



Oxford Cambridge and RSA

AS Level Psychology

H167/02 Psychological themes through core studies

Thursday 17 May 2018 – Afternoon

Time allowed: 1 hour 30 minutes



No additional materials required for this Question Paper.



First name	StemUp Model Solution									
Last name										
Centre number						Candidate number				

INSTRUCTIONS

- Use black ink.
- Complete the boxes above with your name, centre number and candidate number.
- Answer **all** the questions.
- Write your answer to each question in the space provided. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- Do **not** write in the barcodes.

INFORMATION

- The total mark for this paper is **75**.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document consists of **12** pages.

SECTION A – Core studies

Answer **all** the questions.

1 (a) From Bandura et al.'s study into the transmission of aggression:

(i) Outline how participants were pre-rated for aggression in the nursery.

Before the experiment each child was rated for aggression by the experimenter and a nursery school teacher who knew them well. They were scored on four 5-point rating scales measuring physical aggression, verbal aggression, aggression towards objects and aggressive inhibition. [2]

(ii) Explain why the researchers pre-rated participants for aggression before placing them into groups for the experiment.

The ratings were used to match the children on aggression. They were put into triplets of similar aggression and randomly assigned to the two experimental groups or the control group, so no group was more aggressive than another. This controlled for pre-existing aggression as a confounding variable. [2]

(b) Describe what the findings from Chaney et al.'s Funhaler study show us about the development of behaviour.

The study shows that behaviour can develop over time through operant conditioning, specifically positive reinforcement. The Funhaler rewarded correct inhaler use with a spinning disc and whistle, so the pleasant consequences made the children more likely to repeat the behaviour. After only two weeks medical compliance was much higher with the Funhaler than with the standard spacer device, showing children can learn health-enhancing behaviours when they are reinforced by external influences. [3]

2 (a) From Milgram's study of obedience:

- (i) Outline how participants were gathered for the study.

Milgram gathered participants through a newspaper advertisement and direct mail solicitation asking for male volunteers to take part in a study of memory and learning at Yale University. The 40 self-selected volunteers were paid \$4.50 just for turning up. [2]

- (ii) Explain
- one**
- way the sample used in this study may be considered biased.

The sample was androcentric because all 40 participants were men. This means the findings cannot be generalised to women, who might respond differently to pressure from an authority figure, so we cannot say whether women would have obeyed to the same extent. [2]

- (b) Outline
- one**
- conclusion that can be drawn from Bocchiaro et al.'s study into disobedience and whistleblowing.

One conclusion is that people underestimate how likely they and others are to obey an unjust authority. Only 3.6% of the comparison group said they themselves would obey, yet in reality 76.5% of participants obeyed and wrote the letter encouraging students to join the sensory deprivation study. [2]

3 (a) From Freud's study of Little Hans:

Suggest **one** strength of studying just one individual.

A strength is that a large amount of rich, in-depth qualitative data can be gathered over time. This allowed Freud to follow Hans as he passed through the phallic stage and to examine his fears, fantasies and phobia of horses in detail to test his theory of psychosexual development. [2]

(b) How does Baron-Cohen et al.'s study into autism in adults link to the key theme of understanding disorders?

The study helps us understand autism as a cognitive disorder involving a lack of theory of mind. Adults with autism or Asperger syndrome scored significantly worse on the Eyes Task (16.3 out of 25) than the normal adults (20.3) and adults with Tourette syndrome (20.4), showing a specific impairment in mind-reading. [2]

4 (a) From Loftus and Palmer's first experiment into eyewitness testimony:

Identify the independent variable (IV) **and** the dependent variable (DV).

IV: the verb used in the critical (leading) question about the speed of the cars. Each group was asked "About how fast were the cars going when they smashed / collided / bumped / hit / contacted each other?" with one of the five verbs. DV: the participants' estimate of the speed of the vehicles in miles per hour. [3]

(b) Identify the research design used in Grant et al.'s study into context-dependent memory.

Independent measures (independent groups) design. [1]

- 5 Describe how visual information was presented to participants in Sperry's study into the effects of hemisphere disconnection.

The participant sat in front of an upright translucent screen with one eye covered and centred his gaze on a fixed point in the middle of the screen. Visual stimuli such as words, pictures or symbols on 35-millimetre transparencies were arranged in a standard projector and back-projected onto the screen using a tachistoscope. Each stimulus was flashed for one tenth of a second or less so the participant had no time to move his eyes. It appeared either to the left or right of the fixation point so it reached only one visual field (left visual field to the right hemisphere or right visual field to the left hemisphere), or sometimes both fields at once. [4]

Turn over for the next question

SECTION B – Areas, perspectives and debates

Answer **all** the questions.

- 6 (a) Outline **one** principle or concept of the behaviourist perspective.

A key principle is that the majority of behaviour is learned from the environment after birth, for example through conditioning or by observing and imitating the people around us. Because behaviour is learned, undesirable behaviours can also be unlearned. [2]

- (b) Briefly outline why Bandura et al.'s study into the transmission of aggression can be viewed from the behaviourist perspective.

The behaviourist perspective holds that most behaviour is learned from the environment after birth through conditioning or observation. Bandura et al. showed that children learned aggression by observing a significant other: children who watched an adult model hit and kick the Bobo doll later imitated far more physical and verbal aggression than those who saw a non-aggressive model or no model, regardless of their initial aggression ratings. This shows aggressive behaviour is learned, not innate. [3]

- (c) Describe **two** strengths of the developmental area. Support your answer with examples from relevant core studies.

One strength is that research in the developmental area has useful practical applications in the real world, such as in health care and education. Chaney et al. showed that the Funhaler, which positively reinforces correct inhaler use, raised medical compliance in young asthmatics in only two weeks, so it could be used to improve children's health. A second strength is that the area shows how experience shapes behaviour, informing the nature-nurture debate. Bandura et al. found children imitated an aggressive adult model, which suggests parents and the media should present pro-social role models. [4]

- (d) Describe **two** ways in which the developmental area is similar to the area of individual differences. Support your answer with examples from relevant core studies.

One similarity is that both areas collect objective, quantitative data under controlled conditions. In the developmental area Chaney et al. measured how many of the required four or more breath cycles asthmatic children achieved with the Funhaler compared with the standard spacer. In the individual differences area Baron-Cohen et al. scored adults out of 25 on the Eyes Task, finding the autism/AS group averaged 16.3 compared with 20.3 for normal adults.

A second similarity is that research in both areas can have small or unrepresentative samples, which limits generalisability. Bandura et al. studied 72 children drawn only from the Stanford University nursery school, who may not represent children elsewhere. Similarly Freud studied just one boy, Little Hans, whose extreme phobia of horses is not typical of young boys, so neither study's findings can easily be generalised. [6]

Turn over for the next question

- (e)* Discuss the usefulness of psychological research. Support your answer with examples from relevant core studies from the area of individual differences.

Psychological research is useful when it increases our understanding of why people behave as they do and when it leads to practical applications that improve people's lives. However its usefulness is limited when the methods used mean the findings may not be valid or generalisable.

Research in the individual differences area can be very useful because it furthers understanding of disorders. Baron-Cohen et al. found that high-functioning adults with autism or Asperger syndrome scored significantly worse on the Eyes Task (mean 16.3 out of 25) than normal adults (20.3) or adults with Tourette syndrome (20.4), showing they have a specific deficit in theory of mind. This is useful because it explains the social difficulties people with autism experience and suggests practical ways forward, such as teaching them to use alternative cues to read emotions, or teaching those who interact with them to give clear verbal signals of how they feel. Freud's study of Little Hans was also useful in that it provided support for his theory of psychosexual development and the Oedipus complex, and his methods of analysing dreams and fantasies led to psychoanalysis, a therapy still used today.

However, the usefulness of this research can be questioned. Baron-Cohen et al.'s Eyes Task used black and white photographs of only the eye region shown for three seconds, which lacks ecological validity because in real life we read emotions from whole faces, voices and context, so the findings may not reflect everyday social understanding. Freud's study was a case study of one boy, who was unrepresentative because few children have such an extreme phobia, and the data was gathered mostly by Hans's father, a supporter of Freud, so it was subjective and open to bias. Freud's interpretations cannot be tested scientifically, so the findings are of limited use in explaining other children's phobias.

Overall, research from the individual differences area is useful because it increases understanding and suggests applications, but its usefulness depends on how valid and representative the research is.

[10]

SECTION C – Practical applications

Answer **all** the questions.

Eyewitness testimonies continue to be unreliable

Police reports following a violent attack on an individual in a crowded train station have shown that eyewitness testimony may not be as reliable as it seems.

Eyewitnesses were later interviewed as a group at a local police station the day after the incident. During the interview many of the witnesses showed extreme stress when asked to recall details of the event. Eyewitnesses reported that they had seen a man vault over a ticket barrier and run away from security officers in an attempt to escape by boarding a waiting train. The suspect was also reported to have been wearing a bulky jacket that was thought to have concealed a weapon. A man was later arrested and charged with assault.

During the suspect's trial, it became clear that eyewitness testimonies had been extremely inaccurate. The suspect had actually been wearing a light denim jacket, had walked through the barriers having bought a bag of sweets which he had tucked into one of his jacket pockets, and had only started running when he saw that his train was about to leave. No security officers had been on the platform at the time. The case was dismissed as it was found that the police had used leading questions when interviewing eyewitnesses.

Based on an article found on the BBC News website.

- 7 (a) Suggest why this article can be placed in the cognitive area.

The article is about memory, which is a cognitive process. The eyewitnesses had to remember what they saw during the violent attack in the crowded train station, and their recall was distorted by the leading questions the police used in the interviews. [2]

- (b) Identify **one** psychological issue raised by the article. Support your answer with evidence from the article.

One issue is that leading questions can distort memory so eyewitness testimony becomes inaccurate and cannot be relied on in court. In the article the witnesses recalled the man vaulting a ticket barrier in a bulky jacket and running from security officers, when in fact he had walked through the barriers wearing a light denim jacket and no officers were on the platform. The case was dismissed because the police had used leading questions when interviewing the eyewitnesses. [3]

- (c) Briefly outline **one** of the experiments from the core study into eyewitness testimony by Loftus and Palmer **and** explain how it could relate to the article.

In Loftus and Palmer's first experiment 45 students watched seven short film clips of car accidents and after each answered a questionnaire containing the critical question "About how fast were the cars going when they smashed / collided / bumped / hit / contacted each other?" The verb changed the estimates: "smashed" gave a mean of 40.8 mph while "contacted" gave 31.8 mph, showing that leading questions distort memory. This relates to the article because the police used leading questions when interviewing, which led witnesses to inaccurately recall a bulky jacket and a vault over the barrier, so the case was dismissed. [4]

- (d) Using your psychological knowledge, suggest how eyewitness testimony could have been improved in relation to the incident reported in the article.

Firstly, the police officers should be trained not to use leading questions, because Loftus and Palmer showed that the wording of a question can alter what a witness remembers. Training could involve practice interviews using neutral, open questions such as "Describe what the man was wearing" rather than "Was he wearing a bulky jacket?", with the interviews recorded so officers get feedback. Secondly, the witnesses should have been interviewed individually rather than as a group. Social learning research shows that what we see and hear from others influences our behaviour, so one witness's claim that the man vaulted the barrier could have become part of everyone's memory. Witnesses could be kept apart in a waiting room and interviewed one at a time by an officer. Thirdly, witnesses should be interviewed at the train station where the attack happened rather than at the police station the next day. Grant et al. showed that recall is better when the context at retrieval matches the context at learning, so returning each witness to where they stood on the platform, as soon as possible after the event, would provide cues that improve the accuracy of their recall.

[8]

(e)* Evaluate the suggestions you made in 7(d) in relation to the incident reported in the article.

Training officers not to use leading questions would be useful because it is supported by Loftus and Palmer's laboratory evidence that post-event information distorts memory, so witnesses in the train station case would have been more likely to recall the denim jacket accurately. However, officers develop schemas about what an attacker looks like and may ask leading questions without realising, so training may have limited effectiveness. Practice interviews also lack ecological validity compared with a real, stressful interview, and training is time-consuming and expensive for police forces with reduced numbers.

Interviewing witnesses individually is appropriate because it removes the influence of other witnesses and would have stopped one person's claim about security officers spreading to the group. A weakness is the practical implication: a crowded train station produces many witnesses, so finding enough officers and rooms to interview them separately is difficult. There is also an ethical concern, as isolating already stressed witnesses may increase their distress.

Interviewing at the scene is supported by Grant et al.'s evidence on context-dependent memory, so it should be effective. However, it is not always practical because the platform was busy and trains were running, and returning to the scene of a violent attack could re-traumatise the witnesses, so the benefits must be balanced against their wellbeing. [8]

END OF QUESTION PAPER

This image shows a blank sheet of white paper designed for handwriting practice. It features a solid vertical line on the left side, creating a narrow margin. The rest of the page is filled with evenly spaced horizontal dashed lines, providing guides for letter height and placement. There are no other markings or text on the page.

stemup.co.uk