Paper 9990/11 Approaches, Issues and Debates

Key messages

- Candidates should have knowledge of all components of the study as listed in the syllabus. Questions could refer to any part of a study.
- Candidates should be encouraged to read the whole question carefully to ensure that their responses
 are fulfilling the demands of the question. For example, the question may require data or a named issue
 to be included to achieve full marks, these should be correctly present in the responses. The essay
 (final question) requires four evaluation points to be discussed in depth (two strengths and two
 weaknesses) with at least one of these focusing on the named issue. Marks achieved will be limited if
 the named issue is omitted or only described.
- Candidates should take care when presenting the results of studies. For example, the presentation should clearly show if the results are about how many participants performed a task correctly, or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response achieve credit.
- Candidates should also be encouraged to engage with any stimulus material presented in a question (e.g. a novel situation) to access all available marks. In addition, the answer requires contextualisation when a question refers to 'in this study'.
- Candidates should have the knowledge of the real-world applications for all core studies. To show understanding, answers should clearly indicate which particular core study the application is based on and how could this be achieved.
- Candidates should understand the difference between a result and a conclusion. The former is factual and based on collected data, while the latter is a generic comment based on the results reported in any core study.
- Candidates should also understand the set procedure of studies in the order presented in the original journal article. Questions can be based around a part of a procedure, and the answer given should be directed and concise rather than referring to the whole procedure. This can sometimes result in candidates running out of time to answer the other questions.
- Questions about the 'psychology being investigated' require answers that generically describe concepts and theories that are central to the study. Answers which describe the processes of the study itself rather than give a generic description of a theory or concept would achieve lower marks.
- Candidates should be encouraged to plan their answers to ensure that the response given is focused on the demands of each question.

General comments

Candidates achieved a full range of marks available in this examination. A range of excellent answers to many of the questions was given. Psychological terminology was explained well showing good candidate preparation, including knowledge of the new studies from the syllabus for this examination. A very few blank answers were seen.

The more successful responses overall followed the requirements of each question, with explicit use of psychological terminology and logical, well planned answers with evidence. Appropriate examples were used



from the studies when the question asked for it, and candidate responses showed the knowledge of the realworld behaviours in terms of 'what' and 'how'.

Comments on specific questions

Question 1

- (a) Many of the responses to this question were correct (eyes test). Some of the responses named the creator of the test or called it the Autism Quotient Test, and so did not gain credit.
- (b) There were many correct responses to this question. The more successful responses clearly identified two problems with the original test. Popular choices included only having two options and more female faces were used. Some of the responses gave generic methodological weaknesses, which did not gain credit.
- (c) There were some correct responses to this question. Popular correct responses focused on a lack of theory of mind, or that the new test had increased validity. However, some of the responses gave a result from the study, and, therefore, did not gain any credit. Responses did not show a clear understanding of the difference between results and conclusions. A result is factual, based on presented data, whereas a conclusion is the interpretation of the results.

Question 2

- (a) Many of the responses described at least two aspects of participant behaviour that was recorded in the adjacent area. Popular points included coding race/sex/age and noting down the comments made by the passengers. Some of the responses gave results and achieved partial credit.
- (b) The responses to this question were mixed. Some of the responses clearly described the pattern of results and used one correct piece of data to achieve maximum credit. Some of the responses confused the two groups and gave the reverse result. Other responses described results based on race and not sex, or presented made-up data. It is important for candidates to know the key results from all core studies.

Question 3

To achieve maximum marks, the real-world applications had to explain what the application was, how it would be achieved based on the study by Dement and Kleitman, and be ethical. Popular creditworthy choices included: helping to diagnose sleep disorders, track the sleep-wake cycle of insomniacs, used in a therapeutic setting to aid dream recall. The 'how' part of the question was weaker in most of the responses. The candidate responses should clearly state how the application can be achieved or used to explain a disorder, and it should not be assumed that the examiner will make the link. This must be explicitly linked by the candidate response. There were very few responses that were unethical.

- (a) (i/ii) Many of the responses clearly identified the stimuli that were given the two ratings. Common incorrect answers included not stating the plastic nature of buttons for 4(a)(ii) or that the buttons were denim for 4(a)(i). Other incorrect responses included naming objects that were not linked to buttons or using a verb to describe how the boy felt.
- (b) Most of the responses clearly described the sample of participants used. Popular creditworthy points included his sex, his age and his ethnicity.
- (c) Many of the responses outlined an assumption of the learning approach that could be used to explain why the study by Saavedra and Silverman is from that approach. The more successful responses explicitly explained, using an example from the study, why the assumption links to that aspect of the study by Saavedra and Silverman. For example, the assumption of 'conditioning shapes behaviour' is from the social approach, so a full-mark response would then use the example of the mother using positive reinforcement to help her son overcome parts of this button phobia.



Question 5

The majority of the responses to this question described two or three aspects of the specified section of procedure from the study by Yamamoto et al. Many of the responses described the adjacent booths and the hole used to pass tools through. To achieve maximum marks, both of the conditions needed to be identified in the response, and some of the more successful responses did not cover the Cannot See condition. Candidate responses should show knowledge of the full, correct, procedure for all core studies. Candidates should also be encouraged to read questions carefully to ensure that their responses are covering all aspects of the question.

Question 6

To improve responses to this type of question, candidates should be encouraged to focus on the general psychology being investigated in the study by Canli et al. One mark is available for an example from the study, but the rest are achieved for the knowledge of general psychology. The more successful responses clearly outlined role of the amygdala in emotions or how an fMRI brain scan works in generic terms. However, many of the responses described the study without highlighting what general psychology was being investigated. Candidates should be prepared to describe generic psychology and not the specific aims of the study, as this is examined through questions specifically about the aim and procedure of a core study.

Question 7

- (a) The large majority of responses clearly outlined one aim of the study by Laney et al. The most popular choice was investigating the impact of positive false memories. Some of the responses claimed that the study was about changing the behaviour of participants, but this only achieved partial credit. Some of the responses provided a finding from the study rather than an aim, and so did not achieve any credit.
- (b) There was a range of well-chosen methodological weaknesses for the study by Laney et al. Popular choices included questionnaire assessments not being predictive of actual behaviour and lack of generalisability. There were some responses that focused on ethical weaknesses, and so did not achieve credit. To improve, candidates should be encouraged to ensure that once an appropriate methodological weakness has been chosen, it is then explicitly linked to the study by Laney et al. by an example. When a question states 'in this study', an example is required to be able to achieve all full marks.
- (c) There were many examples of real-world applications based on the findings of Laney et al. Popular choices included helping fussy eaters have a better diet and helping cancer patients improve their liking for food and taste. Many of the responses outlined what the application would be, but many did not explain how it would be implemented, needed to achieve both available marks.

- (a) Most of the responses described one aspect of this part of the study by Bandura et al. This, most commonly, was about two observers rating the children. The more successful responses described the scales used, however, many responses described the coding of aggressive behaviour <u>after</u> being exposed to the model and the Bobo doll. This is a different part of the study by Bandura et al.
- (b) The most successful responses clearly explained how each of the four ethical guidelines had either been broken or not. Many of the responses explained what each ethical guideline was about and then give an example from the study to support their explanation. The two ethical guidelines that proved most difficult to explain were confidentiality and right to withdraw, as many of the responses did not to give an example from the study by Bandura et al. There were some tautological responses, for example, stating that confidentiality with privacy. There were many successful responses for both protection from physical harm and psychological harm, with a range of examples given and clearly showing understanding of these ethical guidelines in relation to the study by Bandura et al.



Question 9

The most successful responses evaluated the study by Milgram in depth and in terms of two strengths and two weaknesses, with at least one of these points covering the named issue of qualitative data. Common choices included types of data collected, reliability, validity, generalisability and ethics. The successful responses explained why an element of the study was a strength or a weakness using specific examples from the study by Milgram explicitly to support their point. Most of these answers achieved Level 4 marks.

Candidates should be encouraged to ensure that they follow the requirements of the question, covering two strengths and two weaknesses, all in equal depth. Some of the responses covered the four evaluation points but were brief or did not use the study by Milgram as examples, which meant that the response achieved in the lower bands.

Other responses included three evaluation points that were thorough, logical and well argued with a fourth point that was brief, which meant that the response did not reach the top band marks. Candidates should be aware that any description of the study does not achieve credit in this type of question as it is testing their evaluation skills only. In addition, some of the candidate responses were following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics), and, some of them appeared to produce prepared essays for Milgram, without including qualitative data as one of their points. A response that does not include one evaluation point about the named issue can only achieve Level 3 (6 marks) maximum. There were many responses that briefly outlined strengths and weaknesses with only some being in context, which is a Level 2 response. Any response that has no context cannot achieve above a Level 1 mark. In addition, many of the responses used qualitative data in evaluative sense, but did not fully explain <u>why</u> qualitative data was a strength or a weakness. The more successful responses identified the potential benefits of having qualitative data as part of a holistic approach to understanding the experiences of the participants to expand on the quantitative results collected. This corresponded with the evaluative point 'in detail' in the question. Many of the responses did not cover the named issue.

To improve, candidates should be encouraged to plan carefully, choosing two strengths and two weaknesses with one of these being the named issue. Each strength and weakness should be of equal length with an explanation as to <u>why</u> it is a strength or weakness, with example(s) from the study to show clear understanding. These are the requirements to achieve the Level 4 marks.



Paper 9990/12 Approaches, Issues and Debates

Key messages

- Candidates should have knowledge of all components of the study as listed in the syllabus. Questions could refer to any part of a study.
- Candidates should be encouraged to read the whole question carefully to ensure that their responses are fulfilling the requirements of each question. For example, the question may require data or a named issue to be included. To achieve full marks, these should be correctly present in the responses. The essay (final question) requires four evaluation points to be discussed in depth (two strengths and two weaknesses), with at least one of these focusing on the named issue. Marks achieved will be limited if the named issue is omitted or only described.
- Candidates should take care when presenting the results of studies. For example, the presentation should clearly show if the results are about how many participants performed a task correctly, or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response can achieve credit.
- Candidates should be encouraged to engage with any stimulus material presented in a question (e.g. a novel situation) to access all available marks. In addition, the answer requires contextualisation when a question refers to 'in this study'.
- Candidates should have knowledge of the real-world applications for all core studies. To show understanding, answers should clearly indicate which particular core study the application is based on and how could this be achieved.
- Candidates should understand the difference between a result and a conclusion. The former is factual and based on collected data, while the latter is a generic comment based on the results reported in any core study.
- Candidates should also understand the set procedure of studies in the order presented in the original journal article. Questions can be based around a part of a procedure and the answer given should be directed and concise rather than referring to the whole procedure. This can sometimes result in candidates running out of time to answer the other questions.
- Questions about the 'psychology being investigated' require answers that generically describe concepts and theories that are central to the study. Answers which describe the processes of the study itself rather than give a generic description of a theory or concept would achieve lower marks.
- Candidates should be encouraged to plan their answers to ensure that the response given is focused on the requirements of each question.

General comments

Candidates achieved a full range of marks available in this examination. A range of excellent answers to many of the questions was given. Psychological terminology was explained well, showing a good candidate preparation, including knowledge of the new studies from the syllabus for this examination. Very few blank answers were seen.

The more successful responses overall followed the requirements of each question with explicit use of psychological terminology and logical, well planned answers in evidence. Appropriate examples were used



from studies when the question asked for it and candidate responses showed the knowledge of the realworld behaviours in terms of 'what' and 'how'.

Comments on specific questions

Question 1

- (a) Many of the responses to this question were correct. Some of the responses named an item that was never on the tray, or named 'stick' or 'straw' which were on the tray, and so did not gain credit.
- (b) There were many correct responses to this question. The more successful responses clearly outlined the two ways in which offers were defined in the study. Some of the responses were not in the context of the study, and so did not gain credit. It is important to use examples from the study if the question includes 'in this study'.
- (c) There were some correct responses to this question. Popular correct responses focused on targeted helping, visual confirmation and empathy. However, some of the responses gave a result from the study and, therefore, did not achieve any credit. Responses did not show a clear understanding of the difference between results and conclusions. A result is factual, based on presented data, whereas a conclusion is the interpretation of the results.

Question 2

- (a) (i) Many of the responses outlined the category of 'initiates new activity'. Many of the responses gave an example of a behaviour coded as this category, but as this was relevant to Question 2(a)(ii), many did not achieve credit. Candidates should be encouraged to read all questions with the same number (in this case Question 2) before writing their answers. However, some of the responses clearly outlined the category.
 - (ii) There were some correct responses to this question, with popular choices being laughing and throwing paper basketballs. Many of the responses created a behaviour that could have been shown. However, the question was about an example that <u>had</u> been shown by at least one participant.
- (b) The responses to this question were mixed. Some of the responses clearly described the pattern of results and used one correct piece of data to achieve maximum marks. Some of the responses confused the two groups and gave the reverse result. Other responses described results for happiness, which did not achieve credit as this was <u>not</u> measured using the Activity Index. Candidates should be encouraged to develop their knowledge of the key results from all core studies and how variables were measured.

Question 3

To achieve maximum marks, the real-world applications had to explain what the application was, how it would be achieved based on the study by Laney et al., and be ethical. Popular creditworthy choices included: helping fussy eaters have a better diet, helping cancer patients improve their liking for food and taste, and using positive false memories in certain therapeutic settings. The 'how' part of the question was weaker in most of the responses. Candidate responses should clearly indicate how the application can be achieved or used to explain an event. It should not be assumed that the examiner will make the link. This must be explicitly linked by the candidate. There were very few responses that were unethical.

- Many of the responses clearly identified two characteristics of the learner in the study by Milgram.
 Some of the responses confused the learner for the sample of participants or the experimenter.
 Candidates should be encouraged to read the whole question before commencing their response, as it was Question 4(b) that required a response about the sample of participants.
- (b) Most of the responses clearly described the sample of participants used. Popular creditworthy points included: the sample size, that they were all male, the age range and potential occupations.



(c) Many of the responses outlined an assumption of the social approach that could be used to explain why the study by Milgram is from that approach. The more successful responses explicitly explained, using an example from the study, why the assumption links to that aspect of the study by Milgram. For example, the assumption of how an individual affects behaviour is from the social approach, so a full-mark response would then use the example of how the prods from the experimenter had a direct effect on the obedience levels of the participants.

Question 5

The majority of the responses to this question only described one or two aspects of the specified section of procedure from the study by Andrade. Many of the responses described the test being a surprise and that the participants were debriefed at the end. However, many of the responses either claimed that one group recalled names and the other recalled places, or did not convey that the recall tests were counterbalanced across conditions. Candidates should be encouraged to develop a full knowledge of the correct procedure for all core studies.

Question 6

To improve responses to this type of question, candidates should be encouraged to focus on the general psychology being investigated in the study by Bandura et al. One mark is available for an example from the study, but the rest are achieved from the knowledge of general psychology. The more successful responses clearly outlined Social Learning Theory in generic terms. However, many of the responses described the study without highlighting what general psychology was being investigated. Candidates should be prepared to describe generic psychology and not the specific aims of the study, as this is examined through questions specifically about the aim and procedure of a core study.

Question 7

- (a) The large majority of the responses clearly outlined one aim of the study by Pepperberg. Popular choices included testing symbolic understanding or how a parrot was being tested to show they understood same/different. Some of the responses provided a finding from the study rather than an aim, and so did not achieve credit.
- (b) There was a range of well-chosen methodological weaknesses for the study by Pepperberg. Popular choices included the issues with generalisability and the tasks lacking mundane realism. For the former, there were successful responses explaining how Alex the parrot may be qualitatively different to other parrots either in a laboratory or in the wild, due to him already being used extensively in studies. There were some responses that focused on ethical weaknesses, and so did not achieve any credit. To improve, candidates should be encouraged to ensure that once an appropriate methodological weakness has been chosen that it is then explicitly linked to the study by Pepperberg by an example. When a question states 'in this study', an example is required to achieve all marks available.
- (c) There were many examples of the real-world applications based on the findings of Pepperberg. Popular choices included using the model/rival technique to teach children in the classroom or to help service animals understand same and different objects. Many of the responses outlined what the application would be, but many did not explain how it would be implemented, needed to achieve both available marks.

- (a) Most of the responses outlined either the individual or situational explanation of behaviour. Some of the responses provided a suitable example for either sides of the debate, either from everyday behaviours or from a core study. Popular choices were examples from Bandura et al., Andrade and Milgram. There were a number of responses that were tautological, which did not achieve any credit. This type of response stated that the individual explanation was about the individual, and that the situational explanation was about the situation that a person found themselves in. Issues and debates should be outlined without using the term to outline the term, to achieve maximum marks.
- (b) The most successful responses clearly chose relevant results and used them to explain why the result supported the individual explanation of behaviour and the situational explanation of behaviour. Popular choices for the individual explanation were examples using comments made by



passengers or how the drunk victim was not always helped. This could then be explained using ideas like personality or individual cognitions based on a person's experience of the world. Popular choices for the situational explanation included how groups of seven responded faster than groups of three, clearly showing that the situation we find ourselves in affects our behaviour even when contrary to prediction (in this case diffusion of responsibility).

Question 9

The most successful 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 generalisations. Common choices included types of data collected, reliability, validity, generalisability and ethics. These most successful responses explained why an element of the study was a strength or a weakness using specific examples from the study by Dement and Kleitman explicitly to support their point. The majority of these answers achieved Level 4 marks.

Candidates should be encouraged to ensure that they follow the requirements of the question, covering two strengths and two weaknesses, all in equal depth. Some of the responses covered the four evaluation points, but were brief or did not use the study by Dement and Kleitman as examples, which meant that the response achieved marks in the lower bands. Other responses included three evaluation points that were thorough, logical and well argued with a fourth point that was brief, which meant that the response did not achieve the top band marks.

Candidates should be aware that any description of the study does not achieve credit in this type of question as it is testing their evaluation skills only. In addition, some of the candidate responses were following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics), and some of them appeared to produce prepared essays for Dement and Kleitman. A response that does not include one evaluation point about the named issue can only achieve Level 3 (6 marks) maximum. There were many responses that briefly outlined strengths and weaknesses with only some being in context, which is a Level 2 response. Any response that has no context cannot achieve above Level 1 mark. In addition, many of the responses used generalisations in an evaluative sense but did not fully explain why a small sample size might be difficult to generalise from. The more successful responses identified the potential generalisation problems that females may dream differently to males or might be more likely to report full dream content compared to males. This corresponded with the evaluative point 'in detail' in the question. Many of the responses did not cover the named issue. To improve on this question, candidates should be encouraged to plan carefully, choosing two strengths and two weaknesses with one of these being the named issue. Each strength and weakness should be of equal length with an explanation as to why it is a strength or weakness and with example(s) from the study to show clear understanding. These are the requirements to achieve the Level 4 marks.



Paper 9990/13 Approaches, issues and debates

Key messages

- Candidates should have knowledge of all components of the study as listed in the syllabus. Questions could refer to any part of a study.
- Candidates should be encouraged to read the whole question carefully to ensure that their responses are fulfilling the requirements of the question. For example, the question may require data or a named issue to be included. To achieve full marks, these should be correctly present in the responses. The essay (final question) requires four evaluation points to be in depth (two strengths and two weaknesses), with at least one of these focusing on the named issue. Marks achieved will be limited if the named issue is omitted or only described.
- Candidates should take care when presenting the results of studies. For example, the presentation should clearly show if the results are about how many participants performed a task correctly or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response can achieve credit.
- Candidates should also be encouraged to engage with any stimulus material presented in a question (e.g. a novel situation) to access all available marks. In addition, the answer requires contextualisation when a question refers to 'in this study'.
- Candidates should have the knowledge of the real-world applications for all core studies. To show understanding, answers should clearly indicate which particular core study the application is based on and then how could this be achieved.
- Candidates should understand the difference between a result and a conclusion. The former is factual and based on collected data, while the latter is a generic comment based on the results reported in any core study.
- Candidates should also understand the set procedure of studies in the order presented in the original journal article. Questions can be based around a part of a procedure and the answer given should be directed and concise rather than referring to the whole procedure. This can sometimes result in candidates running out of time to answer the other questions.
- Questions about the 'psychology being investigated' require answers that generically describe concepts and theories that are central to the study. Answers which describe the processes of the study itself rather than give a generic description of a theory or concept would achieve lower marks.
- Candidates should be encouraged to plan their answers to ensure that the response given is focused on the demands of each question.

General comments

Candidates achieved a full range of marks available in this examination. A range of excellent answers to many of the questions was given. Psychological terminology was explained well, showing a good candidate preparation, including knowledge of the new studies from the syllabus for this examination. A very few blank answers were seen.

The more successful responses overall followed the requirements of each question, with explicit use of psychological terminology and logical, well planned answers with evidence. Appropriate examples were used



from studies when the question asked for it, and candidate responses showed the knowledge of the realworld behaviours in terms of 'what' and 'how'.

Comments on specific questions

Question 1

- (a) Many of the responses to this question were correct (anger). Some of the responses named a different emotional state or named euphoria, which was in the question. Some other responses named one of the conditions, for example, epinephrine-misinformed.
- (b) There were some correct responses to this question. The more successful responses clearly named two of the four potential categories that a behaviour could be coded by. Some of the responses named two of the conditions (e.g. epinephrine-informed) or attempted to name certain behaviours within a category.
- (c) There were some correct responses to this question. Popular correct responses focused on supporting the two-factor theory of emotion. Incorrect responses reported an actual result rather than a generic conclusion, which was the demand of the question. Responses did not show a clear understanding of the difference between results and conclusions. A result is factual based on presented data, whereas a conclusion is the interpretation of the results.

Question 2

- (a) Many of the responses clearly outlined the procedure of the Model/Rival technique. However, there were some responses that outlined the test procedure or had Alex as the second 'human', which did not achieve credit.
- (b) The majority of responses were correct. Popular choices were blue, triangle and wood. There were some responses that named materials that Alex was not familiar with.

Question 3

To achieve maximum marks, the real-world applications had to explain what the application was, how it would be achieved based on the study by Milgram, and be ethical. Popular creditworthy choices included: explaining why genocide and the Holocaust happened and how we can educate people to stop it occurring in the future, using a uniform to make an army more obedient, using a uniform to help children become more obedient in the classroom and keep focused on tasks and education. The 'how' part of the question was weaker in most of the responses. Candidate responses should clearly state how the application can be achieved or used to explain an event, and it should not be assumed that the examiner will make the link. This must be explicitly linked by the candidate response. There were very few responses that were unethical.

Question 4

- (a) The more successful responses to this question clearly outlined one way in which the participants were deceived in the study by Piliavin et al. Popular responses included: the participants not knowing that the victims were in fact stooges, and the participants thinking that the model was a fellow passenger.
- (b) Many of the responses clearly described the sample of participants used in the study by Piliavin et al.
- (c) Many of the responses outlined an assumption of the social approach that could be used to explain why the study by Piliavin et al. is from that approach. The more successful responses explicitly explained, using an example from the study, why the assumption links to that aspect of the study by Piliavin et al. For example, the assumption of how a group affects behaviour is from the social approach, and so a full-mark response would then use the example of how groups of seven responded faster than groups of three, clearly showing that groups affect our behaviour.

Question 5

The majority of the responses to this question described one aspect of how the Child Anxiety and Phobia Program was used to <u>diagnose</u> the boy in the study by Saavedra and Silverman. Many of the responses



described how the study was used to <u>help treat</u> the boy, but the question was not focused on this aspect of the core study. The diagnosis phase of the study was before the treatment and the more successful responses clearly described the use of diagnostic criteria and interviews.

Question 6

To improve responses to this type of question, candidates should be encouraged to focus on the general psychology being investigated in the study by Dement and Kleitman. One mark is available for an example from the study, but the rest are achieved from the knowledge of general psychology. The more successful responses outlined what REM sleep was, or how an EEG works. However, many of the responses described the study without highlighting what general psychology was being investigated. Candidates should be prepared to describe generic psychology and not the specific aims of the study, as this is examined through questions specifically about the aim and procedure of a core study.

Question 7

- (a) The large majority of responses clearly outlined one aim of the study by Baron-Cohen et al. Popular choices included testing people with AS/HFA for Theory of Mind using the eyes test, and about improving the original version of the eyes test in terms of validity. Some of the responses provided a finding from the study rather than an aim, and so did not achieve any credit.
- (b) There was a range of well-chosen methodological weaknesses for the study by Baron-Cohen et al. Popular choices included the static nature of the eyes or that the language used to choose an emotion could still be troublesome for participants. There were some responses that focused on weaknesses of the original eyes test, and these did not achieve credit as the question was focused on the revised eyes test. To improve, candidates should be encouraged to ensure that once an appropriate methodological weakness has been chosen, that it is then explicitly linked to the study by Baron-Cohen et al. by an example. When a question states 'in this study' an example is required to be achieve full marks.
- (c) There were many examples of the real-world applications based on the findings of Baron-Cohen et al. Popular choices included using the eyes test as a diagnostic tool in schools and other establishments, or as a way of improving social intelligence in candidates. Many of the responses outlined what the application would be and how it would be implemented, to achieve both available marks.

- (a) Most of the responses outlined either the individual or situational explanation of behaviour. Some of the responses provided a suitable example for either side of the debate, either from everyday behaviours or from a core study. Popular choices were examples from Piliavin et al., Andrade and Milgram. There were some responses that were tautological, which did not achieve credit. By this, the candidates stated that the individual explanation was about the individual and that the situational explanation was about the situation that a person found themselves in. Issues and debates should be outlined without using the term to outline the term, to achieve maximum credit.
- (b) The more successful responses clearly chose relevant results and used them to explain why the result supported the individual explanation of behaviour and the situational explanation of behaviour. Popular choices for the individual explanation were examples about gun play or differences in imitative behaviour across participants. Popular choices for the situational explanation of behaviour focused on imitating aggressive models and the role of same-sex models in imitative behaviour. The more successful responses then explained how the result was based on either individual or situational factors. These included explaining differences in hormonal levels, temperament of children, and how the model is influential in the situation to promote potential imitative aggressive behaviours.



Question 9

The most successful responses evaluated the study by Yamamoto et al. in depth and in terms of two strengths and two weaknesses, with at least one of the points covering the named issue of repeated measures. Common choices included types of data collected, reliability, generalisability and ethics. The most successful responses explained why an element of the study was a strength or a weakness using specific examples from the study by Yamamoto et al. explicitly to support their point. Most of these answers achieved Level 4 marks.

Candidates should be encouraged to ensure that they follow the requirements of the question, covering two strengths and two weaknesses, all in equal depth. Some of the responses covered the four evaluation points, but were brief or did not use the study by Yamamoto et al. as examples, which meant that the response achieved in the lower bands.

Other responses included three evaluation points that were thorough, logical and well argued with a fourth point that was brief, which meant that the response did not achieve the top band marks. Candidates should be aware that any description of the study does not gain credit in this type of question, as it is testing the evaluation skills only. In addition, some of the candidate responses were following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics), and, therefore, some of them were producing prepared essays for Yamamoto et al. without including repeated measures as one of their points. A response that does not have one evaluation point about the named issue can only achieve Level 3 (6 marks) maximum. There were many responses that briefly outlined strengths and weaknesses with only some being in context, which is a Level 2 response. Any response that has no context cannot achieve above a Level 1 mark. In addition, many of the responses did not use repeated measures in an evaluative sense, and so that specific point could not be counted towards their final mark.

Some of the more successful responses identified the potential problems of practice effects on validity. Some other responses did not cover the named issue. To improve responses to this question, candidates should be encouraged to plan carefully, choosing two strengths and two weaknesses with one of these being the named issue. Each strength and weakness should be of equal length with an explanation as to <u>why</u> it is a strength or a weakness, with example(s) from the study to show clear understanding. These are the requirements to achieve the Level 4 marks.



Paper 9990/21 Research Methods

Key messages

- This question paper asks candidates to answer a range of questions, including ones about the core studies, in relation to research methods, terms and concepts used to describe or evaluate research methodology, and application of this knowledge to both familiar and unfamiliar contexts. These types of questions require candidates to use a variety of skills, some of which were not shown in many of the candidate responses. Candidates should be encouraged to prepare for each of these skills, especially for demonstrating knowledge of concepts and the application of this knowledge.
- Ability to apply knowledge and understanding to novel scenarios is essential to help candidates to successfully complete this paper. This skill can help candidates in two ways:
 - Candidates should be able to apply research methods, terms and concepts to scenarios presented in questions. These can include, for example, planning, criticising or developing designs, or analysing data.
 - Candidates should be aware of the questions which require a link. When a question includes 'in this study', or makes a direct reference to the scenario, responses should develop beyond simply describing or evaluating – the answer must also be contextualised in a relevant way. Practice could help candidates 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 and it is, therefore, important that candidates understand the basic research methods well and that they respond to the question by using the method stipulated by the question. 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**) candidates should have had the 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 practice with novel scenarios. Candidates should be familiar with the overall structure of **Question 10(a)**, which can be closely tailored to requirements of an individual question, such as the required research methods and the scenario.

General comments

In general, candidate responses achieved marks across the whole range of available marks for this paper. However, very few responses consistently and accurately demonstrated knowledge and understanding, or achieved the additional marks for linking the response to the scenarios, thus limiting marks achieved overall. Nevertheless, some of the candidate responses showed a good grasp of a range of psychological concepts and, therefore, achieved the basic marks.

Candidate responses overall demonstrated some knowledge of a range of aspects of research methods in this paper. Successful responses were seen to the more straightforward questions, such as **Questions 1(b)**, **2(a)**, **5**, **6**, **7(b)(i)**, **8(b)**, **8(c)(i)** and **9**, while the more demanding questions, such as **questions 7(b)(ii)**, **8(c)(ii)** and **10** were answered less successfully. This examination tested a cross-section of psychological skills, which some of the candidate responses had limited success in demonstrating.

Questions 1(a), 3, 4(a) and (b), 7(a)(i) and 7(a)(ii) required candidates to show an accurate knowledge and understanding. In such questions, covering, for example, concepts like measures of central tendency and spread (Question 3) and order effects (Question 4), candidate responses often showed some knowledge, such as, that they were related to the mean, median and mode, or to practice and boredom. However, this type of response showed limited understanding required to explain the idea.



Some of the questions required a link, for example, to a study. These included **Questions 2(a)**, **7(a)(i)** and **(a)(ii)**, **8(a)**, **8(c)(i)** and **10(b)**, where candidate responses sometimes achieved partial marks for an initial identification of a relevant fact, such as identifying qualitative data in **Question 2(a)**, but then needed to relate this to the information in the stem.

Question 10 was sometimes well answered, although responses often focused on a method other than the required questionnaire. This meant that the valuable time was used unnecessarily, and, as a consequence, the response lacked the necessary relevant detail to achieve higher credit.

Comments on specific questions

Section A

Question 1

- (a) This question was not well answered, with many responses focusing on the two experimental conditions rather than two ways the offer was operationalised. Most of the candidate responses gained one mark for 'first object offered', but few gained two marks. Instead, responses often referred to the type of object offered, such as a stick or a brush.
 There were also some irrelevant responses, showing a lack of understanding of either the term 'object offer' from the study, or the methodological concept of operationalisation.
- (b) Many responses achieved one mark for this question, due to giving answer 'in a lab' without a link to the study. A few excellent answers focused on the fact that the chimps lived in the primate centre and had been used in other studies. Other candidate responses also gave contextualisation regarding the booth and nature of the tasks, which were not typical of the chimpanzees' natural environment.

Question 2

- (a) This question asked candidates to identify the type of data and include a reason for the answer that refers to the boy's statements. This question was often well answered, with most of the candidate responses achieving a mark for 'qualitative', although a common zero-mark response was 'not numerical', followed by a justification. In addition, some of the responses did not make a link to the boy's statements. A range of linked explanations were given by the more successful responses, such as that 'the boy explained his feelings towards buttons, such as why they were gross'. A few responses did not offer a type of data, but a research technique or method, such as 'self report', and, therefore, achieved no marks.
- (b) This question elicited varied responses, including ones which unsuccessfully suggested the boy himself was being subjective about his own feelings, rather than successfully commenting on the subjectivity of the data arising from the researcher's interpretation of the responses.

Question 3

Many of the candidate responses did not achieve full marks for this question. The most common reason for this was responses giving an example of either a measure of central tendency or a measure of spread, or both, instead of an explanation. Another reason was that candidate responses simply repeated words from the question, such as 'a measure of central tendency measures the centre of the scores' or 'a measure of spread measures the spread of the data'. Other candidate responses explained how examples of such measures were calculated, for example, 'the mean' or 'the biggest and the smallest', which was irrelevant.

Question 4

(a) Candidate responses often showed a poor understanding of the concept, with an absence of the essential point that these 'effects' have consequences on performance, i.e., that is their *effect*. Frequently given answers were 'practice effects are caused by repetition'/'fatigue effects are caused by boredom or tiredness'. Whilst these statements are true, neither defines what a practice or fatigue effect is, as they do not mention the critical piece of information about what that effect is. Some of the responses that did not achieve credit explained false memories as a consequence of order effects. Others confused order effects with demand characteristics (or, less often, with social desirability).



(b) Very few answers were related to experiments. Many of the candidate responses gave further definitions of order effects or of validity. Some of the candidate responses which did not achieve credit gave irrelevant answers related to ecological validity.

Question 5

Many of the responses were unclear. Some of the candidate responses referred to demand characteristics as something that participants show, rather than being features of the study 'characteristics' that reveal the 'demands' of the study, i.e., the expectations of the researcher, which thus affect the participants' behaviour. Other candidate responses confused demand characteristics with the effects of social desirability, i.e., what society (rather than the researcher of a particular study) expects.

Question 6

There were many well-informed responses to this question, however, there were also some common errors. For example, the statement 'A sample represents the population' is incorrect – it should state 'A sample *should/is intended to* represent the population'. Although candidate responses overall suggested that an evaluation point of volunteer/opportunity samples are unrepresentative, many candidate responses did not extend that knowledge to answering this question, and so made the misassumption that samples are (always) representative of the population.

Many unsuccessful definitions of a 'population' were geographical rather than psychological. In psychological terms, to define a population as the people of one country/town, etc., is not accurate and too simplistic. A population is specifically a group with one or more characteristics in common. This means that they may or may not be geographically dispersed, for example, 'all the internet users in the world' or 'all left-handed people in Europe' are populations that might be of interest to psychologists.

A small but significant minority of candidate responses unsuccessfully used the study by Piliavin et al. as an example of an experiment that used a population rather than a sample.

Section B

Question 7

- (a) (i) Many of the candidate responses correctly identified what privacy meant, but some confused this with 'confidentiality' suggesting that they meant the same thing, and so did not achieve any marks. For example, unsuccessful responses often referred to keeping the old person's details safe and not publishing them. The more successful responses referred to respecting a person's emotional and physical space by not being intrusive with their line of questioning.
- (a) (ii) This question was well answered by candidates who also achieved marks in **part 7(a)(i)**. Some of the candidate responses assumed that the purpose of a pilot study is to make a procedure more ethical, which is not the case. It would not be appropriate to use participants to discover whether a procedure is harmful, and pilot studies do not make studies more ethical.

There were many good responses suggesting things that might be too personal to ask the old people about, such as forgetting loved ones or forgetting to shower, that Aileen should avoid. Detailed answers with a link that achieved full marks suggested solutions, such as using list of general categories they could respond to, such as 'losing everyday items, such as phone or wallet', about which the participants would not have to give specific personal information.

- (b) (i) Most of the candidate responses to this question were successful and correctly operationalised the two age groups. Most of the candidate responses therefore achieved two marks. Some of the candidate responses achieved one mark due to only stipulating that younger and older participants should be used.
- (b) (ii) Many of the candidate responses gave excellent and varied reasons that having a job could affect memory (stress, tiredness, cognitive exercise, etc.), achieving one mark. However, many responses then did not achieve the second mark because they did not link this to the difference between young and old people. A small number of candidate responses successfully suggested that older people who are able to hold jobs may be able to do so *because* they have better memories.



Question 8

- (a) A mix of responses to this question were seen. Some identified that in a natural experiment the IV cannot be manipulated, but not all of these responses identified that this was the naturally occurring event of the motorway being built. Many of the responses instead referred to it being held in the 'natural environment', such as the home of the participants or that the participants were in their own beds, which did not achieve any marks.
- (b) Many of the candidate responses to this question were successful and identified that extraneous variables could be problematic in natural experiments, because there can be other factors affecting the cause and effect relationship. The links to the study were missing in some of the responses, which then achieved one mark. The two-mark responses gave a very good range of thoughtful suggestions, for example, noise inside the houses, how cold they were, how tired the participants were, whether they used earplugs or drank caffeine which could be affecting levels of sleep.
- (c) (i) Most of the responses correctly stated repeated measures and many then explained that the participants had taken part in both conditions before and after the closing of the motorway and so achieved one or two marks.
- (c) (ii) Some of the responses to this question were successful, with many answers achieving at least one mark. Where candidate responses did not achieve the full two marks, this was usually because the answer was not contextualised to Elaf's experiment.

Question 9

- (a) Most of the responses achieved the mark and identified that this was an overt observation, for example, stating that this was because the researcher was openly taking notes.
- (b) A significant minority of candidate responses gave advantages of the field situation rather than of overt observations, and so did not answer the question. Many of the candidate responses, however, gave successful answers.
- (c) There were many good suggestions in response to this question, that were linked to Jasmin's study. For example, people being more likely to talk when they know they were being observed, or to be more appreciative. However, where candidate responses did not achieve full marks this was usually because of giving a generic answer, for example, about the participants 'changing their behaviour', rather than responding directly to the question which stated specifically '... using Jasmin's study as an example.'.
- (d) (i) Although many candidate responses gave at least one behavioural category, not all did. Successful responses often included behaviours like talking or offering to pay for each other's food. However, there were many responses that gave irrelevant information, such as suggestions that were not behaviours (so could not be observed), or behaviours that were not related to friendship.
- (d) (ii) There were many excellent responses to this question, showing that in limited novel situations candidates were able to apply their knowledge to give specific rather than generic answers. A range of responses included: laughing they may be laughing at something other than their friend, helpfulness they may not help their friend as there are cafe workers to help them, a naturally talkative person may seem more friendly but not actually be, hugging might be a custom rather than a friendship behaviour, even strangers talk to each other.

Those candidate responses which did not achieve a mark often gave disadvantages of other aspects of Jasmin's study, such as the type of data she was collecting.

Question 10

(a) Many of the candidate responses achieved Levels 1 or 2. To move from Level 1 to Level 2, candidates often needed to include a statement relating the sample they were planning to use to the question, i.e., that the students being used would be expecting a test. To move from Level 2 to Level 3, detail was often lacking on how the data from the questionnaire related to the misinterpretation of anxiety and anger. However, many of the candidate responses provided good detail on the element regarding the use of questionnaires, for example, by naming the type of questioning they would use with open and closed question examples.



Some of the responses used methods other than the questionnaire required by the question, including interviews and observations. Such responses did not answer the question set, and so either achieved limited or no marks.

Commonly some of the otherwise good answers did not achieve Level 3 due to the omission of any indication of the questionnaire reaping information about arousal and or anger, thus the proposed procedure would not investigate the issue of misinterpretation.

The procedure suggested by a small number of candidate responses effectively tackled the issue that the participants may believe that the questionnaire itself was a test, thus introducing a threat to validity.

(b) Many of the responses gained two or three marks out of four, due to being commonly based on issues of social desirability bias, with participants potentially not answering truthfully due to the questions being about emotion. Generic answers achieved limited marks.

Inter-rater reliability was also a common issue referred to in terms of interpreting the results, and how this could be improved. However, many of the candidate responses mistakenly suggested that one rater automatically has low inter-rater reliability, which is not the case, as there is only one of them: the correct term here would be 'intra-rater reliability'. Furthermore, some of the responses suggested that this could be solved by adding a second rater. This alone, however, runs the risk of creating a threat to reliability, since the two raters may not rate questionnaire responses in the same way. The two raters must interpret in the same way, for example, by using the same rating system or practising together until they produce the same records from the same raw data.

A small but significant minority of candidate responses ignored that statement in the question that said 'Do **not** refer to ethics or sampling in your answer.', and so gave responses that were not creditworthy. Other unsuccessful responses were not about the procedure of the questionnaire, for example, if the candidate had made the study into an experiment, and so achieved no marks.



Paper 9990/22

Research Methods

Key messages

- This question paper focuses on research methods and requires candidates to answer a range of question types, including ones about the core studies in relation to research methods, terms and concepts used to describe or evaluate research methodology, and application of this knowledge to both familiar and unfamiliar contexts. Some of these skills were not shown in many of the candidate responses. Candidates should be encouraged to prepare for the skills of demonstrating knowledge of concepts and the application of this knowledge.
- Candidates should be encouraged to practise the application of ideas, especially to novel scenarios and in learners' own practical activities, to succeed in this paper. This can help candidates in two ways:
 - Candidates should be able to apply research methods, terms and concepts to scenarios presented in the questions. These can include, for example, planning, criticising or developing designs, or analysing data.
 - Candidates should be aware of the questions which require a link. When a question includes 'in this study', or makes a direct reference to the scenario, responses must develop beyond simply describing or evaluating – the answer must also be contextualised in a relevant way. Practice could help candidates to learn both how to extract relevant ideas and how to make novel suggestions based on scenarios.
- Question 10 in this question paper requires candidates to produce an original design for a novel research question, and 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 candidates having the 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. Candidates should be familiar with the overall structure of Question 10(a), which can be closely tailored to the requirements of an individual question, such as the required research method and the scenario.

General comments

To help candidates achieve marks across the whole paper, candidates should be encouraged to answer all parts of the question and to address the 'in this study' component of the question. Otherwise only limited marks can be achieved.

The answer should be related to the question, rather than be given in isolation, for example, as in **Question 8(a)** – to achieve one mark many candidate responses correctly stated that the experimental design was 'repeated measures', however, often the answers lacked further development. An explanation or application of the answer to the study in question should be given to achieve two marks. As **Question 8(a)** was about city scenes and natural scenes, to achieve full marks a candidate response could include 'all participants did both the natural and city scenes task'. This would show that the candidate understood the term 'repeated measures' and, in addition, would also show understanding of what the two conditions involved in the design are.



Comments on specific questions

Section A

Question 1

(a) This question required a conclusion, but many candidate responses confused conclusions and findings, the mark scheme was widened to allow credit for any answer that provided either of these. Further marks were achieved for referring to the results to support the conclusion/finding. Many candidate responses achieved full marks, but many others did not due to giving conclusions without data or giving data without conclusions.

Question 2

- (a) For the one available mark candidate responses needed to state either that 'liking of asparagus' was ethical, because no mental harm was created, or by stating that 'filmed events such as car crashes and thefts' are less ethical because they might cause mental harm. Some of the candidate responses stated that 'it is less ethical', but without referring to what is less ethical, therefore, such answers did not achieve any marks.
- (b) To achieve two marks candidate responses had to state one way in which the Laney et al. study was not ethical and give an example in support. Many of the candidate responses did this by giving deception as the most common answer supported with the statement that 'participants thought the study was about food preferences and personality when it was about false memory'. Some of the responses referred to other ways in which the study was not ethical and these were credited if an appropriate supporting example was provided.

Question 3

- (a) Libby (part of the question stimulus) needed to use two different techniques to study the boy and his social interactions. Most of the candidate responses correctly referred to a method (observations, questionnaires or interviews), although a few candidate responses unsuccessfully chose qualitative and quantitative data. For one mark each, techniques needed to be identified and for the second mark a description of how each technique could be used to gather data on the social interactions of the boy was required. Full marks were commonly achieved, but some of the candidate responses did not provide two techniques, or the description was insufficient, with answers like 'Libby could observe the boy', which made no reference to social interactions.
- (b) Responses to this question needed to give a problem with one of the techniques used in Question 3(a). For the responses using an interview or questionnaire, the common problem stated was that the boy could give socially desirable answers. For the responses using an observation, the most common answer was that the boy may change his behaviour if he knew he was being observed. A small number of candidate responses did not provide any problem at all, and so did not achieve any marks.

Question 4

Most of the candidate responses did not achieve any marks for this question. A wide range of answers were provided such as 'pressing buttons is more objective' and 'speaking leads to giving socially desirable answers'. The successful answer required to state that when a person is having their brain scanned it is essential that they do not move because it could ruin the scan. Speaking or writing would involve some movement, so in the Canli et al. study buttons were pressed instead, and candidate responses which stated this achieved the one available mark.

- (a) To achieve one mark, this question required candidate responses to show an understanding that the stimulus material was referring to the term 'validity', to state 'validity' and 'because they will not be measuring what they claim'. Most of the candidate responses were successful in answering this question, but some incorrectly gave 'reliability' as the answer, which did not achieve any marks.
- (b) Similar to (a), to achieve one mark for this question candidate responses required to show an understanding that the stimulus material was referring to the term 'reliability', to state 'reliability' and



'because the researchers will be inconsistent'. Most of the candidate responses were successful, but some gave 'validity' as the answer, which did not achieve any marks.

Question 6

There were four possible successful responses to this question: a hypothesis, a null hypothesis, a directional (one-tailed) hypothesis and a non-directional (two-tailed) hypothesis. Examples were also required to achieve full marks. Many of the candidate responses successfully described three of these, gave appropriate examples of each, and, therefore, achieved the maximum 6 marks. Other candidate responses gave descriptions, but did not provide examples or gave incorrect examples. Some of the candidate responses did not achieve marks because the descriptions were lacking detail, although their examples were correct. For example, giving answer 'a directional hypothesis predicts a direction' was insufficient, whereas giving 'a directional hypothesis predicts which condition of the IV will be better'' was creditworthy.

Section B

Question 7

- (a) (i) There were only two possible successful answers to outline the negative correlation presented in the stimulus: 'as exercise increases happiness decreases' and 'as exercise decreases, happiness increases'. Most of the candidate responses achieved the one mark available.
 - (ii) Most of the candidate responses achieved full marks for this question by correctly labelling each axis (happiness and exercise or exercise and happiness) and by drawing a line sloping from top left to bottom right (i.e. a negative correlation). Some of the candidate responses unsuccessfully drew a bar chart and some other candidate responses drew a positive correlation line (bottom left to top right).
- (b) Although there were many irrelevant answers in response to this question that did not achieve any marks, most of the candidate responses were successful and gave 'causal conclusions cannot be drawn from a correlation' as the answer, achieving one mark. For the second mark responses needed this statement to be related to Claus, as the question asked to 'Explain why Claus cannot conclude', which many of the candidate responses did not do.
- (c) Many of the candidate responses did not consider why correlations are useful, and many answers achieved one or no marks. The question required the answer to be related to Claus, which was often missing from the answers. Correlations are useful as sometimes they are good indicators of what variables might be causal and so suggest that an experiment should be conducted. If there is a strong (such as 0.75 or higher) correlation between exercise and happiness, then an experiment could be conducted to find whether there is a causal relationship.

- (a) For one mark, many candidate responses successfully stated that the experimental design was 'repeated measures'. Some of the responses applied this to Duncan's study by stating that 'all participants did both the natural and city scenes task', and achieved one further mark. A lot of confusion was seen about the methods and designs with some candidates stating that 'it was an experiment', and some suggesting that it was an independent design. Neither of these responses achieved marks.
- (b) Many candidate responses achieved one mark for a partial answer and often did not achieve the second mark due to not relating the initial answer to the question. One mark was awarded for responses giving 'counteracts order effects' or 'reduces demand characteristics' as the answer. However, these statements in isolation did not answer the question. The second mark of the question was achieved for showing understanding, and applying the answer to the question. The initial response needed to be applied to 'the scenes' which were identified in the stimulus material.
- (c) Many of the responses were not applied to the question despite the question stating '...from this location in this study'. To achieve full marks responses required to identify points such as 'the participants in the sample all lived in the same city' (one mark) 'and 'so they would be more familiar with city scenes than natural scenes' (one mark). This type of response answers both parts of the question.



(d) Although the question asked to 'describe one *ethical* way' many of the candidate responses suggested giving participants an injection to raise their arousal levels, possibly making this suggestion because it was done in the Schachter and Singer study. However, this type of candidate responses did not acknowledge that the Schachter and Singer study was unethical. Any unethical answer did not achieve any marks. An ethical answer, for example, would be to let participants watch an exciting film *of their choice* and so they would be giving informed consent to something they knew and to something they knew would not cause them harm.

Question 9

- (a) Many of the candidate responses did not suggest a correctly worded open-ended question. Many answers suggested questions that led to a one-word answer, or an answer that could be a choice of a word from several. For example, 'Do you like learning new languages' could be answered with a closed 'yes' or 'no'. To make the question open-ended beginning with a word such as 'Describe' or 'Explain' would encourage more than a one-word answer.
- (b) This question required a link to the study and many candidate responses did not achieve this. If the question states 'in this study' then that part of the question must be addressed. Answers, such as, 'open questions are harder to analyse because they are non-numerical' achieved one mark. By adding 'so it would be hard to compare learners of different languages' candidate responses would have earned the second mark because it would apply the disadvantage to this study on learning a new language.
- (c) The 'in this study' part of the question needed to be addressed for candidate responses to achieve higher marks. For this question, the majority of the candidate responses achieved one mark for stating an appropriate problem, but often did not score the second mark for not addressing the 'in Lydia's study' part.
- (d) Three components were required in order to achieve the three marks available for this question. Firstly, candidate responses needed to identify an appropriate type of interview. This could be either structured, semi-structured or unstructured, and most of the candidate responses did this successfully. Secondly, the reason for the choice of interview was required. In response to the 'reason for your answer' component of this question, many of the candidate responses achieved the available mark. However, many of the candidate responses made a false assumption that a structured interview has only closed questions and an unstructured interview has only open-ended questions. The term 'structured' means that all participants are asked the same questions in the same order, whether the questions are open, closed or a mixture. 'Unstructured' means that different participants are asked different questions. The third component in the question was relating the interview to Lydia's study on learning a new language.

Section C

- (a) Candidate responses achieved a full range of marks in response to this question, and some excellent responses were seen. Answers differed widely in terms of level of awareness shown regarding the nature of an observation, and there were often major omissions resulting in some very low marks. Many of the candidate responses did not address the 'conduct an observation' component of the question altogether and designed an experiment. Some designed an experiment and mentioned the word 'observation'. A few candidate responses described the Piliavin et al. study and, therefore, achieved no marks. It should be noted that an observation is a method in its own, without reference to any experimental terminology. The most successful candidate responses achieving the highest marks showed a clear understanding of the term 'participant observation' as required by the question, as opposed to 'non-participant observation'. This type of candidate responses also chose between overt or covert, structured or unstructured, and naturalistic or controlled. Many of these responses also specified the number of observers and wrote about interrater reliability.
- (b) There were many successful answers to this question, with many focusing on a practical problem and addressing how that problem could be solved. In doing this, maximum marks were achieved by some of the responses. For example, 'there was only one observer who might not be able to see everything that was happening' and to solve this problem 'I would use two observers who could compare data at the end of the study'. However, at the other end of the mark range there were



candidate responses which wrote about ethics or sampling, when the question asked not to, and those which wrote about a weakness of the experiment. These types of answers achieved no marks.



Paper 9990/23

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General comments

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Candidate responses overall demonstrated some knowledge of a range of aspects of research methods in this paper. Successful responses were seen to the more straightforward questions such as **Questions 1(a)** and **(b)**, **3(a)(i)** and **(b)(i)**, **4**, **6**, **7(b)** and **(c)** and **9(a)**, while the more demanding questions, such as **Questions 3(b)(ii)**, **8(a)(i)** and **10** were answered less successfully. This examination tested a cross-section of psychological skills, which some of the candidate responses had limited success in demonstrating. **Questions 5(a)**, **(b)** and **8(b)(ii)** required candidate responses to show an accurate knowledge and understanding. In such questions, covering, for example, concepts such as ethical guidelines in relation to animals (**Questions 5(a)** and **5(b)**) and random sampling (**Question 8(b)(ii)**), candidate responses often showed some knowledge, such as of 'housing' guidelines in relation to animals, but lacked the knowledge or understanding needed to explain the relevant ideas. Some of the questions required a link, for example to a study, which included **Questions 2, 3(a)(ii)** and **(b)(ii), 8(a)(i)** and **10(b)**, were some of the candidate responses achieved partial marks for an initial identification of a relevant fact, such as identifying a disadvantage in **Question 2**, but then did not relate this to the information in the stem. **Question 10** was



sometimes well answered, although responses often focused on a method other than the required nonparticipant. This meant that the valuable time was used unnecessarily and, consequently, the response lacked the necessary relevant detail to achieve higher credit.

Comments on specific questions

Question 1

- (a) Many of the candidate responses achieved the mark for this question. Where a response did not achieve a mark, this was because it referred to the 'number' of children being aggressive or the 'time' the children spent aggressing, neither of which were observed in this study.
- (b) This question was well answered, for example, with statements such as that it could be compared mathematically to test differences between boys' and girls' aggression or the effect of different model.

Question 2

This question was often well answered with many of the candidate responses giving thoughtful answers contextualised to the Andrade study. However, there were three common reasons for responses achieving less than full marks. Firstly, some of the candidate responses ignored the concept of the participant panel in the question and instead gave responses relating to the use of participants who had already been in an experiment so were bored. Secondly, some other candidate responses used 'easy' as an advantage, which is not a psychological advantage. The related psychological advantage is that this makes it possible to gain a larger sample and, in turn, that for Andrade's study this meant that the sample was more likely to be representative of the range of attention/doodling in the population. Lastly, many candidate responses which achieved two or three marks did so because one or both parts of the answer were not contextualised to Andrade's study. This was especially clear in the explanation of disadvantages. Candidates should be encouraged to, for example, cite that such volunteers may be highly motivated, but a few extended this to say that they would have tried harder to remember the names. Similarly, many of the candidate responses correctly observed that volunteers may be similar, but a few linked this to the idea that they may share more doodling or have better attention or recall.

Question 3

- (a) (i) This question was well answered, with many relevant suggestions, such as the type of food they like. There were a few suggestions that were situation variables in response to this question.
- (a) (ii) A minority of candidate responses which did not achieve marks for these questions, gave generic
- (b)(ii) definitions of validity, rather than answering the questions, which related to the study described in the stem. Some other candidate responses did not achieve any credit, despite the attempt to link their variable to Carrie's study, due to not mentioning the potential confounding effect on *sleep*/the relationship between meals and sleep. Often incomplete answers made comments similar to 'Participants who are more busy won't eat as much so the results will be altered'. These were insufficient responses as they also needed to explain what the effect on the results would be in this case to achieve higher marks.
- (b) (i) There were many good suggestions seen in response to this question. However, more commonly, candidate responses suggested another participant variable instead of suggesting situational variables as in **3(a)(i)**. Candidates should be encouraged to learn to distinguish the two concepts.
- (b) (ii) Candidate responses which were creditworthy in response to 3(b)(i), sometimes also achieved the mark for this question. Candidate responses which did not achieve the mark gave vague responses relating to 'an effect on the results' rather than relating their point to the effect on sleep.

Question 4

Responses to this question elicited an excellent range of ideas, such as that you cannot collect detailed data/ qualitative data from sleeping participants, although candidates less often gave a link, such as that Dement and Kleitman had to use less detailed/quantitative measures such as the EEG when they were asleep. Some of the candidate responses described problems with testing participants in a laboratory or with equipment rather than answering the question.



Question 5

- (a) Answers that did not achieve any credit often simply described the meaning of a reward in terms of positive reinforcement, rather than answering the question in relation to ethical guidelines. Others answered in relation to ethical guidelines about feeding, which again, did not answer the question.
- (b) A few candidate responses achieved full marks for this question and many did not achieve any marks. The absence or lack of knowledge about the guideline was illustrated by many candidate responses rewording the question to say that researchers should 'avoid straining the species'. Many responses referred inappropriately to guidelines about numbers or housing and, therefore, did not achieve any marks. Some of the candidate responses achieved one mark for stating that researchers should avoid using species close to extinction, although they did not expand on this in relation to conservation efforts.

Question 6

Some of the candidate responses gave technically excellent answers but did not include any examples. Other gave examples, but these were inappropriate for a psychology examination, such as TV interviews with film stars or political debates. Very commonly responses incorrectly suggested that Laney et al. used an interview.

Question 7

- (a) As with **Question 6**, a minority of candidate responses did not show psychological knowledge and offered irrelevant, 'business-related' responses.
- (b) Candidate responses often gave more successful answers to this question than to (a)(i), with most identifying 'work output' as the DV, and with many varied and excellent suggestions for how this might be done, such as the number of products made or the income generated.
- (c) (i) Many good ideas were seen in response to questions 7(c)(i)–(iii), such as influences of changes in pay, for example, from tips or bonuses.
- (c) (ii) Where candidate responses gave a creditworthy answer to question 7(c)(i), many then also achieved the mark for this question. Where the mark was not achieved, this was because the responses were vague and relating to 'an effect on the results'.
- (c) (iii) Whilst many of the candidate responses with a creditworthy suggestion to the question 7(c)(i) provided one mark answers, fewer responses achieved two marks. This was because the answers lacked either detail or justification.
- (d) A significant minority of candidate responses were about field experiments rather than natural experiments, and so did not answer the question.

- (a) (i) Commonly, candidate responses incorrectly assumed that only a rating scale, not a dichotomous or nominal 'true or not true' question, would offer quantitative data, or would be possible to compare. A small but significant minority of candidate responses did not address the part of the question '... rather than asking participants if they were confident in the 'memory' or not', and often did not achieve any marks.
- (a) (ii) This question was generally well answered, with many candidate responses achieving both marks.
- (b) (i) There were many incorrect answers to this question. These mainly suggested volunteer, self-selecting sampling or opportunity sampling.
- (b) (ii) A minority of candidate responses which correctly identified 'random sample' in question 8(b)(i), gave incorrect details of the technique, either suggesting that people could be picked 'randomly', or by deliberately choosing a variety, or by taking every 'Nth' person. A minority of candidate responses gave successful answers to questions 8(b)(i) and (b)(ii) based on systematic sampling such answers were creditworthy when correct.



Question 9

- (a) A frequent misuse of the term 'Likert scale' was seen, used to mean 'rating scale'. Although this error was ignored, many of the candidate responses incorrectly identified one of the two co-variables as the IV, and the other as the DV. Where candidate responses followed this error through and defined two levels of the IV, the responses achieved credit as a correlational variable must be measured on a continuous scale, not just two groups. Nevertheless, there were also many excellent answers seen, for example operationalising happiness by counting smiling or laughing in a set time period, and operationalising the number of friends by 'counting the number of contacts of social media who they exchange within a week', as 'the number of friends they talk to at least once a month' or 'the number of people they would invite to a party'.
- (b) Many of the candidate responses achieved one of the two available marks, with responses such as 'happiness is unique to everyone', 'not everyone will have the same definition of happiness', but often did not achieve the second mark due to a lack of detail in the answer.
- (c) A minority of candidate responses offered a second answer about happiness, rather than responding to the question about friendships.

- (a) Many of the candidate responses incorrectly suggested that because the study was in the 'natural environment' for the shoppers, that it was necessarily a natural observation. However, this ceased to be the case if the signs were manipulated, such as having a 'signs present' and 'signs absent' situation, or making the signs more obvious, larger, or different colours. One common omission from the procedure was the details of other aspects of the observation, such as identifying that the use of cameras made it a covert observation, that the use of only specified behavioural categories (read sign, obey food/touching sign, disobey food/touching sign) made it a structured observation, or that the changing of signs (days with/without signs) made it a controlled observation. In the same way as for an experiment, a response must identify rather than just state the IV and DV. Another commonly seen response was to describe the study as, and to give details for, a natural or a field experiment.
- (b) Some successful responses were seen to this question, such as noting that a possible uncontrolled variable was whether the shoppers had seen the signs and offering the solution of using a stooge or model to point them out. The most successful responses included direct criticisms of the non-participant observational procedure used, for example, suggesting that the use of cameras restricted the view of the whole shop or made it difficult to discern whether customers had seen/read the signs. One common issue, sometimes given in the procedure but more often as a limitation of the observation, was the use of only Kimberley as an observer. This led to two different errors: the global assumption that one observer automatically has low inter-observer reliability (they cannot, as there is only one of them and the correct term to use would be intra-observer reliability), and that this could be solved by adding a second observer. This alone, however, runs the risk of creating a threat to reliability, since the two observers may not observe in the same way. The two observers must record in the same way, for example, by using the same operational definitions or practising together until they produce the same records from the same raw data (for example, a video).



Paper 9990/31 Specialist Options: Theory

Key messages

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

Candidates should be aware of the terminology/concept/treatment identified in the syllabus as well as key terms used in the named theories and studies, as some did not identify and/or define the terms given in these types of questions. Creating a glossary of key terms, revision of terminology using flash cards and class quizzes on terminology could be useful. Where the response gave an example to help define the term this often achieved full marks. In addition, the definition given should be related to the topic area/specialist choice option. For example, **Question 5(a)** should relate 'unrealistic optimism' to changing health beliefs. These questions are worth 2 marks and a brief response is appropriate.

Question 1b, 3b, 5b and 7b

These questions could ask the candidates to describe a theory, study or technique such as a self-report used by psychologists that is named in the syllabus. These questions could also ask the candidates to describe a part of one of the named studies, such as the procedure or the results from a study in the syllabus or a summary of the key features of the study. This question is worth 4 marks and candidates should write a more extended answer. It would be helpful for the candidates to create a revision flashcard or a mind-map of each bullet point in the syllabus. The flashcard could be given the title used in the syllabus, for example, Leadership Practices Inventory, to help the candidates identify which part of the syllabus the question is referring to. If the question asks for a part of the study, the response should not describe that specific part. For example, if the question asks for the results then the response should not describe the procedure of the study.

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

These questions could require the candidates to explain up to 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 6 marks so the candidates should write a more extended answer for each issue raised. Some of the responses were very detailed for one issue, but then only briefly discussed the second issue. In addition, many of the responses were general and not specific to the theory, technique or study named in the question. To improve, responses should give specific examples to support their point. For the question **part (b)**, the candidates could make a flashcard and include in this strengths and weaknesses of the theory, study or technique to help them prepare to answer these questions.

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

This question will always come from one of the bullet points in the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the syllabus under the appropriate bullet point. For this examination, some of the answers used the incorrect topic area in the syllabus or the description was brief. It is possible for the responses to achieve full marks by describing at least two of the studies, theories or techniques and this would need to be a very detailed description. Full marks can also be achieved by a response that described three of the bullet points in detail (in less depth than if the response described two of the studies, theories or techniques) with excellent understanding and good use of terminology throughout. It is also important that the descriptions are linked to the topic area named in the syllabus. It could be useful for candidates to do revision notes with the title of each bullet point as the header in their notes.



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

This question will always ask the candidates to evaluate the theories, studies and/or techniques described in **part (a)** of the question. The response must include at least two evaluation issues, including the named issue, in order to present a range of issues required and achieve the top band marks. However, most of the responses that evaluated using two issues in this examination, achieved in the lower bands due to the responses being superficial and often lacking analysis. Some responses that considered three issues achieved higher marks as these responses demonstrated comprehensive understanding with good supporting examples from the theories, studies and techniques described in the **part (a)** of the answer. The candidates must also provide some form of analysis. This could be achieved 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 to show an excellent understanding of the issue under discussion. To achieve the requirements of the Level 3 and 4 band descriptors, it is recommended that the response should be structured by issue rather than by study and/or theory. It is also recommended that the response start with the named issue to make sure that the answer covers this requirement of the question.

Some of the responses either covered just the named issue and no other issue, or didn't cover the one named issue in the question. Many of the answers were structured by study/theory rather than by the issue, which often led the response to be quite superficial and repetitive. Many of the responses also provided analysis. Candidates should be aware that this question is worth 10 marks and should attempt to include an appropriate amount of information.

General comments

The candidates for this session achieved marks across the full range of the mark band. Many of the candidates were very well prepared for the exam and showed good knowledge, understanding and evaluation throughout their responses. Some of the candidates were not as well prepared and showed limited knowledge and understanding with brief and/or superficial responses. These candidates often had limited evaluation skills.

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

- (a) The vast majority of the responses gave an appropriate biochemical treatment for impulse control disorders and non-substance addictive disorder. Most of the responses addressed the question and achieved one mark by identifying a treatment. Popular responses included opioid antagonists and anti-depressants such as SSRIs. Many of the responses identified the drug therapy, but did not provide an outline of how this drug can reduce the symptoms of impulse control disorders. Responses that gave a brief outline of how the biochemical treatment worked to reduce symptoms achieved full marks (e.g. opioid antagonist block receptors meaning that the brain cannot receive any opioids). Many of the candidate responses identified an incorrect biochemical treatment such as opium or outlined incorrectly how the drug can reduce symptoms (e.g. SSRIs reduce serotonin).
- (b) Many of the responses were detailed with good descriptions given of feeling-state theory by Miller. For example, many outlined how a state-dependent memory is formed when impulse control disorder develops. Clear descriptions were often given of how positive feelings or arousal are linked to an object or activity and how the person with impulse control disorder seeks to achieve this feeling-state again by repeating the activity. Some of the responses achieved lower marks due to not explaining how the feeling-state theory would lead to a behaviour becoming compulsive and repeated over and over again. A few responses achieved no marks as they gave a behavioural explanation or a biochemical explanation of impulse control disorder.



(c) Many of the responses gave both a similarity and a difference between cognitive and behavioural explanations of impulse control disorders/non-substance addictive disorder. The most common similarity identified was that both explanations involve the sensation of a reward or arousal. A common difference was that the cognitive explanation focusses on thoughts whereas the behavioural focusses on the impulsive behaviour. The other common difference was that the cognitive explanation. Some responses briefly outlined each explanation to illustrate the similarity and/or difference. Many of the responses were imbalanced with a clear explanation given for the similarity/difference, but not for the other similarity/difference. A few of the responses explained the difference between a biochemical explanation and a behavioural explanation, which was not creditworthy. Many of the responses did not address the question as they outlined the two explanations, but did not identify a similarity or a difference.

Question 2

- (a) There were a number of responses that were detailed, accurate and coherent with a good use of psychological terminology to describe explanations of schizophrenia. Most of the responses referred to the genetic explanation by Gottesman and Shields, the dopamine hypothesis and the cognitive explanation by Frith. Many also gave details of research studies that investigated these explanations of schizophrenia, such as the twin studies by Gottesman and Shields and the study by Frith where schizophrenic patients identified the voice that they heard reading out loud. The weaker responses were often very brief with limited details given of the explanation and/or relevant study. For example, identifying the explanation, such as abnormal/increased levels of dopamine, without explaining why this could cause schizophrenia or any of the symptoms of schizophrenia. Many of the responses incorrectly identified low levels of dopamine and/or serotonin as an explanation for schizophrenia. A few described an explanation for a different disorder such as affective disorders rather than schizophrenia, which was not creditworthy.
- (b) Responses to this question covered the full range of the mark bands. The more successful responses used the issues as a starting point and compared the explanations described in part (a). The vast majority of the responses addressed the named issue of the individual versus situational debate. Some responses provided analysis of this issue and made clear comparisons between the explanations and why they supported either the individual or the situational side of the debate. There were a few very successful responses where high-level analysis was given, as the response identified how an explanation could be seen to support both sides of this debate, and this was backed up with clear examples. A range of other evaluation points were considered including nature versus nurture, determinism and reductionism. Many of the responses took an approach of looking at two or three evaluation issues and applied these to their answers to part (a), which was helpful. The weaker responses often evaluated the explanations in turn with a few examples to justify their points and little or no analysis.

Psychology and Consumer Behaviour

- (a) There were many good descriptions of 'competitor-focused' sales technique where the responses stated that this technique focused on the competition rather than the product. Many of the responses gave examples to explain this definition, such as better pricing or better features than the competition. Many of the responses re-stated the question in their response by saying that this technique was competitor-focused, which did not receive any credit. Some of the responses outlined product- or customer-focused sales techniques, which was also not creditworthy.
- (b) The vast majority of the responses were focused on the findings from the Kardes et al. study on disrupt-then-reframe rather than other features of the study such as the procedure. Most of the responses described one basic finding. The most popular finding was to identify that more participants in the disrupt-then-reframe condition purchased the product than those in the re-frame only condition. Some of the responses identified that it was candy that was purchased in the first experiment by Kardes et al. and a few could give the actual result (e.g. 65 per cent disrupt-then-reframe versus 44 per cent reframe-only). There were many confused responses for the second finding, with some incorrectly stating that the consumers purchased products in the second and third experiment by Kardes et al., rather than agreeing to join a group for a small fee for experiment 2 and for experiment 3, rating their attitudes to a tuition fee increase and how much time they were



prepared to spend phoning candidates about an increase in tuition fees. Another popular finding in responses was that the disrupt-then-reframe technique was effective in influencing perceived ambiguity, attitudes and/or compliance when NFCC (need for cognitive closure scale) was high.

(c) Most of the responses achieved at least Level 1 mark band by identifying two advantages of field experiments. The most popular advantages were that field experiments have good ecological validity and fewer demand characteristics. Many of the responses gave some examples from the Kardes et al. study to illustrate their advantages, and, therefore, achieved at least the Level 2 mark band. Some of the responses explained their example in more detail (e.g. why being approached by a salesperson in a supermarket selling candy is a normal activity for the participants) and achieved marks in the Level 3 mark band.

Some of the responses identified and/or outlined strengths of the Kardes et al. study that were not specific to field experiments, such as a large sample. In addition, a small minority of the responses explained disadvantages of field experiments. Neither of these types of responses were creditworthy.

Question 4

- (a) Most of the responses gave a description of thinking fast and thinking slow/system 1 and system 2 by Shleifer, the choice blindness study by Hall et al. and the Braun-LaTour et al. study on advertising and false memory. Many of the responses achieved Level 2 marks for this question as the descriptions were often very brief or did not link to consumer behaviour. This was particularly true for the descriptions of thinking fast and thinking slow, which should have been linked to purchasing decisions. Some of the responses described product placement in films rather than false memory. There were some responses that gave good detailed descriptions of the two studies and the thinking fast and slow theory by Shleifer, and were able to achieve in the higher mark bands.
- (b) The majority of the responses to this question were evaluative, although some of the responses described more studies and/or theories related to intuitive thinking. Some other responses gave a brief outline in **part (a)**, and then gave more details in **part (b)**. These types of responses did not receive any credit as they were descriptive rather than evaluative. Responses that were evaluative structured their response by study/theory rather than by issue. Most attempted to discuss the named issue of reliability, although this was often done in a superficial way. Many candidate responses stated that the studies (and the thinking fast and slow theory) were reliable as the studies could be repeated. However, there were no examples or analysis of their point. Most of the candidate responses attempted to discuss other issues and raised points such as generalisability, ecological validity and ethical issues. Some of the responses attempted analysis, but this was often done by using the words 'similarly' or 'in contrast' without any explanation given about how or why the studies/theory were similar or different in terms of the issue being discussed.

Psychology and Health

- (a) The vast majority of responses achieved at least one mark for their definition of 'unrealistic optimism'. The more successful responses gave an example from health to extend their definition and link it to the question and the topic area. For example, stating that 'unrealistic optimism' is the false belief that a person has that they are more likely to experience good outcomes and less likely to experience bad outcomes. In relation to health, this could be where a person has been diagnosed with a terminal disease, but believes that they will get better, or the belief that unhealthy lifestyle choices such as smoking will not lead to health problems. A minority of responses stated that it involved being optimistic with no other information given. These types of responses did not receive any credit.
- (b) There were some strong responses to this question, with some giving a detailed description of the procedure of the Janis and Feshbach study of fear arousal. There was a good focus on the question with most of the responses outlining the procedure rather than other features of the study, such as the results. Most of the responses identified most of the conditions in the study, such as low and high fear. Some of the responses gave more details and outlined the four conditions with some description of each condition. Many of the responses identified the candidate sample. The most common omission were the self-reports given to the candidates at the end of the study.



Those responses that mentioned these self-reports often identified that these were given to participants without outlining what the self-reports were asking about. However, some responses described this in more depth and identified that the self-reports given by Janis and Feshbach measured the amount of information acquired, attitudes toward the communication, and emotional reactions, as well as questions about conformity to oral hygiene recommendations. It should be noted that the response did not need to identify everything that the self-report measured, but it did need to outline some of what was measured in order to obtain full marks.

(c) Most of the responses achieved at least Level 1 mark band by identifying some ethical issues that were relevant to the study by Janis and Feshbach, such as not getting informed consent or harming the participants. Many of the responses gave an extended answer around the issue of psychological harm and related this to the high fear arousal condition. There were some very successful responses that discussed why the issue of psychological harm could be particularly concerning in this study as it was conducted on teenagers, and it might lead to a decrease in oral hygiene, which would have a detrimental long-term impact. Many of the responses identified a lack of consent and a right to withdraw from the study, and some showed awareness that the study was conducted as part of the school's hygiene programme, so that candidates were not aware that they were in a psychology study.

Question 6

- (a) Many detailed responses were given for this question, with many outlining types and reasons for non-adherence, the health belief model by Becker and Rosenstock, and the review article about rational non-adherence by Bulpitt. Some of the responses described research from other sections of the syllabus, such as the patient-practitioner relationship, with some outlining research relating to use of jargon and style of dress. These types of responses received either no credit or very limited credit, as no links were made between the description of the study and non-adherence, instead links were made to the effect on the attitude of the patient. A few responses mentioned that a positive attitude or understanding would lead to good adherence, but the response to this question should be focused on non-adherence. In addition, some of the responses described research related to misuse of health service, which had very limited relevance. Those responses that focused on the topic area tended to be superficial with few details given of relevant theories and research. However, there were some Level 3 and 4 responses with a very good focus and many links provided between the results of the studies and/or outline of the theory, and why this could cause non-adherence to medical advice.
- (b) Many of the responses structured their answer by addressing each issue in turn. Most of the responses discussed the named issue of generalisability and were able to apply it to the review article by Bulpitt and the health belief model. A few of the responses provided analysis by making a comparison between Bulpitt and the health belief model. This was usually done in a superficial way with the response identifying that they were either 'similar' or 'in contrast' without explaining the comparison or providing a conclusion about which was the most generalisable or why generalisability could be seen as important for this health topic of non-adherence to medical advice. Other popular issues included usefulness, situational versus individual explanations, and strengths and weaknesses of the research described in part (a). Some of the responses achieved in the lower levels of the mark band due to giving very brief responses or structuring their response by theory and/or study, which meant that these types of answers were often repetitive and superficial. Those responses that described research from other parts of the syllabus also achieved in the lower mark band, as most of their answer was not linked to non-adherence.

Psychology and Organisations

- (a) Excellent responses to this question were seen, with the vast majority identifying two of the 'followership' types outlined by Kelley. Responses covered all of the followership types including alienated, effective ('star followers'), passive ('sheep'), conformist ('yes-people') and pragmatic. Some of the responses described rather than identified the types and these were credited.
- (b) There were many good, detailed descriptions of the Leadership Practices Inventory (LPI) devised by Kouzes and Posner. Some of the responses mentioned that both the leader and a number of observers do the ratings. Some described the 5 distinct areas measured by the LPI including: model the way, inspire a shared vision, challenge the process, enable others to act and encourage



the heart. A common error was to describe Muczyk and Reimann's styles of leader behaviour rather than the LPI.

(c) The vast majority of the candidate responses that described the LPI in **part (b)**, also identified both a strength and a weakness of it, and some of the responses used the features of the LPI (such as quantitative data) to justify their point. There were some very successful responses which showed a clear understanding of the question and explained the strength and/or weakness with a detailed example from the LPI. Even those responses that incorrectly described the Muczyk and Reimann's styles of leader behaviour in many instances identified a strength and a weakness of a self-report that might be given to a leader. These types of responses often received a Level 1 mark as there were no supporting examples from the LPI to justify the evaluation points raised.

- (a) There were many good, well developed responses to this question that focused on the temporal conditions of the work environment. Creditworthy responses described types of shiftwork, Knutson's research on the effects of shiftwork on health, and the study by Gold et al. on shiftwork and accidents. Some of the responses achieved in the lower mark bands by providing either brief responses or incorrect information about relevant research. Many of the responses incorrectly described physical and psychological work conditions, such as open plan offices, the Hawthorne studies, or research into token economies at work. These responses were not addressing the question on temporal conditions at work and, therefore, received no credit.
- (b) Some of the responses were structured by evaluation issue, with many beginning with the named issue of demand characteristics. Some of the responses included analysis of their evaluation points, for example, an alternative argument for demand characteristics for the Gold et al. study. These responses explained why there could have been demand characteristics from the nurses who knew they were in a study. The responses then discussed why it is possible that there were fewer demand characteristics, as the nurses were anonymous in the study and this could lead them to giving an accurate response to the questions asked. Popular evaluation issues included generalisability, ecological validity, ethics and usefulness. Many of the weaker responses evaluated the studies from **part (a)** and gave more superficial and repetitive responses. In addition, those responses that described the physical work conditions and/or research relating to health and safety at work, did not receive credit for evaluating this research in **part (b)**.



Paper 9990/32 Specialist Options: Theory

Key messages

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

Candidates should be aware of the terminology and concepts identified in the syllabus as well as key terms used in named theories and studies, as some did not identify and/or define the terms given in these types of questions. Creating a glossary of key terms, revision of terminology using flash cards and class quizzes on terminology could be useful. Where the responses gave an example to help define the term this often achieved full marks. These questions are worth 2 marks and a brief response is appropriate.

Question 1b, 3b, 5b and 7b

These questions could ask the candidates to describe a theory, study, treatment or technique, such as a selfreport used by psychologists that is named in the syllabus. These questions could also ask the candidates to describe a part of one of the named studies, such as the procedure or the findings, or a summary of the key features of the study. This question is worth 4 marks and candidates should write a more extended answer. It would be helpful for the candidates to create a revision flashcard or a mind-map of each bullet point in the syllabus. The flashcard could be given the title used in the syllabus, for example, UAB pain behaviour scale, to help the candidates to identify which part of the syllabus the question is referring to. If the question asks for a part of the study, the response should only describe that specific part. For example, if the question asks for two findings then the response should not describe the procedure of the study.

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

These questions could require the candidates to explain up to 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 6 marks so the candidates should write a more extended answer for each issue raised. Some of the responses were very detailed for one issue, but then only briefly discussed the second issue. In addition, many of the responses were general and not specific to the theory, technique or study named in the question. To improve, responses should give specific examples to support their point. For the question **part (b)**, the candidates could make a flashcard/revision notes and include in this strengths and weaknesses of the theory, study or technique to help them prepare to answer these questions.

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

This question will always come from one of the bullet points in the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the syllabus under the appropriate bullet point. For this examination, some of the answers used the incorrect topic area in the syllabus or the description was brief. It is possible for the responses to achieve full marks by describing at least two of the studies, theories or techniques and this would need to be a very detailed description. Full marks can also be achieved by a response that described three of the bullet points in detail (in less depth than if the response described two of the studies, theories or techniques) with excellent understanding and good use of terminology throughout. It is also important that the descriptions are linked to the topic area named in the syllabus. It could be useful for candidates to create revision notes with the title of each bullet point as the header in their notes.



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

This question will always ask the candidate to evaluate the theories, studies and/or techniques described in **part (a)** of the question. The responses must include at least two evaluation issues, including the named issue, in order to present a range of issues required to achieve the top band marks. However, most of the responses that evaluated using two issues in this examination achieved in the lower mark bands due to the responses being superficial and often lacking analysis. Some of the responses that considered three issues achieved higher marks as these responses demonstrated comprehensive understanding with good supporting examples from the theories, studies and techniques described in the **part (a)** of the answer. The candidates must also provide some form of analysis. This could be done by discussing the strengths and weaknesses of the issue being considered, presenting a counterargument 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 to show excellent understanding of the issue under discussion. To achieve the requirements of the Level 3 and 4 band descriptors, it is recommended that the response should be structured by issue rather than by study and/or theory. It is also recommended that the response start with the named issue to make sure the answer covers this requirement of the question.

Some of the responses either covered just the named issue and no other issues, or didn't cover the one named issue in the question. Many of the answers were structured by study/theory rather than by the issue, which often led the response to be quite superficial and repetitive. Many of the responses also provided analysis. Candidates should be aware that this question is worth 10 marks and should attempt to include an appropriate amount of information.

General comments

The candidates for this session achieved marks across the full range of the mark band. Many candidates were well prepared for the exam and showed good knowledge, understanding and evaluation throughout their responses. Some of the candidates were not as well prepared and showed limited knowledge and understanding with brief and/or superficial responses. These candidates often had limited evaluation skills.

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

- (a) Most of the responses addressed the question and achieved two marks by identifying two characteristics of schizophrenia. Popular responses included delusions, hallucinations and catatonic behaviour. Some of the responses were very detailed, which was not required for a 2 mark question.
- (b) Many of the responses gave a clear and detailed description of token economies as a treatment for schizophrenia. Responses made reference to operant conditioning, tokens given as rewards, indication of some of the behaviours rewarded (self-care, participating in group sessions) and how the tokens could be exchanged for luxury items. Some of the responses included detail about the Paul and Lentz study, including the results, although this was unnecessary. The weaker responses were brief and often did not mention that token economies are based on operant conditioning or behaviourism. Some of the responses did not give any examples of the behaviours rewarded or what the tokens could be exchanged for.
- (c) The responses to this question covered the full range of the marks available. The more successful responses identified the ethical issue and provided examples from the token economy treatment and/or the Paul and Lentz study. For example, there were some very good discussions regarding ethical issues including the appropriateness of rewarding patients with cigarettes, which may not be good for them and cause physical harm. The majority of the responses commented on distress



caused by being unable to complete tasks to obtain rewards and whether the patient was in a position to give informed consent. A small minority of candidates did not show an understanding of what ethics are and instead evaluated the study.

Question 2

- (a) Candidate responses varied considerably for this question and covered the full range of the marks available. Some of the responses highlighted how well prepared some of the candidates were for this examination, whereas others showed very limited knowledge of this topic. There were many responses that were detailed, accurate and coherent with a good use of psychological terminology. Most of the responses referred to biological, psychodynamic and cognitive/behavioural explanations for OCD. Most of the responses showed good understanding of biochemical, genetic and neurological explanations, although the description was not always linked to the symptoms of OCD. Responses that included psychodynamic and cognitive/behavioural explanations were not as comprehensive. Some of the very weak responses included descriptions of case studies of OCD or treatments for OCD. These types of responses did not include any of the explanations of the disorder and, therefore, were not creditworthy. A few of the responses outlined the genetic explanation for schizophrenia and, therefore, also did not receive any credit.
- (b) Most of the responses achieved in the Level 2 mark band with a few providing clear analysis and details of the explanations to back up their evaluative points - these types of responses achieved marks in band 3 and above. Some of the responses focused on one issue per explanation rather than applying the issue to the different explanations. The majority of the candidates stated that explanations were deterministic (or not), but often did not give any reason for this, and also did not provide analysis. Many responses showed confusion between determinism and reductionism. Many of the responses focused too much on covering many issues at the expense of providing any depth of analysis. Apart from the named issue, common areas of comparison included nature versus nurture, reductionism versus holism and situational versus individual explanations. The weaker responses did not recognise that methodological issues are not creditworthy, as most of the responses did not include any research studies in part (a) of their answer. A small number of responses described the explanations for OCD that they outlined in part (a), but made no evaluative comments and, therefore, received no credit for their answer. To improve, descriptions should be included in part (a) and evaluation which uses the explanations as examples for part (b).

Psychology and Consumer Behaviour

- (a) Most of the responses identified at least one, sometimes two, common menu design mistakes outlined by Pavesic and achieved full marks. Common responses identified features that make it difficult to read the menu, such as inappropriate font size and colour.
- (b) There were some very clear and detailed responses and some of the candidates showed an excellent knowledge of the Gil et al. study. These types of responses identified all of the different types of shopping trips and types of shopper and, therefore, achieved full marks. Some of the responses attempted to describe one or more of the types of trips and shoppers, and these responses were usually incorrect. A significant minority of responses gave irrelevant answers about shopping experiences which did not receive any credit.
- (c) The vast majority of the responses achieved at least Level 1 band marks by identifying a strength and a weakness of the Gil et al. study. The more successful responses identified the strength/weakness and then gave a specific example from the study to justify their point. The most frequently cited strengths were lack of demand characteristics or high ecological validity as it was carried out in a supermarket. Popular weaknesses identified were a lack of informed consent in observing the shoppers (although, as shoppers were given tags, it would suggest they did know they were being tracked) and a lack of generalisability as the study took place in just one supermarket in the UK. To improve, responses should give specific examples from the study named in the question to achieve the higher mark bands. In addition, the example must be clearly linked to the strength or weakness identified.



Question 4

- (a) Many of the responses achieved Level 1 or 2 marks for this question. Good descriptions were often seen in responses for the Wansink et al. study on anchoring and purchase quantity decisions, with some giving very detailed descriptions of Wansink et al.'s three studies. There was a wide variety of understanding shown and detail given for availability and representativeness of choice heuristics, with some of the responses giving clear descriptions and examples from consumer decision-making. Other responses were less clear, brief or did not relate their description to consumer decision-making. Many of the responses did not include the Knutson et al. study on precognitive decisions, and those responses which did include it were often very brief and superficial.
- (b) Those responses that achieved the higher mark bands for part (a), in many cases also produced good answers to this question, with some understanding of how ecological validity applies in the studies being shown, and some limited examples given. Other common evaluation issues included usefulness and generalisability. A few responses provided analysis that gave a comparison between the studies described in part (a), a balanced argument about how a study or theory might support one side of the debate as well as the other side, or examined the strengths and/or weaknesses of the issue being discussed. A small minority of the responses evaluated the Gil et al. study from Question 5(b) and 5(c), which did not receive any credit.

Psychology and Health

Question 5

- (a) This was often well answered, with many responses achieving full marks. Most of the responses described acute pain correctly as sharp, short-term pain. A number of responses also gave examples of types of injuries or illness that could lead to acute pain.
- (b) There were some very successful responses to this question with some giving a detailed description of the UAB pain behaviour scale. These types of responses correctly described it as based on observation by clinicians of patient behaviour, including groans or grimaces, with each of 10 behaviours rated on a scale of 0, 0.5 or 1. The weaker responses gave fewer details of the UAB and often did not mention the scoring system. Incorrect responses referred to a self-report or one of the other pain scales named in the syllabus, such as the paediatric pain questionnaire.
- (c) Most of the responses identified at least one, sometimes two, strengths of the UAB pain behaviour scale. Popular strengths included: being able to make comparisons/do analysis due to quantitative data, standardisation of the scale so the reliability is good, and the objective nature of the scale. Some of the successful responses stated that because the UAB is not a self-report, patients cannot lie about their pain, providing a more valid measure. Most of the responses achieved Level 1 or Level 2 marks due to not providing any clear example from the UAB to justify their chosen strength. Responses that were not creditworthy either evaluated the incorrect pain measure or provided strengths of self-reports which was not correct.

- (a) This was generally a very well answered question where many responses showed that the candidates were well-prepared. The majority described the study by McKinstry and Wang on non-verbal communication and the McKinlay study that investigated verbal communication. Some of the responses also included the research by Ley on verbal communication. Inaccuracies and omissions were noted in many of the descriptions of the studies in this bullet point. The weaker responses gave a very brief description of the study with limited details of the results. Responses that were not creditworthy gave irrelevant answers focussing on the relationships between practitioners and their patients.
- (b) There were some good responses to this question. These often identified quantitative and/or qualitative data in the studies and made some evaluative comments about the different types of data. However, analysis was rarely provided. Some of the responses added 'similarly' and 'in contrast', but did not clearly explain why the studies were similar or not in terms of the evaluation issue under discussion. Another appropriate issue frequently used was generalisability (usually with respect to the sample) and this again often lacked analysis. The weaker responses covered many issues in a very superficial manner, simply stating that issues did or did not apply to studies, without explaining why.



Psychology and Organisations

Question 7

- (a) Many of the responses to this question achieved one mark by stating that the continental rota is a rapid rotation. Some of the responses gave a clear outline of what the shift pattern would look like over nine days and then explained that the cycle would be repeated, which achieved the second mark. The weaker responses explained that it was a shift pattern, but did not give any other details and, therefore, received no credit. There was also some confusion with metropolitan shift rota and some responses did not to state that the cycle of the shift repeats.
- (b) Most of the responses attempted to outline two types of bullying. Some of the responses showed a reasonable knowledge of the Einarsen study. Popular types of bullying included scapegoating, predatory and social isolation. Some of the responses gave a more detailed outline of each type of bullying and linked it to bullying in the workplace. The weaker responses did not link the types of bullying to the workplace or gave more irrelevant responses of bullying in everyday life, rather than giving an example from the Einarsen study.
- (C) The responses to this question achieved the full range of the marks available. The most successful responses referenced the study of relying on self-report from workers which could be prone to demand characteristics. Some of the responses gave examples, such as why employees might not say how they really feel, their real experiences of bullying when discussing their work due to fears about their job, the employer possibly being the bully and worries about getting into trouble at work. In addition, the more successful responses mentioned that Einarsen does not provide a solution to work place bullying, so the research is not very practical for employers to reduce bullying at work. However, many responses did not show awareness that the Einarsen study is a review article that described many pieces of research done in a wide variety of organisations and countries throughout the world. In addition, some of the responses stated that the research looked at a narrow range of different types of bullying or that it was done in one office or one company, which is not the case. Lacking generalisability on its own was not creditworthy. A few responses mentioned that the research was mainly done in Western countries and could not be generalised to the East or Africa. This was a correctly identified weakness, although these responses did not explain why bullying in countries outside of the West might be different to that reported in the Einarsen study.

- (a) There was a full range of marks achieved by the responses to this question. The most successful responses demonstrated comprehensive knowledge of the decision-making process, groupthink, and cognitive limitations and errors. Some of the responses gave good details of the decision-making process as outlined by Wedley and Field. There were some very successful descriptions of groupthink and how to avoid it. Some did not include Forsyth's cognitive limitations and errors, or gave a very brief and sometimes confused description. The weaker responses were brief or gave irrelevant descriptions of decision-making in an organisation. Some misconceptions were seen in a few of the responses, such as groupthink being a desirable goal in decision-making. A few weak responses described group decision-making as something that does not happen in good organisations. Many responses referred to other sections of the syllabus, such as group development and roles. If this was clearly linked to decision-making then some credit was given. Instead most of these responses described the roles and/or how groups develop (such as Tuckman's theory) without linking the description in any way to decision-making. Therefore, these types of responses did not receive any credit.
- (b) There were a small number of successful responses to this question, which where structured by evaluation issue and began with the named issue of generalisability. A minority of the responses gave clear examples to justify their evaluative points and attempted some analysis. In addition to generalisability, popular evaluation issues were practical applications and individual versus situational explanations. The weaker responses attempted to evaluate the named issue, but did not provide analysis. These types of responses also stated that a theory or a study either was or was not generalisable cross culturally, with no further explanation being given. Similarly, evaluation issues such as individual versus situational were identified for each of the theories described in **part (a)**. The responses stated that it supported situational, for example, but no indication of why the theory supported the situational side of the debate was given.



PSYCHOLOGY

Paper 9990/33 Specialist Options: Theory

Key messages

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

Candidates should be aware of the terminology/concept/treatment identified in the syllabus as well as key terms used in the named theories and studies, as some did not identify and/or define the terms given in these types of questions. Creating a glossary of key terms, revision of terminology using flash cards and class quizzes on terminology could be useful. Where the response gave an example to help define the term this often achieved full marks. In addition, the definition given should be related to the topic area/specialist choice option. For example, **Question 5(a)** should relate 'unrealistic optimism' to changing health beliefs. These questions are worth 2 marks and a brief response is appropriate.

Question 1b, 3b, 5b and 7b

These questions could ask the candidates to describe a theory, study or technique such as a self-report used by psychologists that is named in the syllabus. These questions could also ask the candidates to describe a part of one of the named studies, such as the procedure or the results from a study in the syllabus or a summary of the key features of the study. This question is worth 4 marks and candidates should write a more extended answer. It would be helpful for the candidates to create a revision flashcard or a mind-map of each bullet point in the syllabus. The flashcard could be given the title used in the syllabus, for example, Leadership Practices Inventory, to help the candidates identify which part of the syllabus the question is referring to. If the question asks for a part of the study, the response should not describe that specific part. For example, if the question asks for the results then the response should not describe the procedure of the study.

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

These questions could require the candidates to explain up to 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 6 marks so the candidates should write a more extended answer for each issue raised. Some of the responses were very detailed for one issue, but then only briefly discussed the second issue. In addition, many of the responses were general and not specific to the theory, technique or study named in the question. To improve, responses should give specific examples to support their point. For the question **part (b)**, the candidates could make a flashcard and include in this strengths and weaknesses of the theory, study or technique to help them prepare to answer these questions.

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

This question will always come from one of the bullet points in the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the syllabus under the appropriate bullet point. For this examination, some of the answers used the incorrect topic area in the syllabus or the description was brief. It is possible for the responses to achieve full marks by describing at least two of the studies, theories or techniques and this would need to be a very detailed description. Full marks can also be achieved by a response that described three of the bullet points in detail (in less depth than if the response described two of the studies, theories or techniques) with excellent understanding and good use of terminology throughout. It is also important that the descriptions are linked to the topic area named in the syllabus. It could be useful for candidates to do revision notes with the title of each bullet point as the header in their notes.



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

This question will always ask the candidates to evaluate the theories, studies and/or techniques described in **part (a)** of the question. The response must include at least two evaluation issues, including the named issue, in order to present a range of issues required and achieve the top band marks. However, most of the responses that evaluated using two issues in this examination, achieved in the lower bands due to the responses being superficial and often lacking analysis. Some responses that considered three issues achieved higher marks as these responses demonstrated comprehensive understanding with good supporting examples from the theories, studies and techniques described in the **part (a)** of the answer. The candidates must also provide some form of analysis. This could be achieved 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 to show an excellent understanding of the issue under discussion. To achieve the requirements of the Level 3 and 4 band descriptors, it is recommended that the response should be structured by issue rather than by study and/or theory. It is also recommended that the response start with the named issue to make sure that the answer covers this requirement of the question.

Some of the responses either covered just the named issue and no other issue, or didn't cover the one named issue in the question. Many of the answers were structured by study/theory rather than by the issue, which often led the response to be quite superficial and repetitive. Many of the responses also provided analysis. Candidates should be aware that this question is worth 10 marks and should attempt to include an appropriate amount of information.

General comments

The candidates for this session achieved marks across the full range of the mark band. Many of the candidates were very well prepared for the exam and showed good knowledge, understanding and evaluation throughout their responses. Some of the candidates were not as well prepared and showed limited knowledge and understanding with brief and/or superficial responses. These candidates often had limited evaluation skills.

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

- (a) The vast majority of the responses gave an appropriate biochemical treatment for impulse control disorders and non-substance addictive disorder. Most of the responses addressed the question and achieved one mark by identifying a treatment. Popular responses included opioid antagonists and anti-depressants such as SSRIs. Many of the responses identified the drug therapy, but did not provide an outline of how this drug can reduce the symptoms of impulse control disorders. Responses that gave a brief outline of how the biochemical treatment worked to reduce symptoms achieved full marks (e.g. opioid antagonist block receptors meaning that the brain cannot receive any opioids). Many of the candidate responses identified an incorrect biochemical treatment such as opium or outlined incorrectly how the drug can reduce symptoms (e.g. SSRIs reduce serotonin).
- (b) Many of the responses were detailed with good descriptions given of feeling-state theory by Miller. For example, many outlined how a state-dependent memory is formed when impulse control disorder develops. Clear descriptions were often given of how positive feelings or arousal are linked to an object or activity and how the person with impulse control disorder seeks to achieve this feeling-state again by repeating the activity. Some of the responses achieved lower marks due to not explaining how the feeling-state theory would lead to a behaviour becoming compulsive and repeated over and over again. A few responses achieved no marks as they gave a behavioural explanation or a biochemical explanation of impulse control disorder.



(c) Many of the responses gave both a similarity and a difference between cognitive and behavioural explanations of impulse control disorders/non-substance addictive disorder. The most common similarity identified was that both explanations involve the sensation of a reward or arousal. A common difference was that the cognitive explanation focusses on thoughts whereas the behavioural focusses on the impulsive behaviour. The other common difference was that the cognitive explanation. Some responses briefly outlined each explanation to illustrate the similarity and/or difference. Many of the responses were imbalanced with a clear explanation given for the similarity/difference, but not for the other similarity/difference. A few of the responses explained the difference between a biochemical explanation and a behavioural explanation, which was not creditworthy. Many of the responses did not address the question as they outlined the two explanations, but did not identify a similarity or a difference.

Question 2

- (a) There were a number of responses that were detailed, accurate and coherent with a good use of psychological terminology to describe explanations of schizophrenia. Most of the responses referred to the genetic explanation by Gottesman and Shields, the dopamine hypothesis and the cognitive explanation by Frith. Many also gave details of research studies that investigated these explanations of schizophrenia, such as the twin studies by Gottesman and Shields and the study by Frith where schizophrenic patients identified the voice that they heard reading out loud. The weaker responses were often very brief with limited details given of the explanation and/or relevant study. For example, identifying the explanation, such as abnormal/increased levels of dopamine, without explaining why this could cause schizophrenia or any of the symptoms of schizophrenia. Many of the responses incorrectly identified low levels of dopamine and/or serotonin as an explanation for schizophrenia. A few described an explanation for a different disorder such as affective disorders rather than schizophrenia, which was not creditworthy.
- (b) Responses to this question covered the full range of the mark bands. The more successful responses used the issues as a starting point and compared the explanations described in part (a). The vast majority of the responses addressed the named issue of the individual versus situational debate. Some responses provided analysis of this issue and made clear comparisons between the explanations and why they supported either the individual or the situational side of the debate. There were a few very successful responses where high-level analysis was given, as the response identified how an explanation could be seen to support both sides of this debate, and this was backed up with clear examples. A range of other evaluation points were considered including nature versus nurture, determinism and reductionism. Many of the responses took an approach of looking at two or three evaluation issues and applied these to their answers to part (a), which was helpful. The weaker responses often evaluated the explanations in turn with a few examples to justify their points and little or no analysis.

Psychology and Consumer Behaviour

- (a) There were many good descriptions of 'competitor-focused' sales technique where the responses stated that this technique focused on the competition rather than the product. Many of the responses gave examples to explain this definition, such as better pricing or better features than the competition. Many of the responses re-stated the question in their response by saying that this technique was competitor-focused, which did not receive any credit. Some of the responses outlined product- or customer-focused sales techniques, which was also not creditworthy.
- (b) The vast majority of the responses were focused on the findings from the Kardes et al. study on disrupt-then-reframe rather than other features of the study such as the procedure. Most of the responses described one basic finding. The most popular finding was to identify that more participants in the disrupt-then-reframe condition purchased the product than those in the re-frame only condition. Some of the responses identified that it was candy that was purchased in the first experiment by Kardes et al. and a few could give the actual result (e.g. 65 per cent disrupt-then-reframe versus 44 per cent reframe-only). There were many confused responses for the second finding, with some incorrectly stating that the consumers purchased products in the second and third experiment by Kardes et al., rather than agreeing to join a group for a small fee for experiment 2 and for experiment 3, rating their attitudes to a tuition fee increase and how much time they were



prepared to spend phoning candidates about an increase in tuition fees. Another popular finding in responses was that the disrupt-then-reframe technique was effective in influencing perceived ambiguity, attitudes and/or compliance when NFCC (need for cognitive closure scale) was high.

(c) Most of the responses achieved at least Level 1 mark band by identifying two advantages of field experiments. The most popular advantages were that field experiments have good ecological validity and fewer demand characteristics. Many of the responses gave some examples from the Kardes et al. study to illustrate their advantages, and, therefore, achieved at least the Level 2 mark band. Some of the responses explained their example in more detail (e.g. why being approached by a salesperson in a supermarket selling candy is a normal activity for the participants) and achieved marks in the Level 3 mark band.

Some of the responses identified and/or outlined strengths of the Kardes et al. study that were not specific to field experiments, such as a large sample. In addition, a small minority of the responses explained disadvantages of field experiments. Neither of these types of responses were creditworthy.

Question 4

- (a) Most of the responses gave a description of thinking fast and thinking slow/system 1 and system 2 by Shleifer, the choice blindness study by Hall et al. and the Braun-LaTour et al. study on advertising and false memory. Many of the responses achieved Level 2 marks for this question as the descriptions were often very brief or did not link to consumer behaviour. This was particularly true for the descriptions of thinking fast and thinking slow, which should have been linked to purchasing decisions. Some of the responses described product placement in films rather than false memory. There were some responses that gave good detailed descriptions of the two studies and the thinking fast and slow theory by Shleifer, and were able to achieve in the higher mark bands.
- (b) The majority of the responses to this question were evaluative, although some of the responses described more studies and/or theories related to intuitive thinking. Some other responses gave a brief outline in **part (a)**, and then gave more details in **part (b)**. These types of responses did not receive any credit as they were descriptive rather than evaluative. Responses that were evaluative structured their response by study/theory rather than by issue. Most attempted to discuss the named issue of reliability, although this was often done in a superficial way. Many candidate responses stated that the studies (and the thinking fast and slow theory) were reliable as the studies could be repeated. However, there were no examples or analysis of their point. Most of the candidate responses attempted to discuss other issues and raised points such as generalisability, ecological validity and ethical issues. Some of the responses attempted analysis, but this was often done by using the words 'similarly' or 'in contrast' without any explanation given about how or why the studies/theory were similar or different in terms of the issue being discussed.

Psychology and Health

- (a) The vast majority of responses achieved at least one mark for their definition of 'unrealistic optimism'. The more successful responses gave an example from health to extend their definition and link it to the question and the topic area. For example, stating that 'unrealistic optimism' is the false belief that a person has that they are more likely to experience good outcomes and less likely to experience bad outcomes. In relation to health, this could be where a person has been diagnosed with a terminal disease, but believes that they will get better, or the belief that unhealthy lifestyle choices such as smoking will not lead to health problems. A minority of responses stated that it involved being optimistic with no other information given. These types of responses did not receive any credit.
- (b) There were some strong responses to this question, with some giving a detailed description of the procedure of the Janis and Feshbach study of fear arousal. There was a good focus on the question with most of the responses outlining the procedure rather than other features of the study, such as the results. Most of the responses identified most of the conditions in the study, such as low and high fear. Some of the responses gave more details and outlined the four conditions with some description of each condition. Many of the responses identified the candidate sample. The most common omission were the self-reports given to the candidates at the end of the study.



Those responses that mentioned these self-reports often identified that these were given to participants without outlining what the self-reports were asking about. However, some responses described this in more depth and identified that the self-reports given by Janis and Feshbach measured the amount of information acquired, attitudes toward the communication, and emotional reactions, as well as questions about conformity to oral hygiene recommendations. It should be noted that the response did not need to identify everything that the self-report measured, but it did need to outline some of what was measured in order to obtain full marks.

(c) Most of the responses achieved at least Level 1 mark band by identifying some ethical issues that were relevant to the study by Janis and Feshbach, such as not getting informed consent or harming the participants. Many of the responses gave an extended answer around the issue of psychological harm and related this to the high fear arousal condition. There were some very successful responses that discussed why the issue of psychological harm could be particularly concerning in this study as it was conducted on teenagers, and it might lead to a decrease in oral hygiene, which would have a detrimental long-term impact. Many of the responses identified a lack of consent and a right to withdraw from the study, and some showed awareness that the study was conducted as part of the school's hygiene programme, so that candidates were not aware that they were in a psychology study.

Question 6

- (a) Many detailed responses were given for this question, with many outlining types and reasons for non-adherence, the health belief model by Becker and Rosenstock, and the review article about rational non-adherence by Bulpitt. Some of the responses described research from other sections of the syllabus, such as the patient-practitioner relationship, with some outlining research relating to use of jargon and style of dress. These types of responses received either no credit or very limited credit, as no links were made between the description of the study and non-adherence, instead links were made to the effect on the attitude of the patient. A few responses mentioned that a positive attitude or understanding would lead to good adherence, but the response to this question should be focused on non-adherence. In addition, some of the responses described research related to misuse of health service, which had very limited relevance. Those responses that focused on the topic area tended to be superficial with few details given of relevant theories and research. However, there were some Level 3 and 4 responses with a very good focus and many links provided between the results of the studies and/or outline of the theory, and why this could cause non-adherence to medical advice.
- (b) Many of the responses structured their answer by addressing each issue in turn. Most of the responses discussed the named issue of generalisability and were able to apply it to the review article by Bulpitt and the health belief model. A few of the responses provided analysis by making a comparison between Bulpitt and the health belief model. This was usually done in a superficial way with the response identifying that they were either 'similar' or 'in contrast' without explaining the comparison or providing a conclusion about which was the most generalisable or why generalisability could be seen as important for this health topic of non-adherence to medical advice. Other popular issues included usefulness, situational versus individual explanations, and strengths and weaknesses of the research described in part (a). Some of the responses achieved in the lower levels of the mark band due to giving very brief responses or structuring their response by theory and/or study, which meant that these types of answers were often repetitive and superficial. Those responses that described research from other parts of the syllabus also achieved in the lower mark band, as most of their answer was not linked to non-adherence.

Psychology and Organisations

- (a) Excellent responses to this question were seen, with the vast majority identifying two of the 'followership' types outlined by Kelley. Responses covered all of the followership types including alienated, effective ('star followers'), passive ('sheep'), conformist ('yes-people') and pragmatic. Some of the responses described rather than identified the types and these were credited.
- (b) There were many good, detailed descriptions of the Leadership Practices Inventory (LPI) devised by Kouzes and Posner. Some of the responses mentioned that both the leader and a number of observers do the ratings. Some described the 5 distinct areas measured by the LPI including: model the way, inspire a shared vision, challenge the process, enable others to act and encourage



the heart. A common error was to describe Muczyk and Reimann's styles of leader behaviour rather than the LPI.

(c) The vast majority of the candidate responses that described the LPI in **part (b)**, also identified both a strength and a weakness of it, and some of the responses used the features of the LPI (such as quantitative data) to justify their point. There were some very successful responses which showed a clear understanding of the question and explained the strength and/or weakness with a detailed example from the LPI. Even those responses that incorrectly described the Muczyk and Reimann's styles of leader behaviour in many instances identified a strength and a weakness of a self-report that might be given to a leader. These types of responses often received a Level 1 mark as there were no supporting examples from the LPI to justify the evaluation points raised.

- (a) There were many good, well developed responses to this question that focused on the temporal conditions of the work environment. Creditworthy responses described types of shiftwork, Knutson's research on the effects of shiftwork on health, and the study by Gold et al. on shiftwork and accidents. Some of the responses achieved in the lower mark bands by providing either brief responses or incorrect information about relevant research. Many of the responses incorrectly described physical and psychological work conditions, such as open plan offices, the Hawthorne studies, or research into token economies at work. These responses were not addressing the question on temporal conditions at work and, therefore, received no credit.
- (b) Some of the responses were structured by evaluation issue, with many beginning with the named issue of demand characteristics. Some of the responses included analysis of their evaluation points, for example, an alternative argument for demand characteristics for the Gold et al. study. These responses explained why there could have been demand characteristics from the nurses who knew they were in a study. The responses then discussed why it is possible that there were fewer demand characteristics, as the nurses were anonymous in the study and this could lead them to giving an accurate response to the questions asked. Popular evaluation issues included generalisability, ecological validity, ethics and usefulness. Many of the weaker responses evaluated the studies from **part (a)** and gave more superficial and repetitive responses. In addition, those responses that described the physical work conditions and/or research relating to health and safety at work, did not receive credit for evaluating this research in **part (b)**.



PSYCHOLOGY

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 of the response 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), examples of each and a conclusion.
- In *Section B*, **Questions 5**, **6**, **7** and **8**, methodological knowledge must be evident and detailed for top marks to be accessed. The procedure, however detailed is just one methodological aspect. For top marks answers must explain methodology rather than merely identify it.
- 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. Description cannot be credited.
- Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

There was evidence to suggest that many candidates had not studied two options. Whilst answers to one option were often very good, some answers to the second option were very poor, often limited to anecdotal or common-sense responses. Further, there were some examples of weak examination technique which candidates would benefit from improving.

Section A

- (i) Candidates need to address the 'stem' of the question, the introduction or the opening words in Section A questions as this is crucial to answering each question part that follows.
- (ii) Answers must refer to the study the question is about. Many answers provided general comments which were unrelated to the study itself.
- (iii) For question **part (d)**, many answers correctly included strengths and weaknesses but often these were not related to the question, and so restricted marks. For example, to score 1 mark, answers must include an advantage and an example.
- (iv) Many conclusions merely repeated what had already been written, and such summaries scored no marks. A conclusion is a 'decision reached by reasoning' and so as the reasoning has been done through the advantages and disadvantages, a final decision/conclusion needs to be drawn.
- (v) Candidates should think about what the question requires rather than writing pre-prepared answers. Many questions will test the ability to apply knowledge from one thing to another, particularly methodological knowledge.



(vi) Candidates should always provide sufficient detail to score all the available marks. A single sentence is more likely to score 1 mark rather than 2 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 (four or five) of relevant methodological design features, each of which should be explained fully, showing good understanding. Many answers listed features such as 'I would have a random sample' and 'It would be an independent measures design' without explanation of why it would be a random sample, or how this would be obtained.

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. Merely describing a relevant piece of research from the topic area is insufficient and scores no marks. The links between the research and how it informed the design must be shown. Further, there is no need for a name (date) to be quoted for each sentence, with some candidates writing 'I chose a self-selecting sample because Milgram (1963) did' for example. This just identifies a study using that technique. It does not explain the choice of sampling technique.

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 that don't address the question will only 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.

Section A

- (a) The question stimulus summarises the work of Watson (1920) who, as a behaviourist, believed that all behaviour was learned through association. Candidates describing the behavioural explanation, or those who outlined classical conditioning, scored top marks. A small number of candidates incorrectly outlined the Freudian explanation and a few candidates, also incorrectly, described the case study of little Albert.
- (b) Nearly all candidates answered the question successfully and scored full marks, including identifying an ethical guideline that was broken and relating this to the case study of little Albert. For example, it was argued that 'the study caused psychological harm' (1 mark awarded) 'because it made little Albert cry' (1 further mark awarded). Some candidates scored partial marks by stating nothing more than 'it caused harm'.
- (c) (i) One generalisation that could be made, as many candidates suggested, is that classical conditioning can explain how all phobias are learned. A statement like this earned 1 mark but as the question stated 'from this case study' a generalisation from what was found with little Albert was needed to earn the second available mark. Candidates writing, for example 'if one child can learn a phobia in this way then so can all children' earned the second mark.
 - (ii) A wide range of answers received credit. Some candidates stated: 'just because one child learned a phobia it does not mean that every child will' and others 'this might explain a phobia of animals but not phobias of anything else. Others opted for 'it is a case study of one person so generalising is problematic'. All these answers scored 1 mark, but the answer needed to be related to the question, so a reference to little Albert was needed to score the full 2 marks.



(d) Many answers included two advantages and two disadvantages and a conclusion, but many candidates scored partial marks only because they did not refer to research on phobias as the question required. For example, a strength might be 'a laboratory experiment means that all other variables can be controlled', To make it relevant to the question, a link to phobias needed to be included.

Question 2

- (a) Most answers scored the full 2 marks when answering this question. The two conditions of the IV in this study were 'evocative, descriptive menu names' and 'regular menu names'. Identifying these two conditions scored the full 2 marks even without examples of food names.
- (b) (i) Many candidates scored 1 mark for an attempt to explain how the rotation was done in the Wansink et al. study, but very few scored full marks because a complete explanation was not given.
 - (ii) Many candidates scored 1 mark for an attempt to explain why the rotation was done in the Wansink et al. study and for this question part many more candidates scored the second mark. Those earning 1 mark often wrote 'this counterbalancing means that extraneous variables were controlled' and those earning 2 marks gave an example from the study to support this such as 'the rotation was planned to minimise any unexpected variations such as blizzards, religious holidays, or game days'.
- (c) For this question, the 'in this study' part of the question was often not addressed. All candidates were able to provide a strength and a weakness of asking open-ended questions but only few candidates related their answer to the Wansink et al. study. A 2 mark answer might be 'participants can say what they think about their experience, such as saying they preferred the descriptive name over the regular name because it sounded more tasty'.
- (d) The advantages and disadvantages of conducting field experiments caused few problems but without relating to the question, such as a mention of 'food names and consumers', a mark could not be awarded. A further common weakness was to give a summary instead of a conclusion.

- (a) Most candidates gave an example such as 'Munchausen syndrome is a factitious disorder' rather than providing an explanation of the meaning of the term.
- (b) Some answers scored 0 marks because no knowledge was shown about either essential or supporting features as outlined by Aleem and Ajarim (1995). Other candidates outlined the four and scored the full 4 marks.
- (c) (i) There were five possible answers in response to this question, and although most candidates were able to identify one physical examination that was used, not all candidates could describe the result as the question required. The most common answer was in relation to the physical 'touch' examination where a tender, hot and indurated area was discovered just above the right breast. Many candidates went on to describe the cause of this, the insertion of faecal matter by the patient, although this was not required. Some candidates described various physical examinations that could have been carried out but were not done in this particular study.
 - (ii) Nearly all candidates scored 1 mark for suggesting one advantage of a physical examination over a clinical interview, but not all went on to address the 'using an example from this study' part of the question.
- (d) This question asked for advantages and disadvantages of case studies, which nearly all candidates addressed, but very few candidates gave examples in support.



Question 4

- (a) This question asked candidates to explain what is meant by the 'job characteristics model' following on from the stimulus material which described some of the work of Hackman and Oldham (1976). Whilst a few candidates could provide a correct explanation, many candidates could not.
- (b) This question required an outline of two psychological states identified by the 'job characteristics model'. There were some candidates who scored full marks for outlining two states, but there were also many candidates who scored no marks.
- (c) (i) Nearly all candidates were awarded full marks for their answers to the question on using absence data from company records, the most common answer being that these records are 'official' and that they are objective: if a person has been absent then it is fact. A few candidates gave a weakness of absence data and some even gave a range of reasons for absence though this was not required.
 - (ii) This question focused on management rating workers and nearly all candidates scored full marks. Some answers focused on weaknesses such as managers not knowing workers, managers not being trained to do the job, or managers having a 'hidden agenda' when rating workers.
- (d) This question focused on the advantages and disadvantages of self-reports (which could include questionnaires or interviews) and most answers provided general advantages and disadvantages without these being linked to the actual question on organisations. For example, if the point is made that 'some participants may provide socially desirable responses' without elaboration or example, this could apply to any question from any option. Answers must be related to the question to score marks. Candidates are welcome to have a pre-prepared list of advantages and disadvantages of all methods and issues and debates, indeed this is encouraged. But candidates must go further and be able to apply the advantages and disadvantages to any question.

Section B

Question 5

- (a) This question required candidates to design a study to investigate phobias of horses in boys. A wide range of answers were provided. Some candidates designed a questionnaire often including questions such as 'do you have a phobia of horses' at the core. Others decided to conduct an experiment and had an IV of girls and boys, even though it was not a requirement for girls to be included. Other candidates conducted a case study, basing their answers on what Freud had done with little Hans. Some candidates designed unethical studies, which should never be proposed, often suggesting exposing a boy with a horse phobia to a horse and recording how the boy responded.
- (b) Most candidates referred to the work of Freud and his study of little Hans. However, often there was nothing more than a description of Freud's work rather than an explanation of how Freud's work had informed their design. For those opting to design an experiment this was particularly difficult; for those designing a case study it was much easier. When deciding what method to use candidates should think about how the whole question, that is both **part (a)** and **(b)**, can be answered. Methodologically some candidates chose two methodological points to explain and often did this successfully. Others evaluated their design and scored no marks because evaluation is not part of the **part (b)** question.

- (a) Investigations into this question on eye magnets had to be a laboratory experiment. This meant that common features of IV, DV, controls and experimental design should have been included and explained in detail. A number of answers included all the specific design features of experiments and scored high marks. Some answers did not have an IV, and some muddled the IV and DV. Often an experimental design, or controls, were not mentioned. Controls are a fundamental part of any experiment and are always good for **part (b)** where methodological decisions such as the reason for applying controls can be explained.
- (b) In relation to methodological decisions, candidates often explained their IV choice of eye magnet or no eye magnet and also explained their choice of material on which to focus. Some candidates



correctly linked this with their psychological knowledge, either using the work on eye magnets and the central gaze effect or on eye magnets in relation to menu design. Only a few candidates included controls in **part (a)** when the reasons why controls are applied, reducing confounding and increasing validity for example, would be a good methodological point to include in **part (b)**.

Question 7

- (a) This question required candidates design a study using a method of their choice, but the study had to be longitudinal. A few candidates did not address this part of the question and were awarded partial marks. Most candidates used an interview, but although some candidates knew about the various features of interviews and applied them to the question successfully, some responses were limited to 'I would conduct an interview', or confused terms or made incorrect assumptions. Some candidates chose to use a questionnaire and answers followed the same answer pattern as seen in the interview designs.
- (b) Relevant psychological knowledge for this question would be the syllabus section on physiology of stress and effects on health, where many studies have shown that stress over time can cause high blood pressure; a haemorrhagic stroke; a myocardial infarction ('heart attack') and minor effects such as a stomach ulcer. These health effects were well used by some candidates when designing their part (a) questionnaires, but other candidates did not do this, instead treating part (a) and part (b) as completely separate questions. In relation to methodology, many candidates using correct terminology in part (a) explained in part (b) why they chose a structured interview over a semi- or unstructured interview for example; explained why they asked some of the questions they did; and explained the value of gathering answers to closed questions, or to open-ended questions.

- (a) Candidates had a free choice of method here to investigate group conflict, and most candidates chose to conduct an observation. Some candidates suggested a covert observation so the participants would not know they were being observed, but other than this only a few candidates considered a range of characteristics of observations: overt versus covert, participant versus non-participant, naturalistic versus controlled and structured versus unstructured. Nearly all candidates recorded time spent managing group conflict as the question requested, but often needed to realise that this meant they were conducting a structured observation with two response categories being 'time spent managing conflict' and 'time not spent managing conflict'. More marks could have been gained if more attention is paid to applying appropriate terminology to the design of investigations.
- (b) In relation to methodological decisions, some excellent answers explained why for example they had chosen to conduct a covert observation or why they had chosen to use a structured observation. Some of these answers linked their methodological decisions to psychological knowledge. A few excellent answers wrote about observing time spent in different types of conflict. A few answers also based their designs on the work of Thomas (1976) who compared the time spent dealing with conflict in different levels of management.



Section C

Question 9

This question required a discussion of arguments for and against the statement provided in the question. The question does not require any description of knowledge. At the bottom end of the mark range, candidates described the work of Lehmkhul who treated Jason and did not address the question. At the top end of the mark range, candidates organised their answers, first considering the arguments for exposure and response prevention (ERP) always being successful before presenting the arguments against it being successful. The work of Lehmkhul was then used to support these arguments.

Question 10

Some candidates did not appear to understand the term determinism, which restricted their answers to bottom band marks, because they could not address the question specifically. The 'determinism and free-will' debate appears on the syllabus and so candidates should have been prepared to apply this debate to any **Section C** question from any option. There were some excellent answers provided by those knowing the term which included a range of examples of retail architecture which might determine behaviour. The work of Finlay et al., Vrechopoulos and Turley and Milliman featured. These arguments were often countered with alternative arguments that architecture is irrelevant, and often the specific work of a Friedman casino design was used because Friedman argues that people focus on the product and not the design of the building there are in.

Question 11

Answers to this question could be organised into two parts: arguments supporting the view that patients would prefer to be diagnosed by a computer followed by arguments supporting the view that that patients would prefer to be diagnosed by a human. Some candidates did this and often used the work of Robinson and West as supporting evidence. Some excellent answers went further than this and brought in the work on patient-centred approaches, something a 'computer doctor' could never provide. There were many descriptive answers which merely described the work of Robinson and West and did not address the question.

Question 12

This question required consideration of arguments for and against the statement of the question rather than pure description. This question focused on job satisfaction but that it could only be measured effectively using closed questions, allowing candidates to expand their discussions not only into the contrasting use of open-ended questions but also of using other methods to assess job satisfaction. There were a few excellent answers, but many candidates described work on job satisfaction, some even writing about job design, and did not address the question set. Others provided a reasonable general debate about the use of closed questions, but did not refer to job satisfaction as required.



PSYCHOLOGY

Paper 9990/42 Specialist Options: Application

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- Questions should be read carefully ensuring that the focus of the response 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), examples of each *and* a conclusion.
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General comments

There was evidence to suggest that many candidates had not studied two options. Whilst answers to one option were often very good, some answers to the second option were very poor, often limited to anecdotal or common-sense responses. Further, there were some examples of weak examination technique which candidates would benefit from improving.

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- (ii) Answers must refer to the study the question is about. Many answers provided general comments which were unrelated to the study itself.
- (iii) For question **part (d)** many answers correctly included strengths and weaknesses but often these were not related to the question in the form of an example, and so restricted marks. For example, to score 1 mark, answers must include an advantage and an example.
- (iv) Many conclusions merely repeated what had already been written, and such *summaries* scored no marks. A conclusion is a 'decision reached by reasoning' and so as the reasoning has been done through the advantages and disadvantages, a final decision/conclusion needs to be drawn.
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Answers to **part (a)** questions in this section should include an appropriate design, have applied a range (four or five) of relevant methodological design features, each of which should be explained fully, showing good understanding. Many answers listed features such as 'I would have a random sample' and 'It would be an independent measures design' without explanation of why it would be a random sample, or how this would be obtained.

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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 that don't address the question will only 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.

Section A

- (a) Many answers scored full marks by explaining what EMDR is. A few candidates thought EMDR is used to diagnose a problem and such answers scored no marks.
- (b) Many candidates answered the question successfully about how impulse control therapy is used and scored full marks. However, many candidates only provided partial answers and wrote the steps of a procedure that could apply to any therapy session. Such answers were not entirely wrong, but full marks could not be awarded when essential details that specifically answered the question were excluded, such as the homework and use of EMDR.
- (c)(i)(ii) Part (i) required a similarity and part (ii) a difference between impulse control therapy (ICT) and imaginal desensitisation (ID). For the similarity, some candidates stated that 'both are therapies' and scored 1 mark, when some elaboration beyond this would have earned a second mark. Others gave more detail such as stating that ICT involves a therapist to conduct the session and the eye movements and similarly ID involves a therapist to conduct a session, to teach muscle relaxation. For part (ii), a difference, candidates were able to elaborate with the most common correct difference being that ICT involves eye movements whereas ID involves progressive muscle relaxation.
- (d) Many answers included two strengths and two weaknesses and a conclusion, but many candidates scored partial marks only because there was no reference to self-reports and people with addictions, as the question required. For example, a weakness might be 'some participants may provide socially desirable responses' and this would score 1 mark, but this answer was not sufficiently focussed on the full question. Adding 'and this would not help the therapist when treating their addiction' would apply the weakness to the question and full marks would be awarded.



Question 2

- (a) Most answers scored 1 mark when explaining the disrupt-then-reframe (DTR) technique which involves 'confusing consumers with a disruptive message and then reducing ambiguity by reframing the message'. Some candidates wrote no more than this, but those that provided some elaboration, usually in the form of an example, scored 1 further mark. The example was typically 'the price for note cards is 300 pennies' (disruption/confusing message) then 'that's \$3. It's a bargain' (the reframe).
- (b) (i) Many candidates explained a repeated measures design instead of an independent measures design. Independent measures is where different participants are in each condition of the independent variable and in the Kardes et al. study participants completed either the DTR technique or completed a reframe only.
 - (ii) Candidates providing a correct answer in (b)(i) nearly always scored full marks for this question part because they understood why a repeated measures design was not used. For example, it could (i) alert any customer to the different techniques (they may become suspicious) (ii) there might be carry-over effects from the first to the second condition and again the result would not be valid. Some candidates wrote an incorrect answer to (b)(i) but when reading part (b)(ii) changed their answer in (b)(i). This indicates that it always important to read both parts of any question before starting to write the answer.
- (c) Although this question stated 'using examples from this study', many candidates did not and so scored limited credit. For example, 'an advantage of conducting a field experiment is that the setting is in real-life' (1 mark) and 'in this study Kardes et al. conducted the study in a supermarket' (1 further mark).
- (d) Many answers correctly focused on the arguments for and against the ethics of using the disruptthen-reframe technique and often used a range of ethical guidelines to structure their answers. Many answers linked the ethical guidelines to the study. For example, candidates would write that using the disrupt component is unethical because it is deceiving participants into buying a product when the reframe is presented. A few candidates referred to it as being a 'deceptive psychological trick'.

- (a) Two conclusions were required here, and most candidates scored full marks for their answers. Most answers referred to the number of accidents being reduced when token economy was applied, and secondly that the costs due to accidents reduced following baseline.
- (b) Some candidates wrote correctly about the two safety measures which were (i) the number of jobrelated injuries and (ii) the total number of days absent from work. Both these measures provided indicators about whether safety behaviour, due to the implementation of the token economy, was improving. Many answers focussed on the use of token economy which did not answer the question set.
- (c) Many candidates answered the question appropriately and scored full marks. Typical answers were that 'technology had improved' or that 'workers were naturally more safety conscious'. A few suggested that workers deliberately did not report accidents to the management, and this answer also received credit.
- (d) This question asked whether the findings of the Fox et al. study could be generalised. Some thoughtful answers were written, arguing, for example, that it could be generalised to other mines, but not to other occupations such as office workers. Others suggested the findings could be generalised because a token economy could be introduced into any organisation, adapted to specific circumstances. A few answers did not score full marks because they were based on incorrect information, most commonly not knowing that two mines were involved in the original study by Fox et al.



Question 4

- (a) The term 'contingency theory' was commonly misunderstood, and many answers scored limited or no credit. Contingency theories believe that the effectiveness of leadership depends (i.e. is contingent) upon the situation, and there are numerous factors involved such as: the nature of the task; the leader's personality such as whether they relationship-oriented or task-oriented; and make-up of the group being led, amongst others.
- (b) (i) The question asked how Fiedler used the Least-Preferred Co-worker (LPC) questionnaire. However, many candidates simply stated that 'Fiedler used the Least-Preferred Co-worker (LPC) questionnaire' or 'Fiedler used a questionnaire with the least preferred co-worker' which was not creditable. Marks were awarded for a mention of 16 items, each on an 8-point scale from negative to positive, for example from unfriendly to friendly. Also creditworthy was that the LPC determines whether the leader is relationship-oriented (high LPC score) or task-oriented (low LPC score).
 - (ii) Suggest questions require candidates to think and to show their understanding. For this question, a suggestion of a disadvantage with using the LPC was required. Some candidates suggested that the least-preferred co-worker could find out and feel hurt or be bullied by others, or even lose their job. Other candidates could not make any suggestion.
- (c) This question required an explanation of a theory that considered individual differences of workers. Most candidates wrote about Hersey and Blanchard's theory which takes into account individual differences in the maturity level of the workers. A few candidates focused on individual differences in leaders and a few candidates wrote about other theories of leadership without considering individual differences, which did not answer the question set.
- (d) This question asked whether theories of leadership were useful to managers in organisations. Some very thoughtful answers were seen, although many lacked supporting examples. Some candidates argued that theories were useful because a manager could adapt their style to the needs of the organisation, and others suggesting that productivity could be improved if leaders are effective. Alternatively, it was argued that many theories do not apply in real life, with workers never fitting neatly into the categories of a proposed theory.

Section B

- (a) This question required candidates to design an observation to investigate the behaviour of people with kleptomania. A few candidates confused kleptomania with pyromania and wrote about observing fire-setting. Some candidates selected participants from a mental institution when it is highly unlikely a kleptomaniac would be detained in an institution. Many candidates suggested an overt observation so the participants would know they were being observed, but this would probably result in false behaviour. Only a few candidates considered a range of characteristics of observations: overt versus covert, participant versus non-participant, naturalistic versus controlled and structured versus unstructured. A few candidates did not address the question and designed an experiment, which could not be credited.
- (b) In relation to methodological decisions, some excellent answers explained why they had chosen to conduct a covert observation rather than overt; why they had chosen to use a structured observation rather than unstructured and why they would conduct a naturalistic observation. The reasons given for naturalistic were that the participant would be, for example, in a shopping mall, and covert, then the participant would not know they were being observed and so behave naturally. Some answers linked their methodological decisions to knowledge and the features of addiction proposed by Griffiths were used. For example, it could be observed that the kleptomaniac showed signs of euphoria after stealing an item.



Question 6

- (a) Candidates were free to choose a method to investigate style of music in different restaurants. Most chose to conduct a field experiment. However, despite the question stating the investigation should be conducted on different types of restaurant, a significant number of candidates did not address this, instead merely describing the study by North et al. who investigated music in just one restaurant. Candidates should never describe a study that has already been conducted because the question requires the candidate to design a study. Answers can be based on existing research, but that design should be applied to the question, in this instance different restaurants. Some candidates did this successfully, some investigating music played in fast food versus 'fine dining' restaurants; others in restaurants offering food of their country versus restaurants with food from overseas.
- (b) In relation to methodological decisions, candidates often explained their IV choice of restaurant and also explained their choice of music that would be played. Some candidates linked this with psychological knowledge, explaining that they chose classical, pop and no music because North et al. did, or why they chose different music from North et al. Only a few candidates included controls in **part (a)** when the reasons why controls are applied, reducing confounding and increasing validity for example, would be a good inclusion in **part (b)**.

Question 7

(a) This question required candidates to use an interview. Whereas some candidates were able to demonstrate their knowledge about the various features of interviews and applied them to the question successfully, some candidates did not refer to an interview, or confused terms or made incorrect assumptions.

Any answer on interviews should consider whether it will be structured, semi-structured or unstructured; whether it will be face-to-face or over a telephone; include examples of questions; whether the questions will be open-ended or closed. If closed what answers will participants give (yes/no, or on a scale); how answers will be coded if they are open-ended. The method of interview does not have an IV or DV or other features of an experiment. It was often incorrectly assumed that structured interviews automatically provide quantitative data. A structured interview means that all participants are asked the same questions in the same order.

(b) In relation to methodology, those candidates using correct terminology in part (a) explained why they chose a structured interview over a semi- or unstructured interview; explained why they asked some of the questions they did; and explained the value of gathering answers to closed questions, or to open-ended questions. Some candidates did this, but many did not. Psychological knowledge should have focused on the work of Chandola et al. (2008) or the physiological and psychological measures of stress.

- (a) Candidates had a free choice of method here to investigate need for achievement. A number of candidates were not able to demonstrate their knowledge of this term and scored limit or no credit. Candidates should consider questions from both their chosen options before beginning to write. A few answers were basic, often being little more that 'I would interview them and ask them which type motivated them'. This could be the basis of a good answer if all the relevant methodology applicable to interview had been applied. Some candidates chose to conduct an observation, but again with vague methodology.
- (b) Relevant psychological knowledge for this question would be the syllabus section on achievement motivation and the work of McClelland (1965) because in order to answer part (a) knowledge of McClelland's need for achievement, for affiliation and for power would be needed. Methodological knowledge can only be shown, or design decisions explained, in this question part if the features specific to the chosen method are described in part (a).



Section C

Question 9

Responses earning high marks presented arguments in favour of medical techniques, supported with examples followed with arguments against using medical techniques, also supported with examples, showing perfect organisation of a **Section C** answer. Many candidates did not answer the question set. The focus of the question was on medical techniques, such as drugs, and depression and the answer needed a focus on the advantages and disadvantages of these techniques. Many candidates described characteristics and explanations of depression, and did not answer the question set.

Question 10

Some candidates did not appear to understand the term determinism, which restricted their answers to bottom band marks, because they could not address the question specifically. There were some excellent answers provided by those knowing the term which included a range of examples of situational factors/retail ambience which might determine behaviour. These arguments were often countered with the simple argument that people shop for a specific product and ambience is irrelevant. Some candidates were successfully able to use the Pleasure/Arousal/Dominance ('PAD') model to support their arguments.

Question 11

Answers to this question could be organised simply into two parts: 'why physiological measures are more useful than psychological measures' followed by 'why physiological measures are not more useful than psychological measures'. A few candidates did this, but a significant number described studies using physiological measures such as those by Wang et al. and Evans and Wener, followed by a description of the work of Holmes and Rahe and Friedman and Rosenman. Descriptive answers do not answer the question set; answers need to consider arguments for and against the given statement with supporting examples.

Question 12

This question required consideration of arguments for and against the statement, but not description. This question focused on leadership and candidates scoring good marks focused first on why situational leadership is irrelevant, followed by a consideration of why it is relevant. The work of Hersey and Blanchard (1988) featured, as did great-man/woman leadership theories. Some candidates extended their debate by referring to the nature nurture debate when addressing the relevance of universalist leaders. Some candidates wrote a generic essay on leadership but needed to organise their answer and focus on the question set.



PSYCHOLOGY

Paper 9990/43

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 of the response 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), examples of each and a conclusion.
- In *Section B*, **Questions 5**, **6**, **7** and **8**, methodological knowledge must be evident and detailed for top marks to be accessed. The procedure, however detailed is just one methodological aspect. For top marks answers must explain methodology rather than merely identify it.
- 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. Description cannot be credited.
- Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

There was evidence to suggest that many candidates had not studied two options. Whilst answers to one option were often very good, some answers to the second option were very poor, often limited to anecdotal or common-sense responses. Further, there were some examples of weak examination technique which candidates would benefit from improving.

Section A

- (i) Candidates need to address the 'stem' of the question, the introduction or the opening words in Section A questions as this is crucial to answering each question part that follows.
- (ii) Answers must refer to the study the question is about. Many answers provided general comments which were unrelated to the study itself.
- (iii) For question **part (d)**, many answers correctly included strengths and weaknesses but often these were not related to the question, and so restricted marks. For example, to score 1 mark, answers must include an advantage and an example.
- (iv) Many conclusions merely repeated what had already been written, and such summaries scored no marks. A conclusion is a 'decision reached by reasoning' and so as the reasoning has been done through the advantages and disadvantages, a final decision/conclusion needs to be drawn.
- (v) Candidates should think about what the question requires rather than writing pre-prepared answers. Many questions will test the ability to apply knowledge from one thing to another, particularly methodological knowledge.



(vi) Candidates should always provide sufficient detail to score all the available marks. A single sentence is more likely to score 1 mark rather than 2 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 (four or five) of relevant methodological design features, each of which should be explained fully, showing good understanding. Many answers listed features such as 'I would have a random sample' and 'It would be an independent measures design' without explanation of why it would be a random sample, or how this would be obtained.

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. Merely describing a relevant piece of research from the topic area is insufficient and scores no marks. The links between the research and how it informed the design must be shown. Further, there is no need for a name (date) to be quoted for each sentence, with some candidates writing 'I chose a self-selecting sample because Milgram (1963) did' for example. This just identifies a study using that technique. It does not explain the choice of sampling technique.

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 that don't address the question will only 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.

Section A

- (a) The question stimulus summarises the work of Watson (1920) who, as a behaviourist, believed that all behaviour was learned through association. Candidates describing the behavioural explanation, or those who outlined classical conditioning, scored top marks. A small number of candidates incorrectly outlined the Freudian explanation and a few candidates, also incorrectly, described the case study of little Albert.
- (b) Nearly all candidates answered the question successfully and scored full marks, including identifying an ethical guideline that was broken and relating this to the case study of little Albert. For example, it was argued that 'the study caused psychological harm' (1 mark awarded) 'because it made little Albert cry' (1 further mark awarded). Some candidates scored partial marks by stating nothing more than 'it caused harm'.
- (c) (i) One generalisation that could be made, as many candidates suggested, is that classical conditioning can explain how all phobias are learned. A statement like this earned 1 mark but as the question stated 'from this case study' a generalisation from what was found with little Albert was needed to earn the second available mark. Candidates writing, for example 'if one child can learn a phobia in this way then so can all children' earned the second mark.
 - (ii) A wide range of answers received credit. Some candidates stated: 'just because one child learned a phobia it does not mean that every child will' and others 'this might explain a phobia of animals but not phobias of anything else. Others opted for 'it is a case study of one person so generalising is problematic'. All these answers scored 1 mark, but the answer needed to be related to the question, so a reference to little Albert was needed to score the full 2 marks.



(d) Many answers included two advantages and two disadvantages and a conclusion, but many candidates scored partial marks only because they did not refer to research on phobias as the question required. For example, a strength might be 'a laboratory experiment means that all other variables can be controlled', To make it relevant to the question, a link to phobias needed to be included.

Question 2

- (a) Most answers scored the full 2 marks when answering this question. The two conditions of the IV in this study were 'evocative, descriptive menu names' and 'regular menu names'. Identifying these two conditions scored the full 2 marks even without examples of food names.
- (b) (i) Many candidates scored 1 mark for an attempt to explain how the rotation was done in the Wansink et al. study, but very few scored full marks because a complete explanation was not given.
 - (ii) Many candidates scored 1 mark for an attempt to explain why the rotation was done in the Wansink et al. study and for this question part many more candidates scored the second mark. Those earning 1 mark often wrote 'this counterbalancing means that extraneous variables were controlled' and those earning 2 marks gave an example from the study to support this such as 'the rotation was planned to minimise any unexpected variations such as blizzards, religious holidays, or game days'.
- (c) For this question, the 'in this study' part of the question was often not addressed. All candidates were able to provide a strength and a weakness of asking open-ended questions but only few candidates related their answer to the Wansink et al. study. A 2 mark answer might be 'participants can say what they think about their experience, such as saying they preferred the descriptive name over the regular name because it sounded more tasty'.
- (d) The advantages and disadvantages of conducting field experiments caused few problems but without relating to the question, such as a mention of 'food names and consumers', a mark could not be awarded. A further common weakness was to give a summary instead of a conclusion.

- (a) Most candidates gave an example such as 'Munchausen syndrome is a factitious disorder' rather than providing an explanation of the meaning of the term.
- (b) Some answers scored 0 marks because no knowledge was shown about either essential or supporting features as outlined by Aleem and Ajarim (1995). Other candidates outlined the four and scored the full 4 marks.
- (c) (i) There were five possible answers in response to this question, and although most candidates were able to identify one physical examination that was used, not all candidates could describe the result as the question required. The most common answer was in relation to the physical 'touch' examination where a tender, hot and indurated area was discovered just above the right breast. Many candidates went on to describe the cause of this, the insertion of faecal matter by the patient, although this was not required. Some candidates described various physical examinations that could have been carried out but were not done in this particular study.
 - (ii) Nearly all candidates scored 1 mark for suggesting one advantage of a physical examination over a clinical interview, but not all went on to address the 'using an example from this study' part of the question.
- (d) This question asked for advantages and disadvantages of case studies, which nearly all candidates addressed, but very few candidates gave examples in support.



Question 4

- (a) This question asked candidates to explain what is meant by the 'job characteristics model' following on from the stimulus material which described some of the work of Hackman and Oldham (1976). Whilst a few candidates could provide a correct explanation, many candidates could not.
- (b) This question required an outline of two psychological states identified by the 'job characteristics model'. There were some candidates who scored full marks for outlining two states, but there were also many candidates who scored no marks.
- (c) (i) Nearly all candidates were awarded full marks for their answers to the question on using absence data from company records, the most common answer being that these records are 'official' and that they are objective: if a person has been absent then it is fact. A few candidates gave a weakness of absence data and some even gave a range of reasons for absence though this was not required.
 - (ii) This question focused on management rating workers and nearly all candidates scored full marks. Some answers focused on weaknesses such as managers not knowing workers, managers not being trained to do the job, or managers having a 'hidden agenda' when rating workers.
- (d) This question focused on the advantages and disadvantages of self-reports (which could include questionnaires or interviews) and most answers provided general advantages and disadvantages without these being linked to the actual question on organisations. For example, if the point is made that 'some participants may provide socially desirable responses' without elaboration or example, this could apply to any question from any option. Answers must be related to the question to score marks. Candidates are welcome to have a pre-prepared list of advantages and disadvantages of all methods and issues and debates, indeed this is encouraged. But candidates must go further and be able to apply the advantages and disadvantages to any question.

Section B

Question 5

- (a) This question required candidates to design a study to investigate phobias of horses in boys. A wide range of answers were provided. Some candidates designed a questionnaire often including questions such as 'do you have a phobia of horses' at the core. Others decided to conduct an experiment and had an IV of girls and boys, even though it was not a requirement for girls to be included. Other candidates conducted a case study, basing their answers on what Freud had done with little Hans. Some candidates designed unethical studies, which should never be proposed, often suggesting exposing a boy with a horse phobia to a horse and recording how the boy responded.
- (b) Most candidates referred to the work of Freud and his study of little Hans. However, often there was nothing more than a description of Freud's work rather than an explanation of how Freud's work had informed their design. For those opting to design an experiment this was particularly difficult; for those designing a case study it was much easier. When deciding what method to use candidates should think about how the whole question, that is both **part (a)** and **(b)**, can be answered. Methodologically some candidates chose two methodological points to explain and often did this successfully. Others evaluated their design and scored no marks because evaluation is not part of the **part (b)** question.

- (a) Investigations into this question on eye magnets had to be a laboratory experiment. This meant that common features of IV, DV, controls and experimental design should have been included and explained in detail. A number of answers included all the specific design features of experiments and scored high marks. Some answers did not have an IV, and some muddled the IV and DV. Often an experimental design, or controls, were not mentioned. Controls are a fundamental part of any experiment and are always good for **part (b)** where methodological decisions such as the reason for applying controls can be explained.
- (b) In relation to methodological decisions, candidates often explained their IV choice of eye magnet or no eye magnet and also explained their choice of material on which to focus. Some candidates



correctly linked this with their psychological knowledge, either using the work on eye magnets and the central gaze effect or on eye magnets in relation to menu design. Only a few candidates included controls in **part (a)** when the reasons why controls are applied, reducing confounding and increasing validity for example, would be a good methodological point to include in **part (b)**.

Question 7

- (a) This question required candidates design a study using a method of their choice, but the study had to be longitudinal. A few candidates did not address this part of the question and were awarded partial marks. Most candidates used an interview, but although some candidates knew about the various features of interviews and applied them to the question successfully, some responses were limited to 'I would conduct an interview', or confused terms or made incorrect assumptions. Some candidates chose to use a questionnaire and answers followed the same answer pattern as seen in the interview designs.
- (b) Relevant psychological knowledge for this question would be the syllabus section on physiology of stress and effects on health, where many studies have shown that stress over time can cause high blood pressure; a haemorrhagic stroke; a myocardial infarction ('heart attack') and minor effects such as a stomach ulcer. These health effects were well used by some candidates when designing their part (a) questionnaires, but other candidates did not do this, instead treating part (a) and part (b) as completely separate questions. In relation to methodology, many candidates using correct terminology in part (a) explained in part (b) why they chose a structured interview over a semi- or unstructured interview for example; explained why they asked some of the questions they did; and explained the value of gathering answers to closed questions, or to open-ended questions.

- (a) Candidates had a free choice of method here to investigate group conflict, and most candidates chose to conduct an observation. Some candidates suggested a covert observation so the participants would not know they were being observed, but other than this only a few candidates considered a range of characteristics of observations: overt versus covert, participant versus non-participant, naturalistic versus controlled and structured versus unstructured. Nearly all candidates recorded time spent managing group conflict as the question requested, but often needed to realise that this meant they were conducting a structured observation with two response categories being 'time spent managing conflict' and 'time not spent managing conflict'. More marks could have been gained if more attention is paid to applying appropriate terminology to the design of investigations.
- (b) In relation to methodological decisions, some excellent answers explained why for example they had chosen to conduct a covert observation or why they had chosen to use a structured observation. Some of these answers linked their methodological decisions to psychological knowledge. A few excellent answers wrote about observing time spent in different types of conflict. A few answers also based their designs on the work of Thomas (1976) who compared the time spent dealing with conflict in different levels of management.



Section C

Question 9

This question required a discussion of arguments for and against the statement provided in the question. The question does not require any description of knowledge. At the bottom end of the mark range, candidates described the work of Lehmkhul who treated Jason and did not address the question. At the top end of the mark range, candidates organised their answers, first considering the arguments for exposure and response prevention (ERP) always being successful before presenting the arguments against it being successful. The work of Lehmkhul was then used to support these arguments.

Question 10

Some candidates did not appear to understand the term determinism, which restricted their answers to bottom band marks, because they could not address the question specifically. The 'determinism and free-will' debate appears on the syllabus and so candidates should have been prepared to apply this debate to any **Section C** question from any option. There were some excellent answers provided by those knowing the term which included a range of examples of retail architecture which might determine behaviour. The work of Finlay et al., Vrechopoulos and Turley and Milliman featured. These arguments were often countered with alternative arguments that architecture is irrelevant, and often the specific work of a Friedman casino design was used because Friedman argues that people focus on the product and not the design of the building there are in.

Question 11

Answers to this question could be organised into two parts: arguments supporting the view that patients would prefer to be diagnosed by a computer followed by arguments supporting the view that that patients would prefer to be diagnosed by a human. Some candidates did this and often used the work of Robinson and West as supporting evidence. Some excellent answers went further than this and brought in the work on patient-centred approaches, something a 'computer doctor' could never provide. There were many descriptive answers which merely described the work of Robinson and West and did not address the question.

Question 12

This question required consideration of arguments for and against the statement of the question rather than pure description. This question focused on job satisfaction but that it could only be measured effectively using closed questions, allowing candidates to expand their discussions not only into the contrasting use of open-ended questions but also of using other methods to assess job satisfaction. There were a few excellent answers, but many candidates described work on job satisfaction, some even writing about job design, and did not address the question set. Others provided a reasonable general debate about the use of closed questions, but did not refer to job satisfaction as required.

