

Please write clearly in block capitals.

Centre number

--	--	--	--	--

Candidate number

--	--	--	--

Surname

StemUp Model Solution

Forename(s)

Candidate signature

I declare this is my own work.

A-level PSYCHOLOGY

Paper 1 Introductory topics in psychology

Time allowed: 2 hours

Materials

For this paper you may use:

- a calculator.

Instructions

- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **all** questions. You must answer the questions in the spaces provided. Do **not** write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 96.
- Questions should be answered in continuous prose. You will be assessed on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

For Examiner's Use	
Section	Mark
A	
B	
C	
D	
TOTAL	



J U N 2 1 7 1 8 2 1 0 1

Section A**Social influence**

Answer **all** questions in this section.

0	1
---	---

Describe how Zimbardo investigated conformity to social roles.

[4 marks]

Zimbardo set up a mock prison in the basement of Stanford University. He selected 24 emotionally stable male student volunteers, who were randomly assigned to the role of prisoner or guard, and conducted a controlled, overt participant observation.

Prisoners were 'arrested' at home, blindfolded, strip-searched and deloused, dehumanised with numbered smocks, nylon stocking caps and ankle chains.

Guards wore khaki uniforms and mirrored sunglasses, carried clubs, worked shifts and were told to maintain order without physical violence, so prisoners'

Extra space *daily routines were heavily regulated. The study was planned to run for two weeks but was stopped early.*



0 2

Fewer and fewer people use single-use plastic items, such as water bottles and plastic straws.

Using your knowledge of social influence processes in social change, explain why fewer and fewer people are using single-use plastic items.

[6 marks]

Campaign groups such as Greenpeace and celebrities such as David Attenborough began as a minority. By being consistent, repeating the same message about plastic pollution for years, and committed, for example through high-profile protests (augmentation principle), they made the majority think deeply about the issue. Because they were also flexible, suggesting realistic swaps such as reusable bottles, the idea gradually spread through the snowball effect until avoiding plastic became the majority view. Through informational social influence, as evidence of plastic harming wildlife spread, people internalised the view that single-use plastic is wrong. Through normative social influence, as the norm among young people is now to care about the environment, people avoid plastic straws to fit in and avoid rejection. People also obey new rules such as the carrier bag charge.

0 3

A researcher wanted to investigate whether there was a relationship between locus of control and resistance to social influence. Before the investigation began, he devised a questionnaire to measure locus of control.

Why would the researcher's questionnaire produce primary data? Suggest **one** limitation of primary data.

[2 marks]

The data is collected first-hand from the participants, specifically for this investigation.

A limitation is that designing and administering the questionnaire takes time and effort and is costly compared with existing secondary data.

Turn over ►

0 4

To assess the questionnaire's validity, the researcher gave it to 30 participants and recorded the results. He then gave the same 30 participants an established questionnaire measuring locus of control. The researcher found a weak positive correlation between the two sets of results, suggesting that his questionnaire had low validity.

Explain how the validity of the researcher's questionnaire could be improved.

[4 marks]

The researcher could compare the two questionnaires item by item and look at where his participants' scores differed most from the established measure. He could then identify the problematic items, for example questions that are ambiguous, leading, too complex or double-barrelled, and remove or rewrite them. He could also add a lie scale and filler questions so respondents are less aware that locus of control is being measured, reducing social desirability bias. Finally, he could re-check concurrent validity, aiming for a strong positive correlation (above +0.80) with the established questionnaire.

0 5

Discuss legitimacy of authority as an explanation for obedience.

[8 marks]

Legitimacy of authority suggests that we obey people we perceive as having legitimate authority over us. Society is organised into a social hierarchy, and people recognise their own and others' positions within it, so we accept that those higher up, such as police officers, teachers and parents, have the right to issue demands. We learn to accept this during childhood. Legitimacy is increased by visible symbols of authority, such as a uniform, and by the legitimacy of the setting, the order and the wider system in which the order is given.

A strength is supporting evidence. Bickman (1974) found that people in New York were about twice as likely to obey a confederate dressed as a security guard as one in a jacket and tie. In Milgram's variations, obedience fell from 65% to 47.5% when the study moved from prestigious Yale University to a run-down office block, and to 20% when the orders came from an 'ordinary



member of the public', showing that legitimacy of setting and person affects obedience. Hofling et al. (1966) found that 21 of 22 nurses obeyed an unknown doctor's telephone order to give an overdose, showing the power of a legitimate hospital hierarchy.

The explanation can also account for real-life events, such as the My Lai massacre, where US soldiers killed unarmed civilians on the orders of their officer, whose legitimate authority they accepted.

However, legitimacy cannot explain why some people disobey a clearly legitimate authority: 35% of Milgram's participants refused to continue, and Rank and Jacobsen (1977) found that 16 of 18 nurses refused a doctor's order to give an excessive dose of Valium. This suggests obedience may also be dispositional, for example due to the authoritarian personality (Adorno et al., 1950), rather than purely situational.

There are also cultural differences: Kilham and Mann (1974) found only 16% of Australian women obeyed in a Milgram-type study, whereas Mantell (1971) found 85% in Germany. This suggests respect for authority varies between cultures, which legitimacy alone does not fully explain. Overall, legitimacy is a useful but partial explanation of obedience.

Extra space

Turn over ►



[illegible]

[illegible]

24

Section B**Memory**

Answer **all** questions in this section.

0 6

Apart from the central executive, name and briefly outline **two other** components of the working memory model.

[4 marks]

Phonological loop: a limited capacity temporary store for acoustically coded, sound-based information, made up of the phonological store (the 'inner ear') and the articulatory process (the 'inner voice'), which keeps items active through sub-vocal rehearsal for about 2 seconds.

Visuo-spatial sketchpad: the 'inner eye', a temporary store for visual and spatial information, such as the layout of a room, with a capacity of about 3 to 4 objects; it has a visual cache and an inner scribe.

0 7

Evaluate the central executive as part of the working memory model.

[4 marks]

A limitation is that the central executive is vague and has been difficult to test, despite being the component in overall charge. The case of EVR (Eslinger and Damasio, 1985), who reasoned well but made poor decisions after brain surgery, suggests it is not a single unitary store but has separate sub-components. However, the idea of a central executive allocating attention is supported by dual-task research, and Braver et al. (1997) found greater prefrontal cortex activity as executive demands increased.



0 8

Natasha had studied a lot for her A-level Drama performance, mostly practising lines from a play alone in her room. However, once on stage in front of her teacher and the examiners, Natasha struggled to remember her lines. Instead, she kept quoting lines from a different play she had once learnt for GCSE.

Discuss retrieval failure **and** interference as explanations for forgetting. Refer to Natasha's drama performance in your answer.

[16 marks]

You may use this space to plan your answer.

Retrieval failure is a form of forgetting that occurs when the cues present at encoding are absent at retrieval, so information that is available in long-term memory is not accessible. Tulving's encoding specificity principle states that cues help retrieval only if they were present when the information was learned. In context-dependent forgetting, external cues from the environment, such as the room, are missing, and in state-dependent forgetting internal cues, such as mood or physical state, differ between learning and recall. Godden and Baddeley (1975) found that divers who learned and recalled word lists in different environments (on land or underwater) recalled about 40% less than divers in matching contexts. Natasha learned her lines alone in her room, but had to recall them on stage, so the external environmental cues of her room were absent. Her internal state also differed: she was probably calm when practising alone, but anxious in front of her teacher and the examiners, so state-dependent forgetting is also likely.

Turn over ►



Interference theory states that forgetting occurs when two memories conflict and become confused with each other, especially when the material is similar, causing response competition. In proactive interference, older memories disrupt the recall of newer ones, and in retroactive interference, newer memories disrupt older ones. McGeoch and McDonald (1931) found recall of a word list was worst when the second list learned was synonyms of the first, showing the effect of similarity.

Natasha's quoting lines from her GCSE play is proactive interference: the older lines are disrupting recall of the newer A-level lines. This is likely because two drama scripts are very similar material, with similar style and structure.

A strength of retrieval failure is strong supporting evidence, such as Godden and Baddeley and Carter and Cassaday (1998), who found that recall was worse when participants' internal state on antihistamines did not match at learning and recall. This suggests that the absence of cues is a valid explanation of forgetting. It also has practical applications: Natasha could rehearse on stage, or mentally reinstate her room before performing, to provide matching cues.

However, Baddeley (1997) argued that in real life contexts are rarely different enough to cause forgetting: learning in one room and recalling in another has little effect, unlike land and underwater, so the explanation may only apply in extreme cases. Also, Godden and Baddeley (1980) found that context had no effect when memory was tested by recognition rather than free recall, so retrieval failure only explains some types of forgetting.

Interference is supported by lab studies such as McGeoch and McDonald, and by real-life evidence: Baddeley and Hitch (1977) found that rugby players' recall of the teams they had played depended on the number of games



played since, not the time that had passed. Schmidt et al. (2000) found that people who had moved house more often remembered fewer of their childhood street names, supporting retroactive interference. This suggests students like Natasha could avoid revising similar material close together. However, most interference research uses artificial materials, such as word lists learned in quick succession, which deliberately induce interference by limiting the time between learning and recall. This lacks mundane realism, so interference may be less common in everyday life. Furthermore, Tulving and Psotka (1971) found that interference disappeared when participants were given cued recall with category headings, suggesting that interference is really a temporary problem of access, so retrieval failure may be the more powerful explanation of forgetting.

Overall, both explanations account for Natasha's forgetting: missing contextual and state cues explain why she could not access her A-level lines, and similar GCSE material explains why she recalled the wrong ones.

Extra space

Turn over ►



[illegible]

Section C**Attachment**

Answer **all** questions in this section.

Only **one** answer for each question is allowed.

For each question completely fill in the circle alongside the appropriate answer.

CORRECT METHOD



WRONG METHODS



If you want to change your answer you must cross out your original answer as shown.



If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown.



0 9

Annie feeds her newborn baby regularly and they have formed a strong bond.

According to the learning theory of attachment, before any attachment had been formed, the milk Annie gives her baby is best described as:

Shade **one** box only.

[1 mark]

A a conditioned stimulus.



B a neutral stimulus.



C an unconditioned response.



D an unconditioned stimulus.



Turn over for the next question

Turn over ►



1 0

According to the learning theory of attachment, now she has formed an attachment with her baby, Annie is best described as:

Shade **one** box only.

[1 mark]

A a conditioned stimulus.

☒

B a neutral stimulus.

☐

C an unconditioned response.

☐

D an unconditioned stimulus.

☐
1 1

Outline **one** difference in attachment behaviours shown by infants who have an insecure-avoidant attachment and infants who have an insecure-resistant attachment.

[2 marks]

On separation from the caregiver, insecure-avoidant infants show little or no separation anxiety and are not distressed, whereas insecure-resistant infants show very high separation anxiety and become extremely distressed when the caregiver leaves.



1 2

These different attachment types were first identified in Ainsworth's 'Strange Situation'.

Evaluate the procedure known as the 'Strange Situation'.

[5 marks]

A strength is that the standardised procedure of eight episodes can be replicated. Bick et al. (2012) found 94% agreement between observers, showing high inter-rater reliability.

However, the artificial setting lacks ecological validity, and it focuses solely on the mother. It may also be culture-bound (imposed etc): Japanese infants, rarely separated from their mothers, show extreme distress

(Takahashi, 1990). It may measure innate temperament (Kagan, 1982) rather than attachment, and Main and Solomon (1986) found a fourth type, disorganised. It is also unethical as it deliberately causes infants distress.

Turn over for the next question

Turn over ►



1 3

Researchers investigated whether the experience of bullying is influenced by attachment type. They interviewed teenagers about their early attachment experiences. Following the interviews, the teenagers were categorised into two groups based on their attachment type:

- **Group 1** – secure attachment in childhood
- **Group 2** – insecure attachment (insecure-avoidant or insecure-resistant) in childhood.

During the interview, the teenagers were also asked about their experience of bullying. They were categorised as either:

- having had experience of bullying, or
- having had no experience of bullying.

Which statistical test would be most suitable to analyse the data in this investigation? With reference to this investigation, explain **three** reasons for your choice of test.

[7 marks]

The chi-squared test would be most suitable.

Firstly, the researchers are looking for a difference between groups, or an association: they want to know whether teenagers with a secure attachment differ from teenagers with an insecure attachment in their experience of bullying, that is whether attachment type is associated with bullying.

Secondly, the design is independent groups (unrelated data): each teenager can appear in only one category, either secure or insecure, and either experience of bullying or no experience of bullying, so different participants are in each cell.

Thirdly, the data is nominal (categorical): rather than giving each teenager a score, the researchers simply count the number of teenagers who fall into each of the four categories in a 2 x 2 contingency table, for example secure with experience of bullying.



1 4

Discuss the influence of early attachment on childhood relationships. Refer to the likely results of the study in **Question 13** in your answer.

[8 marks]

Bowlby proposed that a child's first attachment forms an internal working model (IWM): a mental representation, or schema, of the relationship that acts as a template for later relationships. A child with a secure attachment expects others to be trustworthy and kind, whereas an insecurely attached child may expect others to be unreliable or rejecting, which affects friendships and peer relationships in childhood. Sroufe et al. (2005), in the Minnesota longitudinal study, found that infants classed as securely attached were later rated as more popular and socially competent with peers in childhood.

In the Question 13 study, the likely result is that Group 1 (secure attachment) will report less experience of bullying than Group 2 (insecure attachment), because their positive IWM helps them form supportive friendships. Myron-Wilson and Smith (1998) found that securely attached children were unlikely to be involved in bullying, insecure-avoidant children were most likely to be victims and insecure-resistant children were most likely to be bullies, so many of Group 2 will have experienced bullying, either as victims or bullies.

This research supports the IWM, but it is correlational, so we cannot conclude that early attachment causes later relationship problems: other factors, such as parenting style or temperament, may influence both. Also, the IWM is a hypothetical concept that cannot be directly measured or observed. Assuming a cause and effect relationship is deterministic and could lead to insecurely attached children being labelled as doomed to poor relationships, although many go on to form healthy friendships.

Turn over ►



Finally, the Question 13 study used retrospective interviews, so teenagers' recall of early attachment experiences may be inaccurate, and self-reports of bullying may be affected by social desirability bias, which lowers the validity of the conclusions.

Extra space



[illegible]

Turn over ►



Section D

Psychopathology

Answer **all** questions in this section.

1 5

Identify **two** behavioural characteristics of depression.

[2 marks]

Changes in sleep patterns, such as insomnia or hypersomnia.

Social withdrawal, such as avoiding friends and family.

1 6

Briefly outline **one** way that a cognitive psychologist might treat depression by challenging irrational thoughts.

[2 marks]

Using Ellis's ABCDE model, the therapist would dispute (D) the irrational belief, for example 'I must be liked by everyone', using logical and empirical argument, asking 'Where is the evidence?', so the effect (E) is a more rational, healthier belief.

1 7

Describe the biological approach to treating obsessive-compulsive disorder (OCD).

[4 marks]

The biological approach uses drug therapy to correct the imbalance of neurotransmitters, mainly low serotonin, thought to cause OCD. SSRIs, such as fluoxetine, prevent the reabsorption and breakdown of serotonin by the presynaptic neuron, so more remains in the synapse to continue stimulating the postsynaptic neuron, reducing anxiety and obsessive thoughts. They need about 3 to 4 months of daily use to have an effect. If SSRIs fail, tricyclics such as clomipramine or SNRIs may be used, and benzodiazepines may be given to reduce anxiety by enhancing GABA.



1 8

Discuss statistical infrequency **and** deviation from social norms as definitions of abnormality.

[16 marks]

You may use this space to plan your answer.

Statistical infrequency defines abnormality as behaviour or characteristics that are rare or uncommon in the population. Many human traits, such as IQ, are normally distributed, so most people cluster around the mean and abnormal scores lie at the extreme ends of the normal distribution curve.

For example, the mean IQ is 100 with a standard deviation of 15, and the 2% of people scoring below 70 (two standard deviations below the mean) may be diagnosed with intellectual disability disorder. This definition relies on up-to-date statistics about how common a behaviour is.

Deviation from social norms defines abnormality as behaviour that does not conform to the accepted, expected standards of a society. All societies make collective judgements about what counts as normal, typical behaviour, both explicit norms, such as laws, and implicit unwritten rules, such as standing too close to strangers. Because norms vary from culture to culture and over time, what is abnormal in one society may be normal in another. Antisocial personality disorder, for example, involves a failure to conform to lawful, prosocial behaviour.

A strength of statistical infrequency is that it has real-life application: many

Turn over ►

diagnoses involve some reference to statistics. Diagnosis of intellectual disability disorder requires a low IQ score, and assessments of depression, such as the Beck Depression Inventory, use a cut-off score based on what is typical. It is also objective, as it is based on measurable data rather than personal opinion.

However, some statistically infrequent behaviours are desirable and highly regarded, such as a very high IQ, yet the definition would class these people as abnormal in the same way as those with a low IQ. Also, there is no clear point at which normal becomes abnormal: deciding on a cut-off, such as two standard deviations, is subjective. Furthermore, some people with very rare characteristics live happy, functional lives, so labelling them as abnormal may be unhelpful and could lower their self-esteem. Equally, common conditions such as depression, which affects many people, would not be identified as abnormal.

A strength of deviation from social norms is that it takes into account the effect of behaviour on others and considers the context, so it can be used to identify disorders that harm society, such as antisocial personality disorder. However, not all behaviour that deviates from social norms is a sign of mental illness. Breaking norms such as speeding is simply criminal or eccentric, and some deviation, such as campaigning against injustice, can be beneficial. A further limitation is that norms are culturally relative, so it is difficult to identify universal signs of illness. Hearing voices is a symptom of schizophrenia in the UK but may be accepted as a spiritual experience in some cultures, and imposing British norms on people from other cultural backgrounds may explain why African-Caribbean immigrants in the UK are more often diagnosed with schizophrenia.



Social norms also change over time, so the definition lacks temporal validity: homosexuality was classified as a mental disorder in DSM until 1973, but is now accepted. This shows the definition can be used, or abused, as an instrument of social control: in the 19th century, slaves who tried to escape were diagnosed with 'drapetomania', which was used to justify their oppression.

Overall, neither definition is satisfactory on its own. In practice, clinicians combine them with other definitions, such as failure to function adequately and deviation from ideal mental health, to give a fuller picture of when someone needs help.

Extra space

Turn over ►



[illegible]

24



There are no questions printed on this page

*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



Question number	Additional page, if required. Write the question numbers in the left-hand margin.
	Copyright information For confidentiality purposes, all acknowledgements of third-party copyright material are published in a separate booklet. This booklet is published after each live examination series and is available for free download from www.aqa.org.uk. Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and AQA will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team. Copyright © 2021 AQA and its licensors. All rights reserved.

