Pearson
Edexcel

Examiners' Report
June 2018

GCE Psychology 9PS0 03

ResultsPlus

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk.

Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

ResultsPlus

Giving you insight to inform next steps

ResultsPlus is Pearson's free online service giving instant and detailed analysis of your students' exam results.

- See students' scores for every exam question.
- Understand how your students' performance compares with class and national averages.
- Identify potential topics, skills and types of question where students may need to develop their learning further.

For more information on ResultsPlus, or to log in, visit www.edexcel.com/resultsplus.
Your exams officer will be able to set up your ResultsPlus account in minutes via Edexcel Online.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk.

June 2018
Publications Code 9PS0_03_1806_ER

Introduction

Candidate performance on this paper has improved since the first cohort in 2017 as it was clear that centres had responded to the feedback offered. Whilst there were some generic responses still, far more answers were contextualised to the scenarios presented which enabled the majority of candidates to access more marks overall.

For section A, the best responses applied their ideas to the scenario given in the question. This was done far better by candidates on the whole than in the first sitting in 2017. There were still some generic answers, particularly to Q2b, but overall these were far more limited in this series. Candidates were generally very good with the Mann-Whitney calculations, although they struggled with Type l errors and peer review, which centres may want to reinforce again for future series.

For section B, responses were again more contextualised than last year and candidates performed well on 3a and 3b, but their performance was limited on 3b due to lack of supporting or refuting evidence which was similar to last year. Similarly, on the essay question there were still candidates writing rote-learned recall of the studies with a lack of focus on the question being asked. The best responses answer the question being asked, with the weighting on AO3 which is the case for a 16-mark question.

Section C showed a better performance than in 2017 too, with candidates offering more AO3 in question 5 and a more accurate understanding of animal research than was seen in Q2b in 2017. However, some candidates are still offering inaccurate and misconceived ideas about animal research in psychology so this is still an area that centres could focus on to help candidates in future series.

The remainder of this Examiner Report will focus on each individual question and specific examples of candidate responses which can be used to help prepare students for future 9PS0/03 examinations.

Question 1 (a)

For question 1a, one mark was awarded for identification of the experimental/research design. The vast majority of candidates correctly identified the design used in the study. It was clear that centres had reinforced this since the previous series where far more candidates struggled with what an experimental/research design was. Where candidates were not awarded credit, it was for identifying the wrong design (such as 'repeated measures') or giving a method (such as 'laboratory experiment').

1 Lecture notes and learning

Researchers wanted to see whether providing learning aids during a lecture would help students. Students attended an audio lecture on how car brakes function. Before the lecture, students were given either a skeletal outline (with headings and subheadings) or no learning aid at all (they were given notepaper). After the lecture, students were given a short-answer test that assessed their understanding of how car brakes function.

(Source: adapted from Bui et al. (2015))

(a) Identify the experimental/research design used in the lecture notes and learning study.

(1)

independent measures design

ResultsPlus
Examiner Comments

This response achieved 1 mark for correctly identifying that an independent measures design had been used in the study.

1 Lecture notes and learning

Researchers wanted to see whether providing learning aids during a lecture would help students. Students attended an audio lecture on how car brakes function. Before the lecture, students were given either a skeletal outline (with headings and subheadings) or no learning aid at all (they were given notepaper). After the lecture, students were given a short-answer test that assessed their understanding of how car brakes function.

(Source: adapted from Bui et al. (2015))

(a) Identify the experimental/research design used in the lecture notes and learning study.

(1)

~~Abst~~ Field experiment

ResultsPlus
Examiner Comments

This response was awarded 0 marks for not identifying the experimental/research design.

ResultsPlus
Examiner Tip

Centres should continue to reinforce what an experimental/research design is to candidates.

Question 1 (b)

On question 1b one mark was awarded for identification of a relevant participant variable, with a second mark for justification of how this variable can affect the findings of the study. Purely generic responses did not achieve credit so candidates should be reminded that all responses need to be in the context of the scenario. Candidates performed very well overall scoring at least one mark, with the largest proportion getting full marks, using a variety of relevant participant variables with well-reasoned justification. The most common participant variables included prior knowledge of car brakes, intelligence, memory ability, and tiredness.

(b) Explain how **one** participant variable could affect the findings of the lecture notes and learning study.

(2)

One participant variable could be that there are some participants who already have a good understanding of how car brakes function. This skews the results as this is an ~~good~~ extraneous variable, which would unfairly and incorrectly show that one group have a better understanding of car brakes due to ~~the~~ ~~tradition~~ ~~it~~ having learning aids, which may not be the case.

ResultsPlus
Examiner Comments

This response was awarded 2 marks. One mark for identification of a suitable participant variable, and the second mark for appropriate justification.

ResultsPlus
Examiner Tip

Candidates should always engage with the scenario fully, as this response has done.

Question 1 (c)

Question 1c awarded candidates up to three marks for explanation of one way the study could be generalised to the target population of students. There was a fairly even spread of marks on this question with effective discrimination, with the largest proportion scoring 2 of the 3 available marks. The most common accurate explanations included the use of a stratified sample of students, use of different schools, use of different genders of students, and use of different ethnicities of students.

The best responses tended to include three elements - what the researchers can do (e.g. use a stratified sampling technique), how they can do it (e.g. find how many students take each subject and choose a sample that reflects this), then justification of how this would improve generalisability (e.g. so results can generalise to all types of students and not just those taking a single subject at the university).

(c) Explain **one** way the researchers in the lecture notes and learning study could make the study as generalisable as possible to the target population of students.

(3)

The researchers could use stratisfied sampling based on university records about how many students take each subject ages of the students and genders so the group of students chosen for the study will represent students of different ages proportionally and will represent students taking each different subject so results can generalise to all types of students at the University not just those taking Mechanics for example who may have more previous knowledge of car breaks.

ResultsPlus
Examiner Comments

This response scored 3 marks. The first was for the suggestion of stratified sampling, the second for how they would do the sampling, and the third mark was awarded for justification of why this would improve generalisability in the study.

ResultsPlus
Examiner Tip

Candidates are advised to fully explain all their ideas in context, as this candidate has done.

Question 1 (d)

Candidates performed extremely well on the Mann-Whitney U calculation. The vast majority of candidates were awarded all 4 available marks, with a minority struggling and not performing the full calculation or doing so inaccurately.

The researchers in the lecture notes and learning study decided to carry out a Mann-Whitney U test on the data.

(d) Complete **Table 1** and calculate Mann-Whitney U for the data in **Table 1**.

(4)

Experimental Group		**Control Group**	
Score on test with skeletal outline	**Rank**	**Score on test with notepaper**	**Rank**
85	16.5	67	10.5
46	5	45	3
55	7	33	1
89	19	79	14.5
55	7	45	3
90	18	71	12
78	13	45	3
55	7	67	10.5
92	20	65	9
85	16.5	79	14.5
Total	129	**Total**	81

Table 1

SPACE FOR CALCULATIONS

$U_b = n_a n_b + \frac{n_b(n_b+1)}{2} - \sum R_a$

$= 10 \times 10 + \frac{10 \times 11}{2} - 81$

$= 100 + 55 - 81$

$= 155 - 81$

$= 74$

$U_a = n_a n_b + \frac{n_a(n_a+1)}{2} - \sum R_a$

$= 10 \times 10 + \frac{10 \times 11}{2} - 129$

$= 100 + 55 - 129$

$= 155 - 129$

$= 26$

U_a 26

U_b 74

U 26

ResultsPlus
Examiner Comments

This response achieved all four marks for calculating the correct U value.

ResultsPlus
Examiner Tip

Candidates are advised to show their working so at least partial credit can be awarded if the final statistic is not correct. Here the candidate shows their working and gets the correct final value of U.

Question 1 (e)

For question 1e, candidates were awarded one mark for correct identification of what a Type I error is, and a further mark for reasoning of what a type I error is in the study given. Overall candidates struggled to accurately distinguish between a Type I and a Type II error, so the majority scored no marks. Centres should reinforce the difference between the two for future series. The best responses gave an accurate definition and applied this in context using appropriate reasoning, whereas some candidates just gave a brief definition which gave them a single mark.

(e) The researchers of the lecture notes and learning study need to decide whether to accept or reject their null hypothesis. They have been warned not to make a Type I error when doing this.

Explain to the researchers what a Type I error would be in the lecture notes and learning study.

(2)

The type 1 error would be rejecting the null hypothesis when they should've accepted it. In this experiment it would be saying learning aids do help students when they should've said they don't.

ResultsPlus
Examiner Comments

This response was awarded two marks. The first was for accurate identification of a type I error, and the second was for appropriate exemplification/reasoning to the study.

Question 1 (f)

In question 1f candidates were awarded up to two marks for explanation of the peer review process and a further two marks for reasoned judgement of how likely it would be for the study to be published. In general, candidates struggled with this question and, although there was a spread of marks, the majority scored 0-2 marks. It appeared that they had anticipated peer review would not be assessed as a number did not have any clear knowledge on what the peer review process involved. Centres should reinforce what the peer review process involves to candidates for future series.

(f) The researchers in the lecture notes and learning study are interested in publishing their work in the British Journal of Educational Psychology.

> The British Journal of Educational Psychology publishes psychological research that makes a significant contribution to the understanding and practice of education.
>
> Author Guidelines for the British Journal of Educational Psychology:
>
> - We publish psychological research that makes a significant contribution to the understanding and practice of education.
> - We aim to publish research which has a broad international appeal to researchers and practitioners in education.
> - We welcome experimental studies, observations of classroom behaviours, interviews, and surveys.
> - Important criteria in the selection process are quality of argument and educational significance.
> - We tend to publish more quantitative than qualitative studies.

(Source: statement adapted from the Author Guidelines for the *British Journal of Educational Psychology*, published by the British Psychological Society (2015))

Explain what the peer review process would involve for the researchers in the lecture notes and learning study, including a consideration of the likelihood of their findings being published.

(4)

The peer review process would involve other researchers reviewing the lecture and notes study to decide whether the study meets the author guidelines for the British Journal of education psychology. The other researchers reviewing the study would see it the research has a significant contribution to the understanding and practice of education, which arguably it does as the findings show that learning giving students a learning aid (skeletal outline) during learning results in better test scores, so this technique can be used in the education system. Since the author guidelines state that quantitative research gets published more, it means the lecture notes and learning study is likely to get published as the results provide quantitative data of the students test scores

(Total for Question 1 = 16 marks)

ResultsPlus
Examiner Comments

This response was awarded three marks. The first is an AO2 mark for the first sentence. The second is an AO3 mark for an appropriate judgement regarding the contribution of the research. The final mark was another AO3 mark for another appropriate judgement, this time regarding the quantitative nature of the study.

ResultsPlus
Examiner Tip

Candidates need to avoid tautological statements as these will not be eligible for credit.

Question 2 (a)

In question 2a candidates were awarded up to four marks for explanation of two conclusions that could be made from Figure 1. Two marks were available for each conclusion, and conclusions needed to be drawn from evidence in Figure 1 to be creditable. Candidates needed to have reference to evidence for a two mark answer, which will include an appropriate conclusion (1st mark) and suitable justification (2nd mark). It did not matter which way round this was presented.

Overall candidates did very well on this question, with the largest proportion scoring either 4 or 2 marks. The best responses gave an appropriate conclusion and supported it with evidence from Figure 1, whereas weaker responses either just repeated information from Figure 1 with no conclusions or gave two brief conclusions.

(a) Analyse the data provided in Figure 1 to explain two conclusions that the researchers in the prosocial behaviour and culture study might draw from these results.

(4)

Conclusion 1

Adolecent Americans have a ~~bigger~~ higher liklihood of sharing the reward at between 40% and 50%. ~~at~~ at ages between 10 and 14 compared with Fijian's who ~~fewer~~ were 0% - 15% likely to share the reward which shows ~~Amer~~ adolecent Americans are more Prosocial whereas adolecent Fijians are more antisocial.

Conclusion 2

However, when Americans reach adulthood, their likliness of sharing fell to around 15%. whereas ~~adult~~ Fijians rose to around 35%. Americans may be more antisocial as they age as they live in a more induvidualistic society than adults in fiji who were more prosocial as they aged.

This response scored four marks overall. There are two appropriate conclusions made (at the end in each case), with supporting evidence being provided as justification (at the beginning in each case).

When candidates are given a source to analyse and make conclusions from, they need to give conclusions and not just repeat the source.

Question 2 (b)

For question 2b candidates were awarded up to four marks for explanation of two weaknesses of using a laboratory experiment for the study. There was a maximum two marks available for each weakness, and generic weaknesses did not gain credit as this was assessing AO2 and AO3.

Performance was varied with the most common marks being 0, 2, or 4 marks. Zero was for generic or inaccurate weaknesses, two was generally for either two brief accurate weaknesses or one fully explained accurate weakness in context, and four was for two fully explained accurate weaknesses in context.

The most common weaknesses included the idea that it is not realistic to measure prosocial behaviour in a laboratory, a weakness related to demand characteristics, or social desirability bias.

(b) The prosocial behaviour and culture study used a laboratory experiment.

Explain **two** weaknesses of using a laboratory experiment in the prosocial behaviour and culture study.

(4)

Weakness 1

Laboratory experiments ~~induce~~ produce demand characteristics as the setting is unnatural to the participant. As a result the participants may behave more pro-social because they're aware of ~~being observed in this the environment.~~ the aim of the study and so conform to what they think is expected ~~which encourages~~ This is a weakness because we don't get to see ~~how~~ whether a person would truely act prosocial in a real life sitration.

Weakness 2

Laboratory experiments lack mundane realism. This is a problem when observing prosocial behavior as the artificial environment may encourage them to behave in a way that is not natural ~~to the~~ for themselves. This is a weakness because the study is therefore lacks validity as it is not measuring what it's supposed to be measuring

ResultsPlus
Examiner Comments

This response achieved all four marks. The first weakness got 2 for demand characteristics explained in context, and the second weakness got another 2 for ecological validity explained in context.

ResultsPlus
Examiner Tip

This was the question where candidates most commonly lost credit through giving purely generic ideas. Here, the candidate puts their ideas in context which is what is needed.

Question 3 (a)

For question 3a candidates were awarded up to two marks for explanation of one ethical issue that could be violated in the study. The first mark was for identification of a relevant ethical issue and the second was for suitable exemplification/justification. Weaker responses were generic and could not gain credit as there needed to be some application to the prosocial behaviour and culture study. Most candidates scored at least one mark, with the greatest proportion scoring full marks for this question.

Common answers included deception as confederates were used, lack of informed consent as they were unaware of the study aims/to give permission, protection of participants as they were asked to commit an unethical act, lack of right to withdraw as the students didn't know they were in a study.

3 'Instigators' and an unethical act

A study examined the psychology of 'instigators'. 'Instigators' are people who surround an unethical act and influence the wrongdoer without directly committing the act themselves.

Student confederates were recruited to instruct participants to commit an unethical act. The unethical act was to vandalise a book in the university library by writing the word 'pickle' in pen on a specified page.

There were three conditions in the study:

- two student confederates instructed an unknown student to carry out the unethical act
- one student confederate instructed a close student friend to carry out the unethical act
- one student confederate instructed an unknown student to carry out the unethical act.

(Source: adapted from Bohns et al. (2013))

(a) Explain **one** ethical issue that could be violated in the 'instigators' and an unethical act study.

(2)

The participants of the study eg. Student friend did not give consent to be a part of the study. This is unethical as they may not have wanted to be a part of it which is going against their will without permission.

ResultsPlus
Examiner Comments

This response scored two marks. The first was for identification of consent in context, and the second was for suitable justification.

Question 3 (b)

Candidates were awarded up to six marks for explanation of how far social impact theory supports the findings of the study in question 3b. Three marks were available for application of social impact theory to the findings of the study (AO2), and three marks were available for judgement/justification of social impact theory to the findings of the study (AO3).

Candidates typically applied social impact theory (AO2) effectively with the best responses using evidence to support or refute the theory accounting for the findings (AO3). Overall performance was varied with the most common marks awarded 2 or 3 out of the 6 available.

Common answers included application of strength (salience), number, immediacy (proximity), and use of agency theory as an alternative, personality as an alternative, and social identity theory as an alternative explanation.

The findings of the study are shown in **Table 2** below.

higher no. — don't see them as powerful

	Two student confederates instructed an unknown student to carry out the unethical act	One student confederate instructed a close student friend to carry out the unethical act	One student confederate instructed an unknown student to carry out the unethical act
% of student participants that vandalised the university library book	87	80	62

✓ ✗ ✓

Table 2

S IN

(b) Explain how far social impact theory can support the findings of the 'instigators' and an unethical act study. — agency theory — social force, psychosocial law, division of impact

(6)

Social impact theory can support the findings of this study as that one of the ways in which obedience can be enforced is through social force. This is made up of the strength of the influence, immediacy of the influence and the number of influencers. This could explain how the higher percentage (87%) of student participants was found in the condition where there were two student confederates. As there were 2 confederates, this increases the number of influencers on them, increasing the social force/pressure on the participant to obey. There is a higher social force when 2 confederates are present, compared to only one, as can be seen by the results, where with one confederate, there were 80% and 62% of student who vandalised the book.

Any The immediacy of the source of influence is also another factor in social force. This would be how close the confederates are to the student participant when instructing them. In all three

condition, the confederates would confront the student participant face to face, which makes them more likely to obey as their order is very immediate (close) to them. This can explain for the fairly high percentage of student who vandalised the books, as even the lowest percentage of 62% is fairly high.

However, an alternate theory that can explain this behaviour is agency theory. Agency theory would explain the confederate(s) as an authority figure, and the student participants act as an agent for them when they carry out the order. This can explain the ^18% difference in the percentage of student who vandalised the books between the condition where the participant was a close friend of the confederate and where the participant was unknown to the confederate. As the unknown student participant was not familiar with the confederate, they would not see them as having power over them, so would be less likely to carry out the order. However the close friends of the confederates knew each other and because of this, may see more authority and have more trust in them, so perhaps would feel that the responsibility of their action would go to the confederate.

ResultsPlus
Examiner Comments

This response was awarded four marks. The first was for application of social impact theory regarding number (first condition). The second was for application of social impact theory regarding physical immediacy. The third was for application of social impact theory regarding number (close friends), and the final mark was for using agency theory as an alternative.

ResultsPlus
Examiner Tip

Use of supporting or refuting evidence (including relevant alternative explanations) will help candidates improve their performance on questions such as this one.

Question 4

Question 4 was an extended open response question with the 'Evaluate' taxonomy which targets both AO1 and AO3 content. AO1 was looking for knowledge and understanding of the studies or social control issues and AO3 was looking for analysis, interpretation, and evaluation of both studies in terms of the issues they are affected by and the implications of this, leading to judgements/conclusions.

Assessment of this question was through a level based mark scheme where a 'best-fit' approach was used; deciding which level most closely describes the quality of the answer. Each AO was judged separately and where the components met the requirement for the level fully (and perhaps had elements of the level above), then marks were awarded at the top of the level. Where the components met the level but only just, they were awarded marks at the bottom end of the level. When a response was imbalanced (i.e. one AO was stronger than the other) a compromise was found. Consideration was also given regarding this question requiring greater AO3 content than AO1 (6/16 to AO1, 10/16 to AO3).

The question asked candidates to refer to social control of the studies so the best responses included knowledge and understanding of Watson and Rayner and Raine, consideration of the social control issues of both studies, and evaluation of social control measures through the studies. Weaker responses included lots of rote-learned recall of the studies with inaccuracies, with little consideration given to social control as an issue.

4 Evaluate the classic studies by Watson and Rayner (1920) and Raine et al. (1997) in how they could be used as a means of social control.

(16)

Watson & Rayner (1920) conducted an experimen on little Albert when he was 9 months old. ~~H~~ They wanted to see whether they could classically condition a phobia onto a child. ~~AT~~ This was conducted at a hospital. At 9 months, ~~THE~~ Albert was tested to see whether he had any response to a white rats, which he didn't. At 11 months Albert was tested again a still didn't however, he had a fear response to the banging of a metal bar. For a week, the rat was presented ~~and~~ with the metal bar bang together which made Albert cry and try and move away. After a week, the rat was presented on it's own and Albert feared it. He also displaced his fear onto other white objects such as fur coats, white masks etc. This is a strength for social control as it shows how the paring of stimuli can trigger a negative response. This means that a persons be naviour can be controlled as you could make them learn ~~not to~~ to fear or not to fear objects, situations / scenarios. This has social control in practical application as systematic desentisation controls an individuals behaviour

as a therapist would pair relaxation with stages of their phobia to undo their fear response and replace it with relaxation. This shows how a therapist can control a behaviour of an individual much like Watson & Rayner on Little Albert.

However, a weakness of this social control is that the individual may feel like they have no power over their behaviour and response. You can place a phobia onto anyone without them realising what you have done.

Raine et al found from PET that murders who pleaded not guilty for reasons of insanity had ~~assume~~ asymetrical difference in their amgdala compared to the control group which was the opposite. This can be used as a form of social control as it can be used to determine ~~whether~~ whether or not murders are mentally sane which could effect their sentencing time in prison for their actions. This is a strength of social control as the jury controls how much time in prison they spend based on whether murders are

seen as sane or have problems with their brain, like found in Raine et al study. This means that if a murders is found to have these differences, as found in Raine's study, they could receive appropriate help for their condition (e.g. admission into ~~which is~~ a mental health insitution, drugs etc) which is determined by PET scan and jury decision, which is a form of social control

Raine administered a PET scan on 41 murders who pleaded not guilty for reason of insanity. The were injected with a glucose tracer and had to take part in a 32 minute memory tasks. A weakness of this is that it lacks mundane realism. This is because the 32 minutes of activity tasks ~~may~~ is not a normal behaviour a murder would go through when ~~kill~~ offending. This means that you cannot be sure that ASymetrical differences in the amygdala actually are linked to a murders violent behaviour. This is a weakness ~~of~~ for social controls some clinicians/therapists may try and control a murders behaviour by trying to reduce the effects of the amygdala which

may not even be the reason for the murders behaviour meaning they are not controlling their behaviour.

To conclude, Watson & Rayner and Rainer et al are used as means of social control of phobias and murders. Although there may be issues with their methodology, the still indicate how a phobia is formed / why a murders commits this behaviour and how to further reverse these effects to 'normalise' their behaviour².

ResultsPlus
Examiner Comments

This response was awarded Level 3 - 10 marks.

There is plenty of AO1 knowledge and understanding about both studies on pages 1, 2 and 3. This was judged as Level 4 for this element. However, the AO3 is more limited, i.e. systematic desensitisation at the top of page 2, jury decisions on page 3 and another weaker attempt going onto the final page. It ends with a judgement but overall the AO3 is at the top of Level 2.

Overall the response was awarded Level 3, and given the weighting of A03, the mark was moved down to 10 marks.

ResultsPlus
Examiner Tip

Candidates need to focus on the demands of the question and produce responses consistent with the AO weightings of the command word being used.

Question 5

Question 5 was an extended open response question with the 'Evaluate' taxonomy with a scenario which targets AO1, AO2 and AO3 content. AO1 was looking for knowledge and understanding of the learning theories, AO2 was application to the scenario given in the question about Sam, and AO3 was analysis, interpretation, and evaluation of the ideas presented from learning theories or how other alternative ideas can account for human behaviour and the implications of this, leading to judgements/conclusions.

Assessment of this question was through a level based mark scheme where a 'best-fit' approach was used; deciding which level most closely describes the quality of the answer. Each AO was judged separately and where the components met the requirement for the level fully (and perhaps had elements of the level above), then marks were awarded at the top of the level. Where the components met the level but only just, they were awarded marks at the bottom end of the level. When a response was imbalanced (i.e. one AO was stronger than the other) a compromise was found. Consideration was also given regarding this question requiring equal amounts of AO1, AO2, AO3 (4/12 to AO1, 4/12 to AO2, 4/12 to AO3).

Typically, candidates tended to write relevant AO1 knowledge and understanding of the learning theories and then AO2 in applying it in a relevant way to the scenario provided. There was also a far better attempt than last year regarding AO3 analysis, interpretation, evaluation of the content used. As such, performance on this question has been of a higher standard than last year with answers more commonly accessing level 2 and 3.

The best responses included AO1, AO2, and AO3 and offered a range of factors that could explain the scenario with evidence to support or refute their arguments. Weaker responses just focused on AO1 and perhaps some AO2 with inaccuracies in both, with no attempt to evaluate.

5 When commuting to college Sam notices that whichever form of public transport he uses strangers rarely communicate with each other. He notices that people tend to sit alone where possible and avoid eye contact with other commuters whilst listening to music or reading a newspaper.

One morning there is an incident on the bus when he is going to college. Following the event, Sam notices everyone is communicating and making eye contact. Later, when Sam discussed this change in behaviour with his friend, she argued that communication is a learned behaviour and that people are not born to communicate.

Evaluate the extent to which human behaviour such as communication can be explained by learning theories.

You must make reference to the context in your answer.

(12)

In the field of learning theories, there are several ways used to explain how and why behaviour is learned. Social learning theory is a process whereby individuals learn indirectly through copying others, and this may be used to explain human behaviours such as communication. When an individual is young, they may see adults such as their parents as role models to them, and this may be helped through identifying with them through factors such as gender or common interests or appearance. Through viewing this person as a role model, social learning theory explains that the individual would be more likely to pay attention to their behaviour and then imitate it, as they are given motivation through wanting to be like their role model. As parents usually attempt to communicate with their child from a young age, there children may be likely to copy this behaviours and if given reinforcement for doing so, may be more likely to continue this through to adulthood. This being said, in terms of this situation, people commuting on public transport may socially learn that it is not the

social norm to communicate on transport. They may identify with each other as they are all doing the same activity e.g. getting on the bus and therefore may learn to imitate everyone else being silent. As Sam has noticed that people avoid eye contact and communication, it is arguable that he is paying attention to those he identifies with and so is himself undergoing the process of social learning theory subconsciously.

Another explanation for humans behaviour could be classical conditioning, where behaviour and responses are learnt through associating a neutral stimulus with an ~~unconditioned~~ unconditioned stimulus to give a response. In this scenario, there may be an association made between getting on public transport and not communicating. However, by changing the situation through the incident on the bus and people beginning to communicate with each other, the previous association may become extinct and a new association may be formed. The behaviour of not communicating on the bus, which was then generalised to other types of public transport, will therefore change.

When one person starts communicating on the bus, other people may be more likely to copy this if vicarious reinforcement occurs. As the commuters will see that this individual is rewarded for communicating as they get a

response of others, those watching may be more likely to do the same.

This being said, arguably there are limits to which all human behaviour can be explained using learning theories. It may be argued that behaviours such as simple communication are innate and have a biological basis, as when babies are born, they automatically communicate their feelings through crying e.g. when they are hungry. This idea goes against that of Sam's friend, who argues communication is a learned behaviour.

Overall, it can be concluded that despite learning theories in psychology possibly not being able to explain all human behaviour, theories such as conditioning and social learning theory are strongly supported by evidence and can go towards explaining many behaviours. Human's interactions with each other strongly influences their behaviour and what they learn, and so the environment in which a person is in can affect how individuals communicate due to the social norms and other witnessed behaviours in those situations.

ResultsPlus
Examiner Comments

This response was awarded Level 3 - 7 marks.

The AO1 knowledge and understanding was considered thorough and accurate, so was judged as Level 4. The AO2 application was considered as Level 3 as it was not sustained. Regarding AO3, there is one major paragraph at the end of the response and was overall judged as Level 2.

Overall this was given Level 3, with it starting at 8 and the AO2 and AO3 justified it moving down to 7 marks.

ResultsPlus
Examiner Tip

Consideration needs to be given to three elements equally in an 'evaluate' question where a scenario is presented - AO1, AO2, AO3. Candidates are advised to try and present a balanced response with all of the elements.

Question 6

Question 6 was an extended open response question with the 'Assess' taxonomy which targets both AO1 and AO3 content. AO1 was looking for knowledge and understanding of the practical and ethical considerations for animals or psychological studies using animals and AO3 was analysis, interpretation, and evaluation using content from psychology and the implications of this, leading to judgements/conclusions of how practical and ethical psychological research may be considered.

Assessment of this question was through a level based mark scheme where a 'best-fit' approach was used, deciding which level most closely describes the quality of the answer. Each AO was judged separately and where the components met the requirement for the level fully (and perhaps had elements of the level above), then marks were awarded at the top of the level. Where the components met the level but only just, they were awarded marks at the bottom end of the level. When a response was imbalanced (i.e. one AO was stronger than the other) a compromise was found. Consideration was also given regarding this question requiring greater AO3 content than AO1 (8/20 to AO1, 12/20 to AO3).

Typically, candidates either presented the issues by showing knowledge and understanding of an animal study (AO1) and then commenting on the ethical or practical issues (AO3) or they outlined the issues (AO1) and illustrated with a study (AO3). The best responses gave consideration to a variety of ethical and practical issues, which were exemplified using research studies, leading to accurate judgements and conclusions about the value of animal research in psychology. Weaker responses tended to use human guidelines to judge animal research (e.g. they cannot give consent), or focused on animal rights groups and how researchers should never harm animals and making personal, emotional, judgements on animal research.

6 Animals are sometimes used to conduct psychological research.

Assess the practical and ethical implications of using animals in psychological research.

(20)

Animals are often used in psychology because they are much more practical to use than humans, but due to a similar evolutionary history, have a similar biology, and therefore prove extremely useful However there are issues with generalisability and ethics eg animal research in psychology

Animal research is widely used in learning psychology. The principles of operant conditioning, learning by reward came from Skinner's box and Thorndike's animals such as pigeons. Classical conditioning began with work by Pavlov, looking at Salivation in dogs in response to food Animal research therefore is vital in learning to understand behaviour However there are ethical implications to this: animals, such as mice in Skiner's box were contained and deprived of food to make them want the food 'reward' This goes against the animal guideline that animal's

experiences Should be enhanced not impressed However there are also advantages of using animals: experiments such as these would have been completely unethical to conduct on humans, and therefore using animals allows us to add to the body of research in learning. Practically animals are easier to look at, as they're smaller, and by keeping them in a box, conditions can be controlled for, whereas to reduce behaviour down to just learning based on reward or stimuli links would be extremely difficult to carry out on humans and control all these variables

Within biological psychology animals are widely used, such as Olds and Milner, where electrodes were attached to rats brains to investigate the reward pathways, and amygdala removed in one study of monkeys to investigate aggression, where they found no amygdala produced a fearful response to humans. Again these animal studies are vital, as what was carried out would have been unethical on humans. It also allows us to observe biology over time, as certain

animals have a greatly reduced lifespan compared to humans, allowing you to observe development. However there are also fundamental problems with using animals: firstly a requirement by BPS is that the minimum number are used. this can be difficult to follow as the ~~few~~ less animals used, the more the results could be due to the animals individual differences, also only certain species are allowed to be experimented on, including no endangered or wild species, limiting the scope and type of animals used in research.

A key practical issue of the use of animals in both biological and learning psychology is issues with generalisability. Animals can have a greatly varied biology to humans, and therefore how animals act in one experiment does not mean humans would do the same. However due to shared evolutionary history many structures, such as the brain are highly similar (despite the human brain being 6x bigger than most other mammals) this means findings are likely to be somewhat generalisable this is also

evidenced is that many human studies back up the findings of animal studies, such as Watson and Rayner backing up Pavlov by being able to classically condition little Albert. Therefore findings are often generalisable, but differences must be kept in mind.

Criminal psychology also uses animal studies, such as looking at sham rage studies with the amygdala in cats, and also in studies of brain injury. These are also very useful in terms of practicality, as they couldn't be conducted on humans. However sham rage studies often lack Generalisability to humans. Although animals are easier to study they have less awareness of their surroundings or social implications than human behaviour, which may mean they behave differently. This is likely especially true with offenders, as they likely have a very complex biology, their nature, as well as nurture that could cause offender behaviour. Therefore trying to use animal studies to explain this behaviour is likely

highly reductionist, and limits the validity of their findings and therefore the applicability of these findings to humans.

Overall there are many practical and ethical issues with the use of animals in psychological research. Throughout learning, biological and animal there are disadvantages: a potential lack of generalisability to humans, the need to follow strict ethical guidelines regarding animals and that they ignore the complexity of human behaviour. However the use of animals in all 3 areas is also highly valuable to understand aspects of behaviour that could not ethically be explored on humans. with a range of practical advantages such as their size and shorter lifespan, which makes animal research useful to the advancement of psychological knowledge, despite significant implications of their use.

This response was awarded Level 3 - 12 marks.

The AO1 was considered accurate, but not thorough, and read more like a list rather than a consideration showing knowledge and understanding. This was judged as Level 3.

The AO3 has a range, but not a wide range, of factors and there is quite a lot of repetition of generalisation and some areas that could have been developed further. This was judged as the top of Level 3.

Overall this was awarded Level 3, and was pushed to the top due to the AO3.

This question offers stretch and challenge and so candidates need to stay focused and show what they know whilst answering the question asked. It is an opportunity for them to demonstrate what they have learned over the course of their A-level studies.

Paper Summary

Based on their performance on this paper, candidates are offered the following advice:

- Continue to apply all ideas to the scenario provided in an explicit way. Engagement with the scenarios is what is required to prevent the response being deemed as generic.
- Consider the number of marks available and not the space provided (this is on the front of the examination paper), and consider how much is needed for the number of marks available.
- Reinforce the difference between a Type l and a Type ll error and what the peer review process involves.
- Use supporting or refuting evidence if asked how far a theory supports a given scenario to access AO3.
- Consider the weightings for 12, 16, and 20-mark questions and produce responses with this weighting in mind.
- Answer the question set and avoid lengthy rote-learned recall of studies in the review of studies section.

Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx

Pearson Education Limited. Registered company number 872828
with its registered office at 80 Strand, London WC2R 0RL.