

PSYCHOLOGY

<p>Paper 9990/11 Approaches, Issues and Debates 11</p>
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Key messages

Candidates need to know all components of every core study as listed in the syllabus. Questions can be asked about any part of a core study.

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of each one. For example, the question may require data or a named issue to be included or relate back to a previous answer. To achieve full marks, these need to be correctly present in their responses. The essay (final question) requires four evaluation points to be in depth (two strengths and two weaknesses) with at least one of these about the named issue. 'In depth' tends to be having two examples of a particular concept or to support an evaluative point. Credit is limited if the named issue is omitted or just described.

Candidates need to be careful about how they are presenting the results of studies. For example, they need to know if the results are about how many participants performed a task correctly or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response can gain credit.

Candidates also need to engage with any stimulus material presented in a question (for example, a novel situation) to ensure they can access all available marks. In addition, when a question refers to 'in this study' the answer requires contextualisation with an explicit example from that study.

Candidates need to understand the difference between a result and a conclusion. The former is factual and based on collected data. The latter is a generic comment based on the results reported in any core study.

Candidates also need to know the set procedure of studies in the order presented in the original journal article. Questions can be based around part of a procedure and the candidate must be able to produce an answer that is directed and concise rather than writing about the whole of the procedure. This can sometimes mean a candidate may run out of time for other questions.

There is enough time for answers to be planned to ensure that the response given by a candidate is focused on the demands of each question. This is a crucial skill to develop as some candidates appear to have good knowledge of a study but do not apply this effectively to the question(s) set.

General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well, providing evidence that they were prepared for the examination.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well-planned answers in evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge to real-world behaviours in terms of what and how.

There were many blank responses in this series (every question had blank responses). As positive marking is used, candidates should attempt all questions even if they are unsure of the response they are providing.

Comments on specific questions

Question 1

- (a) The majority of responses correctly named the category of information. It is important for candidates to know that for 1 mark questions, only the first response is taken. Several responses had more than one answer with the correct answer being presented second, which meant no mark could be awarded.
- (b) Stronger responses could clearly outline the two types of false alarms. Common points made by candidates included the participant presenting new names and the participant naming non-party goers. The majority of responses did not name both. Common errors included naming the cat or presenting a name similar to one on the recording. Both of these were not counted as false alarms. It is important for candidates to know how variables were measured in each core study. This question had the highest number of blank responses.

Question 2

- (a) The majority of responses could outline one behaviour that the model was supposed to show in the named condition. Common points included 'waiting for 70 seconds before beginning to help the victim'. There were many responses that misidentified the timeframe or described the behaviour of the victim instead of the model. It is important for candidates to know the difference between the models, the observers, and the victims in the study by Piliavin et al.
- (b) This question required a description of the drunk victim, therefore one point made had to be specifically about this type of victim. Common points included the victim smelling of liquor and that it was always a male. Common errors included not mentioning a specific aspect of the drunk victim, meaning only one mark could be awarded. It is important that candidates carefully read what the question is asking them to focus on.

Question 3

The majority of responses could identify a potential issue of using children in the study by Baron-Cohen et al. Common choices included ethical issues, a child's limited vocabulary or that children can become easily bored by repetitive tasks. Stronger responses could then elaborate on the problem and provide an example from the study to explain why children would be a problem if used as the sample of participants. There was a significant minority of candidates who provided more than one problem. In circumstances like this, all problems are marked independently and the best one credited, although this was rarely awarded maximum marks.

Question 4

- (a) Stronger responses had read the demands of the question which asked for a different aim to the one presented in the question. Many candidates provided an aim that was the same as the question. Common correct responses tended to focus on investigating the cause of the phobia and to investigate the role of evaluative learning in relation to a phobia. Some candidates provided a finding. It is important for candidates to read all part questions from the same numbered question, in this case **4(a)**, **4(b)** and **4(c)** to ensure that they understand what is required.
- (b) A small minority of responses provided the correct direction of severity ratings for the behavioural exposure sessions (e.g., that they increased). Most candidates presented results from the imagery exposure sessions and, therefore, could not be awarded credit. It is important for candidates to know all results from the core studies.
- (c) The most common score here was one mark. Candidates tended to provide one correct result from the posttreatment session, with common choices being he no longer met the criteria for a phobia, and that he could now wear plastic buttons (on his uniform). Some candidates provided two correct results. Again, candidates need to know all results from all stages of each core study.

Question 5

- (a) This question had the second most blank responses on the paper. Stronger responses could clearly describe the procedure for the final part of the study. There were many incorrect responses presented. Some candidates focused on the Aggression Arousal part of the study whilst others described the initial measurement of aggression. Both of these could not be awarded any marks as they were not answering the question. It is very important for candidates to know the procedure for all parts of any core study as questions can be asked about specific procedural points.
- (b) The majority of responses provided a full conclusion. Popular choices focused on boys being more aggressive in general or that aggression can be replicated in the absence of the original model. Some candidates provided a result which could not be credited. It is important for candidates to understand the difference between a result and a conclusion (see key messages).

Question 6

- (a) The minority of responses could outline one aspect of psychology that was being investigated in the study by Dement and Kleitman. Popular choices included outlining what Rapid Eye Movement is. Many candidates wrote all of the findings from the study by Dement and Kleitman which could only be awarded one 'example' mark. These types of questions require candidates to provide generic responses about psychological concepts or theories that were tested or of interest to the psychologists. It should focus on concepts that would need to be known before the study took place.
- (b) Stronger responses could clearly explain why the study by Dement and Kleitman is from the biological approach. Common points included the use of biological measurement techniques with an example from the study.

Question 7

The minority of responses could suggest two real-world applications based on Canli et al. Popular choices included advertisers using emotionally intense imagery or using emotionally arousing images in the classroom. Like with all questions relating to real-world applications, it is important for candidates to outline what the application is and then explain how it can be achieved using evidence from the named study, in this case Canli et al. Additionally, the 'what' part needs to be explicit. Some responses described the study by Canli et al. with no application or suggested future research that could be based on the study. Neither of these could be awarded credit. Finally, there were a number of responses that explained certain behaviours in real life rather than a real-world application. These could also not be credited. Responses need to be prospective and not retrospective. There were very few responses that were not ethical.

Question 8

Stronger responses could clearly provide one reason why each of the people in the question is correct in terms of validity in relation to Milgram. Popular examples for Rose included the realism of the shock generator and that the participant actually received a low-level shock. Stronger responses could provide specific and explicit examples from the study to support the reason. Common errors included focusing the response on reliability and standardisation which could not be awarded any credit. Popular examples for Yaroslav included low levels of ecological validity and mundane realism. Again, stronger responses could then provide specific and explicit examples. Common errors included focusing on the unethical nature of the study, which did not answer the question. Weaker responses tended to provide more than one reason and, in this case, the best 'one reason' was credited. To improve, candidates need to have examples from each core study that appropriately support core concepts on the syllabus, like validity.

Question 9

- (a) The majority of responses could describe at least two features of the sample used in the study by Pepperberg. Popular choices included it being one parrot and that he had been used in communication studies before. Incorrect responses included describing anecdotal evidence not presented in the original journal article.
- (b) Overall, many candidates did not fulfil the Level 2 criteria of explicitly presenting the ethical guideline and then providing an example directly from the study by Pepperberg.

Housing: candidates tended to be able to explain via example only that Alex's housing was adequate and that he could fly around the laboratory.

Pain and distress: candidates tended to be able to explain via example only, with a common one being that he was scolded for providing an incorrect answer.

Reward: again, candidates tended to be able to explain via example only.

Species and strain: The majority of responses could not outline this ethical guideline or provide an example from the study.

Common incorrect responses provided explanations for the ethical guideline of 'numbers'.

Question 10

The strongest responses evaluated the study by Laney et al. in depth and in terms of two strengths and two weaknesses with at least one of these points covering the named issue of ethics. Common choices included ethics, generalisability, reliability, ecological validity, and quantitative data. These strong responses could explain why an element of the study was a strength or a weakness using specific examples from the study by Laney et al. to explicitly support their point. These answers tended to score Level 4 marks. Candidates need to ensure that they follow the demands of the question, covering two strengths and two weaknesses, all in equal depth. Some responses covered the four evaluation points but were brief or did not use the study by Laney et al. as examples which meant the response scored in the lower bands. Other responses included three evaluation points that were thorough, logical, and well argued with a fourth point that was brief, which meant the response generally did not reach the top band. Candidates need to know that any description of the study does not gain credit in this type of questions as it is only testing their evaluation skills. Some responses appeared to follow a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics) and appeared to be prepared essays for Laney et al. A response which does not have one evaluation point about the named issue can only score 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 get above a Level 1 mark. In addition, many responses did use ethics in an evaluative sense but did not fully explain why it could be a strength and/or a weakness. Some responses did not cover the named issue. Some responses were attempting to focus on real-world application which tended to only be awarded partial credit as this question is evaluative in nature and not application. It is advisable to choose a different evaluation point to use. To improve on this question, candidates need to plan carefully, choosing two strengths and two weaknesses with one of these being the named issue, avoiding real-world application where possible. Each strength and weakness should be of equal length with an explanation as to why it is a strength or weakness with examples from the study to show clear understanding. An evaluation that is in depth tends to have at least two explicit examples from the named study for every evaluative point made. These are the requirements for a Level 4 response.

PSYCHOLOGY

Paper 9990/12
Approaches, Issues and Debates 12

Key messages

Candidates need to know all components of every core study as listed in the syllabus. Questions can be asked about any part of a core study.

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of each one. For example, the question may require data or a named issue to be included or relate back to a previous answer. To achieve full marks, these need to be correctly present in their responses. The essay (final question) requires four evaluation points to be in depth (two strengths and two weaknesses) with at least one of these about the named issue. 'In depth' tends to be having two examples of a particular concept or to support an evaluative point. Credit is limited if the named issue is omitted or just described.

Candidates need to be careful about how they are presenting the results of studies. For example, they need to know if the results are about how many participants performed a task correctly or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response can gain credit.

Candidates also need to engage with any stimulus material presented in a question (for example, a novel situation) to ensure they can access all available marks. In addition, when a question refers to 'in this study' the answer requires contextualisation with an explicit example from that study.

Candidates need to understand the difference between a result and a conclusion. The former is factual and based on collected data. The latter is a generic comment based on the results reported in any core study.

Candidates also need to know the set procedure of studies in the order presented in the original journal article. Questions can be based around part of a procedure and the candidate must be able to produce an answer that is directed and concise rather than writing about the whole of the procedure. This can sometimes mean a candidate may run out of time for other questions.

There is enough time for answers to be planned to ensure that the response given by a candidate is focused on the demands of each question. This is a crucial skill to develop as some candidates appear to have good knowledge of a study but do not apply this effectively to the question(s) set.

General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well providing evidence that they were prepared for the examination.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well-planned answers in evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge to real-world behaviours in terms of what and how.

There were many blank responses in this series (every question except one had blank responses). As positive marking is used, candidates should attempt all questions even if they are unsure of the response they are providing.

Comments on specific questions

Question 1

- (a) The majority of responses correctly named the measure. It is important for candidates to know that for 1 mark questions, only the first response is taken. Several responses had more than one answer with the correct answer being presented second, which meant no mark could be awarded. In addition, there were a significant minority of responses that simply stated 'autism test' which could not be awarded credit. This question had the joint highest number of blank responses.
- (b) Stronger responses could clearly outline the Group 4 sample. Common features presented by candidates included that they were from the general population, the mean IQ of the group and the sample size of 14. Some responses provided features from a different Group or gave incorrect data about Group 4. It is important for candidates to know the sample of participants used in every group/condition for all core studies. This question had the joint highest number of blank responses.

Question 2

The majority of responses could describe two aspects of the experience the boy had with buttons. Common points included him running out of buttons in an art class and that a bowl of buttons fell onto him. There were some responses that gave a generic outline of the classroom experience with no specific details of an experience the boy could have had. Candidates need to know case histories for case studies to ensure they understand, in this case, how the phobia may have begun.

Question 3

The majority of responses could identify a potential issue of using children in the study by Canli et al. Common choices included ethical issues, being able to keep still and a lack of understanding of complex emotions. Stronger responses could then elaborate on the problem and provide an example from the study to explain why children would be a problem if used as the sample of participants. There was a significant minority of candidates who provided more than one problem. In circumstances like this, all problems are marked independently and the best one credited, although this is rarely awarded maximum marks.

Question 4

- (a) Stronger responses clearly described the procedure that the principal trainer had to follow with Alex the parrot. Common points included being sat with her back to Alex, not knowing what objects were being presented and then repeating out loud what Alex had answered. The majority of responses could only report one part of the procedure or describe the Model-Rival technique which, for the latter, was not answering the question. It is important for candidates to know the procedure for all parts of any core study as questions can be asked about specific procedural points.
- (b) The majority of responses provided a full conclusion. Popular choices focused on how a parrot can show symbolic understanding of same/different and that symbolic representation is not an exclusive primate trait. Some candidates provided a result and could not be credited. It is important for candidates to understand the difference between a result and a conclusion (see key messages).

Question 5

- (a) A minority of responses could clearly name two features of the models used in the study by Piliavin et al. Common correct features included that they were always male and that they were always white. The majority of responses either provided incorrect features of the models or outlined features of the victim which is not answering the question. It is important for candidates to understand and know the differences between the models, the observers, and the victims in this study.
- (b) A minority of responses provided a full result with a meaningful comparison. The most popular choice was 'people tended to help the ill victim faster than the drunk victim'. Some candidates provided the result about overall helping without a focus on the time taken to help the victims and others presented results about early and late models, both of which were not answering the question.

- (c) A minority of responses provided a full result with a meaningful comparison. The most popular choice was that more people left the critical area when the victim was ill compared to when the victim was drunk. Most responses either presented a result not linked to the critical area or simply described something that did or could have happened in the critical area, which was not answering the question. This question had the joint highest number of blank responses.

Question 6

- (a) The minority of responses could outline one aspect from the background to the study by Andrade. Popular choices included the role of daydreaming in boredom and that we need to maintain arousal levels in order to concentrate. However, many candidates wrote about what happened during the Andrade study which was not answering the question. These types of questions require candidates to provide generic responses about psychological concepts or theories that were tested or of interest to the psychologists, prior to the named study being conducted. It should focus on concepts that would need to be known before the study took place.
- (b) Stronger responses could clearly explain why the study by Andrade is from the cognitive approach. Common points included the use of an assumption that was tested in the study (e.g. memory). Some candidates simply provided a result from the study with no explanation as to why it was cognitive in nature.

Question 7

The minority of responses could suggest two real-world applications based on Yamamoto et al. Popular choices included teaching helping behaviour in the classroom and getting parents to promote prosocial behaviour at home. Like with all questions relating to real-world applications, it is important for candidates to outline what the application is and then explain how it can be achieved using evidence from the named study, in this case Yamamoto et al. Additionally, the 'what' part needs to be explicit. Some responses described the study by Yamamoto et al. with no application or suggested future research that could be based on the study. Neither of these could be awarded credit. Finally, there were a number of responses that explained certain behaviours in real life rather than a real-world application. These could also not be credited. Responses need to be prospective and not retrospective. There were very few responses that were not ethical.

Question 8

Stronger responses could clearly provide one reason why each of the people in the question is correct in terms of either the nature or nurture debate in relation to Bandura et al. Popular examples for Zayn included the role of hormones in aggression that are naturally different in males and females. Stronger responses could provide specific and explicit examples from the study to support the reason. Common errors included stating that nature is about 'natural' behaviours which could not gain credit as it is tautological. Popular examples for Danna included the role of the model and how 'natural' aggression was controlled for. Again, stronger responses could then provide specific and explicit examples. Common errors included stating that nurture is about 'nurturing'. Weaker responses tended to provide more than one reason and in this case the best 'one reason' was credited. To improve, candidates need to have examples from each core study that appropriately support core concepts on the syllabus like the nature versus nurture debate.

Question 9

- (a) The majority of responses could describe at least two features of the sample used in the study by Schachter and Singer. Popular choices included the sample size, that they were all male, and that they were volunteers. Some responses outlined the sample from a different core study.
- (b) Overall, many candidates did not fulfil the Level 2 criteria of explicitly presenting the ethical guideline and then providing an example directly from the study by Schachter and Singer.

Confidentiality: candidates tended to be able to explain via example only that all we know about the sample are generic features, like the university, and that they were all male.

Lack of deception: candidates tended to be able to explain via example only, with a common one being the participants being told the wrong information about their injection.

Privacy: most candidates wrote about confidentiality here. It is important for candidates to understand the difference between confidentiality and privacy.

Protection from physical harm: the majority of responses could not outline this ethical guideline, or stated it is about 'not causing physical harm' (tautological). A common example was that the injection was given by a professional doctor.

Question 10

The strongest 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 ethics. Common choices included ethics, generalisability, reliability, ecological validity, and quantitative data. These strong responses could explain why an element of the study was a strength or a weakness using specific examples by Milgram to explicitly support their point. These answers tended to score Level 4 marks. Candidates need to ensure that they follow the demands of the question, covering two strengths and two weaknesses, all in equal depth. Some responses did cover the four evaluation points but were brief or did not use the study by Milgram as examples which meant the response scored in the lower bands. Other responses included three evaluation points that were thorough, logical, and well argued with a fourth point that was brief which meant the response did not reach the top band in the main. Candidates need to know that any description of the study does not gain credit in these type of questions as it is only testing their evaluation skills. In addition, some responses appeared to be following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics) and appeared to be prepared essays for Milgram. A response which does not have one evaluation point about the named issue can only score 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 get above a Level 1 mark. In addition, many responses did use validity in an evaluative sense but did not fully explain why it could be a strength and/or a weakness. Some responses did not cover the named issue. To improve on this question, candidates need to plan carefully, choosing two strengths and two weaknesses with one of these being the named issue, avoiding real world application where possible (which was not typically well-used as an evaluative point). Each strength and weakness should be of equal length with an explanation as to why it is a strength or weakness with examples from the study to show clear understanding. An evaluation that is in-depth tends to have at least two explicit examples from the named study for every evaluative point made. These are the requirements for a Level 4 response.

PSYCHOLOGY

Paper 9990/13
Approaches, Issues and Debates 13

Key messages

Candidates need to know all components of every core study as listed in the syllabus. Questions can be asked about any part of a core study.

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of each one. For example, the question may require data or a named issue to be included or relate back to a previous answer. To achieve full marks, these need to be correctly present in their responses. The essay (final question) requires four evaluation points to be in depth (two strengths and two weaknesses) with at least one of these about the named issue. 'In depth' tends to be having two examples of a particular concept or to support an evaluative point. Credit is limited if the named issue is omitted or just described.

Candidates need to be careful about how they are presenting the results of studies. For example, they need to know if the results are about how many participants performed a task correctly or on how many trials the participant was correct. This can have a large impact on the interpretation of results and whether a response can gain credit.

Candidates also need to engage with any stimulus material presented in a question (for example, a novel situation) to ensure they can access all available marks. In addition, when a question refers to 'in this study' the answer requires contextualisation with an explicit example from that study.

Candidates need to understand the difference between a result and a conclusion. The former is factual and based on collected data. The latter is a generic comment based on the results reported in any core study.

Candidates also need to know the set procedure of studies in the order presented in the original journal article. Questions can be based around part of a procedure and the candidate must be able to produce an answer that is directed and concise rather than writing about the whole of the procedure. This can sometimes mean a candidate may run out of time for other questions.

There is enough time for answers to be planned to ensure that the response given by a candidate is focused on the demands of each question. This is a crucial skill to develop as some candidates appear to have good knowledge of a study but do not apply this effectively to the question(s) set.

General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well providing evidence that they were prepared for the examination.

Stronger overall responses followed the demands of each question with explicit use of psychological terminology and logical, well-planned answers in evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge to real-world behaviours in terms of what and how.

There were many blank responses in this series (only three questions did not have blank responses). As positive marking is used, candidates should attempt all questions even if they are unsure of the response they are providing.

Comments on specific questions

Question 1

- (a) A minority of responses stated the correct percentage. It is important for candidates to know that for 1 mark questions, only the first response is taken. Some responses had more than one answer with the correct answer being presented second, which meant no mark could be awarded. A common error was to present the percentage of participants who pressed the 450-volt switch. It is important for candidates to read questions carefully.
- (b) Stronger responses could clearly outline two features of the payment given to participants. Common points made by candidates included the amount paid and that they could keep it even if they did not finish the study. Common errors included being paid beforehand and that it was only paid after completion.

Question 2

The majority of responses could describe two elements of the procedure using novel objects with Alex the parrot. Common points included using objects never used in training and that he was asked what's same or what's different. There were many responses that outlined the Model-Rival Technique or gave a generic account of a typical test scenario with no focus on novel objects. It is important for candidates to know all different parts of a procedure for all core studies.

Question 3

The majority of responses could identify a potential issue of using children in the study by Baron-Cohen et al. Common choices included ethical issues, a children's experience with food is limited, and that the study was about childhood memories. Stronger responses could then elaborate on the problem and provide an example from the study to explain why children would be a problem if used as the sample of participants. There was a significant minority of candidates who provided more than one problem. In circumstances like this, all problems are marked independently and the best one credited, although this is rarely awarded maximum marks.

Question 4

- (a) Stronger responses had read the demands of the question and focused the answer on the specific part of the procedure highlighted in the question. These responses could clearly describe what happened to the participant. Popular choices included being introduced to the stooge, waiting 20 minutes so that the Suproxin could enter the bloodstream and that they were handed questionnaires to complete. The majority of responses provided descriptions of different parts of the study or described the procedure before or after the 'time points' provided in the question. It is very important for candidates to know all different parts of a procedure for all core studies.
- (b) The majority of responses provided a full conclusion. Popular choices focused on the two-factor theory of emotion being supported. Some candidates provided a result and could not be credited. It is important that candidates understand the difference between a result and a conclusion (see key messages).

Question 5

- (a) Stronger responses had read the demands of the question which asks for a different aim to the one presented in the question. Many candidates provided an aim that was the same as the question. Common correct responses tended to focus on investigating sex differences in performance on the eyes test and investigating if people with AS/HFA lack a theory of mind. Some candidates provided a finding. It is important for candidates to read all part questions from the same numbered question, in this case **5(a)**, **5(b)** and **5(c)** to ensure that they understand what is required.
- (b) The minority of responses provided a full result with a meaningful comparison. Common correct responses included the AS/HFA group scoring higher than the other groups on the AQ and that females scored the lowest (in Group 3). There were several responses making a value judgement by stating one group performed better or worse. This cannot be awarded credit as a result is a presentation of the data collected without the need for judgement. Stating a group scored higher is

a correct result but stating they did better is not. This question had the second highest number of blank responses on the paper.

- (c) The majority of candidates provided a result that was opposite to the actual result (stating that the AS/HFA group scored higher on the eyes test is incorrect). Some candidates provided a correct direction of results along with a correct data point to be awarded maximum marks. It is important for candidates to know all key results from core studies to help understand what the study reported. This question had the highest number of blank responses on the paper.

Question 6

- (a) The minority of responses could outline one aspect from the background to the study by Bandura et al. Popular choices included the idea of social learning theory and that delayed imitation had never truly been researched. Many candidates wrote about what happened during the Bandura et al. study which was not answering the question. These types of questions require candidates to provide generic responses about psychological concepts or theories that were tested or of interest to the psychologists, prior to the named study being conducted. It should focus on concepts that would need to be known before the study took place.
- (b) Stronger responses could clearly explain why the study by the study by Bandura et al. is from the learning approach. Common points included the testing of social learning theory or the role of vicarious reinforcement.

Question 7

The minority of responses could suggest two real-world applications based on Saavedra and Silverman. Popular choices included helping to find out the source of a phobia or how imagery exposure can help in a therapeutic setting. Like with all questions relating to real-world applications, it is important for candidates to outline what the application is and then explain how it can be achieved using evidence from the named study, in this case Saavedra and Silverman. Additionally, the 'what' part needs to be explicit (e.g. using imagery exposure rather than stating 'useful in therapy'). Some responses described the study by Saavedra and Silverman with no application or suggested future research that could be based on the study. Neither of these could be awarded credit. Finally, there were a number of responses that explained certain behaviours in real life rather than a real-world application. These could also not be credited. Responses need to be prospective and not retrospective.

Question 8

Stronger responses could clearly provide one reason why each of the people in the question is correct in terms of individual and situational explanations in relation to Andrade. Popular examples for Xander included the variety of doodles seen and the amount of doodles produced. Stronger responses could provide specific and explicit examples from the study to support the reason. Common errors included defining the individual explanation using the word 'individual' which is tautological and cannot be awarded credit. Popular examples for Silvia included the boring set-up and the monotone message. Again, stronger responses could then provide specific and explicit examples. Common errors included defining the situational explanation using the word 'situation'. Weaker responses tended to provide more than one reason and in this case the best 'one reason' was credited. To improve, candidates need to have examples from each core study that appropriately support core concepts on the syllabus like individual and situational explanations.

Question 9

- (a) The majority of responses could describe at least two features of the sample used in the study by Yamamoto et al. Popular choices included it being mother-kin pairings and that they had participated in research before. Incorrect responses included describing anecdotal evidence not presented in the original journal article.
- (b) Overall, many candidates did not fulfil the Level 2 criteria of explicitly presenting the ethical guideline and then providing an example directly from the study by Yamamoto et al.

Deprivation and aversive stimuli: candidates tended to be able to explain via example only that social contact was always allowed outside of a trial and that the trials were not time consuming.

Housing: candidates tended to be able to explain via example only that they were housed socially at Kyoto.

Pain and distress: candidates tended to be able to explain via example only, with a common one being that the trial was not distressing as it was only tool selection.

Reward: candidates tended to be able to explain via example only.

Question 10

The strongest responses evaluated the study by Canli et al. in depth and in terms of two strengths and two weaknesses with at least one of these points covering the named issue of generalisations. Common choices included ethics, generalisability, reliability, ecological validity, and quantitative data. These strong responses could explain why an element of the study was a strength or a weakness using specific examples from the study by Canli et al. to explicitly support their point. These answers tended to score Level 4 marks. Candidates need to ensure that they follow the demands of the question, covering two strengths and two weaknesses, all in equal depth. Some responses did cover the four evaluation points but were brief or did not use the study by Canli et al. as examples which meant the response scored in the lower bands. Other responses included three evaluation points that were thorough, logical, and well argued with a fourth point that was brief, which meant the response did not reach the top band overall. Candidates need to know that any description of the study does not gain credit in these type of questions as it is only testing their evaluation skills. In addition, some responses appeared to be following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics) and appeared to be prepared essays for Canli et al. A response that does not have one evaluation point about the named issue can only score 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 get above a Level 1 mark. In addition, many responses did use generalisations in an evaluative sense but did not fully explain why it could be a strength and/or a weakness. Some responses did not cover the named issue. Some responses were attempting to focus on real world application which tended to only be awarded partial credit as this question is evaluative in nature and not application. It is advisable to choose a different evaluation point to use. To improve on this question, candidates need to plan carefully, choosing two strengths and two weaknesses with one of these being the named issue, avoiding real world application where possible. Each strength and weakness should be of equal length with an explanation as to why it is a strength or weakness, with examples from the study to show clear understanding. An evaluation that is in depth tends to have at least two explicit examples from the named study for every evaluative point made. These are the requirements for a Level 4 response.

PSYCHOLOGY

<p>Paper 9990/21 Research Methods 21</p>
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Key messages

- Candidates need to be encouraged to read the question and, if necessary, underline key words. This would help to ensure that they avoid some of the common mistakes. Learners should:
 - respond to the question set, such as describing findings when asked to do so, rather than simply reporting, i.e. repeating, them and referring to ethics or sampling in **Question 10a**, contrary to the question rubric
 - focus on the information in the question rather than, for example, a core study that happens to be about the same topic area
 - use mark allocations to ensure sufficient detail is being provided.
- Another important idea is to avoid repeating the question. Whilst the question provides context and essential information, repeating key words from the stem, e.g. as part of a definition, is circular. For example, 'random allocation' cannot be defined using the words 'random' or 'allocation', this is just restating the question. To avoid this common error of attempting to define a concept in terms of itself, candidates must be encouraged to think about the meaning of each psychological concept to help them.
- A final way in which candidates could generally improve the quality of their responses would be to make clear links to the context when this is indicated in the question, for example where 'in this study' is used or more specifically, as in **Question 8**, '...in Alf's study'.

General comments

One of the most common mistakes was to assume that a structured interview has only closed questions, so an unstructured interview allows for the use of open questions. This is not the case. Either question format can be asked in either interview. Linked to this problem was the tendency of candidates to say that an unstructured interview enables the researcher to collect in-depth data, without an explanation of why this is so (the key point about unstructured interviews is that they can pursue detail based on the participant's responses).

When recruiting a volunteer sample, it is important to accurately describe the use of advertisements, or 'invitations' to join a study, rather than simply 'posters' or 'flyers' as these do not contain the essential idea of potential participants being asked to respond.

Many candidates appeared not to understand that a correlation requires data on a scale. Furthermore, the absence of the ability of correlations to detect causality is the main reason that the experimental method is so important. This needs to be clear to learners.

Comments on specific questions

Section A

Question 1

- (a) This first question part was generally well answered, with most candidates scoring at least one mark. There was some confusion between 'covert' and 'overt' and some confusion between 'covert' and 'non-participant', which impacts the whole question. This is a very important distinction. Some candidates could have improved their answers by giving more detail. It is important for candidates to look at the number of marks available in order to offer enough detail to satisfy the requirement. 'Explain' typically requires some development for full credit. When providing detail,

candidates must ensure it is relevant. In this instance, some candidates included strengths and weaknesses of observations, which were not creditworthy.

- (b) A common, full mark answer provided both 'reduced demand characteristics' and 'so act naturally', although often there was no detail given.
- (c) Answering in terms of ethics was a common choice and was done well by many candidates. Some only gained 1 mark for 'informed consent' because their response lacked an explanation and many incorrectly described deception.

Question 2

- (a) It was evident that understanding of the difference between directional and non-directional hypotheses was limited for many candidates. Some candidates identified the correct type of hypothesis but could not clearly explain the reason why or were unable to do so without repeating 'direction'. A small number of candidates also confused the idea with correlations.
- (b) Performance here was better than on **part (a)**, but candidates' understanding of a 'null hypothesis' was limited, with candidates being unable to express 'a null' or inappropriately referring to correlational hypotheses.

Question 3

- (a) (i) Question **part (a)(i)** was not well answered, with many candidates simply reporting findings rather than describing them. In addition, there was a significant number who described the data for objects used in training as 'higher' than for objects not used in training. Very few candidates identified this as 'similar'.
- (ii) This question part was answered relatively well, although, as above, there was a tendency to report findings. Another common mistake was to compare correct and incorrect, which was not the requirement of the question.
- (b) Most candidates focused on familiarity but, despite the data on the table, many were explaining why Alex made fewer incorrect attempts for objects used in training. In addition, many candidates were not referring to Pepperberg's explanations as demanded by the question, but were making up their own, suggesting a lack of knowledge on the reasons stated by Pepperberg.

Question 4

Candidates often gave one correct reason, but not two. Some repeated the same point.

Question 5

- (a) Many candidates either confused 'random allocation' with 'random sampling' or simply repeated the word 'random' and/or the word 'allocation' in their response. Others had vague and uncreditworthy statements about 'no order', 'no purpose' or 'no reason' for the allocation.
- (b) This question part was reasonably well done, with candidates being able to either simply state that this was the condition where the IV was absent, or to illustrate this in context from Laney et al. Many responses offered an insufficient level of understanding, for example, suggesting simply it was 'so they can be compared' or that it was a 'baseline'. These are true but are incomplete statements of why one group was called a control condition.

Question 6

Many candidates attempted to define the 'right to withdraw' by repeating the words (for example saying 'right to withdraw means that participants have the right to withdraw from the study') and then name studies as having given participants right to withdraw but without giving any more detail. Responses to the confidentiality part of the question were also muddled, with the most common mistake being to confuse this with privacy. Some responses suggested that nothing from the study can be published or that participants cannot discuss the study with anyone else. Again, there were often attempts to give examples that were limited to 'the participants in study X were kept confidential', i.e. a comment that could have applied to almost any study.

Section B

Question 7

- (a) Many candidates did quite well on this question part, although some incorrectly suggested same number of questions, which was repetition. Some candidates focused on the Dement and Kleitman study rather than the information in the question, which led them to suggest ideas such as making people sleep in a dark room or using a doorbell to wake them up.
- (b) Many candidates simply restated the question, suggesting it was to 'standardise' and others stated terms without explanation.
- (c) As above, this question part was not well answered and a small but significant number of candidates left the question out completely. The most common mistake was to assume that a structured interview has only closed questions so an unstructured interview allows for the use of open questions. This is not the case. Either question format can be asked in either interview. Linked to this problem was the tendency of candidates to say that an unstructured interview enables the researcher to collect in-depth data, without an explanation of why this is so (the key point about unstructured interviews is that they can pursue detail based on the participant's responses). Furthermore, some candidates answered correctly but did not link their answer.
- (d) Although performance on this question part was moderately good, a significant number of candidates did not earn the mark because they stated an ethical issue rather than outlining the problem.

Question 8

- (a) (i) This question part was well answered, with a wide range of extraneous variables being identified. Some common mistakes were to identify variables that would apply equally to the young and old, such as gender or there was a lack of contextualisation to old people or reduced range.
- (ii) This question part was also well answered, with some good suggestions for how to research the variable identified. Some responses did not offer suggestions for how to investigate the extraneous variable but made statements about the variable instead.
- (b) (i) Although this question part was reasonably well answered by many candidates, there were also a significant number who repeated 'volunteer' from question, thus were not outlining the term. To avoid this common error of attempting to define a concept in terms of itself, candidates must be encouraged to think about the meaning of each psychological concept to help them.
- (ii) It is important that candidates focus on advertisements, or 'invitations' to join a study, rather than simply 'posters' or 'flyers' as these do not contain the essential idea of potential participants being asked to respond.
- (c) Common mistakes included misidentification as 'repeated measures' or 'matched pairs' to the identification of a method or technique, such as self report, interview, questionnaires or field study. It is critical that candidates understand the difference between a method, a technique and an experimental design. Even when candidates correctly identified the design, they often forfeited the second mark by not explaining a way in which it was linked to Alf's study.

Question 9

- (a) Very few candidates appeared to understand that a correlation requires data on a scale.
- (b) This question part produced better answers than **9(a)**, with most candidates recognising that the question was too broad. Responses were not always focused on the concept of validity.
- (c) (i) This question part was very well answered, with most candidates earning the mark available.
- (ii) Although there were some good answers here, the majority focused on weaknesses of the questions rather than implications for the conclusion, i.e. the lack of causation. Where candidates did recognise this, it was often expressed through their understanding of the potential effect of a

'third variable', so they were able to earn marks. Candidates need to be aware that the absence of the ability of correlations to detect causality is the main reason that the experimental method is so important.

Section C

Question 10

- (a) This question part was not well answered, with many candidates appearing not to understand the concept of a 'natural experiment'. Many candidates said there was just one level of the IV – closed road (i.e. not an experiment) and many others considered the IV of road closure to be under the experimenter's control (so not 'natural'). In addition, many candidates were unable to earn credit for 'c' as they gave no details of the location of the observer or road closure. This is in contrast to the number of candidates who could name the school from which the sample would be taken. As a consequence, many responses were limited to Level 1, either because they did not identify the IV of the open/closed route or because they gave no specifics with regard to location, even though they identified the situation of 'natural' rather than being in a laboratory.
- (b) Many candidates scored at least half marks here, but others only answered part of the question, e.g. giving a problem without a solution and yet others referred to ethics or sampling (contrary to the question rubric). To avoid such common mistakes, candidates should be encouraged to read the question and underline key words.

PSYCHOLOGY

<p>Paper 9990/22 Research Methods 22</p>
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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. 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 questions which require a link. When a question includes ‘in this study’, or makes a direct reference to the scenario, the answer must 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 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 may benefit from 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 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.

Nearly all of the questions required a link to a study. These links are of different types:

- Some links are to a specific key study.
- Other links are to the information provided in the stem (the introduction) to the question.
- A link or use of any examples from any study also appears.

If a question required a link, of any type, and that link is absent, then only partial marks can be awarded. This often results in 1 mark being awarded rather than 2, and sometimes 2 marks rather than 4.

Question 10 Candidates should be able to plan a study for all methods that are on the syllabus and candidates should always read the specific requirements of the question.

Comments on specific questions

Section A

Question 1

- (a) Most candidates were able to give the aim of the Pepperberg study, stating that Alex the parrot could understand the concepts of 'same' and 'difference'. Also creditworthy was whether Alex could understand the concepts of shape/colour/matter. A small number of candidates could not state an aim or wrote about some aspect of the procedure.
- (b) Most candidates were also successful with this question part because they understood how order effects applied to this study. Explaining, for example, that if the same order of questions was always used Alex would be able to predict the answer and, by randomising the questions, it showed that Alex could really understand the concepts of 'same' and 'different'.

Question 2

Many responses could not be awarded any marks because they did not answer the questions set. Candidates need to understand the meanings of the words anaesthesia, analgesia and euthanasia. Some responses included assumptions that anaesthesia, analgesia and euthanasia are harmful to animals and should never be used. Answers like this were awarded 0 marks. Some responses were awarded 1 mark for generic comments about animals not being harmed in psychological experiments. Some answers were awarded full marks for explaining that anaesthesia or analgesia should be given to prevent pain such as during an operation on an animal, or euthanasia applied to end the animal's life if it was in pain and suffering and could not be saved.

Question 3

- (a) This question asked candidates to describe the restaurant questionnaire. Marks could be achieved in several ways: stating that it had five categories (1 mark) such as appetisers, soups etc. (+1 mark for elaboration). Alternatively, 1 mark could be awarded for stating that it included 32 dishes, with 'imagining the participant was out for a special meal' (+1 mark for elaboration). Also creditworthy was the 1–8 rating scale. Some responses achieved 0 marks for referring specifically to the liking of asparagus or eating asparagus. Crucially, this restaurant questionnaire simply asked candidates to rate the order of each item regardless of price. Responses such as 'it was formatted to look like a menu' achieved 0 marks because this was stated in the stem of the question.
- (b) Most answers were awarded 1 mark for explaining that the restaurant questionnaire looked like a menu to make it more realistic / to increase mundane realism. Other responses were awarded 1 mark for stating that it was to distract the participants from the aim of the study / to reduce demand characteristics. Some answers were not awarded an additional mark because the response did not relate to the study in question. For example, 'to increase mundane realism' which could apply to many studies rather than specifically the Laney et al. restaurant questionnaire.

Question 4

- (a) This question asked for an outline of a repeated measures design. Most responses successfully stated that it is where all participants do all/both levels/conditions of the IV, and were awarded 1 mark. A few answers outlined an independent measures design and scored 0 marks. The second available mark was awarded for an example from the Yamamoto et al. study. Stronger responses explained that each chimpanzee did both the 'can see' and 'cannot see' conditions and were awarded 1 mark. Some answers did not provide an example.
- (b) Many responses referred to a reduction in participant variables as an advantage of repeated measures design, which was awarded 1 mark, but often did not apply this advantage to the Yamamoto study. A few answers compared the advantage to using an independent measures design.

Question 5

- (a) There was only one correct answer to this question which was 'negative correlation' (although inverse correlation was also acceptable). Many responses were awarded the 1 available mark.
- (b) There were two examples of negative correlations in core studies. Firstly, there was a negative correlation between the AQ (autism questionnaire) and the eyes test. Secondly, there was a negative correlation of -0.66 between intensity ratings and normative valence in the Canli et al.

study. This was a 'suggest' question and so any negative correlation could receive credit. Possible answers were a negative correlation between an increase in emotional intensity and a decrease in the number of pictures recalled in the Canli et al. study, for example. Some responses referred to potential *positive* correlations which were incorrect.

Question 6

Candidates need to understand that a natural experiment is where the independent variable occurs spontaneously. It can be conducted in the natural environment and could also be conducted in a laboratory. This did not seem to be fully understood by all candidates. Many candidates used the Piliavin et al. study as an example but were often confused by what was natural and what was manipulated. For example, the conditions of 'black' and 'white' could not be manipulated but the conditions of 'drunk' and 'ill' could be. Most responses could be awarded marks for writing that a naturalistic observation takes place in a normal environment with no variables being manipulated. The most common example was of children playing in a school playground.

Section B

Question 7

- (a) Nearly all responses correctly suggested a closed question that related to one of the three topic areas identified in the question and were awarded 1 mark. A closed question must also include answer options, such as a simple yes or no, or options that related to one of the three topic areas. Candidates needed to include answer options to be awarded the 1 mark allocated to this component. The question stated that a rating scale could not be used so any responses with a rating scale could not be given credit. For the open question, many responses included 'describe', or 'explain why?' when asking about the topic areas in the question which was awarded 1 mark. 'Describing' or 'explaining why' requires more than a one-word answer which is what makes it an open question. Some responses were open questions which could be answered with a single word and so could not be awarded any marks.
- (b) This question asked for two strengths of a semi-structured interview. Two common correct strengths were that many questions are the same for all participants which makes the data reliable / the study replicable (the structured part of the semi-structures) and that new or additional questions can be asked to participants, so they are tailored to each individual participant. Candidates should avoid making assumptions, for example assuming that both quantitative and qualitative data would be gathered automatically. This is not the case because all the questions in a semi-structured interview could be closed, or open. Responses which referred to the interview being both subjective and objective were incorrect.
- (c) (i) To be awarded the 2 available marks candidates needed to refer to *all* participants from the university, how those participants would be included (for example putting all names in a hat) and how participants were chosen (such as drawing 50 names out of the hat). A few candidates explained opportunity sampling rather than random sampling which could not be credited.
- (ii) An advantage of using random sampling is that it is more likely to be representative, more generalisable, and that it is not biased. Generic answers like this were awarded 1 mark. The second available mark required the advantage to be related to James' semi-structured interview.

Question 8

- (a) (i) Most responses were awarded 1 mark for explaining that irrelevant questions are useful in reducing demand characteristics / so the aim of the study could not be identified. This answer is correct, but it is generic (could apply to any study), a link to Olive's plan was needed for the second mark to be awarded (forgetting in old people).
- (ii) As in **Question 8(a)(i)**, candidates needed to link their answers to Olive's plan. Most responses identified deception as being the ethical guideline broken but did not go on to relate this to the old people or their forgetting.
- (b) (i) This question invited candidates to suggest one variable that could affect memory in old people. Any reasonable answer that could be justified in **part 8 (b)(ii)** was awarded 1 mark. Answers included whether they lived alone, how active they are, whether they took medication, and their

mental state such as having dementia. Gender was also suggested and awarded credit if justified in **8(b)(ii)**.

- (ii) This question part required an explanation of how the variable identified in **8(b)(i)** affected memory in old people. For example, if 'how active they are' was suggested, then an explanation might be that 'if they are active they might use their memories more' (1 mark) such as remembering a bus timetable (+1 mark). Alternatively, if the old person is taking medication then a side effect might affect memory (1 mark) perhaps making them more sleepy or drowsy and so impairing memory (+1 mark).

Question 9

- (a) The most appropriate measure of central tendency for 'personality' is the mode, with no other measure being relevant. The most appropriate measure for 'shyness' is the median (although the mean is also creditworthy). The mode would be inappropriate for shyness.
- (b) There was 1 mark available for this question. The most appropriate type of graph to display the results for 'personality' would be a bar chart/graph, which most candidates stated. No other type of graph would be appropriate.
- (c) The correct answer was to label the y-axis with 'frequency/number of responses'; the x-axis with 'score on shyness scale' (or just shyness would have been sufficient) and to draw a symmetrical normal distribution shape. This question was often answered incorrectly. Misconceptions included: the axes labelled incorrectly; not knowing the symmetrical normal distribution shape, and applying bar charts, scatter graphs and other incorrect drawings.

Section C

Question 10

- (a) This question required candidates to design a laboratory experiment. This meant that the inclusion of a number of essential features was required such as an IV, a DV and controls. The strongest responses identified the IV as intelligence but went on to explain that intelligence would be divided into high or low scores and further that 'high' would be over 140 and 'low' under 140, for example. Weaker responses often stated 'the IV is intelligence' without elaborating further. The DV was also explained by top band answers often by stating exactly how concentration would be measured. Stronger answers included a number of controls, often general details such as situational variables that could be controlled in a laboratory and also more specific details such as the number of words on the concentration task and how long the task lasted for. The strongest answers often referred to the participants and how they were selected, the experimental design, and how ethics would be maintained. Each of these were explained rather than just identified. For example, rather than 'the experimental design was independent measures', the strongest answers would go on to say that this was because a participant could either be in the 'high' intelligence group or the low intelligence group, but not both.
- (b) Incorrect responses included suggesting that ethics or the sample was a limitation, as these were excluded by the question.

PSYCHOLOGY

<p>Paper 9990/23 Research Methods 23</p>
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Key messages

- Candidates are advised to read the question carefully and underline the key ideas. This would prevent issues such as:
 - Describing how a procedure is conducted rather than following the command word in the question e.g. to define a meaning
 - Offering incomplete explanations
 - Giving inappropriate examples.
- Candidates are advised to link their response to the scenario or study in order to earn full credit.

General comments

Candidates on this paper demonstrated some difficulty with a number of methodological concepts. These included test-retest reliability and inter-observer reliability, the exact nature of a semi-structured interview, the importance of rewards as an ethical issues in relation to research and the precise details of what constitutes a field experiment.

Comments on specific questions

Section A

Question 1

- (a) There were many good answers to this question part. Where responses did not earn credit, this was most often because the candidate gave an incomplete explanation, omitting to include that one of each pair is allocated to each condition.
- (b) Following a good understanding of the concept of a matched pairs design, this question part was well answered. Effective responses were given through both the 'order effects' route and the 'demand characteristics' route, often with good detail.

Question 2

- (a) The majority of candidates described how to calculate a range, rather than defining what the term 'range' meant.
- (b) This question part was very well answered – since the majority of candidates had (incorrectly) demonstrated in **part (a)** that they understood how to calculate the range. Some did not earn full credit as they repeated their response to **part (a)** without linking it to the study as required by the rubric.

Question 3

- (a) Although many candidates demonstrated some understanding of the concept of test-retest reliability, many were unable to give an effective description of the technique, often limiting their response to 'repeating the study' without mentioning the use of the same procedures etc., or mentioning comparisons explicitly.

- (b) The concept of inter-observer reliability was not well understood. The majority of candidates stated that the more observers there are, the more reliability there will be. Many responses were limited to 'comparing' scoring, without indicating that this only measures inter-rater reliability, it does not improve it. The central ideas of improving agreement, through discussion of differences, refining operational definitions etc. were typically absent from responses.

Question 4

- (a) Responses to this question part were generally good, although many candidates gave examples from outside the social approach, so were unable to gain the second mark.
- (b) Good attempts were made at reporting a main conclusion here.

Question 5

Most candidates gained one or two marks in response to this question. Where marks were not earned, candidates tended to have made one of two mistakes. A small number mis-identified the type of interview or gave irrelevant responses. A larger proportion were unable to state explicitly that there were both fixed questions and those which depended on the boy's responses.

Question 6

This question was fairly well answered, with most candidates gaining at least half marks. Responses relating to housing were generally better than the section about rewards. In relation to housing, candidates were often able to give good detail about the need to keep social animals in groups/solitary animals alone, and to give relevant examples. With regard to rewards, many candidates incorrectly stated that animals should be rewarded 'to thank them' for participating in a study or because that was the only way to observe animals behaving in a study.

Section B

Question 7

- (a) Candidates often gave incorrect responses describing the use of a 'natural environment' rather than 'normal environment for the behaviour'. Some candidates understood that a field experiment was still an 'experiment' with a manipulated IV and (a measured) DV. A minority incorrectly suggested that there could be no controls.
- (b) (i) This question part elicited some good answers although some responses were too minimal to earn credit such as 'by observation' (observing what as a measure?) or suggested what would be measured (such as the specific behaviour) but did not then provide a 'measure' (such as how often it was performed).
- (ii) Many candidates appeared to have misunderstood the question, with responses focusing on lack of controls rather than practical difficulties of measurement in a field situation.

Question 8

- (a) This question part was generally well answered with a wide variety of acceptable answers.
- (b) This question part was also generally well answered, with only a small number of candidates offering statements that were not hypotheses and few giving experimental rather than correlational ones.
- (c) This question part was generally well answered. Where full marks were not earned, this was typically because the candidate had not linked their answer to the scenario.
- (d) Although there were some very strong answers to this question, many candidates were unable to explain the role of the spread of points around the line of best fit and fewer still were able to link their response to the question.
- (e) There were some good answers to this question part, which focused on why causal conclusions cannot be drawn from correlational research. Only some of the candidates giving this correct

response were able to link this effectively to the scenario. Other candidates 'added' to the stem, suggesting that the friend had obtained contradictory results.

Question 9

- (a) Many candidates were able to give a response that was linked to the question.
- (b)(i) This question part was very well answered with most candidates offering a means to recruit participants with detail. Where this was not the case, responses tended to describe the use of 'flyers' or 'posters' without the critical information about these *advertising* for participants.
 - (ii) This part was also well answered, with a variety of routes being used to earn full marks.
 - (iii) This final part of (b) was also well answered, again, with a variety of answers earning full marks.
- (c) As the responses to all parts of (b) had been effective, many candidates could understand a problem with generalisation, so were also able to answer this part well.

Section C

Question 10

- (a) In response to this question, there were some very strong answers in terms of the behaviours candidates suggested to observe. This creative engagement with the question facilitated thoughtful responses in terms of observational techniques and many candidates demonstrated good use of relevant terminology in this respect.
- (b) The strength of the engagement with the scenario in **part (a)** led candidates to produce good responses in **part (b)**.

PSYCHOLOGY

Paper 9990/31
Specialist Options: Theory 31

Key messages

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

It is important that candidates are made aware of the terminology, theories, disorders and measures identified in the syllabus as some were unable to identify and/or fully define the disorder, measure or theory given in these types of questions. Creating a glossary of key terms, revision of terminology/theories using flash cards and class quizzes on terminology/theories could prove useful. These questions are worth 2 marks and a brief response is appropriate.

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

These questions could ask the candidate to describe a theory, study, technique or self-report used by psychologists that is named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies, such as the procedure or results, or a summary of the key features of the study. This question is worth 4 marks and the candidates should write a more extended answer. It would be helpful for candidates to create a revision flashcard or mind map of each bullet point in the syllabus. The flashcard should be given the title used in the syllabus, for example, Obsessive-compulsive and related disorders: explanations of obsessive-compulsive disorder: psychodynamic. This will help the candidate identify which part of the syllabus the question is referring to as some candidates described the incorrect study or theory. For studies, the candidate should learn the aim, sample (sampling method if known), method, procedure, two results (if possible) and conclusion. This will ensure that the candidate can either answer a question that asks for an outline of the study or a part of the study, such as the results.

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

These questions could require the candidate to explain up to two strengths or weaknesses of what they have described in **part (b)** of the question. The question could also ask the candidates to make a comparison or to evaluate using a specific issue. This question is worth 6 marks so the candidate should write a more extended answer for each issue raised. Some responses were very detailed for one issue but then only briefly discussed the second issue. In addition, many of the responses were generic and not specific to the study or theory named in the question. To improve, responses should give specific examples to support their point. As mentioned for **part (b)** of the odd numbered questions, the candidate should make flashcards/revision notes and include strengths and weaknesses of the theory, study, technique and self-report to help prepare for these questions.

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

This question comes from one of the bullet points in the syllabus. Candidates could describe the three (or four) studies, theories, characteristics/explanations/treatments of disorders or techniques identified in the syllabus under the appropriate bullet point. For this exam, some of the answers used the incorrect topic area in the syllabus or the description was brief. It is possible for the response to achieve full marks by describing at least two of the studies, theories, characteristics/explanations/treatments of disorders or techniques and this would need to be a very detailed description. It could be useful for candidates to create revision notes, with the title of each bullet point as the header. Alternatively, candidates could create a mind map and put the bullet point in the centre.

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

This question asks the candidate to evaluate the studies, theories, characteristics/explanations/treatments of disorders 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 be considered to have presented a range of issues to achieve the top band. Most responses that evaluated using two issues in this exam, achieved in the lower bands due to the response being superficial and often with little analysis. Some responses that considered three issues tended to achieve higher marks as these responses were able to demonstrate comprehensive understanding with good supporting examples from the studies, theories, characteristics/explanations/treatments of disorders or techniques described in **part (a)** of the answer.

The candidate must also provide some form of analysis. This could be done by discussing the strengths and weaknesses of the issue being considered, presenting a counter-argument to the issue under discussion or comparing the issue between two studies and/or theories. The response needs to explain the comparison/strength/weakness or counter-argument with examples from **part (a)** of the question. It was common for responses to state that two theories, for example, were similar or in contrast for an issue without any explanation as to why they could be compared in this way. This is limited analysis. A conclusion at the end of each issue would be helpful to show excellent understanding of the issue under discussion. In order to achieve the requirements of the Level 3 and 4 band descriptors it would be best to structure the response by issue rather than by study and/or theory. It would also be ideal for the response to start with the named issue to make sure the answer covers this requirement of the question.

A small minority of candidates did not evaluate using the named issue. Quite a few of the answers were structured by study/theory/treatment rather than by the issue which often led to the response being quite superficial and repetitive. A number of the responses included analysis. Candidates should be aware this question is worth 10 marks and so they need to include an appropriate amount of information.

General comments

The marks achieved by candidates for this session of the 9990 syllabus achieved across the full range of the mark band. Some responses showed good knowledge, understanding and evaluation. Other responses did not appear to be as well prepared and showed limited knowledge and understanding with brief and sometimes anecdotal answers, with limited evaluation.

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

The questions on abnormality were the more popular choice of option, followed by health and consumer behaviour.

Comments on specific questions

Psychology and abnormality

Question 1

- (a) There were many strong responses to this question which asked for an outline of two common compulsions of body dysmorphic disorder (BDD). Popular responses included reference to mirror gazing and comparing appearance to others. There were a number of responses that outlined obsessions, such as constant worrying about appearance, rather than compulsions, which were not creditworthy. A few responses gave four or five correct compulsions which did achieve full marks but left less time for the candidate to answer the other questions in the exam.
- (b) The marks for this question covered the full range of marks available. Some responses gave a clear and accurate description of the psychodynamic explanation for obsessive-compulsive disorder (OCD).

Common details included explaining the conflict in the anal psychosexual stage between the parent(s) and child during potty training. In addition, full mark responses gave details of how this led to fixation at the anal stage because of unresolved conflict. Finally, some explained why this fixation then led to obsessions and compulsions later in life, such as an ego defence mechanism. Weaker responses often lacked detail and briefly described the conflict in the anal stage and identified that children can become either anally expulsive or anally retentive. Weaker responses

frequently did not explain that the child becomes fixated at this stage and why this would lead to the development of OCD in later life. Some responses incorrectly outlined the Oedipus complex as the explanation for OCD which was not creditworthy. In addition, some outlined a behavioural explanation rather than psychodynamic which was also not creditworthy.

- (c) The vast majority of responses were able to identify a difference between the psychodynamic explanation and genetic explanations for OCD. Many could also identify a similarity. Common responses which frequently achieved Level 2 band or higher included the similarities of determinism and the influence of parents on the development of OCD. Popular differences were nature versus nurture and reductionism versus holism. The strongest responses briefly outlined the similarity/difference and then gave an example from each explanation. Weaker responses often lacked detail in the examples and some simply stated that psychodynamic supported the nurture side of the debate whereas genetic explanations supported nature with no examples given, which could only achieve a Level 1 mark. Responses that identified the behavioural explanation in **part (b)** achieved poorly in the response to this question. Some responses outlined the explanations without giving any comparison which was not creditworthy.

Question 2

- (a) Responses varied for this question and covered the full range of the marks available. Some responses highlighted how well prepared some of the candidates were for this exam whereas others showed very limited knowledge of the treatment and management of impulse control disorders and non-substance addictive disorder. The strongest responses frequently gave clear details of the studies on biochemical treatment by Grant et al. and covert sensitisation by Glover. Weaker responses often attempted to outline the four treatments in the syllabus and frequently gave very few details of the studies and/or treatments and therefore achieved in the Level 1 or Level 2 mark band. A few candidates identified SSRIs as a treatment but often were not able to describe this treatment in any depth. No explanation was given for how SSRIs work and/or how they would treat the symptoms of impulse control disorders. Some responses outlined applied tension which is a treatment for blood phobia and was not creditworthy for this question.
- (b) The majority of responses were able to achieve some marks for this question. Most covered the named issue of nature versus nurture. Other common evaluation issues included generalisability, determinism versus freewill, reductionism versus holism and appropriateness of treatment (often with reference to effectiveness, cost, time and side effects). Level 2 and above responses were able to give examples from **part (a)** of their response. Level 3 and 4 responses often achieved this as they were able to explain why one of the treatments could be considered to support both nature (the patient's symptoms have developed due to genetics) and nurture (the patient is able to learn techniques to manage their symptoms). These types of responses continued with similar analysis for the other evaluation issues in their answer.

Level 1 responses frequently identified whether the treatment supported the issue (such as nature or nurture) with no example. It was common when reductionism was covered for the response to simply list the other treatments and state that the treatment did not consider them. Many did limited analysis by correctly identifying if the treatments were 'similar' or 'in contrast' for the issue under discussion.

Psychology and consumer behaviour

Question 3

- (a) Most responses that were creditworthy achieved 1 mark by outlining that 'behaviour constraint' is caused by personal space being invaded. A small number of responses achieved full marks by outlining the effect of personal space invasion on the consumer's behaviour such as the customer feeling uncomfortable and leaving the shop. Some responses stated that behavioural constraint is where behaviour is affected or avoided due to the situation or attempted to outline one or more zones of personal space. Neither of these types of responses were creditworthy.
- (b) There were some strong responses to this question with clear details given of Dayan and Bar-Hillel's study 2 (the field experiment) about primacy, recency and menu item position. Common details included the location/sample, independent variable (types of menus), method, and a result. Weaker responses often had less detail with some identifying the location/type of restaurant and giving a result. It was common for some responses to achieve 1 mark by stating that the items at

the top and bottom of the menu were chosen the most frequently. There were a lot of inaccuracies with the details of this study, although no candidate attempted to outline study 1. In addition, a small number of responses outlined the study by North et al. on music in restaurants which was not creditworthy.

- (c) The vast majority of responses were able to identify at least one strength and the marks awarded covered the full range of the mark band. Common strengths included ecological validity, generalisability, lack of demand characteristics and good agreement between study 1 and 2 as the results supported one another. Strong responses identified the strength, explained this with an example from the study and frequently stated the effect this had on validity. Weaker responses were often less well developed and either did not give a clear example from the study by Dayan and Bar-Hillel's or did not explain why the issue raised was a strength. Some responses that achieved 0 marks in **part (b)** achieved 1 mark in this question by explaining that the study had a good ecological validity as it was done in the natural environment. These types of responses often then gave incorrect examples or were very brief. A few responses did explain weaknesses of the study which was not creditworthy.

Question 4

- (a) There were some strong responses to this question. Some provided clear details of models, strategies and marketing theories about consumer decision-making. Stronger responses often gave good explanations of the models (utility, prospect and satisficing) and attempted the strategies. Sometimes the strategies were confused although just mislabelling the strategies could still achieve a high-level mark. Few responses covered the marketing theories. In addition, responses that described marketing mix models: McCarthy – the 4 Ps and/or Lauterborn – the 4 Cs or any of the communication and advertising models were also given credit in response to this question.

Weaker responses often lacked detail of each model, strategy and/or theory or included some theories from other parts of the syllabus which were not creditworthy as they were not linked to consumer decision-making. There were a significant number of candidates who did not attempt this question.

- (b) If the response outlined creditworthy material in **part (a)** then the vast majority were able to access marks in this part of their answer. Most creditworthy responses attempted to address the named issue of generalisations. This was frequently done in a superficial manner where the response simply stated that the theories were 'Western' and therefore not generalisable. There were a few stronger responses for this evaluation issue that gave good examples of how customer decision-making can be affected by culture and/or instances where culture does not play a role in decision-making. Other common issues included reductionism versus holism and applications to everyday life. There was a significant number of responses that only attempted the named issue and therefore could not achieve more than 4 marks. Similarly to **part (a)**, there were a significant number of candidates who did not attempt this question.

Psychology and health

Question 5

- (a) There were many clear responses to this question. Common recording devices identified included fMRI, blood pressure monitor and heart monitor. Some responses attempted to outline how the recording device measures stress but this was not necessary as the question was asking the candidate to identify the device. A significant number of responses identified biochemical tests rather than recording devices, such as blood, urine and saliva tests. These types of responses were not creditworthy. In addition, a small number of responses outlined psychological measures which were also not creditworthy.
- (b) There were a small number of strong responses to this question. A few were able to accurately describe some of the details of the study by Friedman and Rosenman on psychological measures of stress. Common details included the sample, outline of type A and type B personality, procedure and a result. Weaker responses often outlined the personality types and gave a result. A significant number of responses described the incorrect study by Holmes and Rahe and were not creditworthy.

- (c) If the candidate achieved marks in **part (b)**, they were able to explain one and sometimes two weaknesses of the Friedman and Rosenman study. Common weaknesses included generalisability, validity of measurement used to determine Type A/B in the study and reductionism (dividing participants into Type A/B and assuming cause and effect relationship). Stronger responses identified the weakness and were able to give a clear example from the study. Weaker responses frequently identified the issue but lacked examples. A significant number of responses did not achieve marks due to not knowing the study.

Question 6

- (a) The responses to this question covered the full range of the mark scheme. Stronger responses gave clear and often detailed descriptions of strategies for promoting health. The study on fear arousal by Janis and Feshbach was often described in depth with details of the sample, procedure and a result. Weaker responses gave fewer details or incorrectly stated that the strong fear condition saw the highest conformity to dental hygiene when it was the minimal fear condition that had the highest conformity. There were also a number of good descriptions of the study on fear arousal by Cowpe and the Yale model of communication with examples linking the model to promoting health. Weaker responses gave fewer details of the Cowpe study often just stating it involved an advertising campaign and that the chip pan fires reduced. In addition, Level 1 and Level 2 responses that outlined the Yale model of communication did not make it relevant to promoting health. Responses that covered the study on providing information by Lewin frequently gave fewer details and/or there were inaccuracies in the description.
- (b) Most responses achieved Level 1 or Level 2 for this question. Some discussed the named issue of quantitative versus qualitative data. A significant number of responses did not discuss this issue and therefore credit was limited. Stronger responses were structured issue by issue and gave examples from the studies and model covered in **part (a)**. Some attempted analysis and were able to identify whether the studies were similar or different in terms of the issue being discussed. Few candidates attempted to explain the comparison point made or reach any conclusion. A common evaluation issue included practical applications although this frequently just involved the response re-stating the strategy without evaluating whether it would be practical to be used by schools, governments, health services, parents, etc. A small number of responses included good analysis where they explained how two or three of the strategies could be implemented and the problems with implementation. Reductionism versus holism was frequently supported by clear examples. The response often argued that the strategy was either fully 'reductionist' or fully 'holistic' without considering how it could be somewhat reductionist/holistic. Cultural differences was sometimes covered well with clear examples. There was some confusion for some candidates regarding the Yale model of communication where the candidate attempted to evaluate it as a 'study' rather than a model. There were a significant number of candidates who did not answer this question.

Psychology and organisations

Question 7

- (a) There were a variety of responses to this question with many being able to identify two qualities of good followers from Kelley's theory. Many identified the qualities directly from Kelley's theory including self-management, commitment, competence and courage. Some responses outlined two of the qualities which was creditworthy. Some candidates did not know the theory and simply stated that followers are 'people who follow orders' which was not creditworthy.
- (b) The marks for this question covered the full range of the mark band. Strong responses referred to the ability of situational leaders to adapt to group maturity and type of task. These responses then described the four types of appropriate leadership for different levels of maturity and types of tasks which demonstrated good knowledge of this topic. Weaker responses were frequently brief and identified the leader adapting to the group or the maturity of the group. These responses sometimes identified one or two of the types of leadership and were sometimes inaccurate and/or included reference to other leadership theories such as Heifetz's adaptive leadership which was not creditworthy. Some candidates did not know this theory and just contrasted it with traditional leadership which was also not creditworthy.
- (c) Candidates who had some knowledge of situational leadership in **part (b)** of their response were able to achieve some marks for the strength and weakness explained. Common strengths included application to everyday life and generalisability. A common weakness included difficulty with using

the theory with a group where some members are mature and others less mature. Another weakness explained in some responses was that not all leaders will have the ability to switch between different leadership styles. Strong responses outlined the strength/weakness and then gave a clear example from situational leadership. Weaker responses were often very brief with little explanation as to why the point raised is a strength or a weakness. Candidates who did not achieve marks in **part (b)** were often unable to identify any creditworthy strengths or weaknesses. Some summarised what they had written in **part (b)**, which was not creditworthy.

Question 8

- (a) There were some strong responses to this question where the candidate outlined cognitive theories about motivation to work. These responses frequently gave a very clear description of Latham and Locke's goal setting theory, with examples, which sometimes included SMART targets. Equity theory was often less detailed but accurate. Those responses that attempted VIE theory frequently used the correct terms but found it difficult to describe each part of the theory. Weaker responses that achieved either Level 1 or Level 2 for this question sometimes just outlined goal setting theory. Others gave a brief outline for each with a lot of inaccuracies in their response, especially for VIE theory. Some responses were anecdotal and very brief with an outline of types of goals that should be given to employees in an organisation. Other responses outlined some of the need theories of motivation such as Maslow and/or McClelland which was not creditworthy.
- (b) The marks for this question were commonly in Level 1 and Level 2. Most responses attempted the named issue of individual and situational explanations and applied it to the theories described in **part (a)**. Few examples were given in responses other than stating that the theory was either seen as 'individual' or 'situational' without any explanation or example to back up the points given. Another common issue raised was application to everyday life. The response frequently just restated the theory that they had described in **part (a)** rather than discussing the benefits to an organisation of the theory or the problems there might be in implementing the theory. Reductionism versus holism was also a common evaluation point. This was frequently just to identify that a theory was 'reductionist' followed by a statement that the theory did not take into account the other two theories which were then listed. Very few responses attempted to explain why they thought a particular theory was reductionist or holistic. Some responses did not raise any evaluation issues and instead described one or more of the cognitive theories which was not creditworthy.

PSYCHOLOGY

<p>Paper 9990/32 Specialist Options: Theory 32</p>
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Key messages

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

It is important that candidates are made aware of the terminology, theories, disorders and techniques identified in the syllabus as some were unable to identify and/or fully define the disorder, technique or theory given in these types of questions. Creating a glossary of key terms, revision of terminology/theories using flash cards and class quizzes on terminology/theories could prove useful. These questions are worth 2 marks and a brief response is appropriate.

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

These questions could ask the candidate to describe a theory, study, technique/treatment or self-report used by psychologists that is named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies, such as the procedure or findings, or a summary of the key features of the study. This question is worth 4 marks and the candidates should write a more extended answer. It would be helpful for candidates to create a revision flashcard or mind map of each bullet point in the syllabus. The flashcard should be given the title used in the syllabus, for example, Bipolar and related disorders: explanations of depression learned helplessness/attributional style – Seligman. This will help the candidate identify which part of the syllabus the question is referring to as some candidates described the incorrect study or theory. For studies, the candidate should learn the aim, sample (sampling method if known), method, procedure, two findings (if possible) and conclusion. This will ensure that the candidate can either answer a question that asks for an outline of the study or a part of the study, such as the findings.

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

These questions could require the candidate 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 candidate should write a more extended answer for each issue raised. Some responses were very detailed for one issue but then only briefly discussed the second issue. In addition, many of the responses were generic and not specific to the study or theory named in the question. To improve, responses should give specific examples to support their point. As mentioned for **part (b)** of the odd numbered questions, the candidate should make flashcards/revision notes and include strengths and weaknesses of the theory, study, technique/treatment and self-report to help prepare for these questions.

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

This question comes from one of the bullet points in the syllabus. Candidates could describe the three (or four) studies, theories, characteristics/explanations/treatments of disorders or techniques identified in the syllabus under the appropriate bullet point. For this exam, some of the answers used the incorrect topic area in the syllabus or the description was brief. It is possible for the response to achieve full marks by describing at least two of the studies, theories, characteristics/explanations/treatments of disorders or techniques and this would need to be a very detailed description. It could be useful for candidates to create revision notes with the title of each bullet point as the header. Alternatively, candidates could create a mind map and put the bullet point in the centre.

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

This question asks the candidate to evaluate the studies, theories, characteristics/explanations/treatments of disorders 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 be considered to have presented a range of issues to achieve the top band. Most responses that evaluated using two issues in this exam, achieved in the lower bands due to the response being superficial and often with little analysis. Some responses that considered three issues tended to achieve higher marks as these responses were able to demonstrate comprehensive understanding with good supporting examples from the studies, theories, characteristics/explanations/treatments of disorders or techniques described in **part (a)** of the answer.

The candidate must also provide some form of analysis to access Level 2 and above. This could be done by discussing the strengths and weaknesses of the issue being considered, presenting a counter-argument to the issue under discussion or comparing the issue between two studies and/or theories. The response needs to explain the comparison/strength/weakness or counter-argument with examples from **part (a)** of the question. It was common for responses to state that two theories, for example, were similar or in contrast for an issue without any explanation as to why they could be compared in this way. This is limited analysis. A conclusion at the end of each issue would be helpful in order to show excellent understanding of the issue under discussion. In order to achieve the requirements of the Level 3 and 4 band descriptors, it would be best to structure the response by issue rather than by study and/or theory. It would also be ideal for the response to start with the named issue to make sure the answer covers this requirement of the question.

A small minority of candidates did not evaluate using the named issue. Quite a few of the answers were structured by study/theory/treatment rather than by the issue which often led to the response being quite superficial and repetitive. A number of the responses included analysis. Candidates should be aware this question is worth 10 marks and so they need to include an appropriate amount of information.

General comments

The marks achieved by candidates for this session of the 9990 syllabus achieved across the full range of the mark band. Some responses showed good knowledge, understanding and evaluation. Other responses were not as well prepared and showed limited knowledge and understanding with brief and sometimes anecdotal answers with limited evaluation.

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

The questions on abnormality were the more popular choice of option, followed by health and organisations.

Comments on specific questions

Psychology and abnormality

Question 1

- (a) There were many strong responses to this question which asked for an explanation of 'mania'. Common responses included euphoria, rage/irritability and engaging in risky behaviour. Some responses confused bipolar disorder with mania and explained that 'mania' meant both the euphoric period as well as the depressive period which is incorrect. Some responses explained pyromania and kleptomania which was also not creditworthy.
- (b) The marks for this question covered the full range of marks available with some responses showing good knowledge of the study by Seligman et al. on depression and attributional style. Common details covered in many responses included the sample, how the data was collected (Attributional Style Questionnaire and Beck Depression Inventory), procedure and a result. Weaker responses included less detail or there were some inaccuracies. For example, some stated that the control group also underwent therapy which was incorrect. Some responses outlined the Seligman study on learned helplessness which used dogs or gave an explanation of attributional style without any reference to the study. These types of responses were not creditworthy.
- (c) Candidates who attempted this question often achieved in the Level 1 or Level 2 mark band. Common points regarding the effectiveness of the controls used in the study were validity and

reliability with reference to standardisation of the self-reports used in the study. Stronger responses identified a control used in the study, such as all participants being given the attributional style questionnaire. These responses then explained how this made the study more reliable and/or valid and why. Many responses referred to the control group used but were often unable to comment on whether this was an effective control. Some responses referred to social desirability in completing the ASQ and BDI. This was a creditworthy response although few were able to explain how some of the participants may have given socially desirable responses and others may not have, or that levels of social desirability from an individual participant could have varied throughout the length of the study meaning this control was less effective. Weaker responses frequently did not give examples to explain the point raised or fully explain why the control identified was effective or not. There were a significant number of candidates who did not attempt this question.

Question 2

- (a) Responses varied for this question and covered the full range of the marks available. The genetic explanation was the most detailed with many responses providing a clear outline of the study by Gottesman and Shields. Many responses included details of the procedure and results. The biochemical explanation (dopamine hypothesis) was also often clearly described and included details on the areas of the brain linked to positive and negative symptoms as well as the study by Lindstroem et al. on the effects of L-Dopa on people with schizophrenia compared to those without. Strong responses often gave a concise summary of the cognitive explanation, including the study by Frith. Weaker responses often lacked detail and/or there were inaccuracies. Some responses stated that schizophrenia occurs in 48% of monozygotic twins and 9% of dizygotic twins rather than referring to the concordance rates. Although the question was on explanations of schizophrenia and delusional disorder, some responses gave a lot of details of the symptoms of schizophrenia as well as outlining the study by Freeman on symptom assessment using virtual reality. Neither of these responses were creditworthy.
- (b) Similar to **part (a)**, there was a variety of responses to this question and the marks achieved were frequently Level 1 and Level 2. Most responses included the named issue of nature versus nurture and there were many that included clear examples and some analysis. Level 3 and above responses often gave clear counter-arguments that the explanations could be considered to support both nature and nurture. For example, the genetic explanation supports nature due to the 48% concordance rate between monozygotic twins. However, as the concordance rate is not 100% this shows that nurture can also be seen as a contributing factor. Other common evaluation issues included determinism versus free-will and reductionism versus holism. Strong responses were structured by issue and gave specific examples from the explanations outlined in **part (a)** to support their discussion. Weaker responses were usually structured by explanation and often lacked examples and simply stated which side of the debate the explanation supported. Reductionism was frequently discussed by stating that the explanation was reductionist and then the response stated that the explanation did not consider the other two explanations. These responses sometimes indicated comparisons between the explanations but offered no reasoning for the comparison. Some responses used the evaluation issue of generalisability and attempted to argue that as the Gottesman and Shield's study had twins it was not generalisable. This point was not creditworthy as the researchers did not intend for their results to be generalisable beyond twins.

Psychology and consumer behaviour

Question 3

- (a) Some of the responses to this question were able to define 'involvement' as a marketing theory. Full mark responses were able to outline that involvement is the amount of cognitive effort put into decision-making related to the importance of the product to the consumer and gave an example. 1 mark responses typically either identified cognitive effort or the importance of the product but did not link this to consumer decision-making and/or marketing of a product. Many of the responses did not know what the term meant and gave a generic definition. A common incorrect response was that involvement is how involved the consumer or the seller is in the marketing of the product which was not creditworthy.
- (b) There were some good responses to this question with 2 findings given from the study by Hall et al. on choice blindness. Full mark responses often outlined the 32% detection rate for tea and 33% detection rate for jam. Responses that gave a numerical result or made a clear comparison

between the levels of one of the independent variables (such as those with or without a gift incentive) were both awarded full marks for each result.

Weaker responses often included one result or did not give numerical results or make a clear comparison between the levels of one of the independent variables.

Some responses gave a full outline of the study by Hall et al. and were credited for any correct result given. Details of the sample, method, procedure etc. were not creditworthy. A significant number of responses did not know the study and gave a confused response stating that consumers showed 'choice blindness' in the study which was also not creditworthy.

- (c) The vast majority of responses were able to give an outline of at least one strength and/or weakness. Common points raised included ethics, ecological validity, reliability, demand characteristics and generalisability. Some evaluation points were able to be credited as both a strength and a weakness, such as explaining the ethical guidelines met in the study (strength) and the ethical guidelines broken (weakness). Strong responses identified the strength/weakness, explained this with an example from the study and frequently stated the effect this had on validity or reliability. Weaker responses were often less well developed and either did not give a clear example from the study by Hall et al. or did not explain why the issue raised was a strength/weakness. Candidates who achieved 0 marks in **part (b)** were often awarded 0 marks for this question. Some of these responses appeared to guess that the study might have a large sample or good ecological validity and were able to access 1 mark for a brief outline of a correct strength and/or weakness. Some responses mistakenly described the study as a lab experiment, stating that it lacked ecological validity which was incorrect and not creditworthy. Some criticised the ethics, stating customers were being fooled, but failed to recognise the fact that informed consent had been gathered after the study and if customers had known that the products were being swapped then the experiment would have been meaningless.

Question 4

- (a) There were some strong responses to this question. Some provided clear details of communication and advertising models. Strong responses gave clear details of both the AIDA model and hierarchy of effects model. Some referred to the updates to the AIDA model, although this was frequently just identifying these updates. Some responses outlined either models of communication or the Yale model of communication with examples from advertising. Weaker responses lacked detail and just identified the parts of the model with no explanation or examples. This was particularly the case for the Yale model of communication and hierarchy of effects model. A number of responses included other parts of the syllabus in spite of the bullet points given in the question. Some responses outlined disrupt then reframe, sales techniques or marketing mix models which were not creditworthy.
- (b) If the response did outline creditworthy material in **part (a)** then the vast majority were able to access marks in this part of their answer. Most creditworthy responses attempted to address the named issue of reductionism versus holism with some responses giving detailed examples to back up their point as well as an attempt to compare the theories with regards to this issue. Fewer responses were able to provide good analysis by explaining how a model could be considered to be somewhat reductionist and then provide a counter-argument that it was somewhat holistic. Other common evaluation issues included practical applications, cultural and/or individual differences and determinism versus free-will. Weaker responses often attempted definitions of the evaluation issues with some success. The response then discussed the issue and applied it to all of the models together. This evaluation was very superficial. For example, some responses stated that all of the models were reductionist with no examples given. These types of responses sometimes were awarded Level 1, 1 mark, if some of the definitions given were correct.

Psychology and health

Question 5

- (a) Marks awarded for this question were varied. Some responses gave a clear outline of one behavioural technique used to improve adherence to medical advice. Full mark responses often referred to the Funhaler and outlined why this device is rewarding to children (due to the whistle and spinner). Some responses referred to the positive reinforcement provided by the Funhaler and why this then led to an improvement in adherence to using this asthma medication. Other common responses included offering monetary incentives and/or prizes for adherence with many referring to adherence to vaccinations in children. This behavioural technique was researched by Yokley and Glenwick where they investigated providing monetary incentives to encourage parents to immunise their children. 1 mark responses often just identified the behavioural technique such as the whistle and spinner in the Funhaler without explaining why this would improve adherence. Others simply stated 'to give positive reinforcement' with no example. A number of responses were not creditworthy as they outlined techniques that were not behavioural such as doctors' clothing and verbal communication.
- (b) There were some strong responses to this question with clear details given of the study by Sherman et al. on repeat prescriptions. Common details included the sample, procedural details including the interview with the patient and their parent/guardian as well as phoning the pharmacy and a result. Many responses stated that the information provided by the pharmacy was 92% accurate. Very few responses gave the result that the details from the pharmacy were a better record of adherence than those from the doctor. Weaker responses gave fewer details and/or were inaccurate. A common misunderstanding was that the purpose of the study was to improve adherence in patients rather than to track it. A significant number of responses described the study by Chung and Naya on pill counting which was not creditworthy.
- (c) If the candidate achieved marks in **part (b)**, they were able to explain one and sometimes two strengths of the study by Sherman et al. Common strengths included practical applications, ecological validity, comparisons could be made due to quantitative data and validity of the dependent variable due to the pharmacy staff not giving socially desirable responses. Full mark responses were able to outline the strength in some detail, with an example from the Sherman et al. study and explanation as to why it is a strength. Weaker responses achieved Level 1 or Level 2 as they often gave generic strengths with limited reference to the study. For example, there was high ecological validity due to it being a real hospital/clinic. Some responses gave strengths of the Chung and Naya study or outlined weaknesses. Both of these types of responses were not creditworthy.

Question 6

- (a) The responses to this question covered the full range of the mark scheme. Stronger responses gave clear and often detailed descriptions of types and theories of pain. The types of pain were best described in responses with good understanding shown of acute, chronic and psychogenic (phantom limb) pain. Some responses gave good and accurate details of Specificity theory and gate control theory of pain. A small number of responses made good use of terminology and had a very good understanding of the physiology of pain as well as what can increase or reduce pain. Weaker responses were sometimes brief, with few examples or appropriate terminology used. There were some misconceptions about types of pain such as what was an example of acute or chronic pain. Descartes' specificity theory of pain was not well described, tending to be very brief. A significant proportion of responses described methods to measure pain which was not creditworthy. A smaller number of responses described treatments for pain which was also not creditworthy.
- (b) The marks awarded to responses to this question were varied with many awarded Level 1 and Level 2 due to lack of specific examples and no or very limited analysis. Stronger responses were structured issue-by-issue and covered the named issue of practical applications. Some responses did give good examples of applications including the mirror technique for phantom limb pain and ways to close the gate with reference to gate control theory. Weaker responses that often gave very limited responses in **part (a)** gave lots of details of treatments for pain without linking any of these to the types or theories of pain. Other common evaluation issues raised included determinism versus free-will with some responses making a good comparison between having no free-will over the experience of pain, as suggested by specificity theory, and having some free-will to close the gate for gate control theory. Another issue discussed in some responses was

reductionism versus holism. This was frequently just to identify that a theory was 'reductionist' followed by a statement that the theory did not take into account the other theory. Weaker responses attempted to discuss methodological issues and referred to 'studies' that they had not described. For example, the response would state that the studies on pain had a poor sample size or good ecological validity. These types of responses were not creditworthy.

Psychology and organisations

Question 7

- (a) Many responses achieved full marks by identifying two ways that workers compare themselves to other workers, according to equity theory. Pay and status were the most common ways given in responses. Other common responses included effort, status or position within the organisation. Weaker responses often just identified pay to achieve 1 mark. There was quite a lot of over-writing here where responses were attempting to describe equity theory fully rather than focusing on the question.
- (b) The marks for this question covered the full range of the mark band, with many full mark responses. These responses identified the three needs from McClelland's need theory of achievement motivation. These responses then briefly outlined what each need meant. Weaker responses sometimes just identified the three needs or only gained partial credit for their definitions of the needs. Responses that stated the need for power is wanting to have power over others gained credit for identifying the need but not for the definition. There were very few anecdotal responses or where the candidate did not know the theory. A minority of candidates did not attempt the question.
- (c) The vast majority of responses were able to identify at least one difference between McClelland's achievement motivation theory and Maslow's hierarchy of needs. Stronger responses identified the difference and then gave examples from both Maslow and McClelland. The most common (and strong) differences given were the hierarchical nature of Maslow compared to achievement motivation and the number of levels in each model. A significant number of responses were able to achieve full marks through effective use of examples. Weaker responses were too brief and sometimes did not give clear examples from both McClelland and Maslow. The most common misunderstanding of McClelland's theory was that workers will be motivated by just one of the three needs. This is incorrect as McClelland suggests workers can be motivated by all three at the same time with one need frequently giving the highest level of motivation. A few responses attempted to identify differences without any knowledge of one or even both of the theories. These types of responses usually achieved no marks. If the candidate did not answer **part (b)**, it was common for them to also not answer this question.

Question 8

- (a) There was a range of responses to this question where the candidate described what psychologists have discovered about physical and psychological work conditions. Stronger responses gave good details of the Hawthorne studies, a summary of Einarsen's findings from the review article on bullying at work and details of the study on open plan offices by Oldham and Brass. Weaker responses gave fewer details. Some candidates gave anecdotal responses to bullying at work. These responses gave examples of bullying from an imagined work environment. Some of these answers also gave long descriptions of why someone might be bullied or be the bully at work. No reference was made to the findings from the Einarsen review article.
- (b) The marks for this question were commonly in Level 1 and Level 2 with some strong responses that achieved either Level 3 or Level 4 by giving detailed examples with analysis present throughout the response. With regards to the named issue of experiments, the strongest responses focused on the strengths and/or weaknesses of carrying out experiments such as the Hawthorne studies and Oldham and Brass, with mentions of controls, ecological validity and ways to measure the DV. A few very strong responses outlined the findings subsequent to the Hawthorne studies that reinterpreted the conclusions. These reinterpretations believed that the results in the factory could have been due to the Great Depression or fear of reprisals from managers. Other issues covered well included generalisability and individual and situational explanations. Weaker responses were often structured by study rather than issue-by-issue which led to superficial and repetitive responses. These types of answers would frequently identify the issue and then state that this was a strength or a weakness of the study without any examples or explaining the effects of

the strength. Weaker responses rarely included analysis. If it was included, it was often just stating 'similarly' or 'in contrast' with no attempt to discuss or explain the comparison.

PSYCHOLOGY

Paper 9990/33
Specialist Options: Theory 33

Key messages

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

It is important that candidates are made aware of the terminology, theories, disorders and measures identified in the syllabus as some were unable to identify and/or fully define the disorder, measure or theory given in these types of questions. Creating a glossary of key terms, revision of terminology/theories using flash cards and class quizzes on terminology/theories could prove useful. These questions are worth 2 marks and a brief response is appropriate.

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

These questions could ask the candidate to describe a theory, study, technique or self-report used by psychologists that is named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies, such as the procedure or results, or a summary of the key features of the study. This question is worth 4 marks and the candidates should write a more extended answer. It would be helpful for candidates to create a revision flashcard or mind map of each bullet point in the syllabus. The flashcard should be given the title used in the syllabus, for example, Obsessive-compulsive and related disorders: explanations of obsessive-compulsive disorder: psychodynamic. This will help the candidate identify which part of the syllabus the question is referring to as some candidates described the incorrect study or theory. For studies, the candidate should learn the aim, sample (sampling method if known), method, procedure, two results (if possible) and conclusion. This will ensure that the candidate can either answer a question that asks for an outline of the study or a part of the study, such as the results.

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

These questions could require the candidate to explain up to two strengths or weaknesses of what they have described in **part (b)** of the question. The question could also ask the candidates to make a comparison or to evaluate using a specific issue. This question is worth 6 marks so the candidate should write a more extended answer for each issue raised. Some responses were very detailed for one issue but then only briefly discussed the second issue. In addition, many of the responses were generic and not specific to the study or theory named in the question. To improve, responses should give specific examples to support their point. As mentioned for **part (b)** of the odd numbered questions, the candidate should make flashcards/revision notes and include strengths and weaknesses of the theory, study, technique and self-report to help prepare for these questions.

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

This question comes from one of the bullet points in the syllabus. Candidates could describe the three (or four) studies, theories, characteristics/explanations/treatments of disorders or techniques identified in the syllabus under the appropriate bullet point. For this exam, some of the answers used the incorrect topic area in the syllabus or the description was brief. It is possible for the response to achieve full marks by describing at least two of the studies, theories, characteristics/explanations/treatments of disorders or techniques and this would need to be a very detailed description. It could be useful for candidates to create revision notes, with the title of each bullet point as the header. Alternatively, candidates could create a mind map and put the bullet point in the centre.

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

This question asks the candidate to evaluate the studies, theories, characteristics/explanations/treatments of disorders 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 be considered to have presented a range of issues to achieve the top band. Most responses that evaluated using two issues in this exam, achieved in the lower bands due to the response being superficial and often with little analysis. Some responses that considered three issues tended to achieve higher marks as these responses were able to demonstrate comprehensive understanding with good supporting examples from the studies, theories, characteristics/explanations/treatments of disorders or techniques described in **part (a)** of the answer.

The candidate must also provide some form of analysis. This could be done by discussing the strengths and weaknesses of the issue being considered, presenting a counter-argument to the issue under discussion or comparing the issue between two studies and/or theories. The response needs to explain the comparison/strength/weakness or counter-argument with examples from **part (a)** of the question. It was common for responses to state that two theories, for example, were similar or in contrast for an issue without any explanation as to why they could be compared in this way. This is limited analysis. A conclusion at the end of each issue would be helpful to show excellent understanding of the issue under discussion. In order to achieve the requirements of the Level 3 and 4 band descriptors it would be best to structure the response by issue rather than by study and/or theory. It would also be ideal for the response to start with the named issue to make sure the answer covers this requirement of the question.

A small minority of candidates did not evaluate using the named issue. Quite a few of the answers were structured by study/theory/treatment rather than by the issue which often led to the response being quite superficial and repetitive. A number of the responses included analysis. Candidates should be aware this question is worth 10 marks and so they need to include an appropriate amount of information.

General comments

The marks achieved by candidates for this session of the 9990 syllabus achieved across the full range of the mark band. Some responses showed good knowledge, understanding and evaluation. Other responses did not appear to be as well prepared and showed limited knowledge and understanding with brief and sometimes anecdotal answers, with limited evaluation.

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

The questions on abnormality were the more popular choice of option, followed by health and consumer behaviour.

Comments on specific questions

Psychology and abnormality

Question 1

- (a) There were many strong responses to this question which asked for an outline of two common compulsions of body dysmorphic disorder (BDD). Popular responses included reference to mirror gazing and comparing appearance to others. There were a number of responses that outlined obsessions, such as constant worrying about appearance, rather than compulsions, which were not creditworthy. A few responses gave four or five correct compulsions which did achieve full marks but left less time for the candidate to answer the other questions in the exam.
- (b) The marks for this question covered the full range of marks available. Some responses gave a clear and accurate description of the psychodynamic explanation for obsessive-compulsive disorder (OCD).

Common details included explaining the conflict in the anal psychosexual stage between the parent(s) and child during potty training. In addition, full mark responses gave details of how this led to fixation at the anal stage because of unresolved conflict. Finally, some explained why this fixation then led to obsessions and compulsions later in life, such as an ego defence mechanism. Weaker responses often lacked detail and briefly described the conflict in the anal stage and identified that children can become either anally expulsive or anally retentive. Weaker responses

frequently did not explain that the child becomes fixated at this stage and why this would lead to the development of OCD in later life. Some responses incorrectly outlined the Oedipus complex as the explanation for OCD which was not creditworthy. In addition, some outlined a behavioural explanation rather than psychodynamic which was also not creditworthy.

- (c) The vast majority of responses were able to identify a difference between the psychodynamic explanation and genetic explanations for OCD. Many could also identify a similarity. Common responses which frequently achieved Level 2 band or higher included the similarities of determinism and the influence of parents on the development of OCD. Popular differences were nature versus nurture and reductionism versus holism. The strongest responses briefly outlined the similarity/difference and then gave an example from each explanation. Weaker responses often lacked detail in the examples and some simply stated that psychodynamic supported the nurture side of the debate whereas genetic explanations supported nature with no examples given, which could only achieve a Level 1 mark. Responses that identified the behavioural explanation in **part (b)** achieved poorly in the response to this question. Some responses outlined the explanations without giving any comparison which was not creditworthy.

Question 2

- (a) Responses varied for this question and covered the full range of the marks available. Some responses highlighted how well prepared some of the candidates were for this exam whereas others showed very limited knowledge of the treatment and management of impulse control disorders and non-substance addictive disorder. The strongest responses frequently gave clear details of the studies on biochemical treatment by Grant et al. and covert sensitisation by Glover. Weaker responses often attempted to outline the four treatments in the syllabus and frequently gave very few details of the studies and/or treatments and therefore achieved in the Level 1 or Level 2 mark band. A few candidates identified SSRIs as a treatment but often were not able to describe this treatment in any depth. No explanation was given for how SSRIs work and/or how they would treat the symptoms of impulse control disorders. Some responses outlined applied tension which is a treatment for blood phobia and was not creditworthy for this question.
- (b) The majority of responses were able to achieve some marks for this question. Most covered the named issue of nature versus nurture. Other common evaluation issues included generalisability, determinism versus freewill, reductionism versus holism and appropriateness of treatment (often with reference to effectiveness, cost, time and side effects). Level 2 and above responses were able to give examples from **part (a)** of their response. Level 3 and 4 responses often achieved this as they were able to explain why one of the treatments could be considered to support both nature (the patient's symptoms have developed due to genetics) and nurture (the patient is able to learn techniques to manage their symptoms). These types of responses continued with similar analysis for the other evaluation issues in their answer.

Level 1 responses frequently identified whether the treatment supported the issue (such as nature or nurture) with no example. It was common when reductionism was covered for the response to simply list the other treatments and state that the treatment did not consider them. Many did limited analysis by correctly identifying if the treatments were 'similar' or 'in contrast' for the issue under discussion.

Psychology and consumer behaviour

Question 3

- (a) Most responses that were creditworthy achieved 1 mark by outlining that 'behaviour constraint' is caused by personal space being invaded. A small number of responses achieved full marks by outlining the effect of personal space invasion on the consumer's behaviour such as the customer feeling uncomfortable and leaving the shop. Some responses stated that behavioural constraint is where behaviour is affected or avoided due to the situation or attempted to outline one or more zones of personal space. Neither of these types of responses were creditworthy.
- (b) There were some strong responses to this question with clear details given of Dayan and Bar-Hillel's study 2 (the field experiment) about primacy, recency and menu item position. Common details included the location/sample, independent variable (types of menus), method, and a result. Weaker responses often had less detail with some identifying the location/type of restaurant and giving a result. It was common for some responses to achieve 1 mark by stating that the items at

the top and bottom of the menu were chosen the most frequently. There were a lot of inaccuracies with the details of this study, although no candidate attempted to outline study 1. In addition, a small number of responses outlined the study by North et al. on music in restaurants which was not creditworthy.

- (c) The vast majority of responses were able to identify at least one strength and the marks awarded covered the full range of the mark band. Common strengths included ecological validity, generalisability, lack of demand characteristics and good agreement between study 1 and 2 as the results supported one another. Strong responses identified the strength, explained this with an example from the study and frequently stated the effect this had on validity. Weaker responses were often less well developed and either did not give a clear example from the study by Dayan and Bar-Hillel's or did not explain why the issue raised was a strength. Some responses that achieved 0 marks in **part (b)** achieved 1 mark in this question by explaining that the study had a good ecological validity as it was done in the natural environment. These types of responses often then gave incorrect examples or were very brief. A few responses did explain weaknesses of the study which was not creditworthy.

Question 4

- (a) There were some strong responses to this question. Some provided clear details of models, strategies and marketing theories about consumer decision-making. Stronger responses often gave good explanations of the models (utility, prospect and satisficing) and attempted the strategies. Sometimes the strategies were confused although just mislabelling the strategies could still achieve a high-level mark. Few responses covered the marketing theories. In addition, responses that described marketing mix models: McCarthy – the 4 Ps and/or Lauterborn – the 4 Cs or any of the communication and advertising models were also given credit in response to this question.

Weaker responses often lacked detail of each model, strategy and/or theory or included some theories from other parts of the syllabus which were not creditworthy as they were not linked to consumer decision-making. There were a significant number of candidates who did not attempt this question.

- (b) If the response outlined creditworthy material in **part (a)** then the vast majority were able to access marks in this part of their answer. Most creditworthy responses attempted to address the named issue of generalisations. This was frequently done in a superficial manner where the response simply stated that the theories were 'Western' and therefore not generalisable. There were a few stronger responses for this evaluation issue that gave good examples of how customer decision-making can be affected by culture and/or instances where culture does not play a role in decision-making. Other common issues included reductionism versus holism and applications to everyday life. There was a significant number of responses that only attempted the named issue and therefore could not achieve more than 4 marks. Similarly to **part (a)**, there were a significant number of candidates who did not attempt this question.

Psychology and health

Question 5

- (a) There were many clear responses to this question. Common recording devices identified included fMRI, blood pressure monitor and heart monitor. Some responses attempted to outline how the recording device measures stress but this was not necessary as the question was asking the candidate to identify the device. A significant number of responses identified biochemical tests rather than recording devices, such as blood, urine and saliva tests. These types of responses were not creditworthy. In addition, a small number of responses outlined psychological measures which were also not creditworthy.
- (b) There were a small number of strong responses to this question. A few were able to accurately describe some of the details of the study by Friedman and Rosenman on psychological measures of stress. Common details included the sample, outline of type A and type B personality, procedure and a result. Weaker responses often outlined the personality types and gave a result. A significant number of responses described the incorrect study by Holmes and Rahe and were not creditworthy.

- (c) If the candidate achieved marks in **part (b)**, they were able to explain one and sometimes two weaknesses of the Friedman and Rosenman study. Common weaknesses included generalisability, validity of measurement used to determine Type A/B in the study and reductionism (dividing participants into Type A/B and assuming cause and effect relationship). Stronger responses identified the weakness and were able to give a clear example from the study. Weaker responses frequently identified the issue but lacked examples. A significant number of responses did not achieve marks due to not knowing the study.

Question 6

- (a) The responses to this question covered the full range of the mark scheme. Stronger responses gave clear and often detailed descriptions of strategies for promoting health. The study on fear arousal by Janis and Feshbach was often described in depth with details of the sample, procedure and a result. Weaker responses gave fewer details or incorrectly stated that the strong fear condition saw the highest conformity to dental hygiene when it was the minimal fear condition that had the highest conformity. There were also a number of good descriptions of the study on fear arousal by Cowpe and the Yale model of communication with examples linking the model to promoting health. Weaker responses gave fewer details of the Cowpe study often just stating it involved an advertising campaign and that the chip pan fires reduced. In addition, Level 1 and Level 2 responses that outlined the Yale model of communication did not make it relevant to promoting health. Responses that covered the study on providing information by Lewin frequently gave fewer details and/or there were inaccuracies in the description.
- (b) Most responses achieved Level 1 or Level 2 for this question. Some discussed the named issue of quantitative versus qualitative data. A significant number of responses did not discuss this issue and therefore credit was limited. Stronger responses were structured issue by issue and gave examples from the studies and model covered in **part (a)**. Some attempted analysis and were able to identify whether the studies were similar or different in terms of the issue being discussed. Few candidates attempted to explain the comparison point made or reach any conclusion. A common evaluation issue included practical applications although this frequently just involved the response re-stating the strategy without evaluating whether it would be practical to be used by schools, governments, health services, parents, etc. A small number of responses included good analysis where they explained how two or three of the strategies could be implemented and the problems with implementation. Reductionism versus holism was frequently supported by clear examples. The response often argued that the strategy was either fully 'reductionist' or fully 'holistic' without considering how it could be somewhat reductionist/holistic. Cultural differences was sometimes covered well with clear examples. There was some confusion for some candidates regarding the Yale model of communication where the candidate attempted to evaluate it as a 'study' rather than a model. There were a significant number of candidates who did not answer this question.

Psychology and organisations

Question 7

- (a) There were a variety of responses to this question with many being able to identify two qualities of good followers from Kelley's theory. Many identified the qualities directly from Kelley's theory including self-management, commitment, competence and courage. Some responses outlined two of the qualities which was creditworthy. Some candidates did not know the theory and simply stated that followers are 'people who follow orders' which was not creditworthy.
- (b) The marks for this question covered the full range of the mark band. Strong responses referred to the ability of situational leaders to adapt to group maturity and type of task. These responses then described the four types of appropriate leadership for different levels of maturity and types of tasks which demonstrated good knowledge of this topic. Weaker responses were frequently brief and identified the leader adapting to the group or the maturity of the group. These responses sometimes identified one or two of the types of leadership and were sometimes inaccurate and/or included reference to other leadership theories such as Heifetz's adaptive leadership which was not creditworthy. Some candidates did not know this theory and just contrasted it with traditional leadership which was also not creditworthy.
- (c) Candidates who had some knowledge of situational leadership in **part (b)** of their response were able to achieve some marks for the strength and weakness explained. Common strengths included application to everyday life and generalisability. A common weakness included difficulty with using

the theory with a group where some members are mature and others less mature. Another weakness explained in some responses was that not all leaders will have the ability to switch between different leadership styles. Strong responses outlined the strength/weakness and then gave a clear example from situational leadership. Weaker responses were often very brief with little explanation as to why the point raised is a strength or a weakness. Candidates who did not achieve marks in **part (b)** were often unable to identify any creditworthy strengths or weaknesses. Some summarised what they had written in **part (b)**, which was not creditworthy.

Question 8

- (a) There were some strong responses to this question where the candidate outlined cognitive theories about motivation to work. These responses frequently gave a very clear description of Latham and Locke's goal setting theory, with examples, which sometimes included SMART targets. Equity theory was often less detailed but accurate. Those responses that attempted VIE theory frequently used the correct terms but found it difficult to describe each part of the theory. Weaker responses that achieved either Level 1 or Level 2 for this question sometimes just outlined goal setting theory. Others gave a brief outline for each with a lot of inaccuracies in their response, especially for VIE theory. Some responses were anecdotal and very brief with an outline of types of goals that should be given to employees in an organisation. Other responses outlined some of the need theories of motivation such as Maslow and/or McClelland which was not creditworthy.
- (b) The marks for this question were commonly in Level 1 and Level 2. Most responses attempted the named issue of individual and situational explanations and applied it to the theories described in **part (a)**. Few examples were given in responses other than stating that the theory was either seen as 'individual' or 'situational' without any explanation or example to back up the points given. Another common issue raised was application to everyday life. The response frequently just restated the theory that they had described in **part (a)** rather than discussing the benefits to an organisation of the theory or the problems there might be in implementing the theory. Reductionism versus holism was also a common evaluation point. This was frequently just to identify that a theory was 'reductionist' followed by a statement that the theory did not take into account the other two theories which were then listed. Very few responses attempted to explain why they thought a particular theory was reductionist or holistic. Some responses did not raise any evaluation issues and instead described one or more of the cognitive theories which was not creditworthy.

PSYCHOLOGY

Paper 9990/41
Specialist Options: Application 41

Key messages

- (a) 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.
- (b) Questions should be read carefully ensuring that the focus is on what the question asks.
- (c) 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.
- (d) 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 just identify it.
- (e) In **Section C, Questions 9, 10, 11 and 12**, the strongest answers include a debate which has two sides, such as strengths/advantages and weaknesses/disadvantages. Supporting evidence should also be provided. Description cannot be credited.
- (f) Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

A few candidates answered questions from one option only. Some candidates answered questions from three and even four 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 are advised to read the 'stem' of the question, the introduction or the opening words in **Section A** questions as the information provided 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 a strength (or weakness) and an example. Candidates should avoid using terms without explanation, e.g. 'it is reductionist' or 'it is useful in everyday life'. To state 'it is reductionist' is merely to identify; it is not automatically a strength or weakness. Candidates can assume that to be reductionist is always a weakness. It is not; any experiment is reductionist because variables are controlled and only the IV is manipulated. Reductionism is the basis of any experiment and as such it is a strength.

- (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.

Section B

Candidates should avoid making the false assumption that they must conduct an experiment whatever the question. An interview, questionnaire or observation are methods independent of an experiment and candidates should not try to make other methods 'fit' into an experimental format. 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 and the psychological evidence on which their **part (a)** design is based. Only describing a relevant piece of research from a topic area is insufficient to score full 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 e.g. 'I chose a self-selecting sample because Milgram (1963) did'. This identifies a study using that technique, but needs to 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. Candidates should address the question and avoid describing everything they know about that topic area. The strongest responses focus on arguments both for and against the statement, use appropriate evidence to support the argument, and show awareness of wider issues and evidence that is relevant.

Comments on specific questions

Section A

Question 1

- (a) Most candidates were awarded full marks for their answers to this question. Some responses included a more formal definition such as 'bipolar disorder is characterised by episodes of elevated mood alternating with periods of depression', whilst others simply stated that 'it includes alternating manic and depressive states'.
- (b) This question required *two* different findings from the study by Oruc et al. Whilst some responses were awarded full marks, others incorrectly assumed that genetics determined depression. Full mark answers included: firstly, no significant associations were found (1 mark) between bipolar patients and the control group (2 marks). Secondly, that there was an increased susceptibility for bipolar disorder in women (1 mark) in serotonin receptor and serotonin transporter genes (2 marks). Here the difference between partial 1 mark answers and full 2 mark answers can be seen.
- (c) Correct answers could be the cognitive explanation proposed by Beck regarding negative automatic thoughts and the negative triad. A second appropriate answer was the learned helplessness explanation proposed by Seligman where depression results from internal attributions, which are both stable and global. The question excluded biological explanations but some responses included these.

- (d) Candidates tend to be strong, often very strong, at providing generic strengths and weaknesses. Responses often gained limited credit since the answer must relate to the specific question to achieve the full marks. For example, candidates effectively provided strengths and weaknesses of using clinical interviews but needed to ensure that this is related to depression or specifically to the genetic explanation of depression as the question required.

Question 2

- (a) Nearly all responses were awarded a partial 1 mark by including 'a review collects and analyses multiple research studies or papers'. The second available mark was awarded to responses referring to the study by Turley and Milliman on the atmospheric effects of shopping behaviour. Some answers included a definition of a meta-analysis which is 'a statistical process of analysing and combining results from several similar studies'. Although slightly different from a review, candidates still received credit.
- (b) (i) Candidates needed to understand the term 'point-of-purchase'. Responses received credit for suggesting an appropriate variable, one which they might encounter on a daily basis for example, when paying for a coffee in a coffee shop, or for one of the ten different point-of-purchase variables identified by Turley and Milliman.
- (ii) Responses were awarded 1 mark for outlining an appropriate 'model of the effects of ambience', such as Mehrabian and Russell (1974) pleasure/arousal/dominance (PAD) model or the cognition–emotion model (Lazarus, 1991). For the second available mark, candidates had to relate their suggested point of purchase variable to one of these models. Strong answers stated that a 'sign with sales price information' may result in the experience of pleasure or arousal.
- (c) Questionnaires or a field experiment were the most popular responses for ways in which the effect of atmospheric variables on shoppers could be measured. In some answers, no further knowledge of questionnaire technique or format was shown, and needed more elaboration for full credit.
- (d) Candidates were very strong at giving strengths and weaknesses of field experiments but the specific sub-topic, the effect of atmospheric variables on shoppers, was largely omitted.

Question 3

- (a) Most responses were awarded maximum marks by stating that chronic pain is long lasting (3 months or more) and then giving an appropriate example of chronic pain such as arthritis. A small number of answers incorrectly explained acute pain or explained chronic pain but provided an example of acute pain.
- (b) Answers to this question covered the whole mark range. Some responses referred to peripherally acting analgesics, such as aspirin, to manage headache pain for example. Others referred to local anaesthetics which might involve an injection for a tooth extraction. Another possibility was a general anaesthetic which might be used to control pain when undergoing a major surgery. A few answers referred to examples of chronic pain which could not be awarded any marks.
- (c) Some responses were specific, suggesting that acupuncture is used to prevent pain whereas stimulation therapy/TENS is used to relieve pain. Another difference is that acupuncture requires a qualified practitioner to insert the needles in specific places whereas with stimulation therapy/TENS, a person can apply it themselves. Some candidates need to ensure they provide two differences rather than describing acupuncture and stimulation therapy/TENS.
- (d) Strong responses showed the skill of applying strengths and weaknesses (in this instance, of psychological techniques) to a specific question (managing pain) to achieve full marks. Weaker responses stated generic strengths and weakness for limited credit.

Question 4

- (a) Some responses gave an example from the Janis Groupthink paper and were awarded full marks. Other answers included candidates' own appropriate examples of groupthink which could also be awarded full marks. There were some incorrect responses that were not examples of groupthink.

- (b) Candidates were required to explain two 'symptoms' of groupthink (2 marks for each 'symptom'). Many responses could be awarded full marks for explaining, for example, the illusion of invulnerability and the illusion of unanimity. Such explanations were awarded full marks whereas identification of them was awarded partial marks. Janis also identified six other types of symptoms, any of which was creditworthy.
- (c) Candidates were required to suggest two strategies to avoid groupthink. Many suggestions were appropriate and often clearly explained, and these included: encouraging individual evaluation, promoting open inquiry, playing devil's advocate, holding second-chance meetings and breaking large groups into subgroups.
- (d) Candidates would have benefitted from using a specific type of observation throughout, rather than different types of observation. For example, some responses would give a strength of a covert observation, but give a weakness of overt observation. This meant that in the instances where this was related to groupthink, answers were inconsistent in their application of the method.

Section B

Question 5

- (a) Whilst there were many very strong answers to this question, there are several ways weaker responses could be improved. Some candidates confused systematic desensitisation with covert sensitisation or imaginal desensitisation. Some candidates included the term systematic desensitisation in their answer but did not provide detail of what it involved. Strong responses considered how the long-term effectiveness of systematic desensitisation could be investigated. Weaker answers often did not answer the question set, with candidates designing experiments comparing systematic desensitisation with another treatment method without considering how the long term effectiveness of systematic desensitisation could be investigated.
- (b) For psychological knowledge, the most appropriate research was Wolpe (1958), who identified deep muscle relaxation and breathing techniques and the creation of an anxiety hierarchy as essential components of systematic desensitisation. Methodological knowledge should have focused on a way to measure long-term effectiveness of systematic desensitisation, such as the use of a 'before and after' way of gathering data. The use of a questionnaire or interview may have been the simplest way to achieve this. Candidates should note that this question part asks for an *explanation* of psychological and methodological evidence on which their **part (a)** answer is based, not *evaluation* of it.

Question 6

- (a) A logical way to answer this question would be to go to a store and invite participants to answer questions about the reasons for their intended purchase, whether it be the product, its price, the place, or a sales promotion. Responses which included this were often awarded high marks (if they included detail of their questionnaire format and technique). Some candidates conducted an experiment with the 4 Ps as their IV rather than investigating which of these four had most effect on purchase behaviour. Candidates should include details of the questionnaire format, such as the use of open and/or closed questions and their scoring/interpretation, along with the questionnaire technique.
- (b) For psychological knowledge, it was essential to include McCarthy's marketing mix model because McCarthy outlined the four Ps of product, price, placement and promotion. Without this knowledge, it would be difficult to achieve any marks for this question part. For methodological knowledge, candidates' responses were sometimes limited to 'a questionnaire' without providing full detail of what it involved. Candidates must apply the method they are told to apply in the question. Responses which included the design of an experiment were awarded no marks, the question specified the design of a study using a questionnaire, not an experiment.

Question 7

- (a) Candidates were given a free choice of method to investigate age differences in stages of delay. Some candidates chose to interview participants as they waited to see a medical practitioner; others decided to conduct an experiment comparing different age groups, but then gathered information through an interview or questionnaire (meaning there was no need to apply

experimental methodology). Often questionnaire/interview format and technique were absent. Candidates needed to base the questions they asked participants on stages of delay, rather than generic questions such as 'why are you here today?'. Candidates are advised to think through their design before beginning to write their answer, so it is coherent and consistent.

- (b) It is important that candidates show methodological understanding of the format and technique of interviews and also of questionnaire design. These features are essential in any design, as are IV, DV and controls to an experiment, for example. For methodological knowledge, the study by Safer et al. on stages of delay was essential to mention because it provided information about what questions should have been asked in the **part (a)** design. Candidates should note that this question part asks for an explanation of the psychological and methodological evidence on which the designed study is based.

Question 8

- (a) There were some very strong responses to this question. IV, DV, controls and experimental design were often included. Candidates needed to ensure that concentration was fully operationalised in their response. Some candidates applied a repeated measures design where the same workers moved from one office to another and some candidates applied an independent measures design comparing different workers in different offices. Either design was creditworthy.
- (b) Psychological knowledge was sometimes very strong with candidates describing the study by Oldham and Brass on office design in detail. Full marks could only be achieved if they explained how that knowledge had informed their design in **part (a)**. Methodological knowledge was also strong with a full range of experimental terminology being applied. Many candidates evaluated their methodology rather than explain the features of their design, such as how they operationalised levels of concentration or why they decided to apply a repeated measures design rather than an independent groups design.

Section C

Question 9

There were some answers that addressed the question set and were awarded high marks. Responses which used examples of how phobias could be assessed using the GAD-7 were inappropriate because a phobia is anxiety about something specific rather than being generalised. Other candidates focused exclusively on the GAD-7 rather than psychometric measures in general, though this strategy was creditworthy. The wider debate about whether psychometric measures were useful for therapists or not was frequently limited to one or two sentences rather than being a full discussion.

Question 10

Many answers did not focus on the question that was set, instead writing answers about music in restaurants, i.e. the North et al. study rather than the study by Guéguen et al. (2007) which focused on music in open air markets. Some candidates did focus on music in market stalls and provided interesting debate about whether it can be generalised or not, focusing, for example, on different types of music for different types of market stall, and musical preferences of people in different countries. Some candidates used their knowledge to support their point that the location of the Guéguen et al. study, a town in France, could not be generalised.

Question 11

Section C questions test evaluative skills in the form of a discussion/evaluation, not description. This means that candidates showing the appropriate skills, supported with relevant psychological knowledge, score high marks, compared to those who describe. Responses to this questions were often limited to description of the Byrne and Long doctor-centred/patient-centred style along with the McKinstry and Wang 'the way a doctor is dressed' study, but there are no marks for description in any **Section C** question. Both of these studies were appropriate to support points being made in a discussion about practitioner style being irrelevant or not.

Question 12

Answers at the top end of the mark range considered system error, with supporting examples, and human error, also with supporting examples. In these answers, the Three Mile Island incident was used as one of the supporting examples. Weaker responses often focused exclusively on the Three Mile Island incident, describing what happened. Candidates should note that description is inappropriate for **Section C** questions.

PSYCHOLOGY

Paper 9990/42
Specialist Options: Application 42

Key messages

- (a) 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.
- (b) Questions should be read carefully ensuring that the focus is on what the question asks.
- (c) 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.
- (d) 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 just identify it.
- (e) In **Section C, Questions 9, 10, 11 and 12**, the strongest answers include a debate which has two sides, such as strengths/advantages and weaknesses/disadvantages. Supporting evidence should also be provided. Description cannot be credited.
- (f) Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

A few candidates answered questions from one option only. Some candidates answered questions from three and even four 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 are advised to read the 'stem' of the question, the introduction or the opening words in **Section A** questions as the information provided 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 a strength (or weakness) and an example. Candidates should avoid using terms without explanation, e.g. 'it is reductionist' or 'it is useful in everyday life' without further explanation. To state 'it is reductionist' is merely to identify; it is not automatically a strength or weakness. Candidates can assume that to be reductionist is always a weakness. It is not; any experiment is reductionist because variables are controlled and only the IV is manipulated. Reductionism is the basis of any experiment and as such it is a strength.

- (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.

Section B

Candidates should avoid making the false assumption that they must conduct an experiment whatever the question. An interview, questionnaire or observation are methods independent of an experiment and candidates should not try to make other methods 'fit' into an experimental format. 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 and the psychological evidence on which their **part (a)** design is based. Only describing a relevant piece of research from a topic area is insufficient to score full 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 e.g. 'I chose a self-selecting sample because Milgram (1963) did'. This identifies a study using that technique, but needs to 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. Candidates should address the question and avoid describing everything they know about that topic area. The strongest responses focus on arguments both for and against the statement, use appropriate evidence to support the argument, and, at the very top of the mark range and show awareness of wider issues and evidence that is relevant.

Comments on specific questions

Section A

Question 1

- (a) Any two characteristics of generalised anxiety were required, and these included: psychological symptoms such as excessive, uncontrollable and often irrational worry; physical symptoms such as numbness in hands and feet, muscle tension, difficulty swallowing and/or breathing. Having a panic attack was also creditworthy. Many candidates provided two appropriate characteristics, but some candidates confused generalised anxiety disorder with a phobia.
- (b) The GAD-7 includes seven problems/situations such as 'worrying too much about different things' which is rated on a 0-3 scale (from none to nearly every day) with a maximum score of 21, all which were features included in top mark answers. Not all candidates appeared to be familiar with the GAD-7, and other responses were generic such as 'it is questions with a rating scale', which was insufficient for credit.
- (c) Most candidates outlined in detail the case studies of Little Albert (Watson, 1920) who was classically conditioned to be afraid of a white rat and Little Hans (Freud, 1909) who had a fear of horses (displacement from his father). Maximum marks were often awarded for description of these two case studies. Some candidates described the case study of Kimya which could not be credited, Kimya was not a child.

- (d) Candidates tend to be strong at providing generic strengths and weaknesses. Responses often gained limited credit since the answer must relate to the specific question to achieve the full marks. For example, rather than writing 'the test data allows comparison over time' for 1 mark, candidates must relate this to the question, generalised anxiety disorder, e.g. 'the GAD-7 test data allows comparison of generalised anxiety scores over time'.

Question 2

- (a) Many candidates were awarded 1 mark for stating that 'the central gaze cascade effect involves focusing attention on a central item in a display'. Fewer candidates were awarded an additional mark for relating it to the study by Atalay et al. as the question requested. A link to the study was needed, for example, adding 'from the 3 × 3 matrix of vitamins or meal replacement bars looking at the central item' or 'looking at the middle item of the three energy drinks'.
- (b) This question also required a link to the study to be made for full marks to be awarded and whilst some candidates did this, others did not. Appropriate strengths were that eye tracking is scientific equipment so it is both reliable and valid. Further, the data gathered is objective, so where the person looks is clear and unambiguous.
- (c) (i) The 'offline' or 'real life context' referred to by Atalay et al. meant that in the laboratory, real items were used, specifically three brands of energy drinks (Cebion, Niran, and Viba) arranged as they might be in a retail context. Candidates explaining this were awarded full marks. This did not seem to be fully understood, with some responses suggesting that study 2 was conducted in an actual supermarket, when it was not.
- (ii) Candidates being awarded maximum marks showed understanding of the study by writing, for example, 'the centrally located item within a product category is chosen more often (1 mark) irrespective of whether the energy drink is Cebion, Niran, or Viba' (2 marks). Some candidates needed to ensure that their answer was related to the study in question.
- (d) There were many excellent answers on the strengths and weaknesses of laboratory experiments and candidates were awarded the maximum two marks. Candidates need to relate the strengths and weaknesses to consumer product choice for full credit. Some responses included a summary rather than a conclusion.

Question 3

- (a) This question required an explanation of the procedure of the McKinlay et al. study. Most candidates were able to provide some detail for 1 mark with a significant number being awarded the maximum 2 marks. The study involved face-to-face interviews conducted in the home of the participant and each word was sounded out and then used in the context of a sentence. Some candidates included examples from the 13 words such as umbilical in their answers.
- (b) Maximum marks were awarded to candidates who could outline findings with appropriate detail. Correct answers included 'utilisers understood more words than non-utilisers'; 'women with children understood more words than women without children' and 'doctors underestimated the level of word comprehension in working class participants'. Other responses were too generic for credit, like 'the study was successful'.
- (c) (i) Most candidates could be awarded 1 mark for stating that a strength is that a participant can explain what they mean in more detail. Candidates needed to relate the strength to this study, by referring to the 13 words for example, which fewer included.
- (ii) The data gathered in this study was qualitative, from the understanding of the 13 words by participants. The question focused on how the reliability of this qualitative data be assessed. This was done using a number of judges who independently assessed the responses. The use of judges in this way was also done in the core study by Baron Cohen et al. when constructing the eyes test. Candidates need to ensure they answer the question set, in this case by focusing on the reliability of the data rather than generic answers about reliability.
- (d) Candidates need to ensure they understand the strengths and weaknesses of face-to-face interviews. Weaker answers did not relate strengths and weaknesses to patient medical knowledge.

Question 4

- (a) Many candidates correctly identified two reasons for sabotage identified by Giacalone and Rosenfeld and were awarded 2 marks. Others appeared to guess incorrectly.
- (b) Answers to this question covered the whole mark range. Answers at the top end of the mark range wrote about a small sample size and in addition explained why a small sample size was a problem, namely that the Giacalone and Rosenfeld study involved only 38 workers. Similarly, location was also quoted with the explanation that the Giacalone and Rosenfeld study was conducted in the north eastern United States which would not generalise to other regions or other countries. Weaker responses were generic e.g. 'small sample size', 'located in one country' and whilst these answers achieved partial marks, they needed to focus on the study in question.
- (c) Most candidates chose interviews or observations as ways in which sabotage could be investigated. In most answers, other than using the word 'interview' or 'observation', no further knowledge of interview technique or format was shown, no elaboration of whether the observation would be participant/non-participant, natural/controlled, covert/overt, structured/unstructured.
- (d) For this question, candidates provided appropriate strengths and weaknesses for closed questions but frequently did not relate this to data gathered from workers about sabotage. Notably, there were some excellent answers which showed excellent knowledge, understanding and perfect examination technique. Candidates must ensure that they provide strengths and weaknesses which are related to the specific question set and provide conclusions rather than summaries.

Section B

Question 5

- (a) The question required an investigation of the frequency of characteristics of addiction. The most logical way to investigate this would be to ask people with a gambling disorder, either by questionnaire or interview, about characteristics of gambling addiction such as salience, conflict or mood modification/euphoria. Many candidates designed a laboratory experiment which offered *treatment* to gamblers, assessing gambling before and after treatment using Y-BOCS, a strategy which could not answer the question set. Other candidates designed a questionnaire but with questions that did not investigate the frequency of the characteristics. For information: Y-BOCS assesses obsessive compulsive disorder whereas PG Y-BOCS specifically assesses gambling.
- (b) For psychological knowledge, the most appropriate research is listed in the syllabus where it states: 'characteristics of ICDs and non-substance addictive disorder: definitions (Griffiths, 2005)'. Griffiths lists six characteristics of addiction including salience, mood modification/euphoria, tolerance, withdrawal symptoms, conflict and relapse. Methodological knowledge should focus on details of the format and technique of a questionnaire. Because many candidates designed a laboratory experiment, methodological knowledge often focused irrelevantly on that.

Question 6

- (a) It is recommended that candidates think about the logic of their design before starting to write their answer. Many designs proposed to investigate this question could not test the effectiveness of eye magnets. For example, weaker responses proposed an independent design where one menu was 'normal', and another had eye magnets. Comparing the number of orders would be meaningless because participants would order whatever they wanted from the menu. A stronger response would have one menu with some items as eye magnets and some without and then comparing whether the frequency of eye magnet orders was more than the non-eye magnet orders.
- (b) Answers achieving the highest marks included all the appropriate features of an experiment, such as the type of experiment, IV, DV, controls and an experimental design. Each of these was described in appropriate detail and showed good understanding of the terminology applied to their specific design. Answers at the bottom end of the mark range included a limited number of these features and limited explanation. For psychological knowledge, the study by Pavesic (2005) was often quoted, although the focus tended to be on common menu mistakes rather than eye magnets specifically.

Question 7

- (a) The focus of the question was on participants' *beliefs* about health change. Strong responses focused on the question using appropriate methodology and were awarded with high marks. Other responses involved measuring health, changing actual behaviour and then assessing the effectiveness of the health change programme that had been applied, which did not answer the question. Candidates must ensure they give specific methodological knowledge e.g. when conducting an interview, the format (structured/semi-structured/unstructured) or technique (face-to-face or telephone) must be specified.
- (b) For methodological knowledge the study by Lau et al. was commonly referred to, which investigated the events in life which might change beliefs, such as home, exposure to social models or a 'lifelong openness'. Candidates must ensure they have a good understanding of the format and technique of interviews. These features should be essential in any interview design. Candidates designing studies involving a change in health behaviour often included psychological knowledge from different topics, such as health promotion, which was inappropriate for this question.

Question 8

- (a) Strong answers based the questions in their questionnaire on Hertzberg's factors and, in addition, often distinguished between open and closed questions and how answers to these questions would be interpreted. Weaker responses could improve their questionnaire design, as questions were often limited to 'what causes your job satisfaction'. Candidates needed an understanding of Hertzberg's hygiene and motivator factors to answer this question effectively.
- (b) Strong responses included good psychological knowledge about Hertzberg's hygiene/dissatisfiers and motivators/satisfiers which was then used to design the questions on the questionnaire. Methodological knowledge was sometimes very strong, with candidates referring to both question format and technique.

Section C

Question 9

There were some very strong answers in relation to this question. These answers focused on the strengths and weaknesses of case studies and importantly related these strengths and weaknesses to not just kleptomania but often to other impulse control disorders. Frequently, top answer marks contrasted case studies with alternative ways of measuring kleptomania such as the use of K-SAS, the kleptomania symptom assessment scale. The case study by Glover on kleptomania treated with covert sensitisation was often used to support the strengths and weaknesses of case studies. Weaker responses described the case study by Glover. Candidates should note that there are no marks for description in **section C** questions and the case study by Glover only received credit if it was used to support evaluative points.

Question 10

Strong answers focused on how overload, for example, could be caused if tables are spaced too closely together or not if tables are further apart. Such answers showed very good knowledge of both the Robson et al. study and of overload, arousal and behaviour constraint. Other responses did not focus on the question set, instead writing general answers on personal space. For example, responses focused on Edward Hall's personal space boundaries and did not relate this to space between restaurant tables. Candidates are advised to elaborate on key terms such as overload, arousal and behaviour constraint and apply this to the question.

Question 11

There were some very good answers in response to this question. The debate usually focused on the strengths of disclosing information to a computer with the Robinson and West study being used to support the points being made. This was often followed by the weaknesses of diagnosis by computer. Strong answers also brought in information from other studies making the point for example, that computers cannot show a friendly patient-centred style such as that outlined by Byrne and Long. Weaker responses did not progress beyond general points about computers, with no supporting evidence or reference to the Robinson and West study.

Question 12

There were many answers which appeared to have been prepared for a general question on leadership. These answers frequently described a number of leadership theories such as the universalist, behavioural and adaptive leadership theories in addition to the leadership theory outlined by Scouller. Evaluation was often a comparison of nature versus nurture with reductionism rarely mentioned. Candidates must answer the question set as here, the emphasis was on reductionism and Scouller's levels of leadership theory. Other theories were relevant only if they were used in the debate about reductionism.

PSYCHOLOGY

Paper 9990/43
Specialist Options: Application 43

Key messages

- (a) 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.
- (b) Questions should be read carefully ensuring that the focus is on what the question asks.
- (c) 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.
- (d) 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 just identify it.
- (e) In **Section C, Questions 9, 10, 11 and 12**, the strongest answers include a debate which has two sides, such as strengths/advantages and weaknesses/disadvantages. Supporting evidence should also be provided. Description cannot be credited.
- (f) Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

A few candidates answered questions from one option only. Some candidates answered questions from three and even four 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 are advised to read the 'stem' of the question, the introduction or the opening words in **Section A** questions as the information provided 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 a strength (or weakness) and an example. Candidates should avoid using terms without explanation, e.g. 'it is reductionist' or 'it is useful in everyday life'. To state 'it is reductionist' is merely to identify; it is not automatically a strength or weakness. Candidates can assume that to be reductionist is always a weakness. It is not; any experiment is reductionist because variables are controlled and only the IV is manipulated. Reductionism is the basis of any experiment and as such it is a strength.

- (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.

Section B

Candidates should avoid making the false assumption that they must conduct an experiment whatever the question. An interview, questionnaire or observation are methods independent of an experiment and candidates should not try to make other methods 'fit' into an experimental format. 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 and the psychological evidence on which their **part (a)** design is based. Only describing a relevant piece of research from a topic area is insufficient to score full 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 e.g. 'I chose a self-selecting sample because Milgram (1963) did'. This identifies a study using that technique, but needs to 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. Candidates should address the question and avoid describing everything they know about that topic area. The strongest responses focus on arguments both for and against the statement, use appropriate evidence to support the argument, and show awareness of wider issues and evidence that is relevant.

Comments on specific questions

Section A

Question 1

- (a) Most candidates were awarded full marks for their answers to this question. Some responses included a more formal definition such as 'bipolar disorder is characterised by episodes of elevated mood alternating with periods of depression', whilst others simply stated that 'it includes alternating manic and depressive states'.
- (b) This question required *two* different findings from the study by Oruc et al. Whilst some responses were awarded full marks, others incorrectly assumed that genetics determined depression. Full mark answers included: firstly, no significant associations were found (1 mark) between bipolar patients and the control group (2 marks). Secondly, that there was an increased susceptibility for bipolar disorder in women (1 mark) in serotonin receptor and serotonin transporter genes (2 marks). Here the difference between partial 1 mark answers and full 2 mark answers can be seen.
- (c) Correct answers could be the cognitive explanation proposed by Beck regarding negative automatic thoughts and the negative triad. A second appropriate answer was the learned helplessness explanation proposed by Seligman where depression results from internal attributions, which are both stable and global. The question excluded biological explanations but some responses included these.

- (d) Candidates tend to be strong, often very strong, at providing generic strengths and weaknesses. Responses often gained limited credit since the answer must relate to the specific question to achieve the full marks. For example, candidates effectively provided strengths and weaknesses of using clinical interviews but needed to ensure that this is related to depression or specifically to the genetic explanation of depression as the question required.

Question 2

- (a) Nearly all responses were awarded a partial 1 mark by including 'a review collects and analyses multiple research studies or papers'. The second available mark was awarded to responses referring to the study by Turley and Milliman on the atmospheric effects of shopping behaviour. Some answers included a definition of a meta-analysis which is 'a statistical process of analysing and combining results from several similar studies'. Although slightly different from a review, candidates still received credit.
- (b) (i) Candidates needed to understand the term 'point-of-purchase'. Responses received credit for suggesting an appropriate variable, one which they might encounter on a daily basis for example, when paying for a coffee in a coffee shop, or for one of the ten different point-of-purchase variables identified by Turley and Milliman.
- (ii) Responses were awarded 1 mark for outlining an appropriate 'model of the effects of ambience', such as Mehrabian and Russell (1974) pleasure/arousal/dominance (PAD) model or the cognition–emotion model (Lazarus, 1991). For the second available mark, candidates had to relate their suggested point of purchase variable to one of these models. Strong answers stated that a 'sign with sales price information' may result in the experience of pleasure or arousal.
- (c) Questionnaires or a field experiment were the most popular responses for ways in which the effect of atmospheric variables on shoppers could be measured. In some answers, no further knowledge of questionnaire technique or format was shown, and needed more elaboration for full credit.
- (d) Candidates were very strong at giving strengths and weaknesses of field experiments but the specific sub-topic, the effect of atmospheric variables on shoppers, was largely omitted.

Question 3

- (a) Most responses were awarded maximum marks by stating that chronic pain is long lasting (3 months or more) and then giving an appropriate example of chronic pain such as arthritis. A small number of answers incorrectly explained acute pain or explained chronic pain but provided an example of acute pain.
- (b) Answers to this question covered the whole mark range. Some responses referred to peripherally acting analgesics, such as aspirin, to manage headache pain for example. Others referred to local anaesthetics which might involve an injection for a tooth extraction. Another possibility was a general anaesthetic which might be used to control pain when undergoing a major surgery. A few answers referred to examples of chronic pain which could not be awarded any marks.
- (c) Some responses were specific, suggesting that acupuncture is used to prevent pain whereas stimulation therapy/TENS is used to relieve pain. Another difference is that acupuncture requires a qualified practitioner to insert the needles in specific places whereas with stimulation therapy/TENS, a person can apply it themselves. Some candidates need to ensure they provide two differences rather than describing acupuncture and stimulation therapy/TENS.
- (d) Strong responses showed the skill of applying strengths and weaknesses (in this instance, of psychological techniques) to a specific question (managing pain) to achieve full marks. Weaker responses stated generic strengths and weakness for limited credit.

Question 4

- (a) Some responses gave an example from the Janis Groupthink paper and were awarded full marks. Other answers included candidates' own appropriate examples of groupthink which could also be awarded full marks. There were some incorrect responses that were not examples of groupthink.

- (b) Candidates were required to explain two 'symptoms' of groupthink (2 marks for each 'symptom'). Many responses could be awarded full marks for explaining, for example, the illusion of invulnerability and the illusion of unanimity. Such explanations were awarded full marks whereas identification of them was awarded partial marks. Janis also identified six other types of symptoms, any of which was creditworthy.
- (c) Candidates were required to suggest two strategies to avoid groupthink. Many suggestions were appropriate and often clearly explained, and these included: encouraging individual evaluation, promoting open inquiry, playing devil's advocate, holding second-chance meetings and breaking large groups into subgroups.
- (d) Candidates would have benefitted from using a specific type of observation throughout, rather than different types of observation. For example, some responses would give a strength of a covert observation, but give a weakness of overt observation. This meant that in the instances where this was related to groupthink, answers were inconsistent in their application of the method.

Section B

Question 5

- (a) Whilst there were many very strong answers to this question, there are several ways weaker responses could be improved. Some candidates confused systematic desensitisation with covert sensitisation or imaginal desensitisation. Some candidates included the term systematic desensitisation in their answer but did not provide detail of what it involved. Strong responses considered how the long-term effectiveness of systematic desensitisation could be investigated. Weaker answers often did not answer the question set, with candidates designing experiments comparing systematic desensitisation with another treatment method without considering how the long term effectiveness of systematic desensitisation could be investigated.
- (b) For psychological knowledge, the most appropriate research was Wolpe (1958), who identified deep muscle relaxation and breathing techniques and the creation of an anxiety hierarchy as essential components of systematic desensitisation. Methodological knowledge should have focused on a way to measure long-term effectiveness of systematic desensitisation, such as the use of a 'before and after' way of gathering data. The use of a questionnaire or interview may have been the simplest way to achieve this. Candidates should note that this question part asks for an *explanation* of psychological and methodological evidence on which their **part (a)** answer is based, not *evaluation* of it.

Question 6

- (a) A logical way to answer this question would be to go to a store and invite participants to answer questions about the reasons for their intended purchase, whether it be the product, its price, the place, or a sales promotion. Responses which included this were often awarded high marks (if they included detail of their questionnaire format and technique). Some candidates conducted an experiment with the 4 Ps as their IV rather than investigating which of these four had most effect on purchase behaviour. Candidates should include details of the questionnaire format, such as the use of open and/or closed questions and their scoring/interpretation, along with the questionnaire technique.
- (b) For psychological knowledge, it was essential to include McCarthy's marketing mix model because McCarthy outlined the four Ps of product, price, placement and promotion. Without this knowledge, it would be difficult to achieve any marks for this question part. For methodological knowledge, candidates' responses were sometimes limited to 'a questionnaire' without providing full detail of what it involved. Candidates must apply the method they are told to apply in the question. Responses which included the design of an experiment were awarded no marks, the question specified the design of a study using a questionnaire, not an experiment.

Question 7

- (a) Candidates were given a free choice of method to investigate age differences in stages of delay. Some candidates chose to interview participants as they waited to see a medical practitioner; others decided to conduct an experiment comparing different age groups, but then gathered information through an interview or questionnaire (meaning there was no need to apply

experimental methodology). Often questionnaire/interview format and technique were absent. Candidates needed to base the questions they asked participants on stages of delay, rather than generic questions such as 'why are you here today?'. Candidates are advised to think through their design before beginning to write their answer, so it is coherent and consistent.

- (b) It is important that candidates show methodological understanding of the format and technique of interviews and also of questionnaire design. These features are essential in any design, as are IV, DV and controls to an experiment, for example. For methodological knowledge, the study by Safer et al. on stages of delay was essential to mention because it provided information about what questions should have been asked in the **part (a)** design. Candidates should note that this question part asks for an explanation of the psychological and methodological evidence on which the designed study is based.

Question 8

- (a) There were some very strong responses to this question. IV, DV, controls and experimental design were often included. Candidates needed to ensure that concentration was fully operationalised in their response. Some candidates applied a repeated measures design where the same workers moved from one office to another and some candidates applied an independent measures design comparing different workers in different offices. Either design was creditworthy.
- (b) Psychological knowledge was sometimes very strong with candidates describing the study by Oldham and Brass on office design in detail. Full marks could only be achieved if they explained how that knowledge had informed their design in **part (a)**. Methodological knowledge was also strong with a full range of experimental terminology being applied. Many candidates evaluated their methodology rather than explain the features of their design, such as how they operationalised levels of concentration or why they decided to apply a repeated measures design rather than an independent groups design.

Section C

Question 9

There were some answers that addressed the question set and were awarded high marks. Responses which used examples of how phobias could be assessed using the GAD-7 were inappropriate because a phobia is anxiety about something specific rather than being generalised. Other candidates focused exclusively on the GAD-7 rather than psychometric measures in general, though this strategy was creditworthy. The wider debate about whether psychometric measures were useful for therapists or not was frequently limited to one or two sentences rather than being a full discussion.

Question 10

Many answers did not focus on the question that was set, instead writing answers about music in restaurants, i.e. the North et al. study rather than the study by Guéguen et al. (2007) which focused on music in open air markets. Some candidates did focus on music in market stalls and provided interesting debate about whether it can be generalised or not, focusing, for example, on different types of music for different types of market stall, and musical preferences of people in different countries. Some candidates used their knowledge to support their point that the location of the Guéguen et al. study, a town in France, could not be generalised.

Question 11

Section C questions test evaluative skills in the form of a discussion/evaluation, not description. This means that candidates showing the appropriate skills, supported with relevant psychological knowledge, score high marks, compared to those who describe. Responses to this questions were often limited to description of the Byrne and Long doctor-centred/patient-centred style along with the McKinstry and Wang 'the way a doctor is dressed' study, but there are no marks for description in any **Section C** question. Both of these studies were appropriate to support points being made in a discussion about practitioner style being irrelevant or not.

Question 12

Answers at the top end of the mark range considered system error, with supporting examples, and human error, also with supporting examples. In these answers, the Three Mile Island incident was used as one of the supporting examples. Weaker responses often focused exclusively on the Three Mile Island incident, describing what happened. Candidates should note that description is inappropriate for **Section C** questions.