Paper 9990/11
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. Candidates also need to understand each approach, as listed in the syllabus, 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 the question must be addressed in full. 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.

General comments

The marks achieved covered a wide spread of possible marks. A range of excellent answers were provided to many of the questions and could candidates could explain psychological terminology well, providing evidence that they were prepared for the examination. There was evidence that some candidates were not familiar with the new core studies that form the 9990 syllabus.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers. Appropriate examples were used from studies when the question required them and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, assessing how the study by Bandura's differed from others or by explaining how results did or did not support Social Learning Theory in the study by Bandura. This was also evident for the questions about real-life application.

Candidates would benefit from an understanding of the difference between ethical issues and ethical guidelines.

Comments on specific questions

Question 1

- (a) Many candidates were able to identify the one of the correct brain scans used in the Canli et al. study. Common errors included using an EEG or an acronym of an unknown scan (e.g. FHI).
- (b) Most responses could identify the purpose of the brain scan that had been named in **1(a)**. For fMRI this tended to be about the function of the brain, whereas for MRI this was usually about the structure of the brain.
- (c) Stronger responses could clearly describe what a participant had to do once the fixation cross had disappeared from the screen. Indicating emotional arousal and the rating scale were common responses here. However, some responses focused on what happened *before* the fixation cross (e.g. length of time the picture was presented for) and could not gain any credit.

Question 2

(a) Stronger responses could identify the two components of the psychological theory being tested and then describe how the two link together. However, many responses simply described the study without any reference to the theory under investigation. Candidates need to know what theory or theories each of the 12 core studies are based on.

(b) Stronger responses could identify one ethical issue with the most common being about deception. However, the question was about an *issue* and not a *guideline* so to gain credit the response must have been about an issue (which is usually linked to a guideline being broken).

Question 3

- (a) Responses that earned maximum marks tended to identify the measurement tool (feelings thermometer) and how it was used (9 point scale). Some responses could outline just the tool *or* the how. Some responses could not identify the numerical scale or reversed what the numbers indicated (low meaning more distressed).
- (b) Stronger responses could describe the progressive fall in distress ratings across the three sessions to gain maximum marks. However, a significant amount of responses described how the ratings became *higher* over the three sessions which was incorrect. Candidates need to know the results from all of the core studies and be able to describe them.

Question 4

- (a) Common creditable responses tended to either outline a conclusion about doodling aiding concentration *or* give a key result of the doodling group performing better than the non-doodling group on memory scores. Some responses outlined the result for the doodling group only. Responses need a meaningful comparison to gain two marks.
- (b) Many responses could describe a real-life situation where doodling aiding concentration would be beneficial. These included whilst listening to a lecture, whilst working in a call centre or having a job that required sustained concentration.

Question 5

Candidates can improve their answers to questions like this by focusing on the demands of the overall question. In this instance, the question was asking about ethical guidelines that were relevant to the Yamamoto et al. study and not about ethical issues. Stronger responses could identify two guidelines and then describe what they were (sometimes in the context of Yamamoto). Weaker responses tended to attempt to analyse potential consequences of breaking an ethical guideline or present guidelines for the use of human participants, for example, informed consent or right to withdraw. A small minority of responses used the question as a way to express their beliefs about animal rights issues.

- (a) Stronger answers could identify the role that social learning or conditioning has in explaining behaviours, but many responses were simplistic and sometimes tautological. Other responses wrote about applications or confused the learning and social approaches to psychology. Candidates need to understand what a learning psychologist (behaviourist) would believe.
- (b) Many candidates could present a finding from the study by Pepperberg but only few could explain how it supported an assumption of the learning approach. The responses that scored maximum marks tended to focus on the Social Learning elements of the Model/Rival Technique or how the parrot had been rewarded for correct answers and so was therefore more likely to repeat the correct answers.

Question 7

- (a) Correct responses noted that the technique was self-selected or volunteer. Incorrect responses included opportunity (a common incorrect choice), random and in some cases, stratified.
- (b) Stronger responses gave a systematic answer outlining how the sample were recruited by Baron-Cohen et al. Common elements included advertising in a National Autistic Society Magazine. Some responses confused the AS/HFA group with a different participant group or described the procedure of the study rather than how the sample had been recruited.
- (c) Common correct responses focused on the motivation of participants, limited issues of informed consent or that a specific type of participant can be 'asked for' more efficiently. A common incorrect response was that it is 'quick and easy' and it is encouraged that brief answers like this are not given as reasons for a specific sampling technique. Many responses did not contextualise the

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answer by making the reason explicit to Baron-Cohen et al., so gained limited marks. If a question states 'in this study', then the response needs to be explicitly linked to the study to gain maximum marks.

Questions 8

- (a) Stronger responses could do this clearly and efficiently, highlighting aspects like disposition and external environment. Strong answers tended to use an example to ensure that they had outlined the debate sufficiently to gain maximum marks. To improve their responses, candidates need to explicitly label which side of the debate they are outlining for each mark. This was sometimes not seen, which sometimes meant that the response could not gain credit as it was not always clear that the candidate knew the difference between individual and situational explanations. Candidates need to be familiar with the issues and debates on the AS Level syllabus and to be able to outline each one. Many responses to this question were tautological: individual is about individuals and the situation is about the situation, which could not be credited.
- (b) Candidates need to directly engage with any stimulus material presented in Paper 1. In this example it was about how two people, Brett and Mia, were debating the Piliavin et al. study. Candidates could take either side of the debate and then explain why they thought Brett or Mia was correct using any evidence from the study (e.g. results, conclusions, the procedure etc.). Brett being correct was the most common choice, with stronger responses focusing on the type of victim having an effect on helping behaviour and how people did move out of the critical area. Stronger responses for Mia included potential personality differences in the participants. Reasons for responses receiving limited credit were that some responses did not explicitly state which side of the debate they were outlining, a small number of candidates mixed up Brett's and Mia's ideas, and some responses that outlined one side of the debate did not make clear if it was Brett or Mia they agreed with.

Question 9

- (a) This question appeared to be found difficult by the majority of candidates. Stronger responses argued very well how the study was about aggression in the absence of a model, that the control group did not have a model at all or that there were only specific things the children imitated so they do not readily imitate any behaviour. However, many responses described key results of the study or simply described parts of the study that did not answer the question set. Candidates need to know about the background of all core studies.
- (b) Stronger responses could outline a key result that did support Social Learning Theory or did not support it and then give a clear explanation as to why. For the supporting of Social Learning a common answer was the copying of a same-sex model was more prevalent than that of an opposite sex model. Common answers for the not supporting of Social Learning Theory was that some behaviours were seen in the final room that had not been observed or that males were more physically aggressive overall so there may be some biological difference explaining the results. Weaker responses tended to describe results for the 'does not support' part of the question that could readily be explained by Social Learning Theory.

Question 10

The strongest responses evaluated the study by Dement and Kleitman in depth and in terms of two strengths and two weaknesses, with at least one of these points covering the named issue of the use of quantitative data. Common choices included generalisability, mundane realism, ecological validity and replicability. 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 focus on the study by Dement and Kleitman. Other responses included three evaluation points that were thorough, logical and well-argued but with a fourth point that was brief. Some responses confused quantitative and qualitative data and as a result did not cover the named issue. Candidates need to be aware that any description of the study does not gain credit in these type of questions.

Paper 9990/12
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. Candidates also need to understand each approach, as listed in the syllabus, 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 the question must be addressed in full. 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.

General comments

A range of excellent answers were provided to many of the questions and could candidates could explain psychological terminology well, providing evidence that they were prepared for the examination. There was evidence that some candidates were not familiar with the new core studies that form the 9990 syllabus.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers. Appropriate examples were used from studies when the question required them and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, assessing how a result supported an assumption in the study by Bandura et al. or what psychologists have learned about bystander behaviour in the study by Piliavin et al. This was also evident for the questions about real-life application.

Candidates would benefit from an understanding of the difference between ethical issues and ethical guidelines.

Comments on specific questions

Question 1

- (a) Many candidates were able to identify one of the two specific questions used in the training phase. However, some candidates merged the two by stating 'What's same or different?' which is incorrect or using a question not used in training (e.g. 'What colour?').
- (b) Correct responses chose an item that had *two* features the same as a blue wooden triangle. However, some responses only had *one* feature the same and could not be awarded credit.
- (c) Stronger responses could identify one guideline and then describe what they were (sometimes in the context of the study by Pepperberg). Weaker responses tended to attempt to analyse potential consequences of breaking an ethical guideline or a present guideline for the use of human participants, for example, informed consent or right to withdraw. A small minority of responses used the question as a way to express their beliefs about animal rights issues. Candidates can improve their answers to questions like this by focusing on the demands of the overall question. In this instance, the question was asking about an ethical *guideline* that was relevant to the study by Pepperberg and not about an ethical *issue*.

Question 2

- (a) Stronger responses could identify that Theory of Mind was the core theory being investigated in the study by Baron-Cohen et al. These responses extended into describing the theory outside of the context of the Eyes Test which allowed them to access maximum marks. However, many responses described the Eyes Test and its procedure rather than Theory of Mind which could not be credited. Candidates need to be able to describe relevant psychological theories present in all core studies.
- (b) Many candidates could identify one problem that Baron-Cohen et al. reported about the Original Reading the Mind in the Eyes Test. Common choices included only have two choices, the ceiling effect and having no glossary.

Question 3

Stronger responses could present a logical outline of the procedure for any participant that was assigned to the doodling condition. This included how they had been recruited through to the telephone message, the rules about doodling and the surprise recall test. Some responses did not mention aspects exclusive to the doodling condition (e.g. shading in squares and circles) and could only be awarded partial credit.

Question 4

- (a) Many responses could highlight that a correct tool was needed in order for the chimpanzee to get the juice reward and these answers were awarded maximum marks. A minority of responses only featured one half of the task (e.g. tool or juice) to gain partial credit. It was clear that the majority of candidates knew the core task of the study by Yamamoto et al.
- (b) Candidates can improve answers to real-world application questions by explaining *how* the aspect of the study or a result can be used *in the real world*. Stronger responses could explain a similar task that could be used in the classroom to improve the helping behaviour of children for example. Other responses tended to focus on general helping in children without any specific details and could only be awarded partial credit.

Question 5

Stronger responses could formulate a logical progression of the procedure about dream recall in the Dement and Kleitman study. This included being woken up by a doorbell, speaking into a recorder, being asked if they had dreamt and being woken in REM/nREM sleep. Some responses focused on other aspects of the study like estimations of length of dream but the question was specifically asking about dream recall. Therefore, candidates can improve their responses by ensuring that they focus on the demands of the question; in this case the specific aspect of dream recall.

Question 6

- (a) Stronger answers could identify the role that social learning or conditioning has in explaining behaviours, but many responses were simplistic and sometimes tautological. Other responses wrote about applications or confused the learning and social approaches to psychology. Candidates need to understand what a learning psychologist (behaviourist) would believe.
- (b) Many candidates could present a finding from the study by Bandura et al. but only a few could explain how it supported an assumption of the learning approach. The strongest responses tended to focus on the observation and imitation nature of the study.

It is essential that the correct version of the core study is taught, some incorrect responses focused on a video aspect of the study or focused on vicarious reinforcement.

Question 7

(a) Correct responses noted that the technique was self-selected or volunteer. Incorrect responses included opportunity (a popular incorrect choice), random and in some cases, stratified.

- (b) Stronger responses gave a systematic answer outlining how the sample was recruited by Schachter and Singer. Common elements included being from an introductory class and receiving extra credit for participating. Some responses confused it with the study by Dement and Kleitman or described the procedure of the study rather than how the sample had been recruited.
- Common correct responses focused on the motivation of participants, limited issues of informed consent or that a specific type of participant can be 'asked for' more efficiently. A common incorrect response was that it is 'quick and easy' and it is encouraged that brief answers like this are not given as reasons for a specific sampling technique. Many responses did not contextualise the answer by making the reason explicit to Schachter and Singer, so could only gain limited marks. If a question states 'in this study', then the response needs to be explicitly linked to the study by the candidate to gain maximum marks.

Questions 8

- (a) Stronger responses could do this clearly and efficiently, highlighting aspects like disposition and external environment. Strong answers tended to use an example to ensure that they had outlined the debate sufficiently to gain maximum marks. To improve their responses, candidates need to explicitly label which side of the debate they are outlining for each mark. This was sometimes not seen, which sometimes meant that the response could not gain credit as it was not always clear that the candidate knew the difference between individual and situational explanations. Candidates need to know about the issues and debates on the AS Level syllabus and be able to outline each one. Many responses to this question were tautological: individual is about individuals and the situation is about the situation, which could not be credited.
- (b) Candidates need to directly engage with any stimulus material presented in Paper 1. In this example it was about how two people, Bo and Amar, were debating Milgram. Candidates could take either side of the debate and then explain why they thought Bo or Amar was correct using any evidence from the study (e.g. results, conclusions, the procedure etc.). Amar being correct was the most popular choice, with stronger responses focusing on the set-up, the person giving out the prods and the real electric shock prior to the main study. Stronger responses for Bo included potential personality differences in the participants. Reasons for responses receiving limited credit were that some responses did not explicitly state which side of the debate they were outlining, a small number of candidates mixed up Bo's and Amar's ideas and some responses that outlined one side of the debate did not make it clear if it was Bo or Amar they agreed with.

Question 9

- (a) Stronger responses could effectively outline the roles of all confederates including taking notes, acting as one of the victims and a model who helped out the victim when necessary. A common error seen was describing the participants rather than the confederates.
- (b) Stronger responses could outline a key result from the study by Piliavin et al. and effectively explain what psychologists had learned from this. Common examples included that diffusion of responsibility was not seen in the study meaning that real world behaviour may be different to laboratory-based findings and that the perception of a victim affects how much helping behaviour is seen. There were some excellent explanations based on the results presented in responses. Weaker responses tended to just highlight results. Some responses described the procedure of the study with no attempt at presenting results or explaining what we have learned from the study by Piliavin et al.

Question 10

The strongest responses evaluated the study by Laney et al. in depth and in terms of two strengths and two weaknesses, with at least one of these points covering the named issue of the use of quantitative data. Common choices included generalisability, mundane realism, ecological validity and replicability. 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 study by Laney et al. as examples. Other responses included three evaluation points that were thorough, logical and well-argued but with a fourth point that was brief. Some responses confused quantitative and qualitative data and as a result did not cover the named issue. Candidates need to be aware that any description of the study does not gain credit in these type of questions.

Cambridge Assessment
International Education

Paper 9990/13
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. Candidates also need to understand each approach, as listed in the syllabus, 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 the question must be addressed in full. 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.

General comments

A range of excellent answers were provided to many of the questions and could candidates could explain psychological terminology well, providing evidence that they were prepared for the examination. There was evidence that some candidates were not familiar with the new core studies that form the 9990 syllabus.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers. Appropriate examples were used from studies when the question required them and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, assessing how a result supported an assumption in the study by Bandura et al. or what psychologists have learned about bystander behaviour in the study by Piliavin et al. This was also evident for the questions about real-life application.

Candidates would benefit from an understanding of the difference between ethical issues and ethical guidelines.

Comments on specific questions

Question 1

- (a) Many candidates were able to identify the phase of sleep where participants recalled dreams the most.
- (b) Popular correct responses to this question included that an EEG measures brain waves or brain activity.
- (c) Stronger responses could outline the main conclusion about the relationship between eye movements and content of the dream and could then note that the eye movements are not 'random' in nature. A lot of responses gave an example of the relationship but this is a result rather than a conclusion.

Question 2

(a) (i) Many responses could clearly identify two features of the sample. Features can be both demographic and procedural in nature rather than characteristics which is about the demographics of the sample only. Popular choices included age, gender distribution and the sampling technique used to recruit. A minority of responses confused the study by Andrade with the study by Laney et al.

- (ii) Most responses could identify that the participants were allocated randomly to either condition in the study by Andrade. Some responses simply stated that participants were placed into conditions but needed to state *how* it was done.
- (b) Popular correct answers included replicability and cause-effect relationships being established. However, a common incorrect response was standardisation, it needed to be clear why standardisation is a strength, i.e. by stating that it means replicability is enhanced, in order to be a creditable response.

Question 3

Stronger responses could present a logical description of the shock generator with a focus on its features like the number of switches, what the voltage range was, how much the voltage increased per button and what labels were used to describe the level of shocks. However, some responses described the procedure of the study including aspects of the sample and the task presented to the participants. These responses could not gain credit as they were not answering the question set. Candidates are advised to read questions carefully to ensure their responses focus on the elements of the study presented in the question.

Question 4

- (a) Many responses could present a result with some meaningful comparison about the Food History Inventory. Popular responses focused on the increase in mean ratings in the Love group being much higher than that of the control group. Some responses only presented results from one condition with no comparison or elaboration, so could only receive partial credit. Candidates can improve their responses to results questions by ensuring there is a meaningful comparison or some form of elaboration.
- (b) Candidates can improve answers to real-world application questions by explaining how the aspect of the study or a result can be used in the real world. Common stronger responses could explain how the procedure may help fussy eaters begin to eat a wider range of food or improving the diets of people who do not eat enough fruit and vegetables.

Question 5

This question appeared to be found difficult for the majority of candidates. Stronger responses could identify psychology being investigated and then describe what this is outside of the context of the Saavedra and Silverman study, using appropriate examples where possible. Common limited responses tended to describe the procedure of the study and what the boy had to do in therapy sessions which tended to gain minimal credit. Candidates can improve their responses to this type of question by identifying psychological concepts and ideas prevalent in the study and describing these independently of the study.

Question 6

- (a) Stronger responses could identify aspects like how information processing and computer analogies can explain behaviours, but many responses were simplistic and sometimes tautological. Other responses wrote about applications or confused the cognitive and biological approaches to psychology. Candidates need to understand what a cognitive psychologist would believe.
- (b) Many candidates could present a finding from the Baron-Cohen et al. study but only few could explain how it supported an assumption of the cognitive approach. The responses that did score maximum tended to focus on the information processing nature of the study. Some responses muddled the results of the study or presented findings that were unclear, making it difficult for them to then explain why it would support an assumption of the cognitive approach.

Question 7

- (a) Correct responses noted that the technique was self-selected or volunteer. Incorrect responses included opportunity (a popular incorrect choice), random and in some cases, stratified.
- (b) (i) Most responses included a correct feature of the sample used in the study by Canli et al. The most popular choice what that all were right handed.

Cambridge Assessment
International Education

- (ii) Stronger responses could outline the argument presented by Canli et al. that females are more likely to report intense emotional experiences compared to males. This was then usually taken further by outlining that females are also more likely to show physiological reactivity to emotional stimuli which was a crucial aspect of this study.
- Common correct responses focused on the motivation of participants, limited issues of informed consent or that a specific type of participant can be 'asked for' more efficiently. A common incorrect response was that it is 'quick and easy' and it is encouraged that brief answers like this are not given as reasons for a specific sampling technique. Many responses did not contextualise the answer by making the reason explicit to Canli et al. so could only gain limited marks. If a question states 'in this study', then the response needs to be explicitly linked to the study by the candidate to gain maximum marks.

Questions 8

- (a) Many responses to this question were able to clearly outline the difference between nature and nurture. To improve their responses, candidates need to explicitly label which side of the debate they are outlining for each mark. This was sometimes not seen, which sometimes meant that the response could not gain credit as it was not always clear that the candidate knew the difference between nature and nurture. Candidates need to avoid tautological responses. Candidates need to know about the issues and debates on the AS-Level syllabus and to be able to outline each one.
- (b) Candidates need to directly engage with any stimulus material presented in Paper 1. In this example it was about how two people, Crystal and Jon, were debating Bandura et al. Candidates could take either side of the debate and then explain why they thought Crystal or Jon was correct using any evidence from the study (e.g. results, conclusions, the procedure etc.). Jon being correct was the most popular choice, with stronger responses focusing on the observation and imitation of aggressive and non-aggressive behaviours. Stronger responses for Crystal included potential personality/biological differences in the participants. Reasons for responses receiving limited credit were that some responses did not explicitly state which side of the debate they were outlining, a small number of candidates mixed up Crystal's and Jon's ideas and some responses that outlined one side of the debate did not make it clear if it was Crystal or Jon they agreed with.

Question 9

- (a) (i) Many responses could give one question asked of Alex the parrot during any part of the study. Popular choices were 'What's same?' and 'What's different?'
 - (ii) Stronger responses could effectively outline the three steps that Alex was assumed to have gone through before producing a response in a logical order (although this was not necessary to score maximum marks). Other responses purely focused on the same/different aspect of the study and repeated this for each step using different phrases to gain partial credit. Weaker responses tended to focus on the Model/Rival technique or present a result, which could not be credited.
- (b) Stronger responses could outline how an ethical guideline was met by Pepperberg and effectively explain how this occurred. Popular examples included the caging of Alex, the use of rewards and the smallest number of animals was used. There were some excellent explanations based on how Pepperberg met each guideline. Weaker responses tended to just describe a relevant guideline without any context of how Pepperberg met it. Some responses described the procedure of the study with no attempt at explaining how this linked to a guideline relevant to the study by Pepperberg.

Question 10

The strongest responses evaluated the Piliavin 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 the use of field experiments. Common choices included ethics, generalisability, mundane realism, ecological validity and replicability. 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 Piliavin et al. study as examples. Other responses included three evaluation points that were thorough, logical and well-argued but with a fourth point that was brief. Some candidates only covered ethical issues. Candidates need to be aware that any description of the study does not gain credit in these type of questions.

Paper 9990/21
Research Methods

Key messages

Although this is a question paper about research methods, it will still contain questions about the core studies in relation to the research methods used within. It is therefore essential that candidates are prepared to use this knowledge.

Practising the application of ideas to studies (both core studies and novel ones) is important to success on this paper. This could have helped candidates in two ways:

- Candidates needed to be able to apply research methods terms and concepts to novel situations, for example in responses which indicate the need for a link. When a question says 'in this study', responses must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates therefore need to be prepared for questions using this format and practice can help them to learn both how to extract relevant ideas and how to make novel suggestions based on scenarios.
- Question 10 in this paper requires candidates to produce an original design for a novel research question; this 'creative' process requires practice. Furthermore, to learn to identify flaws in a design (whether their own, as in Question 10, or one from a novel scenario for example in Section B) also relies on having had experience of practical problems in conducting studies. This is a high-level skill, and can be developed through practical work with designing and conducting small studies in class or through the discussion of novel scenarios.

General comments

Candidates were able to demonstrate their knowledge of a range of aspects of research methods in this paper, although overall performance was limited. Success was greater on more straightforward questions, such as **Questions 5**, **7(b)**, **8(c)** and **9(a)** than on more demanding ones, such as **Question 3**. This examination tested a cross-section of psychological skills and on some candidates showed limited knowledge, such as **Questions 1**, **2** and **9**. **Question 10** was often well answered and focused on the candidate's ability to design and evaluate their own research, although some responses lacked detail.

Comments on specific questions

Question 1

- This question part was not well answered. Many incorrect answers described a repeated measures design as where participants tested more than once, which is not sufficiently clear. It is important that responses refer to the independent variable and whether participants experience only one level (as in independent measures) or all levels of the independent variable as required here.
- (b) This question part was also not well answered. Stronger answers used the information about their chosen study (most often Yamamoto et al.) to illustrate the disadvantage effectively. Some responses did not refer to a core study or referred to one that was not an experiment, typically Milgram, or to a study using independent groups, such as Piliavin et al., Schachter and Singer or Andrade.

Cambridge Assessment
International Education

Question 2

A small number of responses correctly explained both terms and a larger number succeeded in explaining 'deprivation'. Weaker answers needed to avoid giving circular definitions, such as 'Deprivation is when an animal is deprived'. There were a range of confused answers such as those suggesting that aversive stimuli were pleasant or which suggested the candidate did not understand the words 'aversive' or 'stimuli'. These are terms used on the syllabus in relation to ethical guidelines for animals.

Question 3

- (a) Many responses provided a simple and adequate explanation referring explicitly or implicitly to 'consistency'. Where candidates were not successful in this respect this was either because they mistakenly defined validity or because they described reliability as 'accuracy' which is not sufficiently clear. Fewer answers were able to relate reliability to the Bandura et al. study, with many attempting to use the control condition as evidence of reliability.
- (b) This question part was not well answered. A range of irrelevant responses were given here, with the most common being references to validity. Candidates would benefit from the opportunity to experience poor reliability, such as by performing ratings or observations of the same response or event in class and comparing their records. By seeing that these are different, they are more likely to appreciate the problem of reliability and be able to understand how this could affect the results of the studies they are learning about.

Question 4

- (a) Although several possible interpretations of the question were creditworthy, some candidates were unable to state the range of voltages.
 - A small but significant minority of candidates appeared to misread the question and gave an irrelevant description of how to calculate the range.
- (b) (i) Responses often included the key idea that the range is a measure of spread. Fewer candidates were able to explain what information this provided for Milgram. In other words, they were unable to present the generic idea that the range indicates the spread of results, to the specific information that in this study it indicated the spread of least to most obedience. Practising the application of ideas to studies (both core studies and novel ones) is important to success on this paper.
 - (ii) The best responses indicated both a relative advantage of the standard deviation over the range and an application of this point to Milgram's results. However, many responses were confused, suggesting that these candidates were not sufficiently clear on the difference in function of the two measures of spread.

Question 5

Some candidates had evidently learned a definition for validity and used it effectively to explain their answer, earning full marks. However, many other candidates gave explanations that were too narrow, focusing only on ecological validity, which could earn partial credit. Learners often find it easier to understand the concept of ecological validity than validity in general. Looking at practical examples of threats to validity in studies they have performed themselves may help to broaden their understanding.

Question 6

Many candidates demonstrated some knowledge of naturalistic observations. However, there were two main areas of confusion in their descriptions. Firstly, that naturalistic observations were often confused with natural experiments, so responses contained irrelevant material relating to natural experiments. Secondly, there was an assumption that naturalistic observations were necessarily covert and controlled observations were necessarily overt. This problem was exacerbated by the suggestion by many candidates that the study by Piliavin et al. was a naturalistic observation, which is not correct. It was controlled because the responses being observed were in response to an event that was controlled (the victim falling). For this study to be a naturalistic observation, the observers would have had to have wait to observe reactions to falls by 'real' victims who appeared drunk or ill.

Candidates would benefit from learning simple summaries of the key methodological ideas relating to each study (e.g. the main research method, other techniques used, e.g. to collect data, the experimental design, type of interview or observation if appropriate, the sampling method).

Question 7

- (a) Those candidates who provided a possible correct answer to the question (i.e. directional or non-directional) generally answered correctly. However, many gave responses that suggested they had not understood the question.
- **(b)** This question part was well answered, with a range of possible suggestions.
- (c) Many responses provided an appropriate reason and were either able to provide some detail to their reasoning or to link a brief reason to Gavin's study. Fewer were able to link a detailed reason to Gavin's study, although where candidates did so their answers were excellent.
- (d) Many candidates were able to achieve partial marks with a generic answer. However, there were also some creative responses that were linked to Gavin's study, such as suggesting that if they were a resident of the area they may be less likely to litter (as they would not want their own street to be messy).

Question 8

- (a) There were many good suggestions in answer to this question, using a range of techniques from very simple measures to sophisticated contrived situations used to produce data which could be correlated. However, a significant number of candidates collected nominal data (the individual 'was helpful' or 'was not helpful'. Categorical data such as this cannot be used in a correlational data, so the response could not earn marks.
- (b) Many candidates scored at least some credit here, with some insightful answers that related directly to the measure suggested. Even where the candidate had given an inappropriate answer of a nominal measure in part 8(a) they were often able to suggest a brief advantage of the measure.
- (c) This question part was well answered, although some responses, such as 'correlational graph' suggested that some candidates lacked basic knowledge.
- (d) Few candidates used a diagram in answer to this question although they may have benefited from doing so. The simple answer 'As one variable goes up the other goes down' was relatively rare, with many candidates struggling to do more than produce a simple definition of a correlation. A further problem was allowing their answer to state that one variable caused the other to change, which was not creditworthy.
- (e) Although some candidates produced excellent, logically argued explanations for the effect of cheating by less helpful participants, this question was often poorly answered. Again, sketching two scatter diagrams, one of the results and another of how this would change the pattern would have helped candidates to produce a reasoned explanation for this question.

Question 9

- (a) This question part was generally well answered, with effective and appropriate use of Kyle's data as an example.
- (b) This question was answered with a variety of acceptable responses. The responses from candidates who did not earn credit suggested that they did not understand the idea of a 'type' of variable. The most obvious 'type' in this instance was a situational variable but many responses were vague attempts to explain examples of possible uncontrolled variables, which were not answering the question so could not earn credit.
- (c) The most obvious 'type' in this instance was a participant, although as with question part **9(b)** candidates offered a variety of creditworthy responses. However, as above there were many responses that were too vague to earn credit.

Question 10

- This question was well answered, with many candidates illustrating a good awareness of the principles of using an interview, for example, identifying the interview structure and questioning styles. Many candidates also gave examples of suitable questions. Better responses provided all three in detail and were able to describe the procedure they would use, the sample they would obtain and relevant ethical issues and how they could be overcome. To improve lower scoring responses, candidates needed to, for example, expand on how they would use their chosen interview structure for example, what they would do in a structured or in an unstructured interview. Similarly, they needed to explain more about their use of open and closed questions, such as linking their comments to specific examples and indicating the type of data they would generate and how they would analyse the results from these questions. Some candidates needed to provide more than just a summary of the interview itself and indicate some procedural details, whilst others made their procedure rather too complex by generating controlled situations for the interview respondents to discuss. Whilst acceptable if relevant, this was not required and the candidates' time would have been better spent providing necessary description.
- (b) Although many candidates gained marks here, responses were often generic. Their answers could have applied to any similar study rather than to the particular study that they had designed. To improve on this, candidates need to be able to imagine conducting the study they have suggested and be able to identify realistic problems that are specific to their design. This is a demanding skill, which requires practice. This could be obtained through practical work with designing and conducting small studies or through the discussion of novel scenarios.

Paper 9990/22 Research Methods

Key messages

There is a tendency for learners to over-rely on some concepts. In this instance, the idea of inter-observer/inter-rater reliability, although the same can be seen with demand characteristics and ecological validity. To avoid giving irrelevant answers based on these favoured concepts, candidates need to read questions carefully and consider their answer before beginning to write.

Learners appeared to find the concept of correlational research more difficult to grasp than that of experimental research. This applies to describing such research in general and using examples (as required here in **Question 6**), but also in other situations such as those requiring understanding given examples, such as novel scenario questions and ones in which they have to design their own study based on a correlational design. To aid understanding, learners benefit from the chance to design their own correlational studies, even if they are unable to conduct them.

Question 10 of this paper requires candidates to produce an original design for a novel research question; this 'creative' process requires practice. It is important that learners practice such questions are able to provide detailed responses. In order to achieve this, learners would benefit from both practical opportunities to design studies and practice with designing studies and criticising them. This will give them practice at the skills needed for part **10(b)**.

General comments

Candidates were able to demonstrate their knowledge of a range of aspects of research methods and psychological skills in this paper. The paper included more straightforward questions, such as **Questions 1**, 7 and 8, and more demanding ones, such as **Questions 4** and 6. Candidates often demonstrated a sound ability to apply their knowledge to a novel scenario, such as in **Question 7**, although the level of detail offered in **Question 10(a)** could often have been greater.

Comments on specific questions

Question 1

- (a) This question was well answered. A common response was 'an average', although many candidates accurately referred to 'a measure of central tendency'. A minority of candidates provided a description of how the mean is calculated (the answer to 1(b)) which was not creditworthy as a definition.
- (b) This question was also well answered. A minority of candidates mistakenly described the process for working out a median.

Question 2

- (a) This was often well answered, with some candidates gaining full marks by providing information about the 'no doodling group'. Where this was not the case, candidates typically earned limited credit for their explanation even if they did not provide an appropriate example from the study. A small number of candidates described the purpose of controlled variables and/or gave examples of these from the study, which could not be credited.
- **(b)** This question was often answered correctly. A common incorrect answer was 'scatter diagram'.

Question 3

- (a) This question was well answered. Responses typically identified at least one of the key features of being detailed and being about one instance/person. Other relevant points, such as being focused on unusual examples or the use of multiple techniques were often cited.
- (b) This question part was fairly well answered, although it was more challenging and fewer responses earned full marks. To improve their responses, candidates needed to provide more detail than just stating the disadvantage. For example, suggesting *why* using unusual cases is problematic or explaining why a suggestion of a problem with subjectivity may be the case.

Question 4

- (a) This question part was well answered by some candidates but many gained limited or no credit. Stronger responses made clear suggestions, such as that the parrot may pronounce the word incorrectly and that would make it difficult to score their responses, lowering validity. The most common suggestion was that actions were more 'natural' than speech, but it was then often difficult for candidates to expand their response to suggest why.
- (b) This question part was well answered by fewer candidates with many gaining limited or no credit. A common suggestion was that actions similar to those being expected could be produced accidentally by the parrot, whereas words would be likely to be deliberate. This was a good answer but it was often unclear or lacked elaboration required for full marks.

Question 5

There were many good, precise answers to this question, which showed both an understanding of the term 'standardisation' and the ability to apply that knowledge to the study. However, a significant number of candidates did not appear to understand the concept of standardisation and gave details of either the independent variable or the dependent variable.

Question 6

This question was not well answered. Many candidates earned some marks for a basic understanding of what could be learned from a correlation, although such responses often lacked examples. Stronger answers gave good, reasoned explanations about not being able to learn about causal relationships and also often included ideas about nevertheless being able to use the information to search for causal relationships in subsequent (experimental) research. In lower-scoring responses, candidates often attempted to make a point about the absence of information about causality but often contradicted themselves. Only a small range of the possible examples from core studies was used and few other suggestions were made.

Question 7

- (a) This question part was not well answered. This was in part because some candidates lacked knowledge of ethical issues/guidelines used in relation to animals. However, even when this was not the case, the responses lacked detail. It may help candidates to break the demand of a two mark question into two parts, 'the answer' and 'the detail'. This detail may be a link to an example or an elaboration.
- **(b)** This question part was well answered, often with good explanation relevant to Dr Kwan's study.
- (c) This question part was well answered, showing a good comprehension of the problem with small samples.

(d) This question part was not always well answered, with candidates earning a full range of marks. Stronger responses showed an understanding of the situation presented and gave a cogent explanation of why Dr Kwan should use someone else to conduct his observations. These included both the idea that Dr Kwan would have expectations about the results as it was his study, and this might bias his data collection and that the animals may be familiar with Dr Kwan so respond more helpfully because he is there, so a different researcher would obtain more valid results. Only one of these ideas, well explained, was needed for full marks. Where no marks were gained, this was often because candidates had appeared to misunderstand the question and were suggesting that the other researcher should observe as well as Dr Kwan, whereas the question asks why it would be a good idea for another researcher to conduct the observations rather than him. Such responses focused mistakenly on inter-observer reliability, which could not be credited.

Question 8

- (a) This question part was well answered, with the majority of candidates giving appropriate closed questions with answer options for their suggested questions. A very small minority of candidates mistakenly offered open questions.
- (b) This question part was also well answered, with many candidates gaining full marks having given a detailed response.
- (c) This question part was well answered, with most full-mark answers gaining credit for details about how unstructured interviews are conducted, with only a minority starting with a definition of an interview itself. Either approach was acceptable.
- (d) This question part was very well answered, with most candidates gaining credit. A range of questions related to Kieran's research were offered, indicating that candidates were responding to the requirement for a response linked to the scenario. Very few candidates gave irrelevant suggestions.
- (e) This question part was typically well answered, with candidates identifying an advantage and explaining it. A minority of candidates earned limited credit because they gave two brief advantages instead of one more detailed one as required by the question.

Question 9

- (a) Many candidates were able to identity a suitable behaviour, some were not. Of those responses which answered the question, many were able to score full marks.
- (b) This question often generated good answers, with most candidates gaining limited or full credit. Limited credit could be gained for a generic answer such as 'become part of the group'. Full credit responses responses provided a wide range of different ways for Marla to become a participant observer, demonstrating a good understanding of the term and its application to the scenario.
- (c) Similarly, this question part generated many good answers for which most candidates gained limited or full credit. Limited credit answers were sometimes self-limiting because they focussed on being covert rather than being non-participant.
- (d) In this question, candidates again scored well. Limited or full credit responses were common in both approaches to answering this question. Some candidates effectively argued that Marla should be participant observer, whilst others effectively argued that Marla should be non-participant observer. Either response was equally creditworthy. Where candidates gained no or little credit, their response were typically a repetition of their answers to part 9(b) or 9(c), so were procedural rather than a justification for a choice.

Question 10

- This question was well answered, with many candidates illustrating a good awareness of the principles of using a field experiment, for example, identifying their independent and dependent variables. Many candidates also gave details of the classroom situation they would use. Better responses provided all three in detail and were able to describe the procedure they would use, some controls, the sample they would obtain and relevant ethical issues and how they could be overcome. To improve lower scoring responses, candidates needed to, for example, indicate how they would define 'formal' and 'informal' clothes i.e. what the teachers should wear. Similarly, they needed to explain more about how they would measure the dependent variable of obedience, such as by presenting classes with an unpleasant, difficult or boring task and recording how many completed it. Alternatively, they could have suggested a measure of classroom behaviour, such as noise levels.
- (b) Although many candidates gained marks here, responses were often generic. Their answers could have applied to any similar study rather than to the particular study that they had designed. To improve on this, candidates need to be able to imagine conducting the study they have suggested and be able to identify realistic problems that are specific to their design. This is a demanding skill, which requires practice. This could be obtained through practical work with designing and conducting small studies or through the discussion of novel scenarios.

Paper 9990/23
Research Methods

Key messages

Although this is a question paper about research methods, it will still contain questions about the core studies in relation to the research methods used therein. It is therefore essential that candidates are prepared for recalling and using this knowledge.

In addition, candidates need to be able not only to demonstrate an understanding of research methods terms, but to be able apply these ideas to novel situations. Specifically, in responses which clearly indicate the need for a link, for example which say 'in this study' responses must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates must therefore be prepared for 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 (see point above), an example, or an original 'creative' idea. This will often enable the candidate to produce a response that raises their mark above a basic level. The opportunity to look at examples of limited and elaborated responses to questions would help in developing this skill.

General comments

Candidates were able to demonstrate their knowledge of a range of aspects of research methods in this paper. Offering more straightforward questions, such as **Questions 1**, **4(a)**, **6** and **8** and more demanding ones, such as **2**, **3** and **7**, this examination tested a cross-section of psychological skills. **Question 10** was often well answered and focused on the candidate's ability to design and evaluate their own research. Whilst some problems arose with focusing on a laboratory experiment rather than a correlation or field experiment, there were many strong responses. Candidates typically demonstrated a good understanding of the basic structure of experiments so often gave thorough answers.

Comments on specific questions

Question 1

This question was very well answered, with responses often indicating an excellent understanding.

Question 2

- (a) (i) This question was well answered. Where responses did not earn credit this was often because a definition was given for a 'control condition/group' rather than a 'controlled variable' as required by the question.
- (a) (ii) This question part was well answered. However, as with part 2(a)(i) some candidates confused 'controlled variables' and 'control groups'. Such responses tended to describe the 'no model' groups. Some candidates tried to argue that independent variables were 'controlled' (rather than manipulated by the experimenter, so they described groups such as gender or aggressive/non-aggressive models. These answers earned no credit.

Finally, although there were aspects of the stooges and the models that were controlled variables, simply stating 'stooge' or 'model' was not sufficient to gain credit for identifying what the controlled variable was.

- (a) (iii) Candidates appeared to find this question more difficult. A significant number of candidates mistakenly reported that the children saw a film of the model rather than a live model.
 - For those candidates who had simply stated 'stooge' or 'model' in part **2(a)(ii)**, it was possible for them to earn credit here if they had identified a controlled variable in this question.
- (b) This question part was well answered. However, two common errors in answering this question part were to suggest that simply measuring inter-rater reliability would improve it. Measuring reliability alone is not sufficient, the researchers must act on this information if it is to produce an improvement. Suggesting being unaware of the child's condition was an occasional error, this affects validity not reliability.

Question 3

- (a) This question part was well answered. However, a small number of candidates described how the median was calculated rather than answering the question set.
- (b) Some candidates described the technique of adding 1 to the largest number and dividing by 2. This technique only works on very large data sets. This is unlikely in psychological studies in general and was not the case in this study.
- (c) This question part was well answered.

Question 4

- (a) This question part was very well answered.
- (b) Many responses here only earned limited credit as they were not linked to the study by Saavedra and Silverman, as required by the question. When a question asks '...in this study' (or similar wording) it is essential that the response given is not a generic one but is specifically applied to the context of the given study.

Question 5

Some candidates answered this question well. Other responses referred to generalisability rather than reliability.

A small but significant minority of candidates linked their answer to this question (**Question 5**) to **Question 4**. This was not necessary.

Question 6

This question was generally well answered with some excellent responses. Some responses could have been improved with the inclusion of examples. Other candidates have given similarities as well as differences. Similarities were not required so such candidates would have benefited from spending more time on describing the differences.

Question 7

- (a) This question was typically very well answered. Some responses used the examples of controls provided by the text, others suggested alternative controls. Either approach was acceptable. However, the response needed to be specific, and relate to one clear control. Some answers were too general so were unable to justify the need for one particular control.
- (b) This question part was well answered, with candidates offering an inventive range of solutions to operationalising Mikko's dependent variable. These included: observing the library users, leaving websites or telephone numbers for them to respond to, instructions to contact the library front desk, etc. and in each case, counting the number of people who respond in each town.

(c) This question part was well answered. Candidates were much more likely to offer the correct answer of 'a field experiment is conducted in the normal environment for the behaviour being studied' than the correct answer of 'a field experiment has a manipulated independent variable'.

Question 8

- (a) This was often well answered, with candidates demonstrating an awareness of guidelines that relate specifically to animals. However, the guideline does not require housing to 'replicate the natural environment', merely to offer the animal the various basic needs. However, reference to this was considered to be irrelevant if the response continued to offer appropriate information, such as that it offers food or shelter. References to avoiding being 'cruel' were ignored, as 'cruelty' (or the absence of it) is a value judgment not a guideline.
- (b) Although this was often well answered, many responses referred to human guidelines in this question part. It is essential that candidates are aware that the two sets of guidelines, for human participants and animals subjects, are different.
- (c) This question part was well answered, with appropriate elaboration. Note that this question part did not end 'in this study', so the two advantages did not have to be linked to Dr Gopal's study.

Question 9

- (a) This question part was well answered. The answer had to be linked to Lotty and Nazeem's study, but as the link was a simple one, candidates were able to do this spontaneously.
- (b) This question part was generally well answered. Suggestions included some excellent ideas, for example using pilot studies to make checklists or counting the number of smiles for happiness and screams for fear. However, some suggestions were implausible or impractical, such as using brain scanning to study the amygdala.
- (c) This response needed to be linked to Lotty's idea and where candidates did not earn full marks this was the reason why. Such responses highlight the need for candidates to be prepared for the syllabus requirement to be able to apply to a novel research situation.
- (d) The same need to link the advantage to Nazeem's idea also restricted the possible marks of generic answers.

Question 10

This question part was generally well answered, with candidates offering appropriate independent and dependent variables as well as controls. They did not always include sufficient detail, however. A significant minority of responses referred to looking for correlations rather than differences. It is essential that candidates understand and can recognise the fundamental difference between a correlational study, looking for links or relationships between two measured variables and experiments, looking for differences in a measured variable caused by the manipulation of another variable.

A small minority of candidates were using the term 'debrief' when they meant 'brief'.

(b) It is important to note that the question asks for a weakness/limitation with the procedure you have described and how your study might be done differently. The points made in the response must be clearly tied to the candidates answer to 10(a) rather than being generic. It may be helpful to ask candidates to consider whether the limitation (as they have written it) could apply to other studies. If so it is probably generic.

Paper 9990/31 Specialist Options: Theory

Key messages

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

It is important that candidates are made aware of the terminology/concept identified in the syllabus as well as key terms used in named theories and studies as some were unable to identify and/or define the terms given in these types of questions. Revision of terminology using flash cards could prove useful. Where the response gave an example to help define the term this often achieved full marks. These questions are worth two marks and 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 four marks and the candidates should write a more extended answer. A common error seen in the responses was to describe a theory or technique that did not answer the question set. There were a few general responses that were not specifically directed at the question.

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

These questions could require the candidate to explain two strengths or 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 six 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 theory or technique named in the question.

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

These questions come from one of the bullet points in the syllabus and uses the wording from the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the syllabus under the appropriate bullet point. For this exam, some of the answers addressed a limited number of the studies/theories under the bullet point, used the incorrect bullet point or the description was brief. It is also important that the descriptions are linked to the bullet point.

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

These questions 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 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 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 either covered just the named issue and no other, or covered other issues rather than the one named in the question. Quite a few of the answers were structured by study/theory rather than by the issue which often led the response to be quite superficial and repetitive. A very small number of the responses did analysis. Candidates should be aware this question is worth 10 marks and attempt to include an appropriate amount of information.

General comments

There was a very small entry for this 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 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 for most candidates and most attempted all questions that were required. A number of candidates did not respond to one of the questions asked in the option area. A few candidates attempted to respond to more than two topic areas but often did not attempt all of the questions for each option chosen. These responses achieved at the lower end of the mark band.

Comments on specific questions

Psychology and Abnormality

Question 1

- (a) Most responses achieved one mark for this question by explaining that a button phobia is a fear of buttons. Some candidates were able to extend their response by stating that the phobia was persistent and/or irrational to achieve full marks.
- (b) Many of the responses that wrote about cognitive-behavioural therapy for the treatment of a button phobia did give a number of pieces of correct information. Most were able to describe that it involves working with a therapist to address the irrational thoughts the patient has around buttons. A small minority of responses were able to give more details of cognitive-behavioural therapy and how it might work in practice with button phobia. A large number of responses incorrectly described systematic desensitisation and these responses were not creditworthy.
- (c) As the strengths and weaknesses of cognitive-behavioural therapy and systematic desensitisation share some common issues, some candidates who wrote general responses could access marks even if their description in part (b) was incorrect. The most common strength mentioned in responses was that the therapy is effective. A few responses were able to explain why. The most common weaknesses included the time required to do the therapy and the effort required by the patient outside of sessions to do the homework usually set during cognitive-behavioural therapy.

Question 2

- (a) Most answers described something for the three bullet points in the syllabus for this topic (biological: genetic and neurochemical, cognitive and learned helplessness/attributional style). There were a few detailed, accurate and coherent responses with many references to appropriate explanations of depression. Good responses tended to describe Beck's cognitive triad and learned helplessness. Better responses were able to give examples of how these explanations applied to depression specifically. Many responses achieved in the lower levels due to giving either very brief answers or answers where the treatments of depression were described, rather than the explanations.
- (b) Most responses to this question achieved in either the Level 1 or 2 mark bands. The answers often included reference to nature versus nurture but tended to be structured by going through each explanation in turn and were often quite repetitive and very brief for each issue mentioned. Some of the responses just focussed on the nature versus nurture debate, which limited the credit available.

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 explanations in terms of the issue under discussion. Without this analysis, these answers could only achieve Level 2 maximum.

Cambridge Assessment
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Questions 3 and 4 - Psychology and Consumer Behaviour

There were too few candidates for this option for a meaningful report to be produced.

Psychology and Health

Question 5

- (a) Responses for the question were very weak and most candidates could not give a basic definition of stimulation therapy/TENS. A few good responses described this treatment as using a device that uses a mild electrical impulse to help alleviate pain. Some were then able to describe how the stimulation therapy/TENS would actually reduce pain (e.g. blocking pain-gate) to achieve full marks.
- (b) Most responses were able to give one way of measuring pain. Some gave more than one pain measurement and the best of those given was credited. Popular measures were the paediatric pain questionnaire and the McGill pain questionnaire). Most described some details of these questionnaires and gave a basic description of the pain measure. Some were very brief while others brought in details about the questionnaire that were incorrect and appeared to be details for a different measure. A minority of responses gave excellent details of the pain measure often with examples from the questionnaire chosen. A few described clinical interviews to measure pain and this was creditworthy, but these types of responses tended to be very brief.
- (c) The majority of candidates achieved a Level 2 mark for this question. Most were able to discuss the validity of the pain measure given in part (b) of their response. Popular points included the weaknesses of quantitative data and the subjective nature of self-reports.

Question 6

- (a) Most answers described something for at least two of the three bullet points in the syllabuses. There were a few detailed, accurate and coherent responses with many references to appropriate terminology and details of the misuse of the health service. Most described hypochondriasis and Munchausen syndrome. Some gave details of the case study by Aleem and Ajarim. There were many anecdotal responses where the candidates described general reasons why someone might misuse the health service without giving any details of research and/or conditions that might lead to misuse.
- (b) Most responses for this question were very brief and gave a basic evaluation of what psychologists have found out about the misuse of the health service. These types of responses attempted to evaluate some of the studies mentioned in part (a) of the question. One response did include much more detailed evaluation and discussed the named issue of generalisability in some depth. Analysis was provided where a counter-argument was given regarding the difficulties with getting a large sample with disorders such as Munchausen where the condition is very rare.

Questions 7 and 8 - Psychology and Organisations

There were too few candidates for this option for a meaningful report to be produced.

Cambridge Assessment
International Education

Paper 9990/32 Specialist Options: Theory

Key messages

Questions 1(a), 3(a), 5(a) and 7(a)

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

Questions 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 syllabus or a summary of the key features of the study. This question is worth four marks and the candidates should write a more extended answer. A common error seen in the responses was to describe a theory or technique that did not answer the question set. There were a few general responses that were not specifically directed at the question.

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

These questions could require the candidate to explain two strengths or 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 six 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 theory or technique named in the question.

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

These questions come from one of the bullet points in the syllabus and uses the wording from the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the syllabus under the appropriate bullet point. For this exam, some of the answers addressed a limited number of the studies/theories under the bullet point, used the incorrect bullet point or the description was brief. It is also important that the descriptions are linked to the bullet point.

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

These questions 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 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 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 either covered just the named issue and no other, or covered other issues rather than the one named in the question. Quite a few of the answers were structured by study/theory rather than by the issue which often led the response to be quite superficial and repetitive. A very small number of the responses did analysis. Candidates should be aware this question is worth 10 marks and attempt to include an appropriate amount of information.

General comments

There was a very small entry for this 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 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 for most candidates and most attempted all questions that were required. A number of candidates did not respond to one of the questions asked in the option area. A few candidates attempted to respond to more than two topic areas but often did not attempt all of the questions for each option chosen. These responses achieved at the lower end of the mark band.

Comments on specific questions

Psychology and Abnormality

Question 1

- (a) Most responses achieved some credit for this question by explaining that a non-substance addictive disorder is a compulsion or an obsessive need. Some then gave a more detailed response by explaining what an addiction is, such as stating that it gives the person pleasure when they engage in the behaviour or withdrawal symptoms are experienced if the person tries to stop the behaviour. A few responses gave a substance addictive disorder, such as alcohol, which was not creditworthy.
- (b) Many of the responses were able to write about covert sensitisation for treating and managing impulse control disorders and some were in-depth with examples. Some candidates gave very brief responses and often these types of responses did not include relevant terminology.
- (c) Most candidates achieved limited credit for this question, due to writing quite brief responses. The most common similarity described was that both treatments are effective and the most common difference was side effects.

Question 2

- (a) Significant numbers of candidates produced very good answers to this question, many of whom described behavioural, psychoanalytic, biomedical/genetic, and cognitive explanations of phobias. However, a small proportion of candidates did not address the question and simply described what is meant by phobia and gave lists of different phobias.
- (b) There were a few excellent answers where candidates had focused on three or four issues and written about these in some detail, referencing each explanation as relevant. However, many responses to this question achieved limited credit. Some answers did not include reference to determinism or confused determinism with reductionism. Weak responses tended to be those that went through each explanation given in (a) and evaluating them in turn. This meant that points could not be well developed.

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 explanations in terms of the issue under discussion. Without this analysis, these answers could only achieve limited credit.

Psychology and Consumer Behaviour

Question 3

- (a) Most candidates achieved full marks by giving a detailed description of the effect of attention and shelf position on product choice. Most mentioned that the consumer will look in the middle of the shelf and then choose this product to purchase.
- (b) There were some good answers where candidates described the consumer decision model. Credit was also given for other models that lead to consumer decision-making including utility and satisficing theories, as well as the black box model and that by Ajzen. However, any theory given did need to be described. Those responses that simply listed a variety of different consumer decision models received very limited credit.
- (c) A common weakness explained was cultural bias and the common strength was that companies can use the model to improve sales. Candidates could achieve higher marks by giving slightly more in-depth responses. This could be done through giving a brief example to back up their point to achieve higher marks.

Question 4

- (a) Most answers described something for the three bullet points in the syllabus for this topic. There were a number of very good detailed, accurate and coherent responses with many references to appropriate terminology and details of types of research relevant to menu design. Some responses achieved in the lower levels due to giving either very brief responses or responses that were more anecdotal.
- (b) The responses were mainly poorly answered with most achieving limited credit. Most responses clearly understood the concept of validity but did not discuss the validity of each study clearly, merely stating whether the research was high or low in validity. Candidates should be encouraged to decide on a number of issues that they will use and then apply each study to that issue (as opposed to evaluating each study 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 in terms of the issue under discussion. Without this analysis, these answers could only achieve limited credit.

Psychology and Health

Question 5

- (a) The majority of responses tended to score limited credit here. When trying to explain what skills are, a synonym for 'skills' should be used, such as abilities, or the use of an example, such as empathy, to avoid a tautological response. Responses that achieved full marks often gave an example to support their definition.
- (b) Most responses achieved some credit by giving a clear description of the study by Robinson and West (1992). Some responses achieved lower marks due to confusing the findings of the study or providing a very brief response.
- (c) Most responses achieved some credit for this question by explaining a strength and a weakness of the study. Popular points focussed on issues of cultural bias, issues with the nature of the illness investigated and problems with self-reports. However, many were not able to recognise that any diagnosis will include aspects of self-report. Indeed, Robinson and West were comparing disclosure in three types of self-reports.

Question 6

- (a) There were some excellent responses that described unrealistic optimism, transtheoretical model and the Lau study in some detail. However, many responses did not focus on the correct topic of individual factors in changing health beliefs. Many described the health belief model, although a few responses achieved marks for this by describing how it impacts on changing individual health beliefs.
- (b) Few responses were able to score highly on this question. Those who did attempt to use the named issue of individual and situational factors produced little or no analysis, simply describing studies as individual or situational rather than looking at the extent of each. Other common issues discussed were generalisability and type of data used in the study.

Many 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 individual factors in changing health beliefs. Without this analysis, these answers could only achieve limited credit. Some responses did include analysis and generally did this by providing a comparison between two of the studies in terms of the issue under discussion. They were then able to give a conclusion around the issue in terms of which study was stronger.

Psychology and Organisations

Question 7

- (a) Responses usually achieved one mark. There was a tendency to use the word 'adapt' in the response rather than explaining what that meant. Credit cannot be given for stating what adaptive leadership is not, e.g. it is not traditional leadership. Full mark responses often gave an example of an adaptive leader's skills which helped the response to achieve full marks.
- (b) Better responses gave clear descriptions of two of the levels of Scouller's levels of leadership, often through the use of examples. Weaker responses tended to be quite brief and many just identified two of the levels. Some did over-write for this response and described all three levels.
- (c) Most achieved limited credit for their response to this question. Responses tended to give examples of applications to everyday life rather than discussing the applications. Some responses were able to provide a discussion, and these responses focussed on training needs, cultural bias or how, if the three levels can be achieved, this would bring about better leadership and thus benefits to the organisation.

Question 8

- (a) Most answers were able to describe something from the three bullet points in the syllabus for this topic including workplace sabotage, absenteeism and measuring organisational commitment. There were many detailed, accurate and coherent responses with many references to appropriate terminology and good reference to attitudes to work. Some responses described motivation and bullying rather than attitudes to work which could not be credited unless clearly linked to attitudes to work to answer the question set.
- (b) The responses covered the full range of the mark scheme. As well as the named issue of generalisability, common issues raised tended to be usefulness and cultural bias. Stronger responses 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 pieces of research described in (a) and applied some evaluation in turn, this resulted in less detail.

There were also some that were poorly answered and achieved limited credit. These types of answers often included brief reference to generalisability with some understanding shown of why a theory and/or study might not be generalisable.

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 pieces of research relating to attitudes to work in terms of the issue under discussion. Without this analysis, these answers could only achieve limited credit.

Paper 9990/41

Specialist Options: Application

Key messages

What 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.

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 should 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 B** (b) the methodological reasons underlying the chosen design must be explained. The psychological knowledge on which the design is based must be explained.

In **Section C**, **Questions 9**, **10**, **11** and **12**, 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. This is not an essay question where theory and evidence is described. Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

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.

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. Many answers 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 prepared answers. Many questions will test the ability to apply knowledge from one situation 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 example, that 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) of relevant methodological design features, each of which should be explained fully, showing good understanding. These can be a combination of specific and general features. Many candidates identified features, but did not explain them. For example, nearly all candidates used the word sample in their design, but often did not write about a specific sampling technique or how this would be obtained. 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. Many candidates merely described psychological knowledge rather than explaining how that knowledge was used in their part (a) design.

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 the 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 explain the difference, stating that obsessions are thoughts and compulsions are behaviours. Some candidates were able to provide more detail. A few candidates confused obsessions and compulsions and scored no marks.
- (b) Some candidates did not fully address the question set, instead writing about general limitations of questionnaires. Often answers appeared to be looking for something more complex than was required. For example, stating that 'one hour appears (as does three hours) for two different categories' would be a creditable limitation as this made any answer ambiguous. Another limitation might be that the categories may not apply at all times: sometimes the respondent may be in one category and sometimes in another.
- (c) Most candidates described the MOCI, the Maudsley Obsessive-Compulsive Inventory. Four features were needed to score full marks, but any correct detail could be credited.
- (d) Some answers included two advantages, two disadvantages and a conclusion but many did not.

 A number of conclusions repeated what had already been written, and such summaries scored no additional marks. Some candidates appeared not to be clear on what a psychometric measure was.

Question 2

There were too few candidates for this option for a meaningful report to be produced.

Question 3

- Some candidates wrote more than was required for two marks, and others wrote complex answers rather than stating the answer clearly and simply. Credit was given for any two aspects.
- (b) This question required candidates to describe an alternative way to score the SRRS, requiring candidates to apply their understanding to an unfamiliar situation, rather than simply demonstrate their knowledge. Some inventive answers were written, but most focused on three possibilities: a Likert-type scale with a five-point scale and the total score determined; points allocated by a participant determined by the extent to which an event applied to their specific circumstances; a visual analogue scale such as 'how much stress does X cause you' was also suggested.
- (c) This was a 'suggest' question, in which candidates were asked for their own thoughts on how, in this instance, the SRRS can be applied in the 'real world'. Marks were allocated according to the appropriateness of the suggestion and the extent of the detail/explanation provided, and any appropriate suggestion received credit. Many candidates suggested that it could allow people to monitor their own life events and if they achieve a high score, they could avoid events to prevent making the score higher, such as not going on vacation or changing social activities.

(d) Many responses started with disadvantages, pointing out that the SRRS was based on life in the United States, in the 1960s, with men the specific focus of attention, and so it could not be generalised for these reasons. Advantages included that it was the first of its kind to recognise that life events were stressful and could be measured. Many candidates did not provide a conclusion, or gave a summary instead. Top answers concluded, for example, that the SRRS was a start, but that each culture could develop its own variation because there can never be one SRRS that applies worldwide.

Question 4

There were too few candidates for this option for a meaningful report to be produced.

Section B

Question 5

- The requirement was to design an experiment and so the use of any other method could not be credited. It is advisable that the question set is answered specifically. Many candidates designed very good studies, with many features of experiments being evident. Typically the IV was people with and people without an impulse control disorder, but often there was no identification of what the specific disorder actually was. The DV was often some measure of positive feelings. Most candidates, but not all, correctly suggested an independent measures design. In some answers, no IV or DV was mentioned and in many answers the sampling technique was inadequately described. Many candidates believed that participants could be 'collected from a mental institution'. A few answers provided a hypothesis but in most cases these were incorrectly worded and one-tailed and two-tailed were often confused.
- (b) Methodological evidence could include 'design decisions' such as the reason for choosing a particular experimental design, or why a particular measure (such as score on a 'positive feelings' questionnaire) was the DV. Explanation of any specific or 'typical' methodological feature received credit. For the psychological evidence in this instance, the 'feeling-state' theory by Miller (2010) was apposite which is that intense positive feelings become linked with specific behaviours such as compulsive shopping. This knowledge, described in this question part, should inform the design of part (a). For example, in part (a) there could be two groups, one of compulsive shoppers and the other not (the IV), complete a questionnaire about positive feelings (the DV) when shopping.

Question 6

There were too few candidates for this option for a meaningful report to be produced.

Question 7

- (a) The question required that an interview be used, and although it often was, many answers did not include, or confused, relevant methodological terms. Some answers stated 'I would conduct an interview' without elaboration whilst other answers did not distinguish between structured, semi-structured and unstructured types, and only a few candidates mentioned whether the interview would be conducted face-to-face or over a telephone. Some candidates included examples of questions to be asked, but often these were rather simple, such as 'do you still eat vegetables'. Rarely was the recording or analysing of answers mentioned. Most candidates realised that this would be a longitudinal study with the adult participants undergoing a food programme as a child, but often did not apply this when acquiring their sample of participants.
- (b) Candidates must refer to both methodological and psychological aspects in their answers in order to score all the available marks. For this question, the psychological evidence was the study by Tapper et al. (2003) who used 'The Food Dudes' as models to encourage children to eat vegetables. Methodological evidence could involve explaining the 'design decisions' made when designing the study, such as the type of interview (e.g. structured), type of technique (e.g. face-to-face), and the reason for applying a self-selecting sample (or whatever technique was suggested).

Question 8

There were too few candidates for this option for a meaningful report to be produced.

Section C

Question 9

In response to this question many candidates provided an interesting range of arguments both for and against, but often these arguments lacked essential supporting evidence. The question states 'Use examples of research you have studied to support your answer' because this is an essential component of the answer. For example, there might be the statements 'Biomedical treatments directly restore any chemical imbalance that might be causing the OCD' and similarly 'Biomedical treatments may alleviate associated symptoms but not remove the cause'. These are appropriate comments, but they are general, showing very little knowledge from the topic area of OCD and any research that is relevant.

Question 10

There were too few candidates for this option for a meaningful report to be produced.

Question 11

Answers to this question showed a similar 'anecdotal' style as found in answers to **Question 9**. However, here some candidates could write about and compare the different models. For clarification, Lau et al. write about three models: (i) The enduring family socialization model; (ii) The lifelong openness model suggests that people are always open to persuasion from influential socialising agents. When leaving the family peers become more influential than family; (iii) The windows of vulnerability model suggests that parental influence persists unless the child is exposed to important social models who have different and more influential views.

Question 12

There were too few candidates for this option for a meaningful report to be produced.

Paper 9990/42

Specialist Options: Application

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In **Section C**, **Questions 9**, **10**, **11** and **12**, 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. This is not an essay question where theory and evidence is described. Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

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.

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

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Answers to part **(a)** questions in this section should include an appropriate design, have applied a range (ideally five) of relevant methodological design features, each of which should be explained fully, showing good understanding. These can be a combination of specific and general features. Many candidates identified features, but did not explain them. For example, nearly all candidates used the word sample in their design, but often did not write about a specific sampling technique or how this would be obtained. 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. Many candidates merely described psychological knowledge rather than explaining how that knowledge was used in their part (a) design.

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Comments on specific questions

Section A

Question 1

- (a) Most candidates were able to correctly identify two features that were targeted, some identifying a specific feature, such as persecutory ideation, and others identified a relevant term, such as hallucinations, and then provided a brief explanation of the term.
- (b) The study by Freeman lists many possibilities for which virtual reality would be useful, some associated with abnormality and some more general. However, as the question asked for a suggestion specifically in relation to abnormality, any appropriate abnormality was credited. For example, candidates often identified 'a phobia' and then gave a brief explanation of how virtual reality could be used to help people with a phobia.
- Two differences were required, and answers scoring top marks provided two distinct differences and for each stated the case for virtual reality and then the case for the doctor. Some answers scored limited credit for statements like 'the doctor is real, whereas virtual reality is not'; others made points in relation to generalisations, ethics, and the experience and wisdom of a doctor compared to a programmed computer.
- (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 additional marks. Weaknesses included potential 'simulator sickness', the ability to program the technology, and the generality of the program. Ecological validity was raised as a weakness by some, and used as a strength by others. Credit was awarded according to the argument provided in support of each case.

Question 2

- (a) Many answers scored marks by stating that it was an opportunity sample and why it was this sampling technique, 'people passing by the tasting venue'. Some candidates stated that the sampling technique was random, with people being chosen 'at random' as they walked past. This is not a random sample (where everyone has an equal chance of participating) and any 'random sample' answer could not be credited.
- (b) Any two of the three detection techniques could be used, with credit for identification of the technique: concurrent, retrospective or sensory change detection. Further credit was awarded elaboration, e.g. for description of the technique.
- (c) Candidates should be familiar with the term deception, and most candidates could identify two examples from the study. Most typically these were deception regarding the aim of the study and deception in relation to the switching of the 'magical' jars. However, many candidates did not address the second part of the question which asked *why* these deceptions were necessary.
- (d) The strengths and weaknesses of field experiments are well-known and in this instance they had to be applied to studying consumer behaviour, logically using examples from the study by Hall et al. Many candidates included the five components (two advantages, two disadvantages and a conclusion) and scored full marks. Some candidates believe that field experiments have no controls, which is not the case.

Question 3

- (a) Most candidates scored full marks for a brief description of what is meant by a mean and a median. A small number of candidates confused the term median with mode, and a few candidates stated that the mean is the average, without further elaboration.
- (b) The study was ethical: written informed consent was obtained after patients received a description of the trial's purpose and procedures. The informed consent form also mentioned that compliance, pulmonary function and safety would be measured. However, the study was unethical because the patients were not informed that compliance was under electronic surveillance so as not to introduce an unacceptable bias in favour of compliance. These two reasons were often stated, but alternatively many candidates wrote about confidentiality and debrief, which were also creditworthy. A few candidates wrote about physical harm caused by the medicine, but this was not creditable because the patients had asthma and needed to take the medicine.
- (c) Nearly all candidates wrote 'just because the medicine has left the bottle it doesn't mean that it has been taken' and scored limited credit, but more explanation was needed for full credit, such as relating the reason to the Chung and Naya study. Other creditworthy answers come from the Chung and Naya study where they refer to (i) mis-readings because of errors due to multiple openings, or (ii) where the cap being left off for 15 minutes recorded more than one opening. Both these errors could affect the validity of the measures.
- (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 were not able to show their understanding of what the term 'objective' meant and a small number confused it with the term 'subjective'. The strongest answers wrote about the nature of objective data, that it is quantitative and can be analysed statistically, but alternatively, that it does not provide any reason for the numbers obtained. There are two points to note: numbers are not automatically objective; the source of the number makes it objective or not. Second, it could be argued that questionnaires do not produce objective data because a person can give a subjective, false answer.

Question 4

- (a) Most candidates were able to give two effects of bullying on a person in the workplace, the most common being the effect it might have on the health of the bullied person, and also frequently included was the comment that bullying might lead to job dissatisfaction, absenteeism and the possible effect this might have on the organisation itself.
- (b) Phases of bullying were not well understood. In the paper by Einarsen, different phases are listed and inclusion of any of these phases received credit. The first phase is bullying being indirect and discreet, later becoming more apparent and victims being isolated. Einarsen also refers to four phases beginning with aggressive behaviour and ending with severe trauma. Credit was also given for Allport's phases starting with 'anti-location' and ending with 'extermination'.
- (c) Many candidates successfully described two differences and scored full marks, but others appeared not to be familiar with the terms. Dispute-related bullying develops out of grievances; a work-related conflict, or as a result of a highly escalated interpersonal conflict. Predatory bullying is where the victim has done nothing provocative and may 'by chance' be in a situation where a predator is demonstrating power, or in other ways is trying to exploit an accidental victim into compliance.
- (d) Here candidates could apply their methodological knowledge about the advantages and disadvantages of interviews to bullying. Many candidates did this very successfully, and wrote about an open-ended interview allowing the victim to express their grievances in detail. Many candidates realised that telling management about the bullying may lead the victim to be perceived as weak, tale telling, etc. Top answers related the advantages and disadvantages to bullying and ended with an appropriate conclusion.

Section B

Question 5

- (a) Many candidates assumed that because a longitudinal study had to be conducted it automatically meant that a case study was required. A longitudinal study is simply one that is conducted over a period of time and many participants can be assessed at different time periods. Some candidates suggested an experiment with an IV of one ECT group and another non-ECT group. Yet others suggested assessing side effects using a questionnaire. All these methodologies received credit as the question did not specify a method.
- (b) The main weakness in many answers was a failure to relate relevant psychological evidence to the design of the study in part (a). In this question, knowledge of side effects should have been described, such as the reporting of short-term memory loss. This should then have been used to assess side effects in part (a). In part (a), candidates often assessed side effects by asking in a questionnaire 'do you have any side effects', when it would have been better to ask specifically about short-term memory loss. Alternatively, those designing an experiment could have a memory test as the DV. Doing this would show that part (a) is based on relevant psychological knowledge and that knowledge is more fully described in this question part.

Question 6

- (a) Investigations into this question could use any method. Experiments were common, but 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. This question can easily be broken down into an IV and DV: IV of slogans linked to a brand and slogans not linked to a brand and a DV of recall of slogans. Other methods could be used, but these too should be based on full and relevant methodological terminology.
- (b) In relation to methodological decisions, one explanation, for example, could be about why certain controls were applied; another could be about the selection of the sample; another could be about why the instructions given to participants were standardised. Explanation of any methodological decision like these would receive credit. Psychological knowledge was often based on the work of Kohli et al. (2007) who studied slogans and brand image. Some candidates did not mentioned any psychological knowledge.

Question 7

- (a) Although the question specified that an observation must be used, many answers were incorrectly based on alternative methods such as questionnaires and psychometric tests such as the McGill pain questionnaire. For answers using an observation, specific details were often missing. The features of an observation can include: 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.
- (b) Many candidates correctly referred to the UAB pain behaviour scale and although many were aware of its use, many others thought incorrectly that it was some form of questionnaire. If specific features were absent from part (a), candidates struggled to explain the reason for their use in this question part. Many answers were successful in doing this, some explaining that the observation needed to be covert and so the patient would be unaware of the observation and not change his pain behaviour.

Question 8

(a) When candidates are given a free choice of method to use it does not mean that multiple methods should be used, as was done by some candidates. One method in detail is far better than several methods with a sentence on each, because the detail shows understanding and the ability to plan a coherent design. Answers at the top of the range tended to be those using questionnaires, but sometimes answers were limited because questions asked were often far too general, i.e. 'have you heard of Maslow', rather than being based specifically on knowledge of his hierarchy.

(b) Most candidates were able to demonstrate extensive knowledge of Maslow's hierarchy of needs, and many wrote very long, detailed answers. However, as the question requires both psychological and methodological knowledge, and marks are restricted if only one of these is addressed.

Section C

Question 9

In response to this question, many candidates wrote an essay focussing on the question 'describe the causes of depression' rather than the specific question set. In many of these answers, there was no attempt to address the 'to what extent' component of the question, instead there was a list of study after study descriptions that appeared to have been pre-prepared. This strategy is not appropriate and the focus should be on using arguments supported by evidence to weigh up the extent of support.

Question 10

Answers to this question were stronger than answers to **Question 9** because here candidates gave reasons both for and against the usefulness of children, and used studies, such as that by Fisher et al. to support their reasons. For example, a common argument against is that children are not major consumers because they do not purchase houses, cars and major expenditure goods. Arguing against this is that children are major consumers, because they eat food and drink, and advertising such as 'Ronald McDonald' leads children to want to eat at McDonalds. A wide range of other arguments were presented, and any appropriate answer received credit.

Question 11

This question led to some candidates strongly arguing 'for' and others strongly arguing 'against'. Note that there is not a right or wrong answer; credit is awarded for the quality of debate. Some candidates argued that punishment is never justified because people cannot afford it, but others countered this, arguing that a missed appointment meant that the medical practitioner received no money and that this was not fair to them. Some argued that if an appointment has been made then it is a contract and the person should be punished if that contract is broken. What distinguished the top answers was the evidence presented in support of the arguments.

Question 12

Stronger answers based arguments, both for and against, on the work of Latham and Locke who outlined SMART targets. Arguments in support of the statement were simply that if a goal is clear (specific, measurable, etc.) then it would motivate workers, but if the goal set was not 'SMART' then it would not be motivating. Some candidates widened the argument by relating motivation to extrinsic factors, such as pay (pay being the only thing to motivate workers) whilst others argued that the best motivators were intrinsic. Any wider argument received credit.