

# PSYCHOLOGY

---

**Paper 9990/12**  
**Paper 1 Approaches, Issues and**  
**Debates**

## Key messages

Candidates need to know all components of the study as listed in the syllabus. Questions can be asked about any part of a study. This is also the same for approaches where a candidate needs to know how each type of psychologist would try to explain behaviour.

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of each one. For example, the question may require data or a named issue to be included. To achieve full marks these need to be correctly present in their responses. The essay (final question) requires four evaluation points to be in depth (two strengths and two weaknesses) with at least one of these about the named issue. Credit is limited if the named issue is omitted.

Candidates need to be careful about how they are presenting the results of studies. For example, they need to know if the results are about how many participants performed a task correctly or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response can gain credit or not.

Candidates also need to engage with any stimulus material presented in a question (e.g. a debate) to ensure they can access all available marks.

There is enough time for answers to be planned to ensure that the response given by a candidate is focused on the demands of each question.

## General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well providing evidence that they were prepared for the examination. There was no evidence that candidates had not learned the new studies that form the 9990 syllabus. This was also evidenced by very few blanks answers.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers in evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, writing about what psychologists had learned from the results of one of the core studies. This was also somewhat evident for the questions about real-life application.

## Comments on specific questions

### Question 1

- (a) Many candidates were able to identify that either the stick or straw was the necessary tool to complete the tasks. Some candidates did name an object that was in the tray but not useful for the task. A small amount of candidates named a tool that was never used in the study.
- (b) Responses to this question were varied. Stronger ones could clearly outline how the tool offer was operationalised in the Yamamoto et al. study. Some responses tended to focus on the entire procedure of tool giving without necessarily directly answering the question so could not gain

credit. Candidates need to be able to focus on the demands of the question rather than telling the examiner everything they know about that element of the study.

### Question 2

- (a) Stronger responses could outline what the model was supposed to do during the 'early' condition. Common errors included the location of the model during the trial, the time taken before the model was supposed to help and the responses confusing the victim with the model. Candidates need to be able to differentiate between what the model was supposed to do and what the victim always did.
- (b)(i) Popular correct responses focused on the victims always being male and wearing the same clothes. Common incorrect responses tended to focus on the age of the victim (a difference) and the two conditions of ill and drunk (a difference).
- (ii) Popular correct responses focused on the victim being of different ages or having a different role (ill or drunk).

### Question 3

- (a) Stronger responses could outline the Disgust/Fear Hierarchy clearly showing good knowledge of the measure in the study. Some responses claimed that the ratings were out of 10 or stated that a low score was high distress. It is important that candidates clearly understand how measures were recorded and created for all Core Studies.
- (b) The stronger responses could clearly identify one weakness of the Disgust/Fear Hierarchy in terms of subjectivity or giving incorrect scores for his fears. For these types of question the tariff needs to be looked at by the candidate (in this case 1 mark) as some responses gave a full explanation as to *why* it was a weakness but this was not the demand of the question. Identify means that the weaknesses needed to be stated without an explanation to gain credit.

### Question 4

- (a) Stronger responses could readily state what was changed on the revised test to resolve the problems of the original test with the correct amount of pairs of eyes and the correct amount of response options. Some responses stated an incorrect number of eyes and/or response options and other responses attempted to solve the problem themselves rather than focusing on what Baron-Cohen did to help resolve the issues surrounding the original eyes test.
- (b) A wide variety of responses was seen for this question. Creditworthy responses tended to focus on using the eyes test as a way of helping to diagnose potential autism in children and adults. Weaker responses tended to give findings of Baron-Cohen and not state the real-life application. Stronger responses explicitly stated *how* the findings or part of the procedure could be used in the real world to help diagnose or identify potential social intelligence that is lacking in people.

### Question 5

- (a) Candidates can improve their answers to questions like this by focusing on the rules of the question. IN this case data had to be used in the answer. Many responses did not include data or when it did, the interpretation of the given data was incorrect. For example, it was on 88 per cent **of trials** that the participants would estimate the five minutes correctly. However, many responses claimed that it was 88 per cent **of participants** who could correctly estimate five minutes which is incorrect and could not gain credit. Some responses gave answers that were better suited for **Question 5(b)**. Other responses gave results from a different aspect of the study.
- (b) Many candidates could describe one of the dreams reported by participants in the study with popular choices being tomato throwing and playing basketball.

### Question 6

- (a) Candidates need to understand what a biological psychologist would believe in. Stronger responses could clearly describe two assumptions that a biological psychologist would believe in, in terms of the origins of our behaviours. Popular choices focused on the role of the nervous

system and hormones controlling elements of our psychology. Some responses presented assumptions from a different approach to psychology which could not gain credit here.

- (b) Many responses could state one of the key findings from the Canli et al. study but only a few could then relate it *explicitly* back to one of the assumptions presented in **Question 6(a)**. Stronger responses could name the amygdala as part of the linking back to show how it affects our behaviour which fulfilled the demands of the question.

#### Question 7

- (a) The majority of responses could state one of the first prods used by Milgram. The few incorrect responses either gave a later prod or one that was never used in the study.
- (b) Stronger responses could describe the aspects involved if a participant asked the question about permanent injury. These tended to focus on the script used by Milgram to ensure all received similar answers to the query. Weaker responses tended to be about the sample shock given to the participant or what happened during the word-association task which could not gain credit.
- (c) Candidates are required to be able to think and reason about why something may have happened in a study even if it is not explicitly written about in the Core Study. This is a good example of a question that does this. Stronger responses could reason and explain that the meeting ensured that the study was ethical and that no harm had come to Mr. Wallace during the entire study. Weaker responses tended to focus on the procedure of the study and what happened rather than explaining *why* Milgram did this in his study.

#### Questions 8

- (a) Candidates need to know about the various debates listed in the syllabus. They need to be able to clearly express both sides of an argument, in this case individual versus situational explanations of behaviour. Stronger answers readily outlined the difference between the two (sometimes with examples but it was not necessary for this question). However, there were many responses that used a tautological approach and simply stated things like 'situational explanations are about the situation you are in' which could not gain credit.
- (b) The rules of the question need to be adhered to in questions like this. Candidates had to either support Aarav *or* Kyra. Stronger responses engaged with the debate stated why either of the people were correct using evidence from the study to support their arguments. However, some responses did not engage with the material presented in the question and gave a generic response about either situation or individual. Candidates need to engage with stimulus material given to them as part of the question to be able to access all available marks. In addition candidates need to choose one side of the debate and not present both.

#### Question 9

- (a) This was another example of candidates having to think about what a study is researching. Similar to **Question 8(b)**, the access all available marks candidates need to engage with material presented to them in the question. Stronger responses could identify what was different and then describe why it was different to the stimulus material. Weaker responses tended to write about aspects of the study by Laney et al. without relating anything to the stimulus material.
- (b) Stronger responses could outline a key result that had told psychologists something about false memories and then with a clear explanation as to *why*. A popular answer was about implanting positive false memories and the impact this could have on a variety of human behaviours. Weaker responses tended to describe results or part of the procedure without explicitly telling the examiner what had been learned from this. To improve on this, candidates should choose an appropriate result from the study and then explicitly explain what has been learned from knowing this result.

#### Question 10

The strongest responses evaluated the Bandura et al. study in depth and in terms of two strengths and two weaknesses with at least one of these points covering the named issue of ethics. Common choices included generalisability, reliability, validity and the named issue of ethics. These strong responses could explain why an element of the study was a strength or a weakness using specific examples from the Bandura et al. study

explicitly to support their point. These answers tended to score Level 4 marks. Candidates need to ensure that they follow the demands of the question, covering two strengths and two weaknesses all in equal depth. Some responses did cover the four evaluation points but were brief or did not use the Bandura et al. study as examples which meant the response scored in the lower bands. Other responses included three evaluation points that were thorough, logical and well argued with a fourth point that was brief which meant the response did not reach the top band in the main. Candidates need to know that any description of the study does not gain credit in these type of questions as it is testing their evaluation skills *only*.



# PSYCHOLOGY

---

<p><b>Paper 9990/22</b> <b>Paper 2 Research Methods</b></p>
---

## Key messages

Paper 2 tests research methods and will therefore contain questions about the research methods specified in section 3.1.2 of the syllabus. It is therefore essential that candidates be prepared for not just recalling their knowledge but *using* this knowledge as well.

It is required that candidates apply their understanding of research methods to novel situations, outlined in many of the questions. Responses to such questions must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates must therefore be prepared to answer questions using this format and will need to practise both extracting relevant ideas and making novel suggestions based on scenarios. The opportunity to look at examples of generic and applied responses to questions would help in developing this skill.

As in any examination, reading the question is very important. Candidates need to identify whether the response requires, for example, a link back to the question, an example, or an original 'creative' idea. This will often enable the candidate to produce a response that is most likely to achieve marks. The opportunity to look at examples of limited and elaborated responses to questions would help in developing this skill.

## General comments

Candidates across the ability range were able to demonstrate their knowledge of a range of aspects of research methods in this paper. This examination also tested a cross-section of psychological skills.

**Questions 5(b), 7(c)(ii), and 8(a)** were examples of questions requiring contextualisation to the study, answers to which could be improved by focusing on examination technique. **Question 6** on operationalisation and **Question 10** on observations were two areas in which candidates could have learned material better in order to improve their performance. However, candidates typically demonstrated a good understanding of ethics and controls.

## Comments on specific questions

### **Section A**

#### **Question 1**

- (a) Some responses were contextualised or included examples to make a point. This was acceptable but not necessary.

A small number of candidates merely attempted to produce a definition in terms of being informed and giving consent. This was not acceptable as the sole response as it repeated the question.

Some candidate responses contained confusion between informed consent and any right to withdraw, deception and protection. If this was the only element to the response, this was not acceptable.

A common error was to state that participants need to know the real aim in order to give informed consent. Although knowing the real aim would *enable* participants to give informed consent, it is not *necessary*. It is only essential that the participants are aware of what the procedure of the study entails, not why. This happens to be a good example of the difference between informed consent and deception; a distinction which learners often find difficult. To tell participants a false aim would be deception. This should always be avoided if possible. However, informed consent can be given

without deception, yet still avoiding introducing demand characteristics, by telling the participants what will happen in the procedure but not telling them the aim.

- (b) This question part was generally well answered. A small number of responses simply contained terms with no explanation. In the absence of an 'explanation', such responses could only gain one mark.

### Question 2

- (a) There were many comprehensive responses to this question part. However, a common error was to attempt to describe semi-structured interviews as including closed questions with some open questions. This is incorrect.

Other responses suggested that candidates were confused about the meaning of 'filler questions', suggesting that they were any of the additional questions an interviewer could ask when conducting a semi-structured interview.

- (b) This question was well answered with a range of responses. In addition, to those in the mark scheme, other common creditworthy responses included: reducing the risk of accidentally asking leading questions and thus reducing validity; to avoid personal questions that could invade privacy. Other good answers referred to the use of only fixed questions in a structured interview to avoid researcher bias/to avoid the researcher focusing on finding evidence to support their own hypothesis.

### Question 3

- (a) This question was generally well answered although a small number of candidates left this answer space blank. In such cases the candidate was often able to give a good response to part (b) of this question.

A small number of candidates mistook 'false memory' (and 'Laney et al') for the idea of false beliefs in the study by Baron-Cohen et al and thus described the wrong study.

- (b) Responses to this question were generally good, although a small number of candidates gave insufficient answers; for example: 'to compare results', which does not offer an 'explanation'.

### Question 4

- (a) This question was generally well answered, with very, very few candidates simply answering 'yes' or 'no', without offering an explanation for their decision.

### Question 5

- (a) This question was very well answered. A small number of candidates contextualised their response, which was acceptable but unnecessary.

- (b) This question was well answered by some candidates. However, in contrast to the minority of responses to part (a), many candidates did not contextualise their answer when they should have done as the question specified 'in this study'.

### Question 6

- (a) This question was answered less successfully, with few candidates gaining full marks. Many responses only described what is meant by 'independent variable' and 'dependent variable', which was not required and did not answer the question. Some responses defined operationalisation, and more successful answers, described what is meant by operationalisation of the independent variable and of the dependent variable. Other responses gave no descriptions but did offer appropriate examples of the operationalisation of independent and or dependent variables. The best responses did both of these.

### Question 7

(a) Although mark-earning responses included a wide range of acceptable questions, a significant number of candidates did not earn a mark here. The most common error was to write a question that would generate quantitative data but that perhaps was not recognised as such because the candidate did not supply option choices. A closed question is one which has only a limited (closed) range of possible answers, unlike an open question for which there are no parameters to constrain the participant's response.

(b) (i) This question was not successfully answered with very many candidates restating the question, saying that 'lying affects validity'. Another error was to suggest that lying reduced reliability. This does not answer the question (since it is not about validity) and it could only be the case if there was a specific pattern relating to social media use that led to some children lying more than others, and therefore skewing the results.

There were many muddled responses which attempted to suggest that social desirability would cause demand characteristics. This reflects the very common misunderstanding about the concept of demand characteristics. Many, many learners have the belief that demand characteristics are the biased responses that participants show. This is not the case. Demand characteristics are the features (*characteristics*) of a study which indicate to the participants the purpose/aim of the study or what is expected of them (i.e. the *demands*).

(ii) This question part was often well answered. In addition to the possible responses on the mark scheme, other successful answers included the idea of asking parents, as they would not lie; the use of filler questions to make the aim less obvious; and the use of covert observations through one-way mirrors in the natural environment to count the number of times they really use social media.

Another approach in better answers was to suggest that Robin could give a false aim/deceive the participants for example by telling the children that the study was for the development of new apps or was about social media safety awareness.

(c) (i) There were many 1-mark responses to this question part. Although many candidates identified the use of random sampling, few fully answered the question to say *how* this would be done. Successful answers identified the use of random number generators, or suggested allocating numbers to people on a list and selecting the sample from a hat. Note that a small number of candidates gave the unethical response of putting *names* in a hat.

A minority of candidates suggested opportunity or volunteers sampling without justification, neither of which would give a wide range.

Nevertheless, a range of other, successful responses were suggested, such as placing adverts in children's magazines (volunteer sampling) or to put the questionnaire online so that it is not only accessed by children who live near Robin.

Finally, a small minority of candidates confused random sampling and random allocation.

(ii) Most responses here were generic, ignoring the requirement of the question to explain the importance 'in this study'.

Successful responses were often embedded in terms of representing the different social media habits of children of different ages, with some candidates' answers going on to explain that they may, for example, use different platforms. Other successful responses included such ideas as: children from one school finishing late so having less time for social media compared to other children, or children from different backgrounds having different exposure to social media.

### Question 8

- (a) In answer to this question, most responses made appropriate reference to an example from Hua's study.

However, a significant number of responses incorrectly suggested that correlational relationships are causal, in either the explanation or the example.

- (b) There was a range of successful responses given in answer to this question.

### Question 9

- (a) The vast majority of creditworthy response to this question related to ethics.

- (b) This question part was very well answered.

- (c) Although many candidates were able to identify an appropriate advantage, a great many did not apply their answers to Bella's investigation, as required by the question.

Most correct responses chose the obvious advantage of this design avoiding the effects of individual differences. However, two minor misunderstandings were common. The first was to say that this design 'reduces individual differences'. This is not the case. The design cannot actually alter individual differences themselves; such differences do, however, have much less effect in this design than in a study with an independent measures design. The second common misunderstanding was to use 'individual differences' and 'participant variables' as if they have the same meaning. They do not.

- (d) The responses to this question part contained a range of excellent explanations, with both an identification of a suitable control and an explanation of either how or why it should be controlled. Ideas such as controlling coffee/caffeine consumption or room temperature were justified on the basis of their tendency to raise pulse rate. Other controls included phobias of other animals, e.g. ones with fewer legs than 4 (such as slugs or more legs than eight such as centipedes), the time of day or temporal relation to meal times.
- (e) This question part was very well answered. A common successful answer was to explain how emotions, other than fear, could increase pulse rate. This includes emotions such as disgust or excitement.

### Question 10

- (a) Many responses to this question part did not mention the key elements in the design of an observational study, such as what behaviours would be recorded and whether the observers would be overt or covert and participant or non-participant. Characteristics such as this are central to the way an observational study is conducted. In successful responses, which identified the observational techniques being used, few went beyond naming the technique to describe how it would be achieved in their study.

Typical answers took the idea of 'how people responded' from the question stem, but did not indicate what 'response' they might give, or how this might be observed and measured. A very small minority of candidates offered appropriately operationalised responses, such as a 'smile' would be recorded if 'the teeth are showing', and an operationalisation of a frown if the eyebrows are pulled together.

Less common errors included:

- A minority of candidates stated that the study was a naturalistic observation but then introduced deliberate smiling and frowning, therefore manipulating what is being observed, so the situation is no longer naturalistic.
- A minority of responses referred to smiling at 'random strangers', when what was being described was an opportunity sampling procedure.

Finally, there was occasionally unnecessary justification of the chosen procedure. This did not earn credit.



- (b) Many candidates were able to identify appropriate weaknesses. Those who scored well were likely to have chosen a weakness that related directly to the procedure they had designed so were able to outline both a specific limitation of the procedure and a specific solution.

# PSYCHOLOGY

---

<p><b>Paper 9990/32</b> <b>Paper 3 Specialist Options: Theory</b></p>
---

## Key messages

### **Question 1(a), 3(a), 5(a) and 7(a)**

It is important that candidates are made aware of the terminology/concepts identified in the syllabus as well as key terms used in named theories and studies; a few responses were unable to identify and/or define the terms given in these type of questions. Revision of terminology using flash cards could prove useful. Where a response gave an example to help define a term, full marks were often achieved. These questions are worth 2 marks so a brief response is appropriate.

### **Question 1(b), 3(b), 5(b) and 7(b)**

These questions could ask the candidate to describe a theory or a technique used by psychologists that is named in the syllabus or identified in one of the studies or theories named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies from the specification or a summary of the key features of the study. This question is worth 4 marks and the candidates should write a more extended answer. An error seen in some responses was to describe a theory or technique that was from the wrong bullet point. There were also a few general responses that were not specifically directed at the question, so maximum marks could not be awarded.

### **Questions 1(c), 3(c), 5(c) and 7(c)**

These questions could require the candidate to explain a strength and weakness (or two strengths or two weaknesses) of what they have described in the **part (b)** of the question. The question could also ask the candidates to make a comparison or to evaluate using a specific issue. This question is worth 6 marks so the candidate should write a more extended answer for each issue raised. Some responses were very detailed for one issue but then only briefly discussed the second issue. In addition, some of the responses were very general and not specific to the study or technique named in the question. Responses that gave specific examples from the study or technique were more likely to achieve full marks.

### **Questions 2(a), 4(a), 6(a) and 8(a)**

This question will come from one of the bullet points in the exam and use the wording from the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the specification under the appropriate bullet point. Candidates can achieve full marks by describing two of the studies, theories or techniques in detail, although the majority of candidates that choose to describe two were less likely to achieve the top level due to the response being brief.

### **Questions 2(b), 4(b), 6(b) and 8(b)**

This question will always ask the candidate to evaluate the theories, studies and/or techniques described in **part (a)** of the question. There will also be a named issue that the candidate must discuss in their response. Ideally, the response should discuss a number of issues (with a minimum of two) in order to be considered to have presented a range of issues. In their response, the candidate must provide some form of analysis. This could be done by discussing the strengths and weaknesses of the issue being considered, presenting a counter-argument to the issue under discussion or comparing the issue between two studies, techniques and/or theories. A conclusion at the end of each issue would be helpful in order to show excellent understanding of the issue under discussion. In order to achieve the requirements of the level 3 and 4 band descriptors it would be best if the response was structured by issue rather than by study and/or theory. It would also be ideal for the response to start with the main issue to make sure the answer covers this requirement of the question.

Many of the responses were structured by study/technique/theory rather than by the issue, which sometimes led to the response being superficial and repetitive. A very small number of the responses analysed well. Candidates should be aware this question is worth 10 marks and attempt to include an appropriate amount of information in order to obtain the highest possible marks.

### **General comments**

There was a small entry for this fourth sitting of the 9990 syllabus. The marks achieved by the candidates tended to be at the lower end of the range of the mark scheme. A few candidates provided good answers and provided some details of studies, theories and techniques as well as being able to evaluate their descriptions in some depth.

Time management for this paper was good and most candidates attempted all questions that were required. A very small number of candidates did not respond to one of the questions asked in the option area.

No candidates attempted to respond to more than two topic areas, which was pleasing to see in this fourth sitting of the syllabus.

The questions on abnormality and organisations were the more popular choice of questions.

### **Comments on specific questions**

#### **Section A**

#### **Psychology and Abnormality**

##### **Question 1**

- (a) Most responses achieved one mark for this question by explaining that unipolar depression is characterised by a low mood, lack of energy and/or hopelessness. Some responses mentioned that the low mood continues for a long period of time or compared unipolar depression to bi-polar depression and stated that unipolar depression does not include periods of mania. These type of responses achieved full marks.
- (b) Many of the responses described two types of drugs that treat depression. Popular responses included MAOIs and SSRIs. Many also gave details of how these drugs increase the amount of serotonin and dopamine in the body. A number of responses also included side effects; these were not creditworthy. Some of the responses were very long which was inappropriate for a 4 mark question and left the candidate less time for the rest of the exam questions.
- (c) Most candidates did make some comparisons between drug treatments and cognitive restructuring therapy for depression. Popular similarities included that both treatments are effective and they can take time before the patient notices an improvement in symptoms. Popular differences included the side effects experienced and the involvement of the patient in the treatment with drugs, requiring the patient to take a pill each day whereas cognitive restructuring involves regular appointments with a therapist as well as homework. Most candidates achieved in the 3–4 mark band. This was due to writing quite brief responses. Some responses gave a very detailed description of cognitive restructuring treatment which was not creditworthy unless a comparison with drug treatments was made.

##### **Question 2**

- (a) Significant numbers of candidates produced good answers with some detail given on the causes of impulse control disorders and non-substance addictive disorder. Most responses described biochemical, behavioural and cognitive causes of the disorder. A small proportion of candidates described what is meant by impulse control disorders and non-substance addictive disorders and/or describe therapies that have been used for this disorder. Neither of these descriptions were creditworthy.
- (b) Many responses to this question achieved in either the level 1 or 2 mark band. Most answers did include reference to reductionism although this was often very brief and many stated that the cause

under discussion was 'simplistic' or 'ignored other causes', Weak responses tended to be those that went through each cause of the disorder given in (a) in turn and evaluating them. This meant that points were not be developed well.

Most responses did not include any analysis and did not consider strengths and/or weaknesses of the issue, provide any counterargument or a comparison between the different causes in terms of the issue under discussion. Without this analysis, these answers could only achieve level 2 maximum.

## Psychology and Consumer Behaviour

### Question 3

- (a) Most candidates achieved full marks by giving a detailed description of what is meant by personal space. Many responses mentioned that it is an invisible boundary that surrounds a person into which others may not enter. Many also mentioned the effects of personal space invasion such as increased arousal. Some also identified the different types of personal space.
- (b) There were many good answers where candidates described two of the results of the Milgram (1986) study on defending a place in a queue. Popular responses included the percentage of participants who gave verbal, non-verbal and physical responses. Some responses included quotes of the comments made by participants. Many also described the result that participants were more likely to respond to the intrusion when the intruder was ahead of them in the queue rather than behind. Weaker responses gave a general result without the numerical findings or did not provide a comparison between two of the conditions.
- (c) Most responses achieved 3–4 marks for this question. A common strength discussed was ecological validity and the common weaknesses included cultural bias and lack of control. Candidates could achieve higher marks by giving more in depth responses. This could be done through giving a brief example from the study to back up their point to achieve in the 5–6 mark band.

### Question 4

- (a) Most answers described some of the research and theories relevant to lighting, colour and smell in the physical environment. Some responses gave brief descriptions of the models of the effects of ambient including pleasure-arousal and cognition-emotion. Many responses described the study by Kutlu et al and/or the study by Chebat and Michon. These descriptions were sometimes very brief or had many inaccuracies in them. There were a few very good and detailed, accurate and coherent responses with many references to appropriate terminology and details of the two studies from the specification. Some responses achieved in the lower levels due to giving either very brief responses or responses that gave more anecdotal type responses.
- (b) The responses were mainly achieving either level 1 or level 2. Most responses clearly understood the concept of ecological validity but did not compare the ecological validity of each study clearly, merely stating whether the research was high or low in ecological validity. Candidates should be encouraged to decide on a number of issues that they will use and then apply each study or theory to that issue (as opposed to evaluating each study/theory in turn). To access higher marks the issues need to be analysed as to how well they apply to the research.

Most responses did not include any analysis and did not consider strengths and/or weaknesses of the issue, provide any counterargument or a comparison between the different research described in part (a) in terms of the issue under discussion. Without this analysis, these answers could only achieve level 2 maximum.

## Psychology and Health

### Question 5

- (a) The majority of responses tended to score full marks here by giving a clear description of what is meant by a 'Type II error' in practitioner diagnoses. Weaker responses were very brief and a small number of candidates did not answer this question.
- (b) Most responses achieved in the 3–4 mark band by giving clear description of the procedure of the study by McKinstry and Wang on the style of doctors' clothing. Popular features of the study included details of the sample, the number of photographs shown to the patients as well as the types of clothing worn by the doctors and the details of the questions asked to the participants. Some responses gave incorrect details of some of the features but the vast majority of responses achieved at least 1 mark for this question.
- (c) Most responses did achieve some marks for this question explaining one or two strengths of the study. Popular points did include ecological validity, strengths of quantitative data, ethics and practical applications. Weaker responses tended to be very brief with generic strengths given with no specific examples of the study to back up the strengths given.

### Question 6

- (a) Most answers were able to describe two or three theories/studies relevant to the causes of stress. The vast majority of responses discussed work, life events and personality as causes of stress. Some responses gave very detailed descriptions of the study by Chandola et al., the life events scale and type A and type B personalities and how type A personalities are more likely to experience stress. Weaker responses tended to be very brief and/or included a number of inaccuracies in the answer.
- (b) The responses were mainly achieving either level 1 or level 2. Most responses did provide an evaluation of the reliability of the research and life events scale described in part (a). These responses tended to be very brief with few examples given directly from the research. Most candidates evaluated each study/theory in turn rather than structuring their response by issue. This usually meant that the response just briefly indicated whether the study had high or low reliability (for example) without any explanation about why this was the case.

Similar to previous questions, most responses did not include any analysis and did not consider strengths and/or weaknesses of the issue, provide any counterargument or a comparison between the different research described in part (a) in terms of the issue under discussion. Without this analysis, these answers could only achieve level 2 maximum.

## Psychology and Organisations

### Question 7

- (a) There were many good, full mark responses to this question. Candidates were able to explain what is meant by 'slow rotation' in shiftwork and many gave an example to expand their definition. A few candidates used the word 'slow' in their response rather than explaining what it meant. A few candidates described the job design of 'rotation' rather than shiftwork, which didn't answer the question.
- (b) Many of the responses to this question achieved full marks by giving a clear and somewhat detailed description of the study by Gold et al. on shiftwork and accidents. Popular features included details of the sample, the topics asked about in the study and also details of the results of the study. Some candidates described the study by Fox et al. on token economies and did not receive any credit. Weaker responses tended to be brief with few details of the Gold study given.
- (c) Most achieved 3–4 marks for their response to this question. Popular strengths included generalisability, ecological validity and practical applications. Popular weaknesses included generalisability and problems with self-report. Less successful responses tended to be very brief with generic strengths and/or weaknesses given with no specific examples of the study to back up the strengths given.

### Question 8

- (a) Most answers were able to describe something from the three bullet points in the specification including the job descriptive index, Minnesota satisfaction questionnaire and the quality of working life. There were some excellent responses that gave examples of the types of questions asked in each questionnaire as well as the response categories used. Most responses were able to describe the topics covered by each questionnaire. Less successful responses often gave inaccurate details of the questionnaires and sometimes confused the different questionnaires. A small number of candidates described the theories of job satisfaction rather than how job satisfaction is measured and these responses were not creditworthy.
- (b) Most responses for this question achieved in the level 1 or level 2 mark band. As well as the named issue of self-reports, common issues raised tended to be an evaluation of quantitative data and cultural bias. Responses that were more successful took their evaluation points in turn and applied them to what they had described in (a). This enabled them to produce a detailed response. When the response took each of the questionnaires described in (a) in turn and applied some evaluation in turn this resulted in less detail.

Less successful answers often included brief reference to self-reports with some understanding shown of the strengths and weaknesses of questionnaires described in part (a). Most of these did not give any specific examples, but tended to evaluate job satisfaction questionnaires in general, rather than the specific ones described in part (a).

Most responses did not include any analysis and did not consider strengths and/or weaknesses of the issue, did not provide a counterargument or a comparison between the different pieces of research relating to attitudes to work in terms of the issue under discussion. Without this analysis, these answers could only achieve level 2 maximum.

# PSYCHOLOGY

---

Paper 9990/42  
Paper 4 Specialist Options: Application

## Key messages

That which has been learned from the **AS** component of the syllabus should be transferred to the **A2** component. For example, at **AS** candidates learn about methodology, such as experiments, which also apply to **A2**.

Questions should be read carefully ensuring that the focus is on what the question asks rather than what is hoped that the question asks.

All components of the question should be included in answers. For example, Question part **(d)** for **Questions 1, 2, 3 and 4** required advantages and disadvantages (plurals) *and* a conclusion.

In **Section B (a)** methodological knowledge must be evident and detailed for top marks to be accessed. The named method must always be used. The procedure, however detailed, is just one methodological aspect. For top marks answers must explain methodology rather than merely identify it.

In **Section C** to access top marks answers must include a debate which has two sides, such as strengths/advantages and weaknesses/disadvantages. Supporting evidence should also be provided.

Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will never achieve top marks.

Candidates do not need to re-write the question when starting their answers.

## Comments on specific sections

### **Section A**

Candidates frequently failed to address the 'stem' of the question, the introduction or the opening words in **Section A** which is crucial to answering each question part that follows.

In part **(d)** many answers only included one advantage (or disadvantage) and many did not include a conclusion; in questions requiring two advantages and two disadvantages and a conclusion, so restricting marks available. Many conclusions merely repeated what had already been written, and such *summaries* scored no marks. A conclusion is a 'decision reached by reasoning' and so as the reasoning has been done through the advantages and disadvantages, a final decision/ conclusion needs to be drawn.

Candidates should think about what the question requires rather than writing pre-prepared answers. Many questions will test the ability to *apply* knowledge from one thing to another, particularly methodological knowledge.

Candidates should always provide sufficient detail to score all the available marks. A single sentence is more likely to score one mark rather than two marks, so a little elaboration, explanation or an example, which goes beyond the basic sentence, is always recommended. Candidates should always try to impress the Examiner with their psychological knowledge.

### **Section B**

Answers to part **(a)** questions in this Section should include an appropriate design, have applied a range (ideally five) relevant methodological design features, each of which should be explained fully, showing good understanding. These can be a combination of specific and general features. Candidates must address the named method if it is stated. In part **(b)** answers should explain the methodological decisions on which their part **(a)** design is based and also explain the psychological evidence on which their design is based.

### **Section C**

It is essential that answers focus on the question that is set. Every question in this section invites candidates to consider the extent to which they agree or disagree with the statement. It does **not** ask candidates to

describe everything they know about that topic area, and answers doing this are likely to achieve minimal marks. To score marks at the top end of the mark range, answers must focus on arguments both for and against the statement, answers must *use* appropriate evidence to *support* the argument, and at the very top of the mark range answers should show awareness of wider issues and evidence that is relevant.

### Comments on specific questions

#### **Section A**

#### **Question 1**

- (a) Most candidates were able to correctly describe the neurological explanation of obsessive-compulsive disorder, often referring to basal ganglia and related regions. A small number of candidates confused this with other biomedical explanations, which had implications for question part (b).
- (b) This question part, linked to part (a), meant that candidates had to distinguish between all three biomedical explanations, here describing the genetic and biochemical. Some candidates did get the explanations muddled, but many provided full and detailed answers, often supported with relevant studies, such as that by Mattheisen and Altemus for example.
- (c) A number of candidates scored partial marks or no marks because they described the cognitive explanation and then described a genetic or biomedical explanation. How the two differed, as the question asked, was not addressed. Top marks provided a difference, such as 'the cognitive explanation is nurture, whereas the genetic explanation is nature'. Another difference is that the cognitive explanation can be 'situational' whereas a biomedical explanation is 'individual'.
- (d) Many answers included two advantages, two disadvantages and a conclusion and often scored full marks. Answers only including one advantage (or disadvantage) or not including a conclusion, could not score full marks. A number of conclusions merely repeated what had already been written, and such summaries scored no marks. Strengths (of the biomedical explanation) included the data being objective, scientific and findings replicated; weaknesses included reductionism because biomedical explanations are 'individual' and do not consider the social or situational aspects of obsessive-compulsive disorders.

#### **Question 2**

- (a) Answers to this question were of two types: those who knew the term planogram and such answers nearly always scored full marks, and those who did not, who guessed, and nearly always scored no marks. A planogram is a visual diagram or drawing that provides detail of where every product in a retail store should be placed. This can be 'shelf-specific' as shown in the question and as used by Atalay et al.
- (b) Any two findings scored marks, with partial answers scoring one mark and full answers, including some elaboration, two marks. An example of a finding would be: 'horizontal centrality on choice was found across three different studies and product categories (vitamins, meal replacement bars, and energy drinks)'.
- (c) Candidates often distinguished between what was useful for the seller and what was useful for the shopper; others focused exclusively on the seller. Either approach was acceptable. Answers often considered how promotions could be centrally located or items that needed to be sold because of a 'sell-by' date.
- (d) Some candidates did not include two advantages or two disadvantages and some wrote a summary rather than a conclusion, which restricted marks. A few candidates did not know the term 'eye tracking' which meant that some advantages and disadvantages they wrote were inappropriate. Top mark answers included reference to the reliability of eye tracking and that it produces quantitative objective data; alternatively that there may be cultural differences in where people look, or that it is reductionist because it is only one feature that comprises consumer product choice.



### Question 3

- (a) (i) and (ii) Nearly all candidates scored full marks because they could correctly identify which condition showed most improvement (the 'specific prompt plus monetary incentive') and which condition showed least improvement (the 'pooled control groups').
- (b) The optimal way to score maximum marks in questions like this is to state the difference for both sides, and then repeat the format if two differences are required. Describing one then describing the other does not answer the question. In this instance stating 'the monetary incentive group could win \$175.00 in cash prizes whereas there was no monetary incentive for the general prompt group' would score two marks and similarly stating 'the monetary incentive group named the child (to be immunised) whereas in the general prompt group the child was not named'.
- (c) Many candidates scored no marks because they re-wrote 'pooled control groups' which is a combination of two different control groups. The question required identification of these two individual groups which were (i) *contact* control group who received telephone contact but no mailing, and no prompt information. (ii) a *no-contact* control group who received no contact at all.
- (d) Here candidates could apply their methodological knowledge about the advantages and disadvantages of sending mail (information about immunisation) to participants. Many candidates did this very successfully, often including many more advantages and disadvantages than needed. The quality of answers could have been improved if a contrast had been made with alternative methods or a little more explanation added. For example, stating that 'postal information is expensive' is correct, but adding why this is so, would complete the answer.

### Question 4

- (a) Candidates who merely stated 'a need theory is when a person has a need' scored no marks because the question asked for an *explanation* of the term 'need'. Some candidates could give an example such as 'Maslow's hierarchy of needs' and give an example of one or more of those needs, to score 1 mark. Candidates scoring full marks stated that 'a need is something that is necessary to live such as 'physical' needs for survival such as air, water, food and warmth. Social needs are also important and this is where need theories of motivation apply.
- (b) Perfect examination technique would be to (i) give a similarity: 'Maslow says 'X' and also Aldefer also says 'X'; (ii) distinct from above to give a difference: Maslow says 'X' but Aldefer says 'Y'. A few candidates did this, but many provided only one of the two required components, or wrote about Maslow then wrote about Alderfer without giving any similarity or difference. Answers needed not be detailed and stating 'whereas Maslow has five needs such as physiological and safety, Alderfer has three, combining physiological and safety into 'existence' needs'.
- (c) Many candidates successfully described an alternative theory of motivation with many to choose from such as equity theory, VIE theory and goal setting theory. A small number of candidates described the theory by McClelland and scored no marks because this is a need theory: the need for achievement, etc.
- (d) This question asked for advantages and disadvantages of using self-reports and so candidates could apply their methodological knowledge acquired from any part of the course. Whilst most answers successfully provided two advantages and two disadvantages problems were sometimes encountered when *applying* this to need theories of motivation. It is essential that the question is addressed, i.e. motivation rather than writing a general list which could apply to anything.

### Section B

### Question 5

- (a) This question required the design of a questionnaire to investigate hoarding behaviour. Many answers included an appropriate list of features specific to questionnaires, however, there was a lack of knowledge about they could be applied to hoarding behaviour. For example, the most common example of a question to be asked was 'why do you hoard items' with little else, and often the response would be nothing more than 'yes or no'. A more detailed knowledge of the topic area in question should be evident in designs. Lack of knowledge was also evident in selecting

participants because most candidates assumed that they were being treated in a mental institution, when hoarding is nearly always done in the home.

- (b) The main weakness in many answers, as mentioned above, was a failure to relate relevant psychological evidence to the design of the study in part (a). Hoarding involves (i) accumulation of things that have little or no value and (ii) difficulty in discarding such things. Hoarded items typically involve newspapers, magazines, paper/plastic bags, etc. Severe anxiety is often experienced when attempting to discard items, and there is also comorbidity with OCD.

#### Question 6

- (a) Investigations into this question could use any method. Experiments were common, and although many candidates did use relevant terminology, many did not. To achieve top marks terminology must be evident, such as an IV and DV for an experiment. Perhaps because the question concerned mobile phones, a number of candidates seemed to tell the story of when they purchased their mobile phone, rather than focusing on the psychology of the three decision-making strategies. Also noteworthy is that IV's can have, two, three or as many conditions as is appropriate.
- (b) In relation to methodological decisions there was often confusion regarding the experimental design to be applied. This was whether one person would be presented with all three strategies (a repeated measures design) but this would be illogical because order effects might result; or whether different people would receive one strategy (an independent measures design). This debate about designs would have been an excellent discussion point in this question part had it been done well. Psychological knowledge was sometimes appropriate and showed creditworthy expansion (e.g. a reference to satisfying), although some candidates mentioned no psychological knowledge at all and scored no marks.

#### Question 7

- (a) Investigations based on this question had to be a field experiment. This meant that common features of IV, DV, controls and experimental design should have been included and explained in detail. Some answers did not have an IV, and some got the IV and DV confused. Some answers included the sampling technique, and while sometimes this was explained very well, sometimes it was simply 'I would have an opportunity sample' which is insufficient. A number of candidates designed an experiment and then opted to gather data by using observation. This was a good idea and perfectly acceptable.
- (b) Most candidates were able to successfully apply their psychological knowledge to this question, referring to both the principles of operant conditioning and the extension of it to a token economy, with the study by Fox et al. being evident. Methodologically some candidates referred to both experiments and observations (as mentioned in part (a)) but sometimes answers became a list rather than a detailed explanation of one or two features.

#### Question 8

- (a) Although the question specified that an observation must be used, many answers were incorrectly based on alternative methods such as questionnaires. The named method must be used. The main features of observations were often absent, resulting in low marks. Answers should have focused on whether or not the participant is aware of the observation; whether the observer is part of the observation or not; where the observation is conducted and the nature of the data to be collected. All these features should have been applied to investigate 'sins of commission'.
- (b) Many candidates assumed that 'sins of commission' are part of 'group-think'. They are not, instead are part of 'cognitive limitations and errors, Forsyth (2006). Forsyth defines a sin of commission as the misuse, abuse and/or inappropriate use of information, and provides a number of sins of commission including belief perseverance, sunk cost bias, extra-evidentiary bias and hindsight bias, for example. In terms of methodology many candidates simply 'do an observation' with no elaboration, but many others are knowledgeable about the types available and often provided detailed reasons for their chosen type.

## Section C

### Question 9

There were three types of response to this question: (i) candidates who wrote about schizophrenia and mentioned case studies in no more than a sentence. (ii) candidates who wrote quite a lot about case studies and their advantages and disadvantages, but rarely referred to schizophrenia. Both these types of answers scored low marks. (iii) candidates who showed detailed knowledge of both case studies and schizophrenia, and so scored high marks.

### Question 10

Answers in response to this question were often anecdotal which scored low marks. Although perhaps everyone has given or received a gift, and can tell the story of the experience, this is an A level examination and so psychological knowledge must be applied in order to score even middle band marks. It is expected that candidates know the studies on the syllabus and so should have been able to apply information from the study by Porublev et al. (2009) and perhaps other information such as positive reinforcement.

### Question 11

There were many excellent answers here with candidates presenting arguments both in favour of, and against, the providing information health promotion strategy. Supporting the providing information strategy were examples from the work of Lewin (heart) and sometimes the study by Tapper et al. (food). When arguing against, most candidates used the alternative strategy of fear arousal and quoted the work of Janis and Feshbach (1953). A few candidates concluded that both approaches can be successful and quoted the study by Cowpe (1989) who used a combination of each strategy.

### Question 12

Only five candidates answered this question so these comments apply only to this restricted sample. Candidates appeared not to know the term 'psychometric', which restricted their marks, despite the term appearing in the issues and debates section of the syllabus. Even so, the assessment of team roles is a basic component of Belbin's work and the 'Belbin team inventory' appears on the syllabus, so answers able to consider the advantages and disadvantages of the inventory were expected. Candidates should always prepare for questions on all aspects of the syllabus.