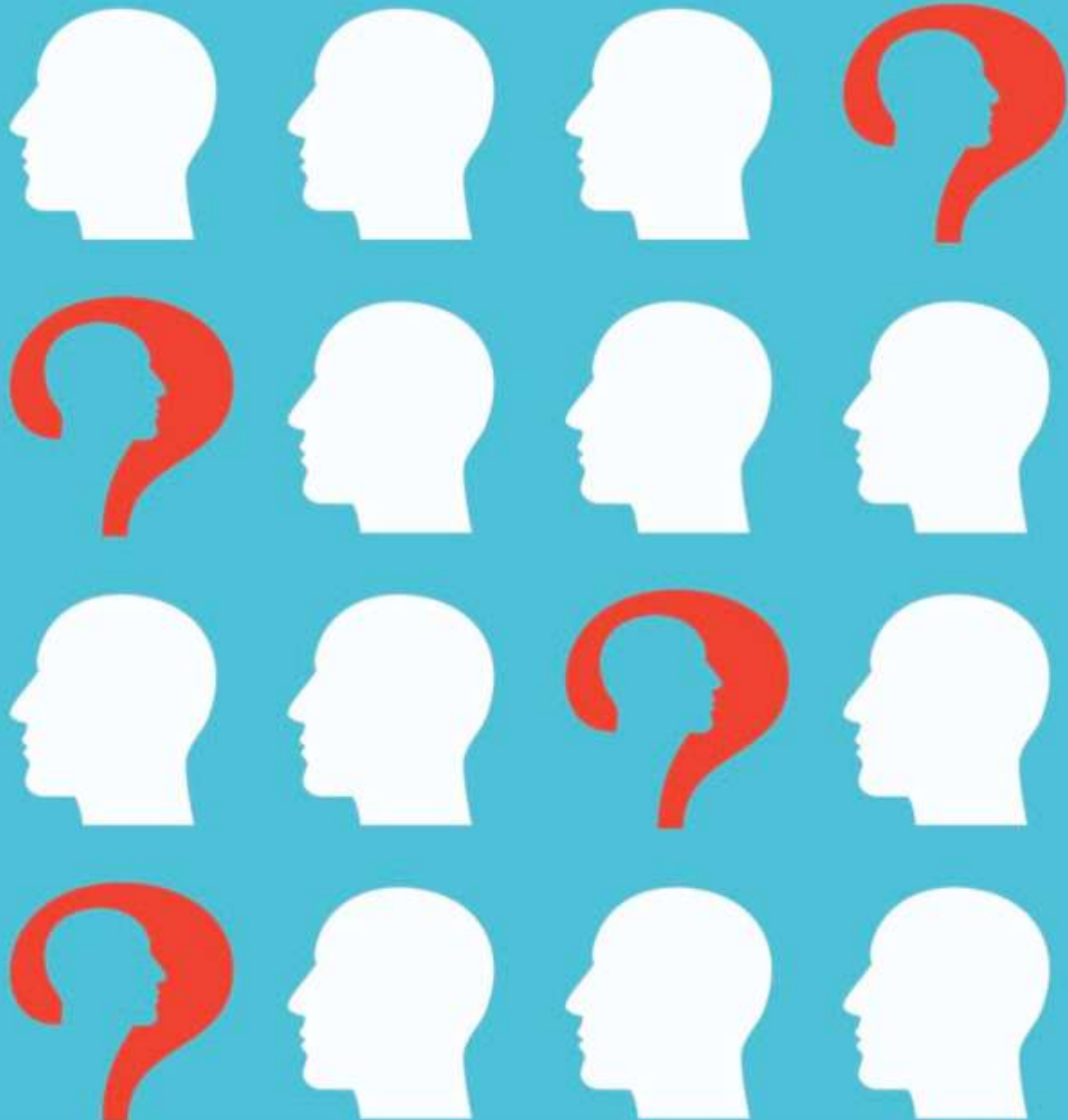


# Exam Questions

Answer Booklet

**EDEXCEL Psychology**





## Topics:

### **Psychological Skills**

- **Research Methods**
- **Review of Studies**
- **Issues & Debates**

# Paper 3

EDEXCEL Psychology



## Research Methods & Answers

1.

### Screen use and language skills

Researchers wanted to investigate the association between screen use and children's language skills.

They decided to conduct a review of studies, where they considered whether screen use was related to children's language skills.

More than 20 studies were included in the review with the following variables considered in relation to children's language skills:

- Quantity of screen use, which was the duration of time spent that parents reported their children watching television, movies or DVDs on devices (for example, tablets or televisions).
- Quality of screen use, which was the extent of exposure that parents reported their children had to educational programmes.
- Onset of screen use, which was the age that parents reported their children first began viewing screens.

The language skills of the children were measured using a Picture Vocabulary Test, which measured the extent to which a child understands language. The test had an average score of 100, with scores lower than 100 indicating less advanced language skills and scores higher than 100 indicating more advanced language skills.

(Source: adapted from Madigan et al. (2020))

- (a) Explain **one** conclusion that could be made from the data in **Figure 1** in terms of the quantity of screen use.

(2)

## Mark Scheme

(a) **AO2 (1 mark), AO3 (1 mark)**

Candidate responses have to be drawn from evidence presented in Figure 1.

One mark for identification of a conclusion (AO2).  
One mark for justification of the conclusion (AO3).

For example:

- There was a negative correlation between quantity of screen use and children's language skills (1), such as those studies with 3 hours of screen use having language skills scores of 120 or more compared to those with more than 11 hours of screen use having language skills scores of 50 or less (1).
- The more time children spend on screens, the weaker their language skills (1), which is shown by those with 12 hours screen use with 45 on language skills compared to those with 2½ hours of screen use scoring an average of 125 on the language test (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

(b) Calculate the percentage of studies that found children's language skills to be **greater** than the mean of 100, out of all the studies which considered quantity of screen use.

You must give your answer to **one** decimal place.

(1)

## Mark Scheme

(b) **AO2 (1 mark)**

One mark for correct percentage.

- 21.7% (1).

**Reject all other answers.**

There were 10 studies which considered the quality of screen use and language skills. The results concerning time spent viewing educational content are shown in **Table 1**.

<b>Study</b>	<b>Average time spent viewing educational content (hours per week)</b>	<b>Average language skills score</b>
<b>A</b>	1.5	121
<b>B</b>	0.1	49
<b>C</b>	2.2	138
<b>D</b>	0.3	64
<b>E</b>	0.2	55
<b>F</b>	1.6	112
<b>G</b>	0.7	88
<b>H</b>	0.5	76
<b>I</b>	1.1	102
<b>J</b>	0.9	98

**Table 1**

- (c) Explain **one** conclusion that could be made from the data in **Table 1** in terms of the quality of screen use.

(2)

## **Mark Scheme**

**(c) AO2 (1 mark), AO3 (1 mark)**

Candidate responses have to be drawn from evidence presented in Table 1.

One mark for identification of a conclusion (AO2).

One mark for justification of the conclusion (AO3).

For example:

- There was a positive correlation between time spent viewing educational content and language skills (1). This is supported by study A where the children had a higher score with 121 on language skill and had 1.5 hours of viewing educational content compared to a low score of 49 and 0.1 hours in study B (1).
- The more time children spent viewing educational content, the more advanced their language skills (1). For example, the highest average language score was 138 with the most amount of educational content being viewed of 2.2 hours compared to the lowest language score of 49 with the least time viewing educational content with 0.1 hours (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

There were 6 studies which considered the onset of screen use and language skills. The results concerning the age the children first began viewing screens are shown in **Table 2**.

Study	Average onset of screen use (in months)	Average language skills score
K	12	130
L	2	55
M	14	128
N	5	60
O	8	98
P	7	90

**Table 2**

(d) Explain **one** conclusion that could be made from the data in **Table 2** in terms of the onset of screen use.

(2)

### **Mark Scheme**

**(d) AO2 (1 mark), AO3 (1 mark)**

Candidate responses have to be drawn from evidence presented in Table 2.

One mark for identification of a conclusion (AO2).  
One mark for justification of the conclusion (AO3).

For example:

- There was a positive correlation between onset of screen use and children's language skills (1) which is supported by study L where the children had a lower score with 55 on language skill and started using screens at 2 months compared to a higher score of 130 and an average 12 month onset of screen use in study K (1).
- The earlier children use screens, the weaker their language skills (1). For instance, the highest language score of 130 has a 12-month onset of screen use compared to the lowest language score of 55 with the earliest onset of screen use as 2 months (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

- (e) All of the research studies considered by the researchers had been through the process of peer review.

Explain one strength and one weakness of using studies that had been through the peer review process in the screen use and language skills study.

(4)

### Mark Scheme

**(e) AO2 (2 marks), AO3 (2 marks)**

One mark for identification of a strength/weakness of using peer reviewed studies for their research (AO2)

One mark for justification of each strength/weakness of using peer reviewed studies for their research (AO3)

For example:

Strength

- Using 23 peer reviewed studies to consider the impact of screen use on the children's language skills will be more trusted by organisations, the government and the public (1) so this is more likely to lead to acceptance that screen use can impact child development and organisations and the public will be more willing to reduce non-educational screen use for their children (1).
- The 23 studies that have been through peer review will have been checked by experts within a relevant research field to children's language skills which gives credibility to the findings (1) because the peer reviewers can spot errors, omissions and make suggestions to improve the validity of the studies, so there will be greater trust in the conclusions into screen use and language skills in the children (1).

Weakness

- It may be that important research concerning the impact of screen use on children's language skills has been omitted due to possible publication bias (1) as there may be studies that found negative or non-significant findings regarding screen use that were never published and could have shown that overall that there was no relationship or a positive correlation between quantity of screen use and children's language skills (1).
- Despite the 23 studies about screen use and language being reviewed by external experts, there is still the possibility of errors which have been missed, reducing the credibility of the study (1) as any errors missed in the peer review process can mean any conclusions made about screen use and children's language skills could lead to real-world changes that could be ineffective or even harmful (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

(f) Explain **one** improvement that could have been made to the screen use and language skills study.

(2)

### **Mark Scheme**

**(f) AO2 (1 mark), AO3 (1 mark)**

One mark for identification of an improvement in relation to the screen use and language study (AO2)

One mark for justification of the improvement (AO3)

For example:

- The researchers could have included studies that used tests to measure language expression as well the understanding of language (1) which would have given them a more comprehensive understanding of the language skill of the children in relation to their screen use, increasing the validity and credibility of the findings (1).
- The researchers could have used studies that directly monitored the children's screen use over the course of the study (1) which would have given them a more objective measure of the actual time spent using screens as the parent reports could have been biased, increasing the validity and credibility of the findings (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

2.

### Helping behaviour study

Researchers wanted to see whether being in close proximity to luxury goods would influence helping behaviour.

80 participants (40 males and 40 females) were either seen to be exiting a luxury shop in a prestigious area of Paris (20 males and 20 females) or were passers-by on an ordinary street in Paris with no shops (20 males and 20 females).

A female confederate was instructed to use crutches and carry a bottle of water in one hand and a packet of sweets in the other hand. When a participant was approximately five metres away, the confederate was required to 'accidentally' drop her bottle of water and packet of sweets and try to pick them up.

The participants, who were estimated to be aged between 20–70 years old, were judged to have helped the confederate when they offered to pick up the items or picked them up without asking. The confederate recorded the participant's sex, estimated age, whether they helped or not, and the location (outside the luxury store or on the ordinary street with no shops).

(Source: adapted from Lamy et al. (2016))

- (a) The researchers in the helping behaviour study used opportunity sampling to recruit the participants for their study.

Explain **one** strength and **one** weakness of using opportunity sampling for the helping behaviour study.

(4)

**Mark Scheme**

**(a) A02 (2 marks), A03 (2 marks)**

One mark for identification of a strength/weakness of using opportunity sampling for the helping behaviour study (A02)

One mark for justification of the strength/weakness of using opportunity sampling for the helping behaviour study (A03)

For example:

Strength

- By using the people exiting the luxury shops or on the ordinary street that were available at the time means that this method is very convenient (1) because the participants are readily available meaning that sampling people to check their helping behaviour does not take excessive time or effort compared to other sampling techniques (1).

Weakness

- As they have only used people exiting the luxury shops or on the ordinary street at the time, the participant sample may be biased and unrepresentative (1) because the people shopping or walking by may have been particularly unhelpful and so the conclusions about helpfulness would not be generalisable to the target population of people in that area (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

**Table 3** shows the data collected by the confederates regarding the age of the participants for the helping behaviour study.

<b>Estimated age of the participants</b>	<b>Did help the confederate</b>	<b>Did not help the confederate</b>
<b>20–35 years</b>	51%	49%
<b>36–50 years</b>	62%	38%
<b>56–70 years</b>	68%	32%

**Table 3**

(b) Explain **one** conclusion you can make using the data in **Table 3**.

(2)

**Mark Scheme**

**(b) AO2 (1 mark), AO3 (1 mark)**

Candidate responses have to be drawn from evidence presented in Table 3.

One mark for identification of a conclusion (AO2).  
One mark for justification of the conclusion (AO3).

For example:

- Older participants were more likely to help the confederate than the younger participants (1) because 68% of the 56-70 year olds helped compared to 51% of the 20-35 year olds (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

**Table 4** shows the data collected regarding the participants' location.

	<b>Did help the confederate</b>	<b>Did not help the confederate</b>
<b>Luxury shop (N = 40)</b>	14	26
<b>Ordinary street with no shops (N = 40)</b>	31	9

**Table 4**

(c) Explain one conclusion you can make using the data in Table 4.

(2)

**Mark Scheme**

**(c) A02 (1 mark), A03 (1 mark)**

Candidate responses have to be drawn from evidence presented in Table 4.

One mark for identification of a conclusion (A02).  
One mark for justification of the conclusion (A03).

For example:

- The participants exiting the luxury shop were less helpful than those on the ordinary street with no shops (1) because only 14/40 helped near the luxury shop compared to 31/40 on the ordinary street which is far more (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

**Table 5** shows the data collected regarding the participants' gender.

	<b>Did help the confederate</b>	<b>Did not help the confederate</b>
<b>Male (N = 40)</b>	20	20
<b>Female (N = 40)</b>	25	15

**Table 5**

- (d) The researchers in the helping behaviour study decided to carry out a chi-squared test on their data from **Table 5**. They found an observed/calculated value of 1.27 for a one-tailed (directional) test at the 5% level of significance when  $df=1$ .

Explain what this shows in terms of the helping behaviour of the participants in the study.

(2)

### Mark Scheme

**(d) AO2 (1 mark), AO3 (1 mark)**

One mark for comparing the observed/calculated value with a relevant critical value (AO2)

One mark for justification of what this means for the findings of the study (AO3)

For example:

- The calculated value (1.27) is less than the critical value (2.71) at the 5% level of significance for a one-tailed test (1). This means that there was no significant difference between the helping behaviour of the males and females in the study (1).

**Look for other reasonable marking points.**

- (e) State **two** reasons why the researchers in the helping behaviour study used a chi-squared test to analyse their data in **Table 5**.

(2)

### Mark Scheme

**(e) AO2 (2 marks)**

One mark for each appropriate statement for using the chi-squared test in the helping behaviour study for the data in Table 5.

For example:

- They are looking for a difference between the males and females in terms of helping behaviour (1).
- The data was nominal because they were placed into one of four categories (1).

**Look for other reasonable marking points.**

- (f) The researchers collected quantitative data when recording whether the participant would help the confederate or not for the helping behaviour study.

Explain one weakness of using quantitative data for the helping behaviour study.

(2)

### **Mark Scheme**

**(f) AO2 (1 mark), AO3 (1 mark)**

One mark for identification of a weakness of using quantitative data in the helping behaviour study (AO2)

One mark for justification of the weakness (AO3)

For example:

- Using the number of people helping or not helping only gives restricted information about the helping behaviour of the participants which lacks validity (1) because they cannot know the underlying reasons for their behaviour so may not truly represent the helpfulness of the participants in the study as they may have normally helped but were just in a rush so did not help (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks**

- (g) The researchers used a field experiment for the helping behaviour study.

Explain one weakness of using a field experiment for the helping behaviour study.

(2)

## Mark Scheme

### **(g) AO2 (1 mark), AO3 (1 mark)**

One mark for identification of a weakness of using a field experiment in the helping behaviour study (AO2)

One mark for justification of the weakness (AO3)

For example:

- Using a field experiment in the natural setting of Paris may have extraneous variables that affected the participant level of helpfulness so could lack validity (1) because it could be that situational variables such as the presence of others near the confederate could have influenced whether the participant helped them so may not represent their usual behaviour (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks**

### 3.

Preschool children and PE study

A researcher wanted to investigate the role of the teacher in preschool children's activity levels.

They visited different preschools in Hong Kong and observed a physical education (PE) lesson with children at preschool, aged 4 to 6 years old.

The PE lesson consisted of a highly structured 30-minute lesson which was repeated over 4 consecutive weeks. During the first two lessons, the children learned the routine and during the final two lessons, the children practised the routine. The researchers observed the children in the final lesson on the fourth week.

The teachers were split into two groups:

- More active – the teacher took more than 900 steps per lesson and gave praise throughout for physical activity.
- Less active – the teacher took less than 900 steps per lesson and did not give praise for physical activity.

The teachers and the children had their body weight and height measured before the study to determine their body mass index (BMI). The more active teachers had a lower BMI, but there were no significant differences in the children.

To measure the physical activity, a pedometer was used for teachers and children. A pedometer records the number of steps taken.

(Source: adapted from Cheung (2020))

The results of the preschool children and PE study are shown in **Table 5**.

		Average number of steps			
		More active male teacher with praise	More active female teacher with praise	Less active male teacher with no praise	Less active female teacher with no praise
Overall		1560	1555	765	760
Gender	Boys	1810	1600	1010	810
	Girls	1310	1510	520	710

**Table 5**

(a) Explain **one** practical application of the preschool children and PE study, using the data from Table 5.

(2)

### **Mark Scheme**

**(a) AO2 (1 mark), AO3 (1 mark)**

One mark for identification of an appropriate practical application of the preschool children and PE study (AO2)

One mark for justification of the practical application (AO3)

For example:

- A practical application is ensuring teachers leading a PE class are trained to show higher levels of activity to encourage the pupils to also be more active (1) because the preschool children had 795 more steps on average with the more active teacher than with the less active teacher (1).
- A practical application is ensuring teachers leading a PE class are trained to give higher levels of praise to encourage the pupils to be more active (1) because the preschool children had an average of 1558 steps with the teachers who gave them praise compared to an average of 763 steps with the teachers that did not praise them (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

- (b) Using research evidence, explain how far social learning theory can account for the findings of the preschool children and PE study.

(6)

### **Mark Scheme**

**(b) AO2 (3 marks), AO3 (3 marks)**

Up to three marks for application of social learning theory to the findings of the preschool children and PE study (AO2).

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

**Application of learning theories to the study (AO2)**

For example:

- Social learning theory would suggest the children considered the teacher as a role model which accounts for the both the boys and girls having more steps with the more active teacher, 1560 and 1555 respectively, and less steps with the less active teacher, 765 and 760 respectively (1).
- Social learning theory would state the children were observing and imitating their teacher through motor reproduction which accounts for the difference in activity levels in the more active teacher class with 1560 or 1555 steps compared to the less active teacher class with 765 or 760 steps (1).
- The higher amount of physical activity in the more active teacher class, with 1560 or 1555 steps than the less active class, 765 or 760, could be accounted for by external motivation as the teacher was praising the children in the more active class and not in the less active class (1).
- The children in the more active teacher class may have been internally motivated to continue with higher physical activity in the final lesson and show more steps as they experienced beneficial effects of the exercise over time compared to those in the less active teacher class who had less steps on average (1).
- The boys had higher physical activity when the teacher was male with 210 steps more in the more active class and 200 in the less active class, which was similar for girls, showing that the boys identified with the male teacher and the girls the female teacher more as role models (1).

### **Judgement/justification of how far research evidence can account for the findings of the study (AO3)**

For example:

- Bandura, Ross, and Ross (1961) showed children were likely to learn to imitate a role model acting aggressively or non-aggressively towards a Bobo doll and this could be the same for the preschool children copying the activity levels of their teacher leading the PE class (1).
- Bandura (1965) found that when offering a positive reinforcement to children for aggressive acts they all significantly increased aggression regardless of whether they had seen the model rewarded, punished, or with no consequence so shows the power of reinforcement and supports the influence of praise in the more active class increasing physical activity levels.
- Studies, such as Mazur (1983), have linked testosterone to aggression, so it may have been that biological factors were at least partly responsible for the more active children, such as if some had been exposed to greater levels of testosterone in the womb, so were more competitive than children who were less active (1).
- Bandura, Ross and Ross (1961) found some support for the influence of the gender of the role model, with boys who viewed the male model displaying more physical and verbal aggression and girls who viewed the female role model displaying more imitative verbal aggression, so could provide some support the boys being more active with a male teacher and girls more active with a female teacher (1).

**Look for other reasonable marking points.**

**Answers must relate to the scenario.**

**Generic answers score 0 marks.**

4.

Evaluate Rosenhan (1973) and Raine et al. (1997) in terms of ethical issues.

(16)

**Mark Scheme**

**AO1 (6 marks), AO3 (10 marks)**

**AO1**

- When carrying out research in psychology, there are ethical issues to consider, such as the BPS code of ethics and conduct (2009) which requires psychologists to show responsibility by protecting the participants in their study.
- Raine et al. (1997) used 82 participants, including 41 murderers not guilty by reason of insanity (NGRIs) and 41 control participants.
- Participants in Raine et al. (1997) carried out a continuous visual performance task for 32 minutes and then had a PET scan afterwards.
- In Rosenhan (1973) there were eight pseudopatients who went to 12 hospitals across the USA which varied with age and funding.
- The pseudopatients in Rosenhan (1973) were all asked to say they could hear the same words 'empty', 'hollow', and 'thud' when they went to the hospital.
- When at the hospital, the pseudopatients in Rosenhan (1973) were asked to record the behaviour of the staff and other patients in the hospital.

### A03

- The participants in Raine et al.'s (1997) study who had schizophrenia were kept off their medication which whilst they consented could be seen as unethical as it could have caused them to have more distressing symptoms.
- Controls in Raine et al. (1997) participated under protocols and consent forms approved by the Human Subjects Committee of the University of California, Irvine, so there was full informed consent obtained.
- As the murderers were NGRIs, there could be a question of how far they were aware of their ethical rights and understood the procedure of Raine et al. (1997), questioning if they were able to give fully informed consent.
- The continuous performance task given to the participants in Raine et al.'s (1997) study did not cause any distress to the murderers and would not therefore breach ethical principles such as the BPS code of ethics and conduct (2009) in terms of protecting them from harm.
- Participants in Raine et al. (1997) only underwent a single PET scan, so the possible impact on their health and well-being as a result of their exposure to the radioactive tracer would be negligible, protecting them from long-term harm.
- There are potential ethical concerns of governments using Raine et al.'s (1997) findings to impose brain scans on wider society as they may claim they could prevent potential crimes as some brain differences between the murderers and controls were found in the study.

- Asking healthy people to lie about having mental health symptoms when presenting themselves means that the doctors were deceived as they were under the impression the pseudopatients were telling the truth.
- Rosenhan (1973) took steps to protect the identity of the hospitals used and the pseudopatients so he did try to ensure confidentiality when conducting his study.
- Staff at the hospitals in the study were reported to have ignored patients and dehumanised patients, which may have damaged the psychological well-being of staff in other hospitals and those that were innocent of this claim.
- The abuse Rosenhan's (1973) research claimed to be occurring in mental health hospitals may have deterred people requiring help and support from seeking it, fearing they would be abused, so could have inflicted harm on wider society.
- There have been suggestions that when implementing his study Rosenhan may have removed data from a pseudopatient that would have shown positive treatment in the hospitals (Cahalan, 2019) so his reported findings may have created unnecessary harm to staff at hospitals.
- Rosenhan later told a research and teaching hospital that he would send more pseudopatients over a period of 3 months but none were sent, deceiving the hospitals and potentially causing harm to real patients who were treated suspiciously due to Rosenhan's claim.

**Look for other reasonable marking points.**

Level	Mark	Descriptor
<b>AO1 (6 marks), AO3 (10 marks)</b>		
<b>Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge &amp; understanding is capped at maximum 6 marks.</b>		
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)

Kristie is at school in her biology class, sitting next to her friend Dominique. Dominique regularly cheats on class tests and Kristie has witnessed this but always does her tests honestly. The teacher announces the class will have a progress test the next week.

Dominique is very popular and frequently tells other students what to do and they always follow what she says. Recently, she told Kristie to trip up another student as they were going down the stairs and she did so. As a result, Dominique invited Kristie to an exclusive party.

Dominique sees the biology teacher leave a copy of the forthcoming progress test on her desk as they leave the lesson. When they are alone, Dominique tells Kristie to sneak into the biology teacher's classroom during lunchtime and take photos of the forthcoming progress test. She tells Kristie that if she does, she will be rewarded like she was previously.

Kristie sneaks into the classroom and gets caught when taking photos of the test by the biology teacher. When asked why she has done this, Kristie says she was only following what another student told her to do.

- (i) Evaluate the extent to which human behaviour, such as the events at Kristie's school, can be explained by social psychology.

You must make reference to the context in your answer.

(12)

### Mark Scheme

#### **AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)**

##### **AO1**

- Agency theory states that individuals are more likely to obey people they perceive to be an authority figure when in an agentic state.
- An authoritarian personality is where someone who has experienced harsh parenting has an admiration of rules and respects authority so is more likely to obey authority figures.
- Social impact theory states the closeness of individuals acting on a target source can influence the likelihood a behaviour is to be carried out.
- Social identity theory suggests that as part of social identification people assume the behaviours and norms of their in-group and become prejudiced to their out-groups.

## AO2

- Kristie may have shifted into an agentic state when Dominique told her to sneak into the teacher's classroom and take photos of the forthcoming test and did so therefore obeying her command.
- It may be that Kristie has an authoritarian personality, as she could have experienced harsh parenting, so was more likely to obey authority figures, so could explain why Kristie obeyed Dominique's order for her to sneak into the teacher's classroom to take photos of the test.
- Dominique told Kristie directly in a one-to-one situation to sneak into the teacher's classroom to take photos of the test, so this would have a large impact on her in how she would respond due to immediacy of her as a social source.
- Kristie may see Dominique and the other students as part of her in-group and the teachers and other staff at school as her out-groups, so it may be that following the norms of the student group at her school is to steal a test, rather than study for it, which would be advocated by the teachers in the out-group.

## AO3

- Milgram's research into obedience showed that a majority of people were willing to obey an authority figure who was in a lab coat (uniform) to give a lethal electric shock when told to do so, supporting the influence of legitimate authority figures on individuals such as Kristie.
- Elms and Milgram (1966) found that fully obedient individuals scored higher on the 'F-scale', which measures levels of authoritarianism, compared to defiant participants, so could support Kristie being more obedient to Dominique if she had this personality type.
- Milgram, Bickman, Berkowitz (1969) showed support for fewer individuals having a larger influence on a target source, but the theory does not consider the impact of personality so it could be personality factors affecting Kristie into obeying Dominique's command.
- Operant conditioning suggested people repeat behaviours when they are given a positive stimulus, and could also explain why Kristie snook into the teacher's classroom to take photos of the test as she wanted a reward as she had previously from Dominique, so social factors may not be a complete explanation for human behaviour.

**Look for other reasonable marking points.**

Level	Mark	Descriptor
<b>AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)</b>		
<b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs application vs evaluation/conclusion in their answer.</b>		
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)

- (ii) Assess how psychological understanding has developed over time, with reference to any two of the following applications to psychology:
- Clinical psychology
  - Criminological psychology
  - Child psychology
  - Health psychology.

(20)

### Mark Scheme

#### **AO1 (8 marks), AO3 (12 marks)**

##### **AO1**

- The DSM has changed over time, with the most recent DSM-5, by modifying diagnostic features to account for evidence regarding developments in mental health issues.
- Exposure to Western television due to technological advances has increased over time, which has been linked to increased dissatisfaction over body image and weight.
- Technological advances in brain scanning have led to the development of EEG, CT and PET scans, with the later invention of fMRI scans which are still being refined to improve its temporal precision.
- Research conducted in the 1960s showed role models, including those on television, could increase aggressive behaviour through imitation and more recent research has shown humanness to be a factor in violence.
- Methods used to study genetics has developed over time, with family and twin studies, then adoption studies and more recently methods such as Genome-Wide Association Studies (GWAS) and studies to identify copy number variants (CNVs).
- Over time knowledge of mental health conditions has developed, with more recent research evidencing the role of neurotransmitters beyond dopamine, which was the focus of the original neurotransmitter hypothesis for schizophrenia.
- Memory research has had advancements over time which has helped develop knowledge of how errors in recall can occur and this has helped the Police and courts to understand the inaccuracy of memory and how to improve procedures.
- In child psychology, over time knowledge has developed about attachment which has led to influences on day care and the understanding of how deprivation could potentially affect a child's development.

### A03

- The DSM-5 has consolidated autistic disorder, Asperger's disorder and pervasive developmental disorder into autism spectrum disorder to represent a single continuum of mild to severe impairments, showing understanding of mental health issues has changed over time.
- The latest scientific findings from research in genetics and neuroimaging has been integrated into the DSM-5 to improve clinicians' ability over time to identify diagnoses based on common causes.
- Becker et al. (2002) found key indicators of disordered eating were significantly more prevalent in Fijian women following exposure to Western television over time, compared to only one reported case of anorexia by the mid-1990s.
- Brain-scanning techniques are used in clinical psychology and can now show both the structure and function of the brain of mental health patients, in contrast to only the structure or activity of the brain with CT or PET scanning.
- The invention of fMRI has enabled children in child psychology and pregnant women to be scanned without the exposure to radiation of older imaging techniques, making the procedure safer and giving a greater understanding of human behaviour and development.
- Bandura's research showed children imitated role models to act aggressively towards a Bobo Doll, with more recent research such as Bastian et al. (2011) suggesting violent video games diminish humanity which has been shown to increase violence and has developed psychological understanding of aggression.

- Jamieson and Romer (2021) investigated US television and gun violence between 2000 and 2018 and showed a positive correlation between TV violence involving guns and actual murders due to firearms, especially amongst youths, suggesting violent media may be contributing to acceptance of guns for violent purposes.
- Research in the 1960s using twins suggested there was genetic influence on the development of schizophrenia (e.g. Gottesman and Shields, 1966), and Tiwari et al. (2010) reviewed evidence from family, twin, and adoption studies over time and suggested a strong genetic component, with estimated heritability of 81%.
- More recent genetic methods have tried to build on previous findings for the biological basis of mental health issues, with some identifying specific genes or copy number variants, such as 22q11 deletion, the RELN gene, and Xq23 (see Tiwari et al., 2010) that have been linked to mental health conditions such as schizophrenia.
- The review by Carlsson et al. (2000) considered studies carried out over time on the role of neurotransmitters beyond dopamine being involved in schizophrenia, including glutamate, serotonin and GABA and has enabled a more complete understanding of the role of neurotransmitters in the condition.

- In the 1950s typical antipsychotics were used such as chlorpromazine with the later development of atypical drugs such as clozapine in the 1960s (which were introduced clinically in the 1970s) and more recently there have been third generation drugs being tested involving glutamate, showing the progression of treating mental health over time.
- Barlett's (1932) work showed how memory is reconstructive in nature, with Loftus and Palmer (1974) showing evidence that leading questions could affect memory of eyewitnesses, and with more recent research in this area, a better understanding of the factors affecting eyewitness testimony have been developed over time.
- Bowlby's (1944) '44 juvenile thieves' study suggested that deprivation affected their later behaviour and has influenced psychological research over time to investigate the possible influence of deprivation on the child, which has been used in areas such as day care where findings about the outcomes have been mixed in terms of social, emotional and cognitive development.

**Look for other reasonable marking points.**

