



AS Level Psychology

H167/02 Psychological themes through core studies

Time allowed: 1 hour 30 minutes

* 7 6 5 9 1 7 7 4 6 8 *



Please write clearly in black ink. **Do not write in the barcodes.**

--	--	--	--	--

--	--	--	--

First name(s) StemUp Model Solution

Last name

- Use black ink.
- 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.

- 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) Describe the background to Milgram's study into obedience.

During the Second World War millions of innocent people were systematically slaughtered on the command of Hitler and the Nazis, and this could only happen on such a scale because large numbers of ordinary people obeyed orders from authority figures. Milgram believed obedience is so deeply ingrained that it can override morals, ethics and empathy, even when the commands are destructive and immoral. He therefore aimed to test how far an individual would go in obeying an authority figure when the command breached the moral code that you should not hurt another person against their will. [4]

- (b) (i) Describe the sample used in Bocchiaro et al.'s study into whistleblowing.

Bocchiaro et al. used a volunteer sample of 149 undergraduate students from VU University in Amsterdam, in the Netherlands (160 took part but 11 were removed). There were 96 women and 53 men with a mean age of 20.8 years, and they were paid or given course credit. [2]

- (ii) Outline **one** way in which Bocchiaro et al.'s study showed sampling bias.

The sample was gender biased because 96 of the 149 participants were women and only 53 were men. This means the low rates of whistleblowing found may not fully represent how men in the Netherlands would have responded to the unethical sensory deprivation request. [2]

- 2 Explain **one** similarity between Loftus & Palmer's study into eyewitness testimony and Grant et al.'s study into context-dependent memory.

One similarity is that both studies used an independent measures design, meaning different participants were allocated to each condition and every participant experienced only one level of the independent variable. In Loftus and Palmer's first experiment the 45 students were split into five groups and each group received only one critical verb in the question about speed (smashed, collided, bumped, hit or contacted). In Grant et al.'s study the 39 participants were assigned to one of four conditions, reading and being tested in either matching contexts (silent-silent or noisy-noisy) or mismatching contexts (silent-noisy or noisy-silent). [4]

- 3 Outline **one** way in which Chaney et al. followed ethical considerations in their Funhaler study.

Chaney et al. gained informed consent from the parents of the asthmatic children, who were contacted through their clinics and agreed to their child using the Funhaler and to completing the questionnaires themselves, so the children were only used once parents had consented. [2]

- 4 (a) Sperry carried out a study into split brain patients.

Identify the apparatus used in this study.

Sperry used a tachistoscope, a projector that flashed images onto a translucent screen for one tenth of a second to one visual field, and a set of everyday objects placed behind the screen for the tactile tests, which participants handled with one hand out of sight. [2]

- (b) Casey et al. carried out a study into neural correlates of delay of gratification.

Outline **one** way in which the researchers' procedure increased the reliability of their study.

The faces in the go/no-go task were presented for a standardised time of 500 milliseconds with a one second interval between them, using programmed laptop computers. Because every participant saw each stimulus for exactly the same time, the procedure was consistent and could be repeated, so differences in performance reflected whether a person was a high or low delayer rather than variations in the way the task was presented. [3]

- 5 (a) Freud used the case study method in his research.

Describe how he used this method in his study of Little Hans.

A case study investigates one individual or small group in great depth, usually over time, gathering rich qualitative data about unusual behaviour. Freud studied one five year old boy, Little Hans, who had a phobia of horses, through regular detailed letters from the boy's father reporting Hans' dreams, fantasies and conversations, which Freud interpreted to build a thorough account of the boy's phobia and his Oedipus complex. [3]

- (b) Baron-Cohen et al. used the experimental method in their study of autism.

Explain **one** strength of using this method in this study.

One strength is that the experimental method is objective. Performance was measured strictly through the number of correctly identified mental states on the 25 photographs in the Eyes Task, so there was little opportunity for the researchers to interpret the results subjectively. This means the lower scores of the autism and Asperger group (mean 16.3) compared to the normal adults (mean 20.3) were a valid reflection of theory of mind differences. [3]

SECTION B – Areas, perspectives and debates

Answer **all** the questions.

- 6 (a) Outline the defining principles and concepts of the area of individual differences.

The individual differences area assumes that every person is unique, so psychology should study how and why people differ from each other rather than looking only for universal laws. It adopts an idiographic approach, often using case studies and in-depth methods to understand the individual. It focuses on concepts such as personality, intelligence and mental health, and on how individuals who differ from the norm, for example people with autism, can be understood and helped. It tends to assume people have free will and draws on both nature and nurture to explain differences.

[4]

- (b) Describe **one** strength of using the individual differences area to explain behaviour.

One strength is that the area avoids over-generalisation. By studying individuals in depth rather than assuming everyone is the same, it recognises that explanations which fit most people may not fit a particular person. For example, Freud's detailed study of Little Hans explained the boy's own phobia of horses in terms of his unique experiences, giving an understanding of behaviour that a group average could not have provided.

[3]

- (c) Describe **one** weakness of using the individual differences area to explain behaviour.

One weakness is that findings are difficult to generalise. Because the area focuses on unique individuals or small unusual groups, often using case studies, the results may apply only to the people studied. Freud's conclusions about Little Hans came from one middle class Viennese boy whose father was a supporter of Freud, so it is not possible to claim that all children's phobias develop through the Oedipus complex.

[3]

- (d) Outline **one** application of the individual differences area.

One application is intervention strategies for people with autism. Baron-Cohen et al. showed that high functioning adults with autism struggled to read mental states from the eyes, scoring lower on the Eyes Task than controls, which reflects the area's principle of understanding how individuals differ. Adults on the spectrum can therefore be taught to use other cues such as the mouth and tone of voice to judge emotions and improve social functioning. [3]

Turn over for the next question

- (e)* Discuss the free will/determinism debate in psychology. Use examples from relevant core studies to support your answer.

Free will is the idea that individuals are in control of their own destiny and make conscious choices that affect their behaviour. Determinism is the view that behaviour is caused by forces beyond the individual's control, which may be internal, such as biology or unconscious drives, or external, such as reinforcement or the situation.

Much core study evidence supports determinism. Grant et al. (1998) showed recall was determined by context, since participants tested in matching conditions recalled more than those in mismatching conditions. Chaney et al. (2004) found compliance with asthma medication rose from 10 to 81 percent when children were reinforced by the Funhaler's whistle and spinner, showing behaviour being shaped by consequences. Casey et al. (2011) found low delayers showed greater ventral striatum activity to happy faces 40 years after the marshmallow test, suggesting self-control is biologically determined, and Freud (1909) explained Hans' phobia through psychic determinism. A strength of this position is that it allows psychology to establish cause and effect, predict behaviour and develop useful treatments and interventions, such as the Funhaler itself. It also recognises that people cannot always be held fully responsible for their actions.

However, determinism treats people like machines and cannot be disproved, since it can always be argued that a cause has simply not yet been found. Other studies support free will. In Milgram (1963) 14 of the 40 participants refused to continue to 450 volts, and in Bocchiaro et al. (2012) nine participants blew the whistle despite situational pressure, showing some people choose to resist. Bandura et al. (1961) found children did not automatically imitate every behaviour they saw, implying some choice about what to model. Free will gives people responsibility and feels intuitively right, but it is hard to test scientifically and, as Bocchiaro's whistleblowers' religious faith suggests, apparent choices may themselves be determined.

In conclusion, a soft determinist position seems most useful: behaviour is shaped by biology, learning and situation, as most core studies show, but within those constraints individuals retain some capacity to choose.

[12]

SECTION C – Practical applications

Answer **all** the questions.

The Shock of Going Overdrawn!

Bank customers who overspend could soon get an electric shock to warn them that they have gone into debt, thanks to an invention from a British technology firm. Zapping someone for going overdrawn might sound harsh, but the company behind the idea claims many customers are worried about buying things they cannot afford. The “zap” comes from a wristband worn by the customer which links to the activity of their bank account. However, a spokesperson for the banks stressed that people would never be made to sign up to accounts linked to the wristbands.

The company that developed the digital technology said it was responding to demand. They pointed out that contactless payment methods had made it more difficult for people to keep track of their spending, therefore increasing the risk that some will get into financial trouble. It said its research had found that one in three millennials were “too scared to check their bank account”. It also found that only a third of 18- to 24-year-olds felt their banks provided them with the digital budgeting tools they needed to stay on top of their debt and finances. The managing director of the company claimed that “customers can now get complete control and oversight of their finances without having to lift a finger”.

Adapted from an online article from The Guardian (May 2016)

- 7 (a) Outline the behaviourist perspective in psychology **and** briefly explain how it applies to this article.

The behaviourist perspective assumes that we are born as a blank slate and that almost all behaviour is learned from the environment, so nurture matters more than nature. It studies only observable, measurable behaviour, treating the mind as a black box. Behaviour is learned through classical conditioning, in which a neutral stimulus becomes associated with an unconditioned stimulus and produces the same response, and through operant conditioning, in which behaviour followed by reinforcement is repeated while behaviour followed by punishment is not. In the article, the painful electric zap from the wristband acts as a punishment for the behaviour of overspending, so customers should learn not to buy things they cannot afford. Through classical conditioning, going overdrawn becomes associated with the pain of the shock, and staying within budget is negatively reinforced because it avoids the zap. [5]

(b) Briefly describe **two** psychological issues raised by this article.

- (i) *The ethical issue of protection from harm: psychologists must ensure people are not exposed to physical or psychological harm. Giving customers a painful electric shock from the wristband every time they go overdrawn could cause pain, stress and even greater anxiety about money.*
- (ii) *The long term effectiveness of punishment: behaviourists such as Skinner found that punishment only suppresses behaviour temporarily and can create negative emotions rather than teaching an alternative. Zapping customers may make them fear their account rather than learn positive saving habits.*

[4]

(c) Using your knowledge of psychology, suggest **two** ways in which young people could be encouraged to save money.

One way is to use positive reinforcement, based on operant conditioning. Behaviour that is followed by a pleasant consequence is more likely to be repeated, as Chaney et al. showed when the Funhaler's whistle and spinner rewarded children for using their inhaler correctly and compliance rose from 10 to 81 percent. Banks could offer young people a savings account app that gives an immediate reward each time money is saved, such as bonus interest paid the same day or points towards a prize when a monthly target is met. Rewards should follow the deposit immediately so the association is strong, and surprise bonuses on a variable schedule would keep the saving going.

A second way is to use modelling and vicarious reinforcement, based on social learning theory. Bandura et al. showed children imitate the behaviour of models they observe, particularly those who are similar to them and who are seen to be rewarded. A campaign could use popular young influencers and relatable 18 to 24 year olds on social media and in school finance lessons to demonstrate saving, showing how to set a budget and transfer money, and the rewards they gained, such as affording a car or a deposit. Seeing peers rewarded for saving makes saving a social norm and young people are motivated to reproduce the behaviour.

[8]

- (d) Evaluate the suggestions you have made in part (c) with reference to issues and debates you have studied in psychology.

Both suggestions sit on the nurture side of the nature versus nurture debate, assuming saving is learned from the environment rather than innate. This is optimistic, as it suggests any young person can be taught to save. However, Casey et al. found that the ability to delay gratification has a biological basis in the ventral striatum and prefrontal cortex, so low delayers may struggle to resist spending whatever rewards or role models they are offered, and both suggestions may fail those who most need them.

The positive reinforcement suggestion is deterministic and reductionist, treating saving as a simple stimulus response link controlled by rewards and ignoring free will and emotions. It is also socially sensitive, as it may make young people in poverty feel blamed. Its strength is usefulness: Chaney et al. showed reinforcement changes real behaviour quickly and cheaply, and rewards are more ethical than the shocks in the article.

The modelling suggestion is more holistic, recognising cognitive processes such as attention and motivation, and less deterministic because young people choose which models to imitate. However, its usefulness depends on validity: Bandura's evidence came from an artificial laboratory with children and a Bobo doll, so it may not generalise to adults making real financial decisions, and there are ethical concerns about using influencers to manipulate young people's spending choices. [8]

END OF QUESTION PAPER

[illegible]

Oxford Cambridge and RSA

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

© OCR 2019