back home. This is a practical advantage as we can apply this knowledge of superordinate goals but we bring them in football to reduce hostility between fans by conducting charity matches. Both teams will compete for the same goal (to raise money for charity) in order to reduce hostility in crowds as they are working together for the same goal.

Overall, Sherif et al (1954) and Rosenthal (1973) have many practical advantages and disadvantages which make effect psychology as a whole when coming to conclusions about diagnosis of schizophrenia and theories such as realistic conflict theory.

Q4 – candidate response 1

4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

The aims of Rosenhan (1973) were to test if diagnosis was reliable, to see if professionals were able to notice fake symptoms in schizophrenia, and to see the effects of being labelled as abnormal.

Rosenhan's study has high generalisability as the 8 pseudo patients were sent to 12 different hospitals across 5 states of America. This is a practical advantage as the variety of hospitals means that results about diagnosis in institutions were the same throughout many different institutions in America. Also, the hospitals varied in amount of staff, and whether they were public or private, this adds further practical advantages to the generalisability about the reliability of diagnosis.

However, the hospitals in the study were only in America, so this limits the generalisability of the results about diagnosis because America uses the DSM to diagnose schizophrenia, however parts of Europe use the ICD to diagnose. Therefore results about diagnosis in this study are limited only to patients in the USA with schizophrenia. This

is a practical disadvantage because generalisability is limited for this study, reducing the overall validity of the results.

Rosenhan has high reliability, due to using a standardised procedure. All pseudo patients phoned the institutions saying they heard voices saying "empty" "hollow" and "thud." Once they were admitted they stopped showing these symptoms. Each ^{patient} ~~practitioner~~ followed the same procedure, making the study easily replicable, increasing the test-retest reliability. Other researchers in psychology can replicate the study to find similar results about diagnosis in schizophrenia. This is a practical advantage for psychology as results can be credited through by following the same procedure as ~~on~~ Rosenhan with different participants.

Sherif et al aimed to see how conflict could arise when hostility was introduced and whether superordinate goals could reduce competition.

Sherif's sample consisted of 22, 11 year old

Q4 – candidate response 1 continued

Boys from middle class protestant families in Oklahoma. The generalisability of the study is very limited as the sample is both ad hoc and androcentric. The results about competition being caused by hostility and the credibility of Realistic Conflict Theory cannot be generalised to the wider population which consists of females and people from other cultures. This is a practical disadvantage as results are limited about competition to a small sample of the wider population.

The ^{conclusions} ~~findings~~ of Sherif's study were that superordinate goals such as freeing a truck stuck in the mud, reduced conflict between 2 groups. This was shown when both teams opted to share a bus back home. This is a practical disadvantage as we can apply this knowledge of superordinate goals but we bring them in football to reduce hostility between fans by conducting charity matches. Both teams will compete for the same goal (to raise money for charity) in order to reduce hostility in crowds as they are working together for the same goal.

Overall, Sherif et al (1954) and Rosenthal (1973) have many practical advantages and disadvantages which may affect psychology as a whole when coming to conclusions about diagnosis of schizophrenia and theories such as realistic conflict theory.

Q4 – candidate response 2

4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

Sherif aimed to investigate whether competition could lead to prejudice. There were 24 participants, all 11-12 year old boys from the same middle class background. The Stage 1 of the procedure included formation of the group identities where the boys were split into 2 groups (unknowing of each other) and given team building exercises such as creating a flag & coming up with group names (Eagles & Rattlers). Stage 2 consisted of competition for limited resources. The groups were introduced to each other & expressed an interest in competing where they played games ~~for~~ with negative interdependence such as baseball & tug of war, which led to hostile behaviour, e.g. burning the Eagles' flag. The 3rd stage consisted of conflict resolution as resources for up tasks with superordination goals in order to improve group relations & reduce prejudice, e.g. fixing a water tank which improved relations between groups. Sherif found when competition was zero sum (only one winner) prejudice was worse & there was hostility but the introduction of superordinate goals led to reduced prejudice & the boys were more friendly, concluding that competition

can lead to prejudice.

This study was very practical as it had high ecological validity. This is because it was a field experiment meaning the boys were in a natural environment of a summer camp. This means the boys were more likely to behave realistically & show how they would behave in competition in real life allowing for an accurate representation on how competition can lead to prejudice. This high ecological validity means the study is very generalisable to real life since the boys' behaviour was natural meaning the findings on prejudice as a result of competition is generalisable to real life scenarios, making it very practical.

However, a practical issue with this study is that it lacks internal validity due to it being a field experiment. The naturalistic element of being in an actual camp meant that it was hard to control extraneous variables that may have influenced the boys' behaviour in competition. This means that ^{Sherif's} study cannot be replicated due to no control and no standardised procedure leading to the unreliable findings on the effect of competition on prejudice.

Q4 – candidate response 2 continued

Rosenhan aimed to investigate the reliability & validity of mental health diagnoses in hospitals. He used 8 pseudopatients (including himself) and instructed them to go to the doctor and claim to hear 'hollow minds.' All patients came from varied backgrounds & were completely healthy. Rosenhan included research at 12 hospitals from the East & West Coast, varying in funding (public/private) & staff. Once the pseudopatients were admitted into hospitals, they were told to behave as normally as possible to see if nurses noticed and they were told to record the behaviour of the nurses in the hospital. Rosenhan found that all patients were diagnosed with schizophrenia, except one, who was diagnosed with a different personality disorder. The length of stay at a mental health hospital varied from 7 to 51 days. Rosenhan found that majority of nurses ignored the patients when asked a question. He also found that nurses labelled the pseudopatient behaviour as deviant due to the SZ label, e.g. was walking up & down was seen as nervousness even though it was due to boredom. Rosenhan also found that the real patients were able to identify the pseudopatients as fake unlike the nurses, concluding that the diagnoses are reliable.

due to all doctors diagnosing majority of patients with SZ but not valid as they were actually healthy.

A practical issue with this study is that it lacked population validity since Rosenhan's research was based on a small sample size of 8 pseudopatients & focused on American culture of diagnoses. This means what he found about the incorrect reliability & invalidity of mental health diagnoses may not necessarily be applicable to other cultures, e.g. in India or China, ^{where} this is a practical issue as it reduces the generalisability of Rosenhan's validity & reliability findings.

However, Rosenhan's research could be seen as practical in the use of his field experience. This is because Rosenhan used ¹² real hospitals along the East & West Coast of USA and doctors & nurses were unaware of their research meaning patients were able to record their hospital diagnoses & observe how nurses would actually act amongst real patients allowing for Rosenhan's findings on how nurses treat patients in the hospital & the invalid diagnoses applicable to real American life and allowing for helpful reforms in nurse behaviour & reforms in the DSM to improve validity.

(Total for Question 4 = 16 marks)

What mark should be awarded?

What mark would you give the response?



Q4 – candidate response 2

4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

Sherif aimed to investigate whether competition could lead to prejudice. There were 24 participants, all 11-12 year old boys from the same middle class background. The Stage 1 of the procedure included formation of the group identities where the boys were split into 2 groups (unknowing of each other) and given team building exercises such as creating a flag & coming up with group names (Eagles & Rattlers). Stage 2 consisted of competition for limited resources. The groups were introduced to each other & expressed an interest in competing where they played games ~~for~~ with negative interdependence such as baseball & tug of war, which led to hostile behaviour, e.g. burning the Eagles' flag. The 3rd stage consisted of conflict resolution as resources set up tasks with superordination goals in order to improve group relations & reduce prejudice, e.g. fixing a water tank which improved relations between groups. Sherif found when competition was zero sum (only one winner) prejudice was worse & there was hostility but the introduction of superordinate goals led to reduced prejudice & the boys were more friendly, concluding that competition

on leads to prejudice.

This study was very practical as it had high ecological validity. This is because it was a field experiment meaning the boys were in a natural environment of a summer camp. This means the boys were more likely to behave realistically & show how they would behave in competition in real life allowing for an accurate representation on how competition can lead to prejudice. This high ecological validity means the study is very generalisable to real life since the boys' behaviour was natural meaning the findings on prejudice as a result of competition is generalisable to real life scenarios, making it very practical.

However, a practical issue with this study is that it lacks internal validity due to it being a field experiment. The naturalistic element of being in an actual camp meant that it was hard to control extraneous variables that may have influenced the boys' behaviour in competition. This means that ^{Sherif's} study cannot be replicated due to no control and no standardised procedure leading to the unreliable findings on the effect of competition on prejudice.

Q4 – candidate response 2 continued

Rosenhan aimed to investigate the reliability & validity of mental health diagnoses in hospitals. He used 8 pseudopatients (including himself) and instructed them to go to the doctor and claim to hear 'hollow minds.' All patients came from varied backgrounds & were completely healthy. Rosenhan included research at 12 hospitals from the East & West Coast, varying in funding (public/private) & staff. Once the pseudopatients were admitted into hospitals, they were told to behave as normally as possible to see if nurses noticed and they were told to record the behaviour of the nurses in the hospital. Rosenhan found that all patients were diagnosed with schizophrenia, except one, who was diagnosed with a different personality disorder. The length of stay at a mental health hospital varied from 7 to 51 days. Rosenhan found that majority of nurses ignored the patients when asked a question. He also found that nurses labelled the pseudopatient behaviour as deviant due to the SZ label, e.g. was walking up & down was seen as nervousness even though it was due to boredom. Rosenhan also found that the real patients were able to identify the pseudopatients as fake unlike the nurses, concluding that the diagnoses are reliable.

due to all doctors diagnosing majority of patients with SZ but not valid as they were actually healthy.

A practical issue with this study is that it lacked population validity since Rosenhan's research was based on a small sample size of 8 pseudopatients & focused on American culture of diagnoses. This means what he found about the incorrect reliability & invalidity of mental health diagnoses may not necessarily be applicable to other cultures, e.g. in India or China, ^{where} this is a practical issue as it reduces the generalisability of Rosenhan's validity & reliability findings.

However, Rosenhan's research could be seen as practical in the use of his field experience. This is because Rosenhan used ¹² real hospitals along the East & West Coast of USA and doctors & nurses were unaware of their research meaning patients were able to record their hospital diagnoses & observe how nurses would actually act amongst real patients. Allow for Rosenhan's findings on how nurses treat patients in the hospital & the invalid diagnoses applicable to real American life and allowing for helpful reforms in nurse behaviour & reforms in the DSM to improve validity.

(Total for Question 4 = 16 marks)

Q4 – candidate response 3

4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

Rosenhan conducted a study into whether diagnosis was accurate in American hospitals and whether the nurses could distinguish the sane from the insane. In his study however all hospitals were based in America, and although multiple were used, this creates issues in the generalisability of his study. For example, procedures which are conducted in American hospitals may differ from those in Europe or other areas around the world and therefore results obtained be representative and applied accurately to all hospitals. On the other hand however, Rosenhan did ensure that various types of hospitals were used and this expanded the sample. For instance he implemented both private and public hospitals and those in different states, this makes the sample slightly more representative. ~~and~~ Consequently, although his results may not be able to be applied throughout the world, his study may have helped in looking at the differences between private and public beliefs and budgets. If money makes any difference, it is then changes can and should be made.

Rosenhan's study also included using participants who were unaware they were part of an experiment, which although is unethical due to the deception, it meant that more accurate behaviour could be displayed and reduced the impact that demand characteristics would have on the results. This in turn

makes his study more reliable and valid and thus it may be that more practical applications can be drawn.

By deceiving the participants, who were the nurses and doctors, their behaviour which was observed is more accurate and true to life and thus is more reliable and so results are more likely to draw useful conclusions from his study. Rosenhan concluded that accuracy was poor and no clear distinctions were made by the nurses and doctors, his results indicated that diagnosis of mental disorders needed to improve and his changes to both the ICD and DSM were encouraged by making them more clear.

On the contrary, his pseudopatients were made to take these observations and therefore it can provide many subjective results as nothing is being objectively measured. Instead they are interpreting behaviour and this can provide unreliable results. In fact one major implication was the fact that one of the pseudopatients got involved romantically with a nurse and this could have altered his view and results, this makes the study unreliable and equally as invalid and thus practically may be heavily reduced.

Whilst it is attempted to conduct a more ecologically valid experiment. In contrast to Rosenhan he instead used a field experiment rather than a naturalistic experiment. Consequently more standardised procedures were followed and implemented in his work. For example, all boys were observed, not just the Rosenhan but were also recorded and this meant that multiple

Q4 – candidate response 3 continued

researchers could listen and look at what was happening, discuss what they saw and agree. This then improved inter-rater reliability and thus the results were more accurate. Through recording the boys' behaviour, if a researcher identified a certain factor/behaviour then it could be seen to be significant and this could help to draw more evidence and beneficial conclusions, allowing us to really get what may be causing prejudice and what they help to reduce it. However, the procedures and implementation of recording did not come without its flaws, the use of recording equipment requires a lot of technology and money and it was revealed after the study was complete that some of the boys actually saw the microphones which may have impacted upon their behaviour. For instance if they knew they were being recorded then they may have suspected they were part of an experiment and so acted differently, which would make the conclusions Sherrill made invalid as they were not behaving true to life.

Sherrill also used a small sample size of participants, 22, and focused primarily on a certain group. The sample consisted of ~~mostly~~ American, 11 year old boys and thus it was very unrepresentative of the wider population. The lack of diversity means that behaviour shown may not be reflective of most other people and thus conclusions made from the results may not be beneficial. For example, if we have a pre-arranged room Sherrill, it was suggested that prejudice arose from competition and reduced via cooperation, but this may only be impactful

on the certain group of people and the group may behave differently.

These boys were also paired up and matched before being placed in groups, this was part of Sherrill's design. This however could impact the study because if the boys were matched on IQ, sporting ability, level then they are, it could be going to find it easier to identify with each other and so relationships formed may be naturally stronger, this could influence how true the conclusion was. In real life, when we are grouped together, we are not matched and paired with similar people and it is often random, this could make relationships weaker and so hostility may not be as big and honest, may differ.

In conclusion, Rosenhan and Sherrill both had issues in their design and implementation of their experiments which had effects on the practicality of their studies. However, since Rosenhan had more of a natural experiment and an experiment would individually his study could be seen to have more issues and too many extraneous variables and subjective factors could have affected his results.

What mark should be awarded?

What mark would you give the response?



Q4 – candidate response 3

4 Evaluate Rosenhan (1973) and Sherif et al. (1954/1961) in terms of their practical issues in design and implementation.

(16)

Rosenhan conducted a study into whether diagnosis was accurate in American hospitals and whether the nurses could distinguish the sane from the insane. In his study however all hospitals were based in America, and although multiple were used, this creates issues in the generalisability of his study. For example, procedures which are conducted in American hospitals may differ from those in Europe or other areas around the world and therefore results obtained be representative and applied accurately to all hospitals. On the other hand however, Rosenhan did ensure that various types of hospitals were used and this expanded the sample. For instance he implemented both private and public hospitals and those in different states, this makes the sample slightly more representative. Additionally, although his results may not be able to be applied throughout the world, his study may have helped in looking at the differences between private and public beliefs and budgets. If money makes any difference, it is then changes can and should be made.

Rosenhan's study also included using participants who were unaware they were part of an experiment, which although is unethical due to the deception, it meant that more accurate behaviour could be displayed and reduced the impact that demand characteristics would have on the results. This in turn

makes his study more reliable and valid and thus it may be that more practical applications can be drawn.

By deceiving the participants, who were the nurses and doctors, their behaviour which was observed is more accurate and true to life and thus is more reliable and so results are more likely to draw useful conclusions from his study. Rosenhan concluded that accuracy was poor and no clear distinctions were made by the nurses and doctors, his results indicated that diagnosis of mental disorders needed to improve and his changes to both the ICD and DSM were encouraged by making them more clear.

On the contrary, his pseudopatients were made to take these observations and therefore it can provide many subjective results as nothing is being objectively measured. Instead they are interpreting behaviours and this can provide unreliable results. In fact one major implication was the fact that one of the pseudopatients got involved romantically with a nurse and this could have altered his view and results, this makes the study unreliable and equally as invalid and thus practically may be heavily reduced.

Whilst it is attempted to conduct a more ecologically valid experiment. In contrast to Rosenhan he instead used a field experiment rather than a naturalistic experiment. Consequently more standardised procedures were followed and implemented in his work. For example, all boys were observed, not like Rosenhan but were also recorded and this meant that multiple

Q4 – candidate response 3 continued

researchers could listen and look at what was happening, discuss what they saw and agree. This then improved inter-rater reliability and thus the results were more accurate. Through recording the boys' behaviour, if a researcher identified a certain factor/behaviour then it could be seen to be significant and this could help to draw more evidence and beneficial conclusions, allowing us to really get what may be causing prejudice and what they help to reduce it. However, the procedures and implementation of recording did not come without its flaws, the use of recording equipment requires a lot of technology and money and it was revealed after the study was complete that some of the boys actually saw the microphones which would have impacted upon their behaviour. For instance if they knew they were being recorded then they may have suspected they were part of an experiment and so acted differently, which would make the conclusions Sherrill made invalid as they were not behaving true to life.

Sherrill also used a small sample size of participants, 22, and focused primarily on a certain group. The sample consisted of mostly American, 11 year old boys and thus it was very unrepresentative of the wider population. The lack of diversity means that behaviour shown may not be reflective of most other people and thus conclusions made from the results may not be beneficial. For example, if we have applications from Sherrill, it was suggested that prejudice arose from competition and reduced via cooperation, but this may only be applicable

on the certain group of people and the group may react in a different fashion.

These boys were also paired up and matched before being placed in groups, this was part of Sherrill's design. This however could impact the study because if the boys were matched on IQ, sporting ability, level then they are, it could be going to find it easier to identify with each other and so relationships formed may be naturally stronger, this could influence how true the conclusion was. In real life, when we are grouped together, we are not matched and paired with similar people and it is often random, this could make relationships weaker and so hostility may not be as big and honest, may differ.

In conclusion, Rosenhan and Sherrill both had issues in their design and implementation of their experiments which had effects on the practicality of their studies. However, since Rosenhan had more of a natural experiment and an experiment worked individually, his study could be seen to have more issues and too many extraneous variables and subjective factors could have affected his results.

Q5



Q5

Assessment of biological psychology in terms of the explaining the behaviour of Ada and Daniel using the 'Evaluate' taxonomy (command word)

Assessment objectives assessed:

- AO1 (4 AO1)
- AO2 (4 AO2)
- AO3 (4 AO3)

Requires (1) knowledge and understanding; (2) application to the scenario/novel stimulus; (3) evaluation and analysis to make judgements and draw conclusions

- 5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys reading and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology.

You must make reference to the context in your answer.

(12)

Q5

Marked using levels based 'best-fit' approach using the level descriptors

Candidates who did well gave balanced responses, including AO3 and offered accurate and detailed content

Candidates who did not do well gave imbalanced responses towards AO1 and AO2 with no AO3 and offered content that lacked accuracy and depth

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application vs evaluation/conclusion in their answer.		
Level 0	0	No rewardable material.
Level 1	1–3 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	4–6 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	7–9 marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques & procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning. Leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	10–12 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

Q5 – candidate response 1

Issues and Debates

- 5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

dopamine
serotonin
genetic?
born?

Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys reading and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

not genetic
carrier

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology. VS SLT

You must make reference to the context in your answer.

4A01 4A02 4A03

(12)

Biological psychology may account for human behaviour such as the ability to read via genetics. Ada may have inherited a gene from her mother that improves her ability to read compared to those who do not possess the gene e.g. Daniel. Furthermore this may explain why she has "always" had excellent reports, as this suggests this has originated since birth.

A strength of genetics as an explanation for human behaviour is the MAO-A gene commonly associated with aggression. Bruner found that several generations of the same Dutch family had all been convicted of serious violent offences and

also all possessed the MAO-A gene. Therefore genes may determine human behaviour.

Biological psychology can also explain human behaviour through the interaction of neurotransmitters. Dopamine is an excitatory neurotransmitter that is associated with pleasure and serotonin is an excitatory neurotransmitter that ~~can be associated~~ is associated with happiness. Ada may have higher levels of dopamine and serotonin when reading giving her a euphoric effect which may lead her to regularly reproduce the behaviour of reading. On the other hand, Daniel may feel no effect when reading and only reaches the 'high' when playing video games.

This can be supported by drug theories and therapies as drugs like cocaine induce higher levels of dopamine by blocking dopamine receptors, prolonging the pleasure effect. Furthermore, ~~this~~ this can suggest why people take recreational drugs repeatedly to gain this euphoric effect.

Q5 – candidate response 1 continued

On the other hand social learning theory may be better at explaining human behaviours such as reading. Both Ada and Ada's mum are girls and Daniel and Daniel's dad are boys. Bandura stated that behaviours are more likely to be repeated if the role models displaying the behaviours are the same - sex ~~one of~~ and are viewed of high authority which parents often are. This may explain why Ada has a greater ability to read, as she reproduces her mum's behaviour of reading and furthermore is positively reinforced. Whereas Daniel reproduces ~~his~~ his dad's behaviour of video games and as he receives positive punishment such as nagging by teacher to read more he is less likely to repeat the behaviour.

In conclusion, the biological explanation for reading is limited as it cannot explain why Daniel does not enjoy reading like his dad. ~~The~~ Social learning theory is more likely to accurately explain why certain

behaviours are repeated or not via direct reinforcement or punishment and parental behaviours.

Q5 – candidate response 1

Issues and Debates

- 5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

dopamine
serotonin
genetic?
born?

Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys reading and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

not genetic
carrier

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology. VS SLT

You must make reference to the context in your answer.

4A01 4A02 4A03

(12)

Biological psychology may account for human behaviour such as the ability to read via genetics. Ada may have inherited a gene from her mother that improves her ability to read compared to those who do not possess the gene e.g. Daniel. Furthermore this may explain why she has "always" had excellent reports, as this suggests this has originated since birth.

A strength of genetics as an explanation for human behaviour is the MAO-A gene commonly associated with aggression. Bruner found that several generations of the same Dutch family had all been convicted of serious offences and violent

also all possessed the MAO-A gene. Therefore genes may determine human behaviour.

Biological psychology can also explain human behaviour through the interaction of neurotransmitters. Dopamine is an excitatory neurotransmitter that is associated with pleasure and serotonin is an excitatory neurotransmitter that can be associated with happiness. Ada may have higher levels of dopamine and serotonin when reading giving her a euphoric effect which may lead her to regularly reproduce the behaviour of reading. On the other hand, Daniel may feel no effect when reading and only reaches the 'high' when playing video games.

This can be supported by drug theories and therapies as drugs like cocaine induce higher levels of dopamine by blocking dopamine receptors, prolonging the pleasure effect. Furthermore, this can suggest why people take recreational drugs repeatedly to gain this euphoric effect.

Q5 – candidate response 1 continued

On the other hand social learning theory may be better at explaining human behaviours such as reading. Both Ada and Ada's mum are girls and Daniel and Daniel's dad are boys. Bandura stated that behaviours are more likely to be repeated if the role models displaying the behaviours are the same - sex ~~one of~~ and are viewed of high authenticity which parents often are. This may explain why Ada has a greater ability to read, as she reproduces her mum's behaviour of reading and furthermore is positively reinforced. Whereas Daniel reproduces his dad's behaviour of video games and as he receives positive punishment such as nagging by teachers to read more he is less likely to repeat the behaviour.

In conclusion, the biological explanation for reading is limited as it cannot explain why Daniel does not enjoy reading like his dad. The social learning theory is more likely to accurately explain why certain

behaviours are repeated or not via direct reinforcement or punishment and parental behaviours.

Q5 – candidate response 2

5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys reading and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology.

You must make reference to the context in your answer.

(12)

the ability to read may be down to genes. These may be predispositions that can explain why some individuals find reading easier than others. For example, this may explain why Ada enjoys reading books as her mother always really enjoyed reading books, therefore it may be in her genes to have the ability to read well. Evidence from Gottesman and Shields ^{Heron who} found there was a 410.6% chance of a mother who had schizophrenia passing it on to her child, therefore, although this is schizophrenia, there is evidence to suggest that genes from parents can be passed down to children like her with Ada and her mum.

Hormones can also be used ~~another reason why Daniel~~ to explain reading,

for example, males have a higher level of testosterone than females and so this can explain that Daniel has a higher level of testosterone than Ada. This may be why Daniel does not enjoy reading and prefers playing games about sport as some sports can be aggressive and testosterone contributes to that. Research evidence of Dobobree et al found that male offenders had a higher level of testosterone and so suggest ^{higher} aggression levels. Therefore, this can explain why Daniel prefers to play games about sport as it may contain aggressive behavior.

Another reason to explain ability to read is the reward pathway. Reward pathway is in the limbic system and suggests that when activated, a increase in dopamine, gives a euphoric feeling and so this behavior is ^{rewarded} ~~want to~~ to be repeated so they get that same euphoric feeling. For example, Ada may have her reward pathway stimulated when reading about police officers and so continues to read more. Whereas Daniel has his reward pathway stimulated when he plays video games and prefers to do that. Research evidence of Olds and Milner found that when male had had

Q5 – candidate response 2

their reward pathway stimulated, they ^{wanted} this feeling again and so this can explain the ability and want to read.

A competing theory to explain the ability to read is social learning theory as it suggests that through ^{role} model and observation, retention, reproduction and motivation, behavior can be imitated. Ada may see her mum as her role model and so observes her mum read and so imitates it. Daniel could have observed his ~~dad~~ ^{dad} who is his role model play videogames and so imitates this. Research evidence from Bandura found that children were likely to imitate behaviors after viewing it and so can explain why Ada enjoys and reads well compared to Daniel who doesn't like it or prefers video games.

To conclude, genes, hormones, ^{activation} reward pathway can be said to biologically explain the ability to read. However, competing arguments from social learning theory can also explain. Therefore I believe that biological psychologically can sufficiently explain ability to read.

What mark should be awarded?

What mark would you give the response?



Q5 – candidate response 2

5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys playing and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology.

You must make reference to the context in your answer.

(12)

the ability to read may be down to genes. These may be predispositions that can explain why some individuals find reading easier than others. For example, this may explain why Ada enjoys reading books as her mother always really enjoyed reading books, therefore it may be in her genes to have the ability to read well. Evidence from Gottesman and Shields found there was a 410.6% chance of a mother who had schizophrenia passing it on to her child, therefore, although this is not schizophrenia, there is evidence to suggest that genes from parents can be passed down to children like her with Ada and her mum.

Hormones can also be used to explain reading, another reason why Daniel

For example, males have a higher level of testosterone than females and so this can explain that Daniel has a higher level of testosterone than Ada. This may be why Daniel does not enjoy reading and prefers playing games about sport as some sports can be aggressive and testosterone contributes to that. Research evidence of Doblar et al found that male offenders had a higher level of testosterone and so suggest ^{higher} aggression levels. Therefore, this can explain why Daniel prefers to play games about sport as it may contain aggressive behaviour.

Another reason to explain ability to read is the reward pathway. Reward pathway is in the limbic system and suggests that when activated, a increase in dopamine, gives a euphoric feeling and so this behavior is ^{rewarded} and so to be repeated so they get that same euphoric feeling. For example, Ada may have her reward pathway stimulated when reading about police officers and so continues to read more. Whereas Daniel has his reward pathway stimulated when he plays video games and prefers to do that. Research evidence of Olds and Milner found that when male had had

Q5 – candidate response 2

their reward pathway stimulated, they ^{wanted} this feeling again and so this can explain the ability and want to read.

A competing theory to explain the ability to read is social learning theory as it suggests that through ^{role} model and observation, retention, reproduction and motivation, behavior can be imitated. Ada may see her mum as her role model and so observes her mum read and so imitates it. Daniel could have observed his ~~dad~~ ^{dad} who is his role model play video games and so imitates this. Research evidence from Bandura found that children were likely to imitate behaviors after viewing it and so can explain why Ada enjoys and reads well compared to Daniel who doesn't like it as he prefers video games.

To conclude, genes, hormones, ^{activation} reward pathway can be said to biologically explain the ability to read. However, competing arguments from social learning theory can also explain. Therefore I believe that biological psychologically can sufficiently explain ability to read.

Q5 – candidate response 3

- 5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

→ social learning theory.
→ positive reinforcement. ⇒ motivation.
Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys reading and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology.

→ brain structure - genes
Sport - aggression, reading - natural selection.
→ social aggression.
You must make reference to the context in your answer.

(12)

The evolutionary theory states that natural selection is when a set of genes that express desirable characteristics such as aggression and a strong physique are passed down to successive generations since they served survival value. These traits enabled our ancestors to survive and so we have evolved to also have these genes so that we can survive. For example, Daniel's father enjoys playing video games and Daniel himself plays video games about sports. The evolutionary theory suggests that sports were done by our ancestors to build a stronger physique so that the males could hunt to provide food for their offspring and also so that they could defend their family from predators. Hence this could suggest that Daniel has evolved to inherit genes that express an interest in sports. There is evidence to support the role of genes in Daniel's interest and his father's

inheritance of genes these genes. Chester et al found that ^{high} levels of the MAOA gene caused ~~low~~ people to ~~have~~ display higher levels of aggression and Mertins et al found that lower levels of the MAOA gene produced greater prosocial behaviour.

The hormone explanation ~~ex~~ states that males have androgens, including mainly testosterone in their hormonal makeup whereas females produce oestrogen more often. Testosterone ~~he~~ has ^{stimulated} cell growth in brain areas implicated in aggression and antenatal exposure to testosterone has organising effects on the baby's brain, and increases spatial awareness. This means that high levels of testosterone increases competitiveness, ~~these men~~. This could explain why Daniel and his father enjoy playing video games. They are both males which means that they would both have higher levels of testosterone compared to Ada and her mother. This ^{explains} ~~means~~ ^{why they} that they would enjoy engaging in competitive activities such as playing video games about sport. ~~Moreover,~~ ^{Moreover,} there is evidence to suggest that the role of testosterone in females is more complex than in males. Eisenegger (2011) found that women who were given a dose of testosterone behaved more generously and sociably in a lab based negotiating

Q5 – candidate response 3 continued

game. This implies that a high level of testosterone in females does not have the same impact as it does on males. Hence this suggests that the ~~biological~~ hormone explanation is reductionist as it does not consider the role of environmental factors such as the role of role models. Females may be more inclined to imitate the nurturing behaviours of female role models on television such as cooks or housewives and males may be more inclined to imitate the aggressive behaviour of role models such as footballers and boxers, ~~hence~~ ~~this suggests that~~ as ~~per~~ supported by Bandura's Bobo doll study. This suggests that the biological explanation can explain Daniel and his father's preference of video games but it may be environmentally reductionist.

Since the biological explanation can be considered environmentally reductionist, it may be more useful to use the social learning theory to explain Ada and Daniel's behaviour. The social learning theory states that we learn through the processes of observation and imitation of our role models. Ada may consider her mother to be her role model and Daniel may consider his father to be his role model. Hence Ada has observed her mother reading books and would imitate this behaviour, and Daniel ~~to~~ may have

observed more instances of his father playing video games than reading books, so he has learnt ~~to~~ that behaviour instead. Bandura's 1961 Bobo Doll study found that boys were more likely to imitate the behaviour of a same sex role model compared to girls. Hence this explains why Daniel imitates ~~to~~ his father's ~~to~~ video game playing behaviour. However, the Bobo doll study was conducted in a lab setting, which means that the findings on the children's imitating behaviours lacked ecological validity.

Ada's behaviour of reading books may be better explained by the operant conditioning theory. The operant conditioning theory states that positive reinforcement is when a ~~per~~ pleasant stimulus is introduced in response to a desired behaviour to increase the likelihood of that behaviour being repeated. Ada received excellent reports from her school about her reading development, which may have encouraged her to continue reading, as this provided a source of extrinsic motivation for her.

Hence biological psychology can explain Ada and Daniel's behaviour to a limited extent since it ignores environmental influences which have a major role in their behaviour.

(Total for Question 5 = 12 marks)

What mark should be awarded?

What mark would you give the response?



Q5 – candidate response 3

- 5 Ada was reading a book about a woman who became a police officer and solved an important crime. She enjoyed reading the book so much that she read it all in a single day. Ada's mum has always really enjoyed reading books and Ada had always had excellent reports from school about her reading development.

Ada's friend Daniel does not enjoy reading and never has. He told Ada that he preferred to play video games, particularly games about sport. Daniel's dad enjoys reading and playing video games. When he was younger, Daniel had been asked to read more by his school and was always given extra support for his reading development.

Evaluate the extent to which human behaviour, such as the ability to read, can be explained by biological psychology.

You must make reference to the context in your answer.

(12)

The evolutionary theory states that natural selection is when a set of genes that express desirable characteristics such as aggression and a strong physique are passed down to successive generations since they served survival value. These traits enabled our ancestors to survive and so we have evolved to also have these genes so that we can survive. For example, Daniel's father enjoys playing video games and Daniel himself plays video games about sports. The evolutionary theory suggests that sports were done by our ancestors to build a stronger physique so that the males could hunt to provide food for their offspring and also so that they could defend their family from predators. Hence this could suggest that Daniel has evolved to inherit genes that express an interest in sports. There is evidence to support the role of genes in Daniel's interest and his father's

inheritance of genes these genes. Chester et al found that ^{high} levels of the MAOA gene caused ~~low~~ people to ~~have~~ display higher levels of aggression and Mertins et al found that lower levels of the MAOA gene produced greater prosocial behaviour.

The hormone explanation ~~ex~~ states that males have androgens, including mainly testosterone in their hormonal makeup whereas females produce oestrogen more often. Testosterone ~~he~~ has ^{stimulated} cell growth in brain areas implicated in aggression and antenatal exposure to testosterone has organising effects on the baby's brain, and increases spatial awareness. This means that high levels of testosterone increases competitiveness, ~~these men~~. This could explain why Daniel and his father enjoy playing video games. They are both males which means that they would both have higher levels of testosterone compared to Ada and her mother. This ^{explains} ~~message~~ ^{why they} that they would enjoy engaging in competitive activities such as playing video games about sport. Moreover, ~~however~~, there is evidence to suggest that the role of testosterone in females is more complex than in males. Eisenegger (2011) found that women who were given a dose of testosterone behaved more generously and sociably in a lab based negotiating

Q5 – candidate response 3 continued

game. This implies that a high level of testosterone in females does not have the same impact as it does on males. Hence this suggests that the ~~biological~~ hormone explanation is reductionist as it does not consider the role of environmental factors such as the role of role models. Females may be more inclined to imitate the nurturing behaviours of female role models on television such as cooks or housewives and males may be more inclined to imitate the aggressive behaviour of role models such as footballers and boxers, ~~hence this suggests that~~ as ~~per~~ supported by Bandura's Bobo doll study. This suggests that the biological explanation can explain Daniel and his father's preference of video games but it may be environmentally reductionist.

Since the biological explanation can be considered environmentally reductionist, it may be more useful to use the social learning theory to explain Ada and Daniel's behaviour. The social learning theory states that we learn through the processes of observation and imitation of our role models. Ada may consider her mother to be her role model and Daniel may consider his father to be his role model. Hence Ada has observed her mother reading books and would imitate this behaviour, and Daniel ~~to~~ may have

observed more instances of his father playing video games than reading books, so he has learnt ~~to~~ that behaviour instead. Bandura's 1961 Bobo Doll study found that boys were more likely to imitate the behaviour of a same sex role model compared to girls. Hence this explains why Daniel imitates ~~to~~ his father's ~~be~~ video game playing behaviour. However, the Bobo doll study was conducted in a lab setting, which means that the findings on the children's imitating behaviours lacked ecological validity.

Ada's behaviour of reading books may be better explained by the operant conditioning theory. The operant conditioning theory states that positive reinforcement is when a ~~per~~ pleasant stimulus is introduced in response to a desired behaviour to increase the likelihood of that behaviour being repeated. Ada received excellent reports from her school about her reading development, which may have encouraged her to continue reading as this provided a source of extrinsic motivation for her.

Hence biological psychology can explain Ada and Daniel's behaviour to a limited extent since it ignores environmental influences which have a major role in their behaviour.

(Total for Question 5 = 12 marks)

Q6



Q6

Assessment of ethical issues in terms of human and animal research in psychology using the 'Assess' taxonomy (command word)

Assessment objectives assessed:

- AO1 (8 AO1)
- AO3 (12 AO3)

Requires (1) knowledge and understanding; (2) evaluation and analysis to make judgements and draw conclusions

6 Assess the ethical issues in psychological research using humans and animals.

(20)

[illegible]

Q6

Marked using levels based
'best-fit' approach using the
level descriptors

Candidates who did well gave
imbalanced responses towards
AO3 and offered accurate and
detailed content

Candidates who did not do well
gave imbalanced responses
towards AO1 with little AO3 and
offered content that lacked
accuracy and depth

Level	Mark	Descriptor
AO1 (8 marks), AO3 (12 marks) Candidates must demonstrate a greater emphasis on assessment/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 8 marks.		
Level 0	0	No rewardable material.
Level 1	1–4 marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	5–8 marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	9–12 marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning, leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this will be imbalanced. (AO3)
Level 4	13–16 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)
Level 5	17–20 marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Q6 – candidate response 1

6 Assess the ethical issues in psychological research using humans and animals. ^{0 A01} ^{12 A03} (20)

There are many ethical issues found in psychology, however, it can be argued that benefits tend to outweigh the costs.

Milgram's 1965 study can be criticised for having multiple ethical issues. Milgram wanted to find out the lengths people would go to when obeying an order from an authority figure that causes harm to someone else. He used a sample of 40 men aged 20-51 and ~~for~~ all recruited from a volunteer sampling method where he advertised his experiment on a news ad. ~~Milgram one of~~ However, Milgram deceived participants as he lied to them about the aim of the study. This however, was crucial in order to reduce demand characteristics of ~~particip~~ such as participants trying to guess the aim of the study. Therefore, you could argue that deception was needed in order to obtain accurate findings in order ~~for~~ to test prove his theory correct.

Milgram (1965) introduced participants to two confederates of the study. Drives were then rigged so that the participant was always the teacher and the confederate the learner. Milgram told participants

to give the learner an electric shock every time they made a mistake on the word recall task. Shocks went up by ~~45~~ 15v each time and the maximum voltage was 450v. ~~Participants~~ However, an ethical issue ~~the~~ experienced by participants here is psychological harm. Participants believed that they were causing direct harm to someone thus causing high levels of moral strain. This anxiety experienced by participants could have caused them to then also experience physical harm such as fainting. However, participants gave informed consent as well as were given the right to withdraw from the study. This however, can be criticised as participants were prodded by the experimenter to continue every time they wanted to stop.

Sherif et al (1964) can also be criticised for having ethical issues. He used a sample of 22 boys aged 11 who were white middle class and protestant. His Robber's cave experiment wanted to see if competition over resources would lead to prejudice and he ~~it~~ tested this by ~~some~~ creating negative interdependence tasks between the two groups. Sherif's study can ~~be~~ also be criticised for deception as participants had no knowledge they were being studied. This also meant that ~~know~~ ^{no} informed consent was given ~~meaning the~~ by the boys so

Q6 – candidate response 1 continued

Sherif's findings are completely unethical. Furthermore, physical harm was caused when researchers raided one of the groups cabins in order to provoke the boys thus making his study highly unethical. However, ~~you~~ ~~so~~ boys were given the right to withdraw with two boys leaving due to homesickness. Furthermore, you could argue that Sherif's findings are important in society as not only do they show how prejudice can occur, but he also found that superordinate goals can be used in order to reduce prejudice in society making his findings hugely beneficial.

Watson and Rayner's study on Baby Albert can also be seen to be highly unethical. Watson and Rayner wanted to see if they could condition an 11 ~~year~~ month boy into being afraid of white objects. They struck a bell behind his head making him cry everytime he held a white object. Eventually, they were able to condition him into fearing a white rabbit. Watson and Rayner's study, can be criticised for psychological harm. Baby Albert's conditioning was never reversed meaning his phobia may cause his day to day life to be affected. However, Baby Albert was kept anonymous due to them changing his name making their study ethical to an extent. Furthermore, the conditioning of little Baby Albert ~~at~~ is hugely beneficial as it allows us to know how phobias are

caused as well as ~~any treat~~ to come up with treatments for them.

Psychology can also be hugely criticised for the unethical treatment of animals. Pavlov, ~~also want~~ came up with the theory of classical conditioning and used ~~a son~~ dogs in order to test it. He used a sample of 37 dogs which he bred from young and locked them in a soundproof chamber in a lab. ~~It~~ Pavlov managed to condition the dogs to salivate every time they heard the sound of a bell. However, physical harm was caused where the dogs were starved in order to get them to salivate as well as keeping them locked up in a lab their whole life. The study can also be criticised for its ungeneralisability where animals are different to humans so Pavlov's study could not guarantee it would work on humans so his study and mistreatment of dogs could have been in vain. However, his study was in fact able to prove classical conditioning does exist meaning that the benefits of this knowledge thoroughly outweigh the costs.

Skinner's box, is one final ^{animal} ~~experim~~ study used in psychology which can be criticised for its ethical mistreatment of animals. Skinner wanted to test his theory of operant conditioning which states that ~~we learn~~ we can learn ~~from~~ by using reinforcers and punishment. Skinner

Q6 – candidate response 1 continued

used a lever in order to produce reinforcers of food pellets every time the rats pulled it. However, physical harm was caused to the rats where they were also given electric shocks everytime they pulled the lever the wrong way. The rats were also locked in cages for long periods of time in order for Skinner to test his theory making it extremely unethical. However, Skinner was able to prove that humans can learn through the use of reinforcers and punishments allowing psychologists to understand human behaviour even more than before.

To conclude, while many ethical issues exist in psychology, studies have been hugely beneficial to society allowing us to understand ~~behaviours~~ human behaviours in a huge depth. Without these studies and experiments, psychologists would ~~still~~ be unable to ~~prove~~ understand our behaviours thus showing that the benefits significantly outweigh the costs.

Q6 – candidate response 1

6 Assess the ^{deception} ~~ethical~~ issues in psychological research using humans and animals. ^{AO1} ^{AO3} (20)

There are many ethical issues found in psychology, however, it can be argued that benefits tend to outweigh the costs.

Milgram's 1965 study can be criticised for having multiple ethical issues. Milgram wanted to find out the lengths people would go to when obeying an order from an authority figure that causes harm to someone else. He used a sample of 40 men aged 20-51 and ~~for~~ all recruited from a volunteer sampling method where he advertised his experiment on a news ad. ~~Milgram one of~~ However, Milgram deceived participants as he lied to them about the aim of the study. This however, was crucial in order to reduce demand characteristics of ~~particip~~ such as participants trying to guess the aim of the study. Therefore, you could argue that deception was needed in order to obtain accurate findings in order ~~for~~ to test prove his theory correct.

Milgram (1965) introduced participants to two confederates of the study. Drives were then rigged so that the participant was always the teacher and the confederate the learner. Milgram told participants

to give the learner an electric shock every time they made a mistake on the word recall task. Shocks went up by ~~45~~ 15v each time and the maximum voltage was 450v. ~~Participants~~ However, an ethical issue ~~the~~ experienced by participants here is psychological harm. Participants believed that they were causing direct harm to someone thus causing high levels of moral strain. This anxiety experienced by participants could have caused them to then also experience physical harm such as fainting. However, participants gave informed consent as well as were given the right to withdraw from the study. This however, can be criticised as participants were prodded by the experimenter to continue every time they wanted to stop.

Sherif et al (1964) can also be criticised for having ethical issues. He used a sample of 22 boys aged 11 who were white middle class and Protestant. His Robber's cave experiment wanted to see if competition over resources would lead to prejudice and he ~~it~~ tested this by ~~some~~ creating negative interdependence tasks between the two groups.

Sherif's study can be also be criticised for deception as participants had no knowledge they were being studied. This also meant that ~~know~~ ^{no} informed consent was given ~~meaning the~~ by the boys so

Q6 – candidate response 1 continued

Sherif's findings are completely unethical. Furthermore, physical harm was caused when researchers raided one of the groups cabins in order to provoke the boys, thus making his study highly unethical. However, ~~you~~ ~~so~~ boys were given the right to withdraw with two boys leaving due to homesickness. Furthermore, you could argue that Sherif's findings are important in society as not only do they show how prejudice can occur, but he also found that superordinate goals can be used in order to reduce prejudice in society making his findings hugely beneficial.

Watson and Rayner's study on Baby Albert can also be seen to be highly unethical. Watson and Rayner wanted to see if they could condition an 11 ~~year~~ month boy into being afraid of white objects. They struck a bell behind his head making him cry everytime he held a white object. Eventually, they were able to condition him into fearing a white rabbit. Watson and Rayner's study, can be criticised for psychological harm. Baby Albert's conditioning was never reversed meaning his phobia may cause his day to day life to be affected. However, Baby Albert was kept anonymous due to them changing his name making their study ethical to an extent. Furthermore, the conditioning of little Baby Albert ~~at~~ is hugely beneficial as it allows us to know how phobias are

caused as well as ~~any treat~~ to come up with treatments for them.

Psychology can also be hugely criticised for the unethical treatment of animals. Pavlov, ~~also want~~ came up with the theory of classical conditioning and used ~~a son~~ dogs in order to test it. He used a sample of 37 dogs which he bred from young and locked them in a soundproof chamber in a lab. ~~It~~ Pavlov managed to condition the dogs to salivate every time they heard the sound of a bell. However, physical harm was caused where the dogs were starved in order to get them to salivate as well as keeping them locked up in a lab their whole life. The study can also be criticised for its ungeneralisability where animals are different to humans so Pavlov's study could not guarantee it would work on humans so his study and mistreatment of dogs could have been in vain. However, his study was in fact able to prove classical conditioning does exist meaning that the benefits of this knowledge thoroughly outweigh the costs.

Skinner's box, is one final ^{animal} ~~experim~~ study used in psychology which can be criticised for its ethical mistreatment of animals. Skinner wanted to test his theory of operant conditioning which states that ~~we learn~~ we can learn ~~from~~ by using reinforcers and punishment. Skinner

Q6 – candidate response 1 continued

used a lever in order to produce reinforcers of food pellets every time the rats pulled it. However, physical harm was caused to the rats where they were also given electric shocks everytime they pulled the lever the wrong way. The rats were also locked in cages for long periods of time in order for Skinner to test his theory making it extremely unethical. However, Skinner was able to prove that humans can learn through the use of reinforcers and punishments allowing psychologists to understand human behaviour even more than before.

To conclude, while many ethical issues exist in psychology, studies have been hugely beneficial to society allowing us to understand behaviours human behaviours in a huge depth. Without these studies and experiments, psychologists would ~~still~~ be unable to ~~prove~~ understand our behaviours thus showing that the benefits significantly outweigh the costs.

Q6 – candidate response 2

6 Assess the ethical issues in psychological research using humans and animals.

(20)

ethical issues in psychology are an important consideration as research carried out on animals and humans should be conducted in a way to minimise any harm to the participant/animal. The ethical code of conduct by BPS covers important factors of consideration e.g. respect which psychologists need to be trained for and demonstrate before conducting any research on humans and animals. One ethical consideration for ethical research using humans is respect, this is where the psychologist should gain informed consent from the participant, preferably in a written form after telling them aspects of research like the procedure and what they'll be doing. Another ethical consideration by the BPS is responsibility, this means that researchers are responsible to keep participants out of harmful situations both in a mental and physical perspective, or, are required to minimise any harm that participants may face e.g. minimising the shock voltage when trying to study negative reinforcement in humans. HCEP guidelines also talk about the need to keep a confidential record of any clients and patients that may be used in studies by locking them away so no person unidentified individual can access it e.g. a study or to when how many people

in a specific ethnic group have a mental disorder, the information about the individual and their disorders must be kept in confidential records. The BPS also mentions debriefing as part of the responsibility code, where participants who may have been involved in research that is potentially harmful or research that required deception are debriefed and provided with any further support e.g. therapy in order to minimise or remove negative emotions after the study has been completed. Animal research contains ethical guidelines as well and also require the researcher to be qualified and show that they have the correct license to perform animal research e.g. a project license will be given to ~~start~~ projects e.g. project to see if panic disorders are caused by a university. The researcher(s) will need to demonstrate that the benefits e.g. improvement of their research in psychological knowledge outweighs any potential harm to the animal e.g. stress. Studies are often refined which means they are changed to provide an ethical environment for research on animals e.g. using water sprays instead of electric shocks. animal studies should show replacement of self-aware

Q6 – candidate response 2 continued

Animals to those with a lower-order thinking to minimal demand characteristics and hence e.g. ^{replace monkey with rat} animal studies that also demonstrate reduction of the number of animals used. So minimal effort on the species of animals overall is conducted e.g. only using 1 rat to study learning for operant conditioning.

Research into psychology is unethical ^{in humans} as it goes against various aspects of ^{of the BPS code of} ~~both~~ ^{ethical} guidelines and often causes distress and harm to participants which may have a long-term, negative influence on their life. For example, Milgram 'induced' a study on 40 men to which whether the presence of an authority figure would ^{result in} ~~result in~~ obedient behaviour. Participants were asked to deliver high voltage shocks to ~~the~~ ^{confederate} 'learner' and prods were provided to encourage participants to carry on delivering shocks even when they demonstrated signs of nervousness e.g. nervous laughter and biting their nails. This research goes against the responsibility code of psychologists which suggests that we should minimise harm and may cause long-term guilt and distress to individuals knowing they would obey an authority even if it was very dangerous

to a second person. ~~Therefore~~ However, ethical ~~concerns~~ ^{guidelines} have been followed more closely over the years, ~~and also~~ ^{this can} be seen in psychological research into obedience as ~~past~~ studies try to protect participants as much as possible. Burger replicated Milgram's study to see whether obedience still stands a decade later and ~~for~~ scanned participants and removed those whom may show significant levels of distress and react negatively as a result of participation in the study before it was conducted. Therefore Burger's psychological research has become more ethical over time and does adhere to the ethical guidelines such as responsibility. Therefore, although research previously strongly opposes our expectations of ethical research, this may no longer be an issue as research like Milgram's would not be assumed to be conducted today without refinements to make it more ethical.

Research ~~into~~ that uses animals is highly unethical as it does not consider the ~~ill~~ ^{effects} that animals may face as a result of harm or confinement. This may be due to the fact that humans cannot understand animals and their uses

Q6 – candidate response 2 continued

on feelings of distress which may provide researchers in future to carry out humane research. Pavlov conducted ~~research~~ ^{research} on a confined dog whose salivary glands were attached to a cannula in a confined room to carry clinical conditioning. Skinner's box study delivered shocks to the ~~test~~ rodents to show the effects of negative reinforcement. There are 2 of many studies within learning psychology that go against ethical considerations such as refinement and replacement in research. Therefore learning psychology concerned a lot of unethical research. However, many may argue that although research on animals is unethical, it would be worse or more unethical to conduct the same research on humans as we have higher order-thinking and self-awareness, research on rats and other animals is therefore more ethical than research on humans to test various sectors of psychology like biological psychology which uses the input of learning areas of the brain like the amygdala in rats (egger and fynn) on aggression and impulse. Since humans have longer life spans and are not as easily controlled, whereas research like learning a human brain model provide far more harm than in animals. Therefore unethical research on animals is justifiable in psychology and overall, as the new methods and technology for research is invented, ^{amount of ethical} ~~the~~ research conducted is increasing so it's not an issue in

(Total for Question 6 = 20 marks) Psychology

What mark should be awarded?

What mark would you give the response?



Q6 – candidate response 2

6 Assess the ethical issues in psychological research using humans and animals.

(20)

ethical issues in psychology are an important consideration to research carried out on animals and humans. Studies should be conducted in a way to minimise any harm to the participant/animal. The ethical code of conduct by BPS covers important factors of consideration e.g. respect which psychologists need to be trained for and demonstrate before conducting any research on humans and animals. One ethical consideration for ethical research using humans is respect, this is where the psychologist should gain informed consent from the participant, preferably in a written form after telling them aspects of research like the procedure and what they'll be doing. Another ethical consideration by the BPS is responsibility, this means that researchers are responsible to keep participants out of harmful situations both in a mental and physical perspective, or, are required to minimise any harm that participants may face e.g. minimising the shock voltage when trying to study negative reinforcement in humans. HCEP guidelines also talk about the need to keep a confidential record of any clients and patients that may be used in studies by locking them away so no person unauthorised individual can access it e.g. a study or to when how many people

in a specific ethnic group have a mental disorder, the information about the individual and their disorders must be kept in confidential records. The BPS also mentions debriefing as part of the responsibility code, where participants who may have been involved in research that is potentially harmful or research that required deception are debriefed and provided with any further support e.g. therapy in order to minimise or remove negative emotions after the study has been completed. Animal research contains a ethical guidelines as well and also require the researcher to be qualified and show that they have the correct license to perform animal research e.g. a project license will be given to ~~start~~ projects e.g. project to see if panic disorders are caused by a university. The researcher(s) will need to demonstrate that the benefits e.g. improvement of their research in psychological knowledge outweighs any potential harm to the animal e.g. stress. Studies are often refined which means they are changed to provide an ethical environment for research on animals e.g. using water sprays instead of electric shocks. animal studies should show replacement of self-aware

Q6 – candidate response 2 continued

Animals to those with a lower-order thinking to minimal demand characteristics and hence e.g. ^{replace monkey with rat} animal studies that also demonstrate reduction of the number of animals killed. So minimal effort on the species of animals overall is conducted e.g. only using 1 rat to study learning for operant conditioning.

Research into psychology is unethical ^{in humans} as it goes against various aspects of ^{of the BPS code of} ~~both~~ ^{ethical} guidelines and often causes distress and harm to participants which may have a long-term, negative influence on their life. For example, Milgram 'induced' a study on 40 men to which whether the presence of an authority figure would ^{result in} ~~result in~~ obedient behaviour. Participants were asked to deliver high voltage shocks to ~~the~~ ^{confederate} 'learner' and prods were provided to encourage participants to carry on delivering shocks even when they demonstrated signs of nervousness e.g. nervous laughter and biting their nails. This research goes against the responsibility code of psychologists which suggests that we should minimise harm and may cause long-term guilt and distress to individuals knowing they would obey an authority even if it was very dangerous

to a second person. Therefore, however, ethical ~~concerns~~ ^{guidelines} have been followed more closely over the years, ^{this can} ~~and also~~ ^{be} seen in psychological research into obedience as ~~past~~ studies try to protect participants as much as possible. Burger replicated Milgram's study to see whether obedience still stands a decade later and for scanned participants and removed those whom may show significant levels of distress and react negatively as a result of participation in the study before it was conducted. Therefore Burger's psychological research has become more ethical over time and does adhere to the ethical guidelines such as responsibility. Therefore, although research previously strongly opposes our expectations of ethical research, this may no longer be an issue as research like Milgram's would not be assumed to be conducted today without refinements to make it more ethical.

Research ~~into~~ that uses animals is highly unethical as it does not consider the ^{ill effects} that animals may face as a result of harm or confinement. This may be due to the fact that humans cannot understand animals and their uses

Q6 – candidate response 2 continued

on feelings of distress which may provide researchers in future to carry out humane research. Pavlov conducted research on a confined dog who's salivary glands were attached to a cannula in a confined room to carry clinical conditioning. Skinner's box study delivered shocks to the ~~test~~ rodents to show the effects of negative reinforcement. There are 2 of many studies within learning psychology that go against ethical considerations such as refinement and replacement in research. Therefore learning psychology concerned a lot of unethical research. However, many may argue that although research on animals is unethical, it would be worse or more unethical to conduct the same research on humans as we have higher order-thinking and self-awareness, research on rats and other animals is therefore more ethical than research on humans to test various sectors of psychology like biological psychology which uses the input of learning areas of the brain like the amygdala in rats (egger and fynn) on aggression and impulse. Since humans have longer life spans and are not as easily replaced, whereas research like learning a human brain model provide far more harm than in animals. Therefore unethical research on animals is justifiable in psychology and overall, as the new methods and technology for research is invented, the amount of ethical research conducted is increasing so it's not an issue in research.

(Total for Question 6 = 20 marks) Psychology

Q6 – candidate response 3

6 Assess the ethical issues in psychological research using humans and animals. ^{CBT, belief model} ^{unethical} (20)

When conducting research in psychology, it is important to ~~adhere~~ ^{adhere} to ethics provided by British Psychology Society ^(BPS). A ~~code~~ ^{code} of ethics is an institution where there is an ethics committee. This ~~also~~ ^{is} so that when designing and carrying out research that may pose risk of a breach of ethical guidelines, members of the ethics committee can review whether it should be permitted to take place or not. Examples of investigations which may breach the BPS ethical guidelines are when ~~unethical~~ ^{unethical} research is required to be obtained, the participants or class of individuals who the participants may represent are subject to harm, deception is required, ^{valid} ~~consent~~ ^{consent} cannot be obtained, ^{or} ~~if~~ if the research ~~may~~ ^{findings} may evoke strong and worrying predictions about society. When conducting research on animals, ~~must~~ ^{must} follow the ~~ethical~~ ^{ethical} procedures. ~~Act~~ ^{Act} ~~is~~ ^{is} in order to reduce ~~the~~ ^{the} unethical nature of it as ~~much~~ ^{much} as possible. Animals are used in research when it cannot be ~~then~~ ^{then} carried out on humans. For example, ~~depression~~ ^{depression} are taken out of animals' brains to investigate the effect of brain damage on dysfunctional behaviour. Also, for animal studies are used for finding the effect of drugs on the nervous system, as well as gene therapy which may help to reverse the symptoms of brain diseases for example Parkinson's disease.

The area of psychology which may be seen as unethical is social psychology, ~~because~~ ^{in the Milgram's investigation} ~~because~~ ^{because} of an obedience of authority. ~~Integrity~~ ^{Integrity} is an important ethical guideline which emphasises the idea of ensuring psychological harm. However, Milgram's obedience study breached the ~~ethical~~ ^{ethical} guideline as it led to lead to severe psychological harm to the participants. As participants might they were administering real life electric shocks to confederates, ~~the~~ ^{meaning} ~~it was~~ ^{it was} ~~observed~~ ^{observed} ~~throughout~~ ^{throughout} the study. This renders social psychology as unethical. However, it may be debated that ~~the~~ ^{the} social psychology has improved in its ethical nature. This is because Burger's replication of Milgram's study about obedience found consistent findings, but from a much more ethical procedure. For example participants were given ~~an~~ ^{an} ~~exit~~ ^{exit} ~~pass~~ ^{pass} with cancelling if showed any signs of distress, and were repeatedly told they could withdraw from the study ~~at~~ ^{at} any time and still keep the \$50 note. ~~That~~ ^{That} ~~depict~~ ^{depict} ~~the~~ ^{the} Furthermore, the unethical nature of Milgram's study could be seen as having practical applications as it can be used to explain ~~obedience~~ ^{obedience} events and activities of the past such as the Holocaust being a mere result of obedience. Therefore not only has social psychology improved its ethicalness but also ~~the~~ ^{the} ~~unethical~~ ^{unethical} ~~nature~~ ^{nature}.

Q6 – candidate response 3 continued

side may be outweighed by the practical applications.

Another area of psychology which can be seen as unethical is Bandura's Bobo doll experiment in which ^{children} ~~children~~ observed adults displaying aggression to a doll, and were tested to see if they would imitate this aggression. Kesselt covers the principle of deception being avoided as much as possible, and being clear and honest about the study to the participants involved. In fact, the children in Bandura's experiment were not told that they were being observed, therefore rendering this study as unethical because it may have ended up causing ^{the} children to feel ~~to~~ isolated that they were being manipulated to act in an anti-social and undesirable manner. This study also took away their personal dignity as Bandura ~~failed~~ failed to respect their autonomy. However, it can be argued that ~~the~~ deception was required to avoid demand characteristics, where ~~Bandura~~ the children may have acted differently if or in a more desirable and pleasant manner if they knew they were being observed. Also, this study may have been unethical but it led to the implementation of the watershed, as this theory of observation and imitation may explain the James Bulger case, after the watching of Guild's Play 3 where violence and murder was observed. ~~There, if this~~ This watershed allows the prevention of

aggression in the future, encouraging a more safe society. Overall, if these demand characteristics were not avoided through deception, they may have manipulated the results of the study, and the watershed may never have been inserted to reduce aggression in the future.

~~Another~~ A third aspect of psychology involved is an unethical side could be the observation and case studies of patients with brain damage. This is because these patients may not be ~~acting~~ aware of what a case study is, ~~therefore~~ ^{of what a case study} is a study, ~~not aware or remembered~~ that of them entails, or may not even remember consenting to be a participant. Therefore, this ~~study~~ ^{breaches the} ~~study~~ ^{SPS} ~~and~~ ethical guidelines of obtaining valid consent. However, ~~the~~ case studies of individuals are generally rendered confidential through naming them as their initials only. Also not only is their confidentiality kept, but some case studies have led to revealingly discoveries about psychology which may improve the required ethical nature of case studies. For example, KF falsified the ~~two~~ multi store model and the ~~theory~~ ^{two} ~~that~~ short term memory is a unitary store - their verbal memory was not intact but their spatial processing was - this ~~the~~ could potentially suggest case studies ~~being~~ ^{are sometimes} unable to obtain valid consent ~~many times~~. This is important to be taken place, carried out due to the practical applications.

Q6 – candidate response 3 continued

lastly, animal studies must follow the 3 R's - ~~reducing~~ the research and procedure must reduce the number of animals needed as much as possible, refine the unethical conditions of the experiment and replace animals wherever possible, for example when the animals are brain dead. In Pavlov's experiment investigating classical conditioning, the dogs were strapped into a box with a harness and were unable to see, smell or hear anything else they also had a tube attached to their tongue to measure the saliva. ^{these are} ~~these are~~ severely unethical conditions that ~~are~~ ^{these} dogs underwent, running animal studies to be unethical. However, these conditions could be deemed to be necessary to avoid any other extraneous variable manipulating the dependent variable, the salivation reflex, other than the independent variable, the association of the bell and food. Furthermore, some ^{animal} studies have had useful practical applications that could not have been done as humans. For example, Carlson used rodents to investigate the effect of ^{inhibiting} NMDA on psychomotor behaviour. This has led to the knowledge of how certain psychiatric symptoms can come about and therefore providing pharmacologists with the means to discover and shape animal models to tackle these symptoms, for example through biological functions. Overall, animal studies have led to significant discoveries that can improve a patient's living standards profoundly.

(Total for Question 6 = 20 marks)

What mark should be awarded?

What mark would you give the response?



Q6 – candidate response 3

6 Assess the ethical issues in psychological research using humans and animals. ^{CBT, belief model} ^{unethical} (20)

When conducting research in psychology, it is important to ~~adhere~~ ^{adhere} to ethics provided by British Psychology Society ^(BPS). A ~~code~~ ^{code} of ethics is an institution where there is an ethics committee. This ~~also~~ ^{is} so that when designing and carrying out research that may pose risk of a breach of ethical guidelines, members of the ethics committee can review whether it should be permitted to take place or not. Examples of investigations which may breach the BPS ethical guidelines are when ~~unethical~~ ^{unethical} research is required to be obtained, the participants or class of individuals who the participants may represent are subject to harm, deception is required, ^{valid} ~~consent~~ ^{consent} cannot be obtained, ^{or} ~~if~~ if the research ~~may~~ ^{findings} may evolve strong and wronging predictions about society. When conducting research on animals, ~~must~~ ^{must} follow the ~~ethical~~ ^{ethical} procedures. ~~It is~~ ^{It is} ~~not~~ ^{not} in order to reduce ~~the~~ ^{the} ~~ethical~~ ^{ethical} nature of it as ~~much~~ ^{much} as possible. Animals are used in research when it cannot be ~~then~~ ^{then} carried out on humans. For example, ~~depression~~ ^{depression} are taken out of animals' brains to investigate the effect of brain damage on dysfunctional behaviour. Also, for animal studies we use for finding the effect of drugs on the nervous system, as well as gene therapy which may help to reverse the symptoms of brain diseases for example Parkinson's disease.

One area of psychology which may be seen as unethical is social psychology. ~~in the Milgram's investigation~~ ^{in the Milgram's investigation} ~~the obedience of authority~~ ^{the obedience of authority} ~~provides~~ ^{provides} integrity is an important ethical guideline which emphasises the idea of ensuring psychological harm. However, Milgram's obedience study breached the ~~ethical~~ ^{ethical} guideline as it led to lead to ~~cause~~ ^{cause} psychological harm to the participants. As participants might they also administering real life electric shocks to confederates, ~~the~~ ^{meaning} ~~it was~~ ^{it was} ~~observed~~ ^{observed} ~~that~~ ^{that} ~~3~~ ³ ~~survives~~ ^{survives} were observed throughout the study. This renders social psychology as unethical. However, it may be debated that ~~the~~ ^{the} social psychology has improved in its ethical nature. This is because Burger's replication of Milgram's study about obedience found consistent findings, but from a much more ethical procedure. For example participants were given ~~an~~ ^{an} ~~exit~~ ^{exit} ~~pass~~ ^{pass} with cancelling if showed any signs of distress, and were repeatedly told they could withdraw from the study ~~at~~ ^{at} any time and still keep the \$50 note. ~~That~~ ^{That} ~~depicts~~ ^{depicts} ~~the~~ ^{the} ~~ethical~~ ^{ethical} nature of Milgram's study could be seen as having practical applications as it can be used to explain ~~obedience~~ ^{obedience} ~~events~~ ^{events} and activities of the past such as the Holocaust being a mere result of obedience. Therefore not only has social psychology improved its ethicalness but also ~~the~~ ^{the} ~~unethical~~ ^{unethical} ~~nature~~ ^{nature}.

Q6 – candidate response 3 continued

side may be outweighed by the practical applications.

Another area of psychology which can be seen as unethical is Bandura's Bobo doll experiment in which ^{children} ~~children~~ observed adults displaying aggression to a doll, and were tested to see if they would imitate this aggression. Kesseler covers the principle of deception being avoided as much as possible, and being clear and honest about the study to the participants involved. However, the children in Bandura's experiment were not told that they were being observed, therefore rendering this study as unethical because it may have ended up causing ^{the} children to feel ~~to~~ isolated that they were being manipulated to act in an anti-social and undesirable manner. This study also took away their personal dignity as Bandura ~~failed~~ failed to respect their autonomy. However, it can be argued that ~~the~~ deception was required to avoid demand characteristics, where ~~Bandura~~ the children may have acted differently if or in a more desirable and pleasant manner if they knew they were being observed. Also, this study may have been unethical but it led to the implementation of the watershed, as this theory of observation and imitation may explain the James Bulger case, after the watching of Guild's Play 3 where violence and murder was observed. ~~There, if this~~ This watershed allows the prevention of

aggression in the future, encouraging a more safe society. But, if these demand characteristics were not avoided through deception, they may have manipulated the results of the study, and the watershed may never have been inserted to reduce aggression in the future.

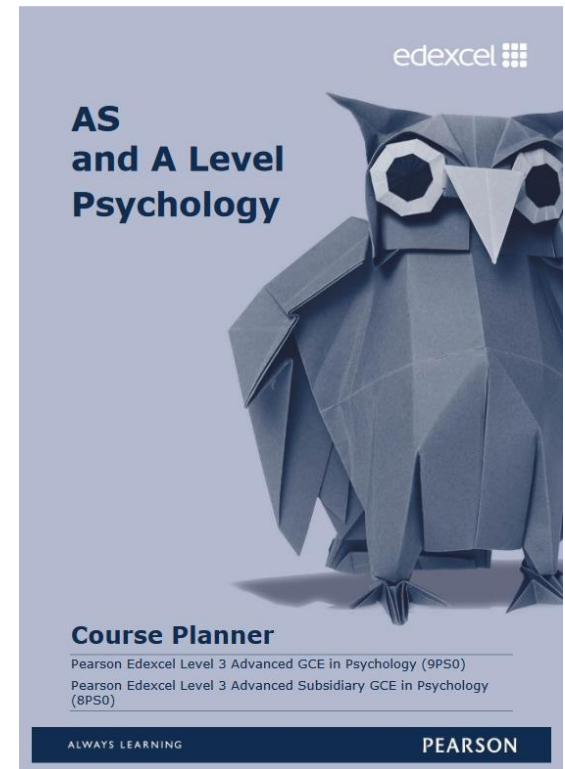
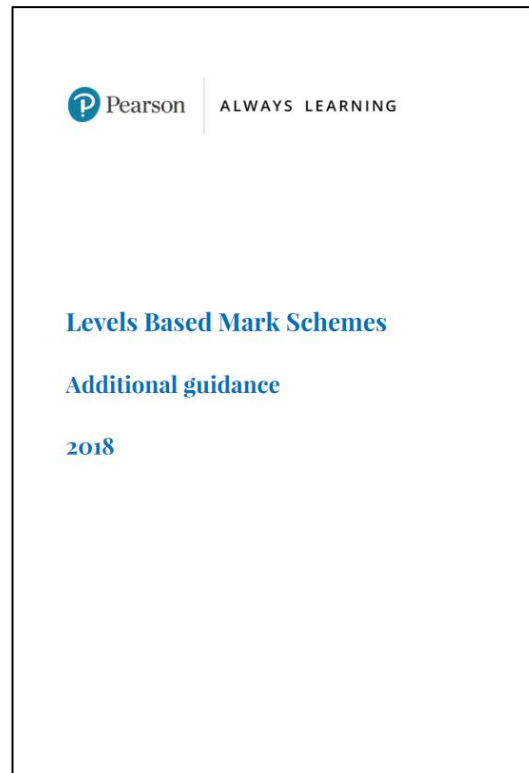
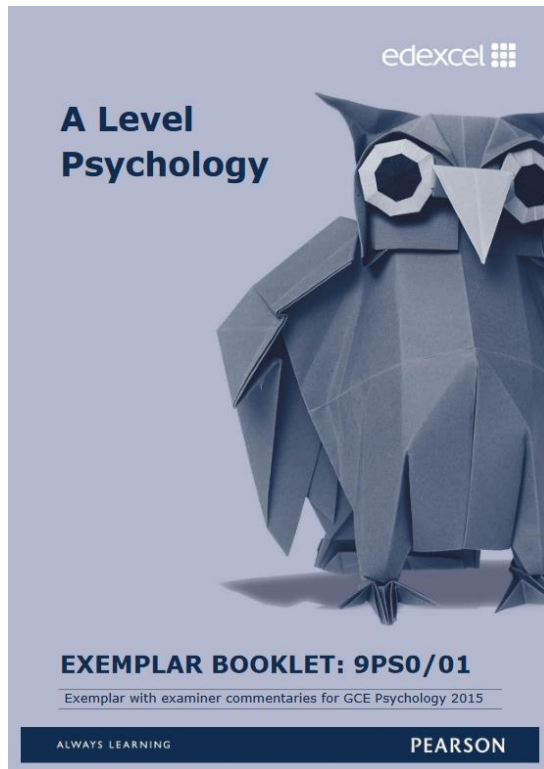
~~Another~~ A third aspect of psychology involved is an unethical side could be the observation and case studies of patients with brain damage. This is because these patients may not be ~~acting~~ aware of what a case study is, ~~they are in a study,~~ ~~not aware or remember that~~ of them entails, or may not even remember consenting to be a participant. Therefore, this ~~study~~ ^{breaches the} ~~study~~ ^{SPS} ~~and~~ ethical guidelines of obtaining valid consent. However, ~~the~~ case studies of individuals are generally rendered confidential through naming them as their initials only. Also not only is their confidentiality kept, but some case studies have led to revealing discoveries about psychology which may improve the required ethical nature of case studies. For example, KF falsified the ~~two~~ multi store model and the ~~theory~~ ^{two} ~~that~~ short term memory is a unitary store - their verbal memory was not intact but their spatial processing was - this ~~the~~ could potentially suggest case studies ~~being~~ ^{are sometimes} unable to obtain valid consent ~~may~~ ^{are} ~~not~~ ^{not} ~~be~~ ^{be} ~~important~~ ^{important} to be taken place, carried out due to no practical applications.

Q6 – candidate response 3 continued

lastly, animal studies must follow the 3 R's - ~~reducing~~ the research and procedure must reduce the number of animals needed as much as possible, refine the unethical conditions of the experiment and replace animals wherever possible, for example when the animals are brain dead. In Pavlov's experiment investigating classical conditioning, the dogs were strapped into a box with a harness and were unable to see, smell or hear anything else they also had a tube attached to their tongue to measure the saliva. ^{these are} ~~these are~~ severely unethical conditions that ~~are~~ ^{these} dogs underwent, running animal studies to be unethical. However, these conditions could be deemed to be necessary to avoid any other extraneous variable manipulating the dependent variable, the salivation reflex, other than the independent variable, the association of the bell and food. Furthermore, some ^{animal} studies have had useful practical applications that could not have been done as humans. For example, Carlson used rodents to investigate the effect of ^{inhibiting} ~~off~~ NMDA on psychomotor behaviour. This has led to the knowledge of how certain psychiatric symptoms can come about and therefore providing pharmacologists with the means to discover and shape animal models to tackle these symptoms, for example through biological functions. Overall, animal studies have led to significant discoveries that can improve a patient's living standards profoundly.

(Total for Question 6 = 20 marks)

Website resources



Considering delivery strategies and sharing best practice

1. Teaching strategies
2. Resources
3. Technology

Support

Subject advisor: Tim Lawrence

Email: TeachingPsychology@pearson.com

Telephone: 0344 463 2535

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/psychology-2017.html>



Pearson

[Support Home](#) [Browse Articles](#) [Contact Us](#) [More](#) [Sign In](#)

Contact Us

Tell us about yourself and the issue you're having and we'll connect you with the right person to help you. All fields marked with an * are required.

Tell us about your issue

*What kind of customer are you?

Select a customer type

Other useful links

[Grade boundaries](#)


This page shows the minimum marks needed to achieve a certain grade for all UK and international examinations. Also refer to the Examiner's Report, which is available for download with other documents.

[Examination results statistics](#)

Results statistics summarise the overall grade outcomes of candidates sitting Edexcel examinations.

[Results Plus](#)

- Edexcel's free online service gives instant and detailed analysis of your students' exam and mock performance.
- See your students' scores for every exam question.
- Understand how your students' performance compares with Edexcel national averages.

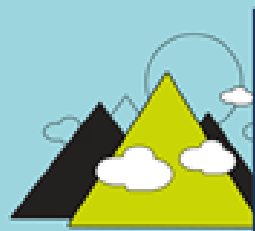


There's so much
more to learn

Find out more about our range of events at
<http://qualifications.pearson.com/training>

Find out more

For more courses see our [Pearson Professional Development Academy](#).



Professional
Development
Academy

Transforming
training for
everyone.

Any questions?

Thank you for attending this event.

How did we do?

Please fill in the *evaluation form*
that you'll receive via email in a
few minutes.



Pearson