PSYCHOLOGY

Paper 9990/11
Approaches, Issues and Debates

Key messages

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

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of the questions. For example, the question may require data or a named issue to be included. To achieve full marks these need to be correctly presented in responses. The essay (final question) requires four evaluation points to be presented in depth (two strengths and two weaknesses) with at last one of these about the named issue. Credit is limited if the named issue is omitted. In addition, if the candidate is required to outline a debate, each side requires explicit labelling by them to be able to access the full range of marks available.

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

Candidates need to know the difference the characteristics of a sample (e.g. demographics; participant variables) and the features of a sample (e.g. anything about the sample including demographics and how the sample was chosen).

Candidates also need to engage with any stimulus material presented in a question (e.g. 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.

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

General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well, providing evidence that they were prepared for the examination. There is evidence that candidates have learned the new studies that form the 9990 syllabus. This was also evidenced by very few blanks answers.

Successful responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers with evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, giving advice to people in novel situations.

Comments on specific questions

Question 1

(a) Many candidates were able to describe an aim of the Milgram study. This usually took the form of being obedient with negative consequences. Some candidates wrote brief aims that highlighted that people may be obedient. A small amount of candidates gave a conclusion or result.

(b) Responses to this question were varied. More successful ones could clearly describe what a strength was with a contextualised example. Some responses tended to be a generic answer about a methodological strength and gained partial credit. Candidates need to be able to focus on the demands of the question in terms of giving an example from the study to show why it was a strength.

Question 2

(a) Many responses were about the concept of 'same/different'. Less successful responses tended to focus on a specific element of the study (e.g. model-rival technique or abstract thought).

(b) Reponses to this question were varied. Stronger responses could clearly describe what Alex was allowed to do during the time he was not in a trial based on the information in the original journal article. Many responses did not make it clear that Alex had to request items. Additionally, many responses highlighted what 'Alex could have done' rather than focusing on what we know Alex was allowed to do.

Question 3

(a) (i) Popular correct responses focused on clear small buttons. Incorrect responses included 'buttons falling on him' or 'hugging his mother'.

(ii) Correct responses were in the minority for this question. Many responses tended to name a situation the boy found himself in (e.g. hugging his mother) or name a button that was not on the hierarchy.

Some responses muddled the correct answer for **Question 3(a)(i)** with that of **Question 3(a)(ii)** and vice versa.

(b) Successful responses could outline the two of the main results shown in this part of the therapy. Some responses described results from other parts of the therapeutic process (e.g. Imagery Exposure) and as a result could not gain credit. It is important that candidates clearly understand the different procedural stages involved in each Core Study.

Question 4

Successful responses could readily describe the procedure asked for in the question. These responses showed clear logical progression, describing exactly what a participant was expected to do during their brain scan. Less successful responses tended to be generic or focus on the part of the procedure when the participants returned weeks later. Candidates can improve their answers to this type of question by focusing on what a participant *actually* experienced in different stages of a study.

Question 5

(a) Candidates can improve their answers to this style of question by understanding the difference between characteristics and features of a sample (the difference is highlighted in the beginning of this report). Successful answers could readily identify two characteristics with popular choices being age and their IQ. Less successful responses gave characteristics of Group 2 or Group 4. Where there are multiple groups of participants, candidates need to know about all of them and how they are similar/different.

(b) Many responses could identify one problem of the original test. The most successful responses could then explain *why* it was a problem using an example from the test itself. Less successful responses tended to repeat the problem or not explain why it was a problem in the first place. Candidates can improve their answers here by explaining why a problem is a problem rather than just stating 'it reduces validity', for example, without telling the examiner why.

Question 6

Reponses to this question were very varied. Successful responses gave clear advice including the use of doodling sheets, allowing doodling to happen and testing them at the end. Many responses focused on explaining *why* the advice had been given. This was not the focus of the question. The scenario had already set up a novel situation and told candidates about the Andrade study. Therefore, candidates can improve their answers to this style of question by giving the advice based on the Andrade study and not explaining why they have given that advice.

Question 7

Candidates can improve their answers to questions like this by focusing on the rules of the question. In this case, data had to be used in one of the answers. Many responses did not include data or when it did, the interpretation of the given data was incorrect. For example, it was on 88 per cent **of trials** that the participants would estimate the five minutes correctly. However, many responses claimed that it was 88 per cent **of participants** who could correctly estimate five minutes which is incorrect and could not gain credit. Some stronger responses could clearly give a result that had a comparison for both parts of the question using correct data to exemplify this.

Question 8

(a) Candidates can improve their answers to questions outlining a debate by explicitly stating each side of the debate. Less successful responses described nature and nurture but did not label which was which. Examiners cannot award credit for implicit answers. Successful responses could clearly describe both sides of the debate explicitly.

(b) Successful responses could use evidence effectively to highlight why Mandy was correct in her assumption about the Bandura *et al.* study. Popular choices of evidence included children copying same sex models, how none of the behaviours had been seen before or that aggression was matched across conditions yet some did become more aggressive. Less successful responses tended to describe the procedure of the Bandura *et al.* study. Also, some responses did not use evidence so could only receive partial credit as evidence was asked for.

Question 9

(a) Reponses to this question were varied. Successful responses could clearly describe two aims that Schachter and Singer reported in their original journal paper. Popular choices included testing the two factor theory or emotion or testing what happens if we do or do not have an immediate explanation. If was clear from the less successful responses that candidates could only write about testing the two factor theory of emotion showing limited knowledge of the purpose of the Schachter and Singer study.

(b) Responses to this question varied for a variety of reasons. Stronger candidates could *explain* whether the guideline had been broken or not using specific examples from the study itself. This was more evident for deception and protection. There were many tautological responses. For example, candidates claimed that material was kept confidential or that participants were debriefed. Both of these examples could not gain credit as confidentiality and debriefing were listed in the question and defining a word using that word cannot gain credit.

Question 10

The strongest responses evaluated the Piliavin *et al.* study in depth and in terms of two strengths and two weaknesses with at least one of these points covering the named issue of independent groups. Common choices included generalisability, reliability, validity and ethics. These successful responses could explain why an element of the study was a strength or a weakness using specific examples from the Piliavin *et al.* study explicitly to support their point. These answers tended to score Level 4 marks. Candidates need to ensure that they follow the demands of the question, covering two strengths and two weaknesses all in equal depth. Some responses did cover the four evaluation points but were brief or did not use the Piliavin *et al.* study as examples which meant the response scored in the lower bands. Other responses included three evaluation points that were thorough, logical and well argued with a fourth point that was brief which meant the response did not reach the top band in the main. Candidates need to know that any description of the study does not gain credit in these type of questions as it is testing their evaluation skills *only*.

In addition, it was noted that in this series more candidates were following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics). Therefore, some candidates were producing prepared essays for Piliavin *et al*. without one of their points being about independent measures. Responses that failed to have one evaluation point about the named issue in the set question, can only score Level 3 (6 marks) maximum.

PSYCHOLOGY

Paper 9990/12
Approaches, Issues and Debates

Key messages

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

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of the questions. For example, the question may require data or a named issue to be included. To achieve full marks these need to be correctly presented in responses. The essay (final question) requires four evaluation points to be presented in depth (two strengths and two weaknesses) with at last one of these about the named issue. Credit is limited if the named issue is omitted. In addition, if the candidate is required to outline a debate, each side requires explicit labelling by them to be able to access the full range of marks available.

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

Candidates need to know the difference the characteristics of a sample (e.g. demographics; participant variables) and the features of a sample (e.g. anything about the sample including demographics and how the sample was chosen).

Candidates also need to engage with any stimulus material presented in a question (e.g. 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.

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

General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well, providing evidence that they were prepared for the examination. There is evidence that candidates have learned the new studies that form the 9990 syllabus. This was also evidenced by very few blanks answers.

Successful responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers with evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, giving advice to people in novel situations.

Comments on specific questions

Question 1

(a) (i) Many candidates were able to give the correct answer of 15 volts. However, many responses gave incorrect increments or gave the range of voltage from smallest to largest.

(ii) Many candidates could not identify the label used for that portion of the generator. Some responses had words that did not appear on the generator or gave a label from a different voltage range.

(iii) Successful responses could give the correct answer of 26. However, there were a variety of incorrect from responses based on the percentage of participants who pressed the maximum, which is not what the question was asking.

(b) More successful responses could clearly outline a conclusion from the study with an explicit example. Weaker responses tended to be brief or just mention that people are obedient without explaining the context.

Question 2

(a) Responses to this question were varied. Successful responses could clearly outline what participants were **told** about their injection. However, less successful responses tended to focus on the fact that participants were **not told** or that a different condition was told about their injection. It is important for candidates to focus on what the question is asking for, in this case what participants were **told** rather than what they were **not told**.

(b) Reponses to this question were varied. Successful responses could clearly identify which group scored higher and what that meant. Few responses presented correct data or any data at all. It was clear from the majority of responses to this question that candidates easily confuse the conditions of the Schachter and Singer study.

Question 3

(a) There were many successful responses to this question. Candidates clearly knew what the aim of the study was, beyond a brief answer of investigating a phobia of buttons.

(b) Responses to this question were varied. Successful responses could clearly describe what a strength was, giving a contextualised example. Some responses tended to be a generic answer about a methodological strength and gained partial credit. Candidates need to be able to focus on the demands of the question in terms of giving an example from the study to show why it was a strength.

Question 4

Successful responses could readily describe the procedure asked for in the question. These responses showed clear logical progression, describing exactly what a participant was expected to do during the Aggression Arousal part of the study. Less successful responses tended to be generic or focus on the part of the procedure when the participants were observed with a Bobo Doll. Candidates can improve their answers to this type of question by focusing on what a participant *actually* experienced in different stages of a study.

Question 5

(a) Candidates can improve their answers to this style of question by understanding the difference between characteristics and features of a sample (the difference is highlighted in the beginning of this report). Successful answers could readily identify two characteristics with popular choices being age and sex. Less successful responses gave features including being given course credits or sample size.

(b) Many responses could identify one validity problem of the Restaurant questionnaire. Successful responses could then explain *why* it was a problem using an example from the test itself. Less succesful responses tended to repeat the problem or state that it reduced validity/accuracy but this was in the question itself. Candidates can improve their answers here by explaining why a problem is a problem rather than just stating ‘it reduces validity’, for example, without telling the examiner why, especially if a concept already appears in the question.

Question 6

Reponses to this question were very varied. Successful responses gave clear advice including the use of setting up scenarios where help is needed or teaching children to always ask for help. Many responses focused on explaining *why* the advice had been given. This was not the focus of the question. The scenario had already set up a novel situation and told candidates about the Yamamoto *et al.* study. Therefore, candidates can improve their answers to this style of question by giving the advice based on the Yamamoto *et al.* study and not explaining why they have given that advice.

Question 7

Candidates can improve their answers to questions like this by focusing on the rules of the question. In this case, data had to be used in one of the answers. Many responses did not include data or when it did, the interpretation of the given data was incorrect. For example, it was on 29 per cent **of pictures** that were rated zero for emotional intensity. However, many responses claimed that it was 29 per cent **of participants** who rated the pictures as zero so could not gain credit. Some stronger responses could clearly give a result that had a comparison for both parts of the question using correct data to exemplify this.

Question 8

(a) Candidates can improve their answers to questions outlining a debate by explicitly stating each side of the debate. Less successful responses described nature and nurture but did not label which was which. Examiners cannot award credit for implicit answers. Successful responses could clearly describe both sides of the debate explicitly.

(b) Successful responses could use evidence effectively to highlight why Duncan was correct in his assumption about the Pepperberg study. Popular choices of evidence included being trained to understand same/different, being taught the label for colours and using behavioural techniques based on reward to learn the different behaviours. Less successful responses tended to describe the procedure of the Pepperberg study. Also, some responses did not use evidence so could only receive partial credit as evidence was asked for.

Question 9

(a) Reponses to this question were varied. Popular strong responses tended to focus on the type of victim and the race of victim with clear operationalisation. Less succesful responses claimed that the race of the model, the time of day or the location were independent variables which are all incorrect. Candidates can improve their answers to questions like this by identifying the independent variable and then operationalising them clearly. For example, type of victim (identification), drunk and ill (operationalisation).

(b) Responses to this question varied for a variety of reasons. Successful candidates could *explain* whether the guideline had been broken or not using specific examples from the study itself. This was more evident for deception and protection. There were too many responses that were tautological. For example, candidates claimed that material was kept confidential or that participants were not debriefed. Both of these examples could not gain credit as confidentiality and debriefing were listed in the question and defining a word using that word cannot gain credit.

Question 10

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

In addition, it was noted that in this series more candidates were following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics). Therefore, some candidates were producing prepared essays for Andrade without one of their points being about quantitative data. Any responses that fails to have one evaluation point about the named issue can only score Level 3 (6 marks) maximum.

PSYCHOLOGY

Paper 9990/13
Approaches, Issues and Debates

Key messages

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

Candidates need to read the whole question carefully to ensure that their responses are fulfilling the demands of the questions. For example, the question may require data or a named issue to be included. To achieve full marks these need to be correctly presented in responses. The essay (final question) requires four evaluation points to be presented in depth (two strengths and two weaknesses) with at last one of these about the named issue. Credit is limited if the named issue is omitted. In addition, if the candidate is required to outline a debate, each side requires explicit labelling by them to be able to access the full range of marks available.

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

Candidates need to know the difference the characteristics of a sample (e.g. demographics; participant variables) and the features of a sample (e.g. anything about the sample including demographics and how the sample was chosen).

Candidates also need to engage with any stimulus material presented in a question (e.g. 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.

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

General comments

The marks achieved by the candidates sitting this examination covered a wide spread of possible marks. Some candidates provided a range of excellent answers to many of the questions and could explain psychological terminology well, providing evidence that they were prepared for the examination. There is evidence that candidates have learned the new studies that form the 9990 syllabus. This was also evidenced by very few blanks answers.

Successful responses followed the demands of each question with explicit use of psychological terminology and logical, well planned answers with evidence. Appropriate examples were used from studies when the question expected it and there was evidence of candidates being able to apply their knowledge of studies to novel situations, for example, giving advice to people in novel situations.

Comments on specific questions

Question 1

(a) Reponses to this question were very varied. Successful responses could clearly describe one aim that Schachter and Singer reported in their original journal paper. Popular choices included testing the two factor theory or emotion or testing what happens if we do or do not have an immediate explanation. If was clear from the less successful responses that candidates could only write about

testing the two factor theory of emotion showing limited knowledge of the purpose of the Schachter and Singer study.

(b) More successful responses could clearly describe what the participants were told after the injection. Less succesful responses tended to list symptoms told to participants in a different condition.

Question 2

(a) Candidates can improve their answers to this style of question by understanding the difference between characteristics and features of a sample (the difference is highlighted in the beginning of this report). Successful answers could readily identify two characteristics with popular choices being kinship and age. Less successful responses gave features.

(b) Reponses to this question were varied. Successful responses could clearly identify a result and describe it using correct data. Few responses presented correct data or any data. Less successful responses tended to give results from the First 'Can See' condition. It was clear from the majority of responses to this question that candidates easily confuse the conditions of the Yamamoto *et al.* study.

Question 3

(a) There were few successful responses to this question. Candidates tended to outline one of the results rather than a generic conclusion that could be drawn from that result and so only gained partial credit. Successful responses could outline a generic conclusion.

(b) Responses to this question were varied. Successful ones could clearly describe what a strength was with a contextualised example. Some responses tended to be a generic answer about a methodological strength and gained partial credit. Candidates need to be able to focus on the demands of the question in terms of giving an example from the study to show why it was a strength.

Question 4

Successful responses could readily describe the Restaurant Questionnaire although these were in the minority. These responses showed clear logical progression, describing exactly how it was laid out and used in the Laney *et al*. study. Less successful responses tended to be generic or focus on the part of the procedure where participants were given false information about asparagus. Additionally, many responses described a different questionnaire used in the study rather than the one asked for in the question. Candidates can improve their answers to this type of question by focusing on what a participant *actually* experienced in different stages of a study.

Question 5

(a) Successful responses could readily identify two examples from the Andrade study. Less successful responses tended to focus on the recall of **places** rather than **names**. The question was clearly about the recall of names.

(b) Many responses could identify one sample problem in the Andrade study. Successful responses could then explain *why* it was a problem using an example from the study. Less successful responses tended to repeat the problem or not contextualise it explicitly with an example from the study. Candidates can improve their answers here by explaining why a problem is a problem rather than just stating 'it reduces validity', for example, without telling the examiner why.

Question 6

Reponses to this question were very varied. Successful responses gave clear advice including the use of hierarchies of fear and rating disgust of spoons. Many responses focused on explaining *why* the advice had been given. This was not the focus of the question. The scenario had already set up a novel situation and told candidates about the Saavedra and Silverman study. Therefore, candidates can improve their answers to this style of question by giving the advice based on the Saavedra and Silverman study and not explaining why they have given that advice.

Question 7

Candidates can improve their answers to questions like this by focusing on the rules of the question. In this case, data had to be used in one of the answers. Many responses did not include data or when it did, the interpretation of the given data was incorrect. For example, it was on 65 **trials** that spontaneous help was offered to white victims. However, many responses claimed that it was 65 per cent **of participants** offered spontaneous help to white victims so could not gain credit. Some more successful responses could clearly give a result that had a comparison for both parts of the question using correct data to exemplify this. Less successful responses tended to give false data or not fully understand the data for black victims by giving incorrect assumptions.

Question 8

(a) Candidates can improve their answers to questions outlining a debate by explicitly stating each side of the debate. Less successful responses described nature and nurture but did not label which was which. Examiners cannot award credit for implicit answers. Successful responses could clearly describe both sides of the debate explicitly.

(b) More successful responses could use evidence effectively to highlight why Patty was correct in her assumption about the Canli *et al.* study. Popular choices of evidence included using brain scans to measure biological responses, the use of females as a sample and how the study was focusing on brain function. Less successful responses tended to describe the procedure of the Canli *et al.* study. Also, some responses did not use evidence so could only receive partial credit as evidence was asked for.

Question 9

(a) Reponses to this question were varied. Popular strong responses tended to focus on the generic psychology that was being investigated by Pepperberg in her study of Alex the parrot. This included model-rival technique, social learning and operant conditioning. Many unsuccessful responses tended to describe the study without noting any psychological principles or concepts being investigated and achieved minimal credit. To improve their answers to this type of question, candidates need to focus on the core psychological theories/concepts/ideas that are being tested here on a generic level rather than just writing about the procedure.

(b) Responses to this question varied for a variety of reasons. Successful candidates could *explain* whether the guideline had been broken or not using specific examples from the study itself. This was more evident for housing and numbers. There were too many responses that were tautological. For example, candidates claimed that Alex was or was not deprived or that a single species was used. Both of these examples could not gain credit as deprivation and species were listed in the question and defining a word using that word cannot gain credit.

Question 10

The most successful responses evaluated the Baron-Cohen *et al.* study in depth and in terms of two strengths and two weaknesses with at least one of these points covering the named issue of quantitative data. Common choices included original problems, sample size and quantitative data. These successful responses could explain why an element of the study was a strength or a weakness using specific examples from the Baron-Cohen *et al.* study explicitly to support their point. These answers tended to score Level 4 marks. Candidates need to ensure that they follow the demands of the question, covering two strengths and two weaknesses all in equal depth. Some responses did cover the four evaluation points but were brief or did not use the Baron-Cohen *et al.* study as examples which meant the response scored in the lower bands. Other responses included three evaluation points that were thorough, logical and well argued with a fourth point that was brief which meant the response did not reach the top band in the main. Candidates need to know that any description of the study does not gain credit in these types of questions as it is testing their evaluation skills *only*.

In addition, it was noted that in this series more candidates were following a GRAVE approach to this question (Generalisability, Reliability, Application, Validity, Ethics). Therefore, some candidates were producing prepared essays for Baron-Cohen *et al.* without one of their points being about quantitative data. A response that fails to have one evaluation point about the named issue can only score Level 3 (6 marks) maximum.

PSYCHOLOGY

Paper 9990/21
Research Methods

- This is a question paper about research methods, which requires candidates to answer a range of question types, including ones about the core studies in relation to research methods, terms and concepts used to describe or evaluate research methodology, and application of this knowledge to both familiar and unfamiliar contexts. Some flaws were evident in the usage of these skills in many candidates. It is therefore essential that candidates are prepared for the skills of recalling concepts and of using this knowledge.
- Practising how to apply ideas to novel scenarios is important to succeed on this paper. This could have helped candidates in two ways:
    - Candidates needed to be able to apply research methods terms and concepts to scenarios presented in questions. These can include: planning, criticising or developing designs or analysing data.
    - Candidates must take note of questions which indicate the need for a link. When a question says 'in this study', or makes direct reference to the scenario, responses must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates therefore need to be prepared for questions using this format and practice can help them to learn both how to extract relevant ideas and how to make novel suggestions based on scenarios.
- **Question 10** on this paper requires candidates to produce an original design for a novel research question; this 'creative' process requires practice. Furthermore, to learn to identify flaws in a design (whether their own, as in **Question 10**, or one from a novel scenario for example in ***Section B***) also relies on having had experience of practical problems in conducting studies. This is a high-level skill, and can be developed through practical work with designing and conducting small studies in class or through the discussion of novel scenarios. The overall format of **Question 10(a)**, and the nature of the mark scheme, is consistent between papers and years. Therefore, it is helpful to prepare candidates to use an essay structure, which can then be applied to the requirements of an individual question.

General comments

In general, candidates were able to access marks across the whole paper. However, very few were consistently able to access the additional marks for linking their response to the scenarios, thus limiting performance as a whole. Nevertheless, some candidates demonstrated a good grasp of definitions for a range of psychological concepts and so were able to access the basic marks with these.

Candidates across the ability range were able to demonstrate some knowledge of a range of aspects of research methods in this paper. Success was greater on more straightforward questions, such as **Questions 1(a)**, **1(b)**, **2(a)**, **2(b)**, **2(c)** and **4(b)**, than on more demanding ones, such as **Questions 7(a)**, **7(c)**, **7(d)(i)**, **7(d)(ii)** and **8(b)**. This examination tested a cross-section of psychology skills and, on some questions, candidates showed limited recall of facts, such as in **Questions 4(a)(i)**, **4(a)(ii)**, **5** and **8(a)**. Note especially that the limited success on **Question 7** and **8(b)** was largely attributable to difficulties with application to the scenario.

Question 10 was sometimes well-answered although responses often lacked one of the necessary key details for a laboratory experiment.

Although some candidates left some answer spaces blank, there was no observable pattern in questions that were left unanswered on this paper. Furthermore, candidates appeared to make appropriate use of additional paper for extended answers and some used the blank pages 11 and 12 to continue writing responses - which is acceptable. Whenever an answer is continued is it advisable to indicate this and to

clearly label additional content with the correct question number and part, something that most candidates are already doing.

Comments on specific questions

Section A

Question 1

(a) Most answers correctly identified '*volunteer/self-selecting*' sampling for the first mark and while most went on to score the second mark by writing 'advertisement in a newspaper' some answers were too vague when writing nothing more than 'an ad' (not specifying where this was published). Some answers correctly referred to direct mail requests.

(b) Again, this question part was generally answered well with most candidates referring to '*participants coming to the researcher*' Where candidates did not earn full marks, was often because they had not answered the 'in this study' command in the question. In other words, the answer could relate to any study and was not made specific to the Milgram study.

Question 2

(a) Many partial marks were scored here (i.e. one mark out of two) because the explanation was insufficient. A covert observation is where the researcher is hidden from the person(s) being observed (such as using a one-way mirror) and it is where the participants do not know they are being observed.

(b) Many answers scored no marks because the question set was not answered, with a general disadvantage being given rather than an answer that focused on the words 'when conducting'. Correct answers could discuss the idea that being hidden could make it difficult for the observer to record all behaviours. It would also correct to suggest that the observer has no control over what the observed person does, meaning that if they walk away, or turn a corner, the observer can do nothing about it.

Question 3

(a) Several components were required in order to score full marks: both conditions of the independent variable (smiling and not smiling), the dependent variable (holding the door open) and the wording needed to show one-tailed (more than). Answers with one of these components missing usually scored one mark and if two components were missing, then zero marks could be awarded. A full mark answer would be '*people who are smiling are more likely to hold a door open than people who are not smiling*'.

(b) Many responses scored marks for this question because fewer components are required and the answer only attracts one mark (rather than two). Different types of answers were acceptable. Answers taking '*there will be no difference*' approach provided the ideal answer, but those stating that '*people smiling will not be more likely…*' also scored one mark.

Question 4

Most candidates scored full marks because they identified an ethical guideline and then stated how it applied to the study. For example, writing the need for *informed* consent (one mark) and this was obtained both from the boy and his mother (second mark). Some candidates muddled confidentiality and privacy and some thought they were the same thing. An ambiguity was psychological harm (leaves in the same state as arrives) but this does not apply here because this is not an experiment. It is a boy being treated for a phobia, so successful treatment means he should not leave in the same mental state.

Question 5

It is likely that candidates would know what the mean is. However, many do not know what an advantage of the mean is because many answers merely defined it or gave an example of how it is calculated. There were three correct answers: the mean takes all the data points into account; it is more representative than the median/mode; the median/mode ignore the effect of outliers.

Question 6

This question was often rarely answered well because often the two terms were confused. Examiners gave credit where they possibly could and answers, which included an example, often scored higher marks because the example helped to clarify and show understanding. The ambiguity with this terminology is that uncontrolled variables are also extraneous variables. An extraneous variable is any variable (other than the IV) that can affect the DV. However, whereas some extraneous variables are often identified and controlled, some have not been identified or are not (or cannot be) controlled, and these are uncontrolled variables. An uncontrolled variable can be 'the weather' and this might be a problem because it can affect participants in one condition and not those in the other, or perhaps just one participant, such as a flash of lightening may distract a participant. This means that a definition (for extraneous and then for uncontrolled) scored one mark, an example a second mark and some explanation of the effect scored the third mark.

Section B

Question 7

(a) (i) This question part was not answered well because answers were often not fully operationalised (as the question required). To be 'operationalised', specifics need to be stated, with the term 'playing' being the component not operationalised. For example, answers such as 'how often a child plays' or 'how many times a child plays' is partially correct for stating what the measure. Crucially, what was also needed, to score the one mark available, was the operationalisation of 'playing'. Stating the activity, such as playing a game, playing football, running would operationalise 'playing'.

(ii) Here most candidates scored full marks by referring to the subjective nature of 'play' and some answers providing an example that contrasted 'playing football' being very different from 'playing chess'. For candidates reading all parts of **Question 7**, this question part should then have helped with both **Questions 7(a)(i)** and **7(b)** (i.e. the need to operationalise playing in **7(a)(i)** and aggression in **7(b)**).

(b) Many candidates were awarded full marks for operationalising 'aggression' by stating, for example, '*the number of times they hit other children*' but many others did not, often stating '*the number of times they were aggressive*', which is not operationalised.

(c) Most candidates stated correctly that 'correlation cannot assume causation' and scored one mark. Many went on to relate this to Dan, by stating, for example, that '*there may be other factors causing aggression in play, such as pre-existing aggression learned at home*' and so scored full marks. Many candidates could not relate their answer to Dan, despite the question explicitly stating '*Explain why Dan cannot conclude…*'

Question 8

(a) This question was answered correctly by nearly all candidates who stated '*how quickly the fish learn to respond/swim to the end of the tank*' or words to the same effect. A few candidates incorrectly provided the independent variable.

(b) Except for those confusing the IV and DV, most candidates again scored full marks by referring to the colour of the lights, which were red or green.

(c) Many answers identified two ethical guidelines (one mark for each) and provided a supporting example. Typically, '*species (and strain) and this can be met by choosing a species that will suffer the least in the proposed study*'. A number of candidates provided partial answers by repeating themselves rather than elaborating '*pain and distress* (one mark) *animals should have no pain or distress*' (repetition and zero marks). A small number of candidates applied human (rather than animal) ethical guidelines and stating '*there must be informed consent*' scored no marks.

(d) This question required an ethical guideline to be applied to Zho's experiment. Most candidates scored both available marks by writing for example, '*species (and strain)*. *Zho should choose a fish species that is suited to living in a tank'*. Some candidates applied human ethical guidelines and a few candidates stated things like '*the fish should have enough to eat and drink*'.

(e) This question required candidates to apply their knowledge of bar charts to Zho's study of fish. Many candidates applied their knowledge correctly and for the *y*-axis wrote about '*speed of swim*' (one mark) and if a unit of measure was added, such as second/minutes, a second mark was awarded. For the *x*-axis correct answers scored one mark for '*colour of light*' or two marks if '*red light'* and '*green light'* were included (though a maximum of three marks from these four possible answers). Some candidates placed wrong label on the wrong axis and scored zero marks.

Question 9

(a) Very few candidates received full marks because they did not answer the question. It is always advised that candidates think carefully about what the question requires. In this instance, the question wanted a suitable control condition to go with the experimental condition. As the experimental group would be singing, then the control condition would logically be no singing, and stating '*a no singing group*' scored one mark. Many candidates read the word '*control'* and applied something to control an extraneous variable.

(b) This question, like many others required a link to the study and many candidates did not do this. Similarly, many candidates defined repeated measures design rather than explaining why it is the best design in this study and scored no marks. Many candidates stated that it is the best design because it reduces individual differences (one mark) because the normal pulse rate of people might differ (one mark) and this would reduce the validity of the study (one mark).

(c) This question also had to be linked to Ella's study to achieve full marks. Many candidates stated that a disadvantage is that there might be an order or practice effect (one mark) like many others required a link to the study and many candidates did not do this. Similarly, many candidates defined repeated measures design rather than explaining why it is the best design in this study and scored no marks. Many candidates stated that it is the best design because it reduces individual differences (one mark) because the normal pulse rate of people might differ (one mark) and this would reduce the validity of the study (one mark).

(d) Most candidates scored one mark for answers to this question for stating no more than 'it would be better because ecological validity would be increased'. Some answers went beyond this and linked it to Ella's study, but many of those answers did not think through their answer; many stated that singing in a natural environment would have no demand characteristics. However, if a study requires people to sing it doesn't matter where they are and the demands would be the same, and it might be the case that people feel more pressure singing outdoors, where others can hear them, than singing in a laboratory.

Section C

Question 10

(a) A range of marks was achieved on this question. Candidates differed widely in terms of how aware they were of structured interview, so there were often major omissions. Others were able to produce a response with a clear understanding of this method and often achieved higher marks. The overall format of **Question 10(a)**, and the nature of the mark scheme, is consistent between papers and years. Therefore, it is helpful to prepare candidates with an overall structure, which can be closely tailored to the requirements of an individual question, such as the required research method and the scenario.

Some candidates wrote about an experiment without mentioning interviews at all and scored no marks. For those writing about interviews what was confused most was the difference between interviews and questionnaires and between structured, semi-structured and unstructured interviews. For the latter the assumption was often that a structured interview produces quantitative data and an unstructured interview produces qualitative data, which is not the case. Another problem was that candidates, when giving examples of questions, often started with '*what is your name/age/sex*' when gathering these details is breaking the guideline of confidentiality, particularly when they are not relevant to the nature of the study.

In the L1 band most often candidates achieved either two marks for an impossible procedure, or a maximum of four marks because they had sometimes written an excellent detailed procedure but had a major omission (see mark scheme). The majority of answers achieved marks in the L2 band, usually not getting into the L3 band because they had insufficient detail on the *What*: the content of questions, the *How*: the structure of the interview and the *How* of the style of questions (see mark scheme).

(b) There were many good answers to this question part, but again, failure to address the question set was a common problem. First, the question stated '*do not refer to ethics or sampling*' and some candidates did. Second, the question asked about a '*practical limitation with the procedure*' and many problems focused on things other than this. Third, for the suggestion of how to overcome the problem there was often nothing more than '*use a different method*' with no elaboration. Candidates scoring top marks had thought about their design beforehand and designed it, in **Question 10(a)**, so that the limitation could be identified and resolved in **part (b)**.

PSYCHOLOGY

Paper 9990/22
Research Methods

Key messages

- This is a question paper about research methods, which requires candidates to answer a range of question types, including ones about the core studies in relation to research methods, terms and concepts used to describe or evaluate research methodology, and application of this knowledge to both familiar and unfamiliar contexts. Some flaws were evident in each of these skills in many candidates. It is therefore essential that candidates are prepared for the skills of recalling concepts and of using this knowledge.
- Practising how to apply ideas to novel scenarios is important to succeed on this paper. This could have helped candidates in two ways:
    - Candidates needed to 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 must take note of questions which indicate the need for a link. When a question says 'in this study', or makes direct reference to the scenario, responses must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates therefore need to be prepared for questions using this format and practice can help them to learn both how to extract relevant ideas and how to make novel suggestions based on scenarios.
- **Question 10** in this paper requires candidates to produce an original design for a novel research question; this 'creative' process requires practice. Furthermore, to learn to identify flaws in a design (whether their own, as in **Question 10**, or one from a novel scenario for example in ***Section B***) also relies on having had experience of practical problems in conducting studies. This is a high-level skill, and can be developed through practical work with designing and conducting small studies in class or through the discussion of novel scenarios. The overall format of **Question 10(a)**, and the nature of the mark scheme, is consistent between papers and years. Therefore, it is helpful to prepare candidates with an overall structure, which can be closely tailored to the requirements of an individual question, such as the required research method and the scenario.

General comments

In general, candidates were able to access marks across the whole paper. However, very few were consistently able to access the additional marks for linking their response to the scenarios, thus limiting performance as a whole. Nevertheless, some candidates demonstrated a good grasp of definitions for a range of psychological concepts and so were able to access the basic marks with these.

Candidates across the ability range were able to demonstrate some knowledge of a range of aspects of research methods in this paper. Success was greater on more straightforward questions, such as **Questions 1(a)**, **1(b)**, **2(a)**, **2(b)**, **2(c)** and **4(b)**, than on more demanding ones, such as **Questions 7(a)**, **7(c)**, **7(d)(i)**, **7(d)(ii)** and **8(b)**. This examination tested a cross-section of psychology skills and, on some questions, candidates showed limited recall of facts, such as in **Questions 4(a)(i)**, **4(a)(ii)**, **5** and **8(a)**. Note especially that the limited success on **Question 7** and **8(b)** was largely attributable to difficulties with application to the scenario.

Question 10 was sometimes well-answered although responses often lacked one of the necessary key details for a laboratory experiment.

Although some candidates left some answer spaces blank, there was no observable pattern in questions that were left unanswered on this paper. Furthermore, candidates appeared to make appropriate use of

additional paper for extended answers and some used the blank pages 11 and 12 to continue writing responses - which is acceptable. Whenever an answer is continued is it advisable to indicate this and to clearly label additional content with the correct question number and part, something that most candidates are already doing.

Comments on specific questions

Section A

Question 1

(a) This question part was generally answered well. Answers which did not earn credit for 'explaining' tended to make some reference to causality in the description, but nevertheless many of these were able to offer a correct example. In other words, they could identify the study-specific correlation but could not give a general definition of a positive correlation. An explanation needs to be independent of the term itself, hence where there was simply a direct repetition of words in the question, such as in 'a positive correlation is when two variables positively correlate' no mark could be awarded.

(b) Again, this question part was generally answered well. Where candidates did not earn full marks, this was often because they had not followed the 'more' command in the question, i.e. they did not compare the two measures.

Question 2

(a) It was rare that candidates could not answer with the appropriate features. However, some confused the name of the university, providing examples of Yale, Cambridge and Harvard in place of Stanford. Where full marks were not gained, candidates had sometimes referred to sampling techniques rather than the sample itself.

(b) Responses to this question part were again very good. The majority of candidates referred to either the sample size or the use of boys and girls. Some candidates gave more detail in their responses than was necessary for full marks, e.g. mentioning the use of both a large sample and both genders.

(c) The final part of this question was also answered well. The most common answer was that the sample came from same nursery school, with some candidates giving a fuller answer explaining why, in this case, this could be problematic. However, a common problem was to give generic answers, e.g. simply making reference to all the children being from 'the same place'. As the question made specific reference to 'in this study', such responses were not creditworthy.

Question 3

(a) Many responses to this question part earned partial marks – either by referring to consistency of procedure, or that replication would yield similar results. Some candidates missed achieving the mark by referring to replicability only. Fewer responses provided an example from the study, but the most common example was that chimps were presented with the same tools in each trial. Two fairly common errors were a confusion between validity and reliability, and where the definition given was circular.

(b) Many responses did not earn marks. This was due to either discussing validity (often that the chimps had been part of experimental studies in the past) or generalisability (these chimps do not represent wild ones). A common incorrect assumption was that individual differences caused a lack of reliability. This is not, however, the case. Individual differences per se are not a reliability issue. Indeed, the DV is designed to measure individual differences, albeit ones caused by the IV, and other individual differences may have a damaging effect via their influence on validity.

Question 4

(a) (i) This question was not answered well, with candidates offering either muddled definitions or referring to social desirability. Demand characteristics are the features of the research situation (the characteristics) which indicate to the participants the intentions of the research (the demands), thus affecting the participants' behaviour.

(ii) Although many responses referred to validity, they were often ineffective because of the weak answers to **part (a)(i)**. To earn credit, the problem given needed to identify how the effect of demand characteristics on behaviour means that the DV is no longer measuring (only) the effect of the IV.

(b) Many responses to this question part earned no marks as they were generic points, e.g. 'deceiving the participants' or 'hiding the aim' and the question asked for a content-specific answer. The majority of correct answers suggested the inclusion of filler questions in the questionnaire.

Question 5

Although many responses were awarded the one possible mark for this question, the majority were imperfect answers. The most common answer was a simplistic statement along the lines of 'the mean takes all scores into account'. Few responses were truly accurate as strictly speaking all of the three measures of tendency use all the scores. The precise difference is that in the calculation of the mean, the *values* of all the scores are used. In addition to this imprecision, few responses provided an explicit contrast with the mode. However, on the positive side, the majority of candidates did attempt to answer the question set so there were very few inappropriate responses that described how the mean was calculated.

Question 6

This question was often answered very well. The mark scheme required a balance but nevertheless allowed full marks to be achieved in a variety of different ways, e.g. through more detail or more examples. Milgram was the most frequently used example for both right to withdraw and deception. Schacter and Singer, Piliavin et al. and Laney et al. were also all used effectively showing that candidates had put a lot of effort into answering this question. Many candidates repeated the terms 'withdraw' and 'deception' in their answers without describing the guidelines themselves but gave good detail and examples so could still achieve moderately good marks. A common error was to simply give the name of researcher/study as without clearly linking details of its procedure to the guideline to provide an example. There were very few responses which suggested that the candidates did not understand the question, and when this happened they tended to list the different ethical guidelines only.

Section B

Question 7

(a) This question part was not answered well for the 3 marks available. Many candidates gained credit for an appropriate identification of a technique - most common response was random sampling - but few went on to give details of how this might be done or why it would achieve a random sample. Even fewer candidates could provide the context in relation to the study, i.e. by making reference to emotions or leisure pursuits, which was an important element of the answer.

(b) Here candidates typically provided a response in question format and used 'Describe' and 'How do you feel when…'. Most candidates achieved this mark. A minority of responses gave a closed question, either with or without option choices. A closed question is one with a limited range of possible answers, whereas an open question allows the participant complete freedom to answer in any way they want. Note, for example, that 'Do you feel exited on a fairground ride?' is a closed question because it does not give the respondent any freedom as it implies only two possible answers, 'yes' or 'no'. However, in an examination where a closed question was asked for, such a response would have to explicitly include those answer options in order to be creditworthy. A small number of candidates gave an open question that was not related to the topic of emotions.

(c) Many responses referred to qualitative data being difficult to analyse/compare or the subjectivity of interpretation. However, many of these did not earn the second mark as they as they did not relate their answer to emotion.

(d) (i) When candidates achieved the full 2 marks available on this question, it was when they referred to the amygdala in their response, and they clearly understood the question. However, most candidates only achieved 1 mark for referring to objectivity without providing the link to the investigation. This was often the case even though they had underlined the word 'emotion' in the question.

(ii) This question part was also only partially answered by candidates. There were many good answers that discussed how subjective emotions cannot be effectively measured in an objective way but they typically did not provide information relating this to the use of the scanner or what participants would have to do whilst being scanned. There was also occasional confusion with other studies using scanning and/or EEG equipment such as Canli et al. and Dement and Kleitman.

Question 8

(a) This question received mixed responses with some candidates clearly able to respond appropriately with the idea that the participants' environment was not manipulated/controlled by the researchers. However, many candidates just stated that a naturalistic observation is when the research takes place in a natural environment, which did not receive credit.

(b) Few candidates earned both marks on this question. Although there were lots of responses referring to the difficulty in controlling extraneous variables, this was the limit of most answers. We used the context of the study to provide an example of the extraneous variable. Where marks were not gained, ahis tended to be because they had discussed problems with other aspects of the observational method, e.g. covert methods, rather than focusing on the naturalistic element.

(c) The question asked 'how', but most candidates focused on 'who', i.e. teachers/parents with limited focus on the how and on 'why' - as children cannot consent for themselves. A limited number of candidates used presumptive consent as part of their answer and when they did, they clearly understood the concept.

(d) This question part was not answered successfully with candidates often showing a lack of understanding of what operationalisation means. Very few responses achieved two marks. Many earned a serendipitous one mark for mentioning a ball, swing**,** hop scotch, playing with toys, using slides etc. somewhere in the response.

(e) The majority of candidates gave good responses to this question part, with candidates clearly understanding what is meant by covert observation with use of CCTV, one-way mirror and various disguises. Alternatively, candidates earned one mark for referring to the children being unaware of the observation. A minority of responses focused, incorrectly, on a participant observation.

Question 9

(a) Very few candidates achieved two marks – those who wrote creditworthy hypotheses often failed to include any operationalisation so just achieved one mark. There were many responses that included the first part of a one-tailed hypothesis but did not then provide the two levels of the IV, such as, 'Teenagers play internet games the most', or 'young people play games on-line more than others' so could not gain credit.

(b) In contrast to **part (a)**, this question part was well-answered with many candidates achieving two marks by referring to age range and internet users or identifying the need for a wide age spread and the specifying ages.

Section C

Question 10

(a) A range of marks was achieved on this question. Candidates differed widely in terms of how aware they were of an effective style of response to this question, so there were often major omissions. Others were able to produce a response with a clear structure and often achieved higher marks. The overall format of **Question 10(a)**, and the nature of the mark scheme, is consistent between papers and years. Therefore, it is helpful to prepare candidates with an overall structure, which can be closely tailored to the requirements of an individual question, such as the required research method and the scenario.

A fairly common omission was to not write about shapes, when in fact at the very least a comparison had to be made back to the original group. In addition, there were many responses with no application of ethics for working with animals or with no operationalisation.

In the L1 band, most often candidates achieved either two marks for an impossible procedure, or four because they had sometimes written an excellent detailed procedure but had a major omission. Most often that was only mentioning one level of the IV (sounds) or omitting controls and less often because they had only referred to 'asking the parrots questions about sounds/shapes' rather than operationalising the DV. The majority of answers achieved in the L2 band, usually not getting into the L3 band because they had not operationalised the sounds and or the shapes condition, or had only implicit controls.

A minority of responses were just a repetition of what the candidate had learned and appeared to understand about the Pepperberg study whilst others spent the majority of the answer discussing the procedure at length, but leaving out critical references to the IV, DV, controls, which are central features of a laboratory experiment.

(b) There were many successful answers to this question part, with examples of different designs, operationalisation of variables, controls, inter-rater reliability and practice/order effects. There was, however, evidence that some candidates had either not read the question properly or did not understand the ideas of non-human animal ethics or sampling in particular, as they provided responses based on animal ethics, distress and not having consent, and issues of generalisability and individual differences in parrots. When ecological validity was provided, candidates often didn't make appropriate suggestions of what could be heard/seen in the wild.

In other instances, candidates tried to give an improvement that was not related to the procedure they had described in **10(a)**, and they did so, they generally used generic improvements relating to changing repeated measures to independent measures, or vice versa, without linking to their own study.

PSYCHOLOGY

Paper 9990/23
Research Methods

Key messages

- This is a question paper about research methods, which requires candidates to answer a range of question types, including ones about the core studies in relation to research methods, terms and concepts used to describe or evaluate research methodology, and application of this knowledge to both familiar and unfamiliar contexts. Some flaws were evident in each of these skills in many candidates. It is therefore essential that candidates are prepared for the skills of recalling concepts and of using this knowledge.
- Practising the application of ideas, especially to novel scenarios and in learners' own practical activities, is important to success on this paper. This could have helped candidates in two ways:
    - Candidates needed to be able to apply research methods terms and concepts to scenarios presented in questions. These can include, for example, planning, criticising or developing designs or analysing data.
    - Candidates must take note of questions which indicate the need for a link. When a question says 'in this study', or makes direct reference to the scenario, responses must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates therefore need to be prepared for questions using this format and practice can help them to learn both how to extract relevant ideas and how to make novel suggestions based on scenarios.
- **Question 10** in this paper requires candidates to produce an original design for a novel research question; this 'creative' process requires practice. Furthermore, to learn to identify flaws in a design (whether their own, as in **Question 10**, or one from a novel scenario for example in ***Section B***) also relies on having had experience of practical problems in conducting studies. This is a high-level skill, and can be developed through practical work with designing and conducting small studies in class or through the discussion of novel scenarios. The overall format of **Question 10(a)**, and the nature of the mark scheme, is consistent between papers and years. Therefore, it is helpful to prepare candidates with an overall structure, which can be closely tailored to the requirements of an individual question, such as the required research method and the scenario.

General comments

In general, candidates were able to access marks across the whole paper. However, very few were consistently able to access the additional marks for linking their response to the scenarios (for example in some parts of **Questions 7** and **9**), thus limiting performance as a whole. Nevertheless, some candidates demonstrated a good grasp of definitions for a range of psychological concepts and so were able to access the basic marks with these.

Candidates across the ability range were able to demonstrate some knowledge of a range of aspects of research methods in this paper, although overall performance was limited. Success was greater on more straightforward questions, such as **Questions 1(a)**, **1(b)**, **2(a)**, **3(a)** **8(a)** and **8(b)** than on more demanding ones, such as **Questions 2(b)** and **7(a)**. This examination tested a cross-section of psychological skills and on some candidates showed limited recall of facts, such as **Questions 2(b)**, **4(a)**, **4(b)**, **9(a)**. There was also significant confusion on **Questions 7(a)**, **7(b)(i)** and (**ii)**, **7(c)** and **7(d)(i)**. Responses to 7**(d)(ii)**, however, were good, showing that candidates had understood the scenario.

Question 10 was sometimes well answered although responses often lacked one of the necessary key details for a field experiment.

Comments on specific questions

Section A

Question 1

(a) Many candidates had a poor grasp of this concept. Although some could identify that individual differences were relevant, or were able to give examples of individual differences, fewer could identify the implication of these differences in a study. However, where marks were earned, definitions were often very good**.**

(b) Although candidates were often unable to define the concept of participant variables in **part (a)**, nevertheless, a good range of ideas were offered here. In addition to those suggested on the mark scheme, others included authoritarian parenting or religion, for example.

Question 2

(a) Most candidates scored 1 mark, typically because they were unable to describe the type of relationship, i.e. to say it was a negative/inverse correlation.

(b) There were very few full-mark answers. Many candidates just repeated the question, i.e. restated that a correlation meant that they could not conclude that there was a causal relationship. It is important that candidates have an understanding of the concept of how causality can be determined as this underpins the central reason for conducting experimental studies as well as explaining the fundamental difference between these and correlational studies.

Question 3

(a) Many responses to this question were not successful, often due to confusion. 'Order effects' were commonly confused with 'the effects of giving orders' (i.e. Milgram), demand characteristics, standardised instructions, the recent effect in memory and the order of the participants themselves, for example suggesting that the last person would be better than the first.

(b) Many candidates did not know the correct answer but made logical guesses. These did not earn credit. For example, neither testing participants individually nor reducing demand characteristics would help to overcome order effects.

Question 4

(a) Responses often contained irrelevant material, such as references to central tendency, quantitative data or ethics. Some candidates incorrectly stated that the standard deviation considers how *many* scores differ from the mean rather than by how *much* they differ**.**

(b) Responses here were better, with common correct answers focusing on the inclusion of all data points in the calculation and the idea that, unlike the range, the standard deviation is better at representing the spread of groups with one or two outliers. Most candidates, however, were unable to provide an advantage, even one that did not provide a comparison between the standard deviation and the range.

Question 5

(a) This question part was sometimes well answered, with responses typically focusing on the concept of validity (although this was not necessarily named – and did not need to be).

(b) This question part was answered somewhat more successfully, with a range of responses, often considering his freedom to move around or seek objects.

Question 6

This question was well answered, with some excellent responses. The benefit of candidates conducting their own studies was illustrated by one very good response which used examples of different question types from within the context of a study they had done themselves in class.

Section B

Question 7

(a) Many responses to this question part were alternative hypotheses rather than null hypotheses.

(b) (i) Although the nature of the sampling process was made evident in the second sentence of the stem, many candidates were unable to identify random sampling.

(ii) Many candidates were able to identify the advantage of representativeness. So even when unable to name 'random sampling' and earn credit in **part (b)(i)**, the candidate had evidentially understood the question stem and was able to gain at least 1 mark here.

(c) This question part was not successfully answered, with many candidates being unable to correctly explain the design. Some incorrect responses named a design, but the wrong one (most commonly repeated measures) but common errors also suggested field experiments, natural observations, laboratory experiments or were left blank.

(d) (i) Few responses referred to the nature of Carol's data, namely that it was continuous data, not totals, so a mode would have been inappropriate, or that it was ordinal so the median was more appropriate than the mean. Even where creditworthy responses were provided, e.g. with reference to outliers, they were typically generic rather than specific to Carol's data.

(ii) This question was well answered, and many responses were awarded 3 or more marks, indicating that candidates had understood the scenario. However, when plotting a bar chart it is not necessary or appropriate to include separate bars or stacked bars to show to total score available. This was a very common error that did not appear to be the misunderstanding of the occasional candidate. The function of descriptive statistics is to provide a simplification of the key data so adding such bars or stacks to a bar chart distorts the summary and defeats the intention.

Question 8

(a) This question part was well answered, with responses often providing both the name of the interview type and a clear advantage, although marks could be gained independently for either of these aspects of the answer.

(b) Those candidates who were able to name the interview type were typically also able to give an appropriate advantage. However, others were also able to provide an advantage even if they were unable to identify the unstructured interview.

Question 9

(a) The purpose of a controlled observation is to enable the creation or manipulation of the setting by the researcher in order to facilitate the observation of the desired target behaviour. Whilst this was apparent in some responses, many incorrectly suggested that the purpose was to reduce extraneous variables, which is not the case.

(b) This question part was often very well answered. However, one problem encountered by candidates was an inability to be able to suggest a 'behaviour'. The syllabus states that candidates should be able to tackle novel scenarios and this is an area in which teachers could provide more opportunities for candidates to develop practical skills that include innovation. Those candidates who were able to suggest a behaviour (rather than an emotion, or a belief) therefore had a head start.

A second issue arose from the difference between operationalisation of a variable to clearly define it so that it can be measured or manipulated and the process of measurement itself. To illustrate this point, we might operationalise 'playing' as skipping, digging with a toy spade or running after a ball. To measure these behaviour we would then have several choices: for example, to count the number of each activity, to time them or to rate their intensity. Operationalisation and measurement were frequently confounded in responses.

(c) This question was asking about how to control potential situation variables, aspects of the play area that needed to be kept the same and was typically well-answered. Where errors were made,

they were commonly because the candidate described how to limit *participant variables* (such as hunger) which are not about keeping the play area – the situation – the same, or were about the *sample*, for example suggesting controls over the number of children.

(d) Although many effective responses tackled suggestions such as being able to gain closer access to the participants and being able to influence their play, some responses were irrelevant. Some irrelevant responses included: suggesting an overt, participant observation could be more detailed and would be easier, suggesting that the participant observer could ask direct questions to collect data. This is changing the method from an observation to an interview.

Section C

Question 10

(a) The most competently written 'major' was the 'what' of the DV. The wide range of excellent suggestions included interacting covert 'managers' collecting data, CCTV, setting projects to standardise, and time spent. In other instances, more limits were imposed to standardise the task. The definition of 'laziness' was also often successful, with successions including time spent on computer games, chatting, using social media, staring into space, yawning and sleeping.

However, a significant minority of responses did not include and IV, or did not describe controls, and many answers were very short so unlikely to include sufficient detail for replication.

(b) As this is a psychology paper, the answers must relate to psychology, thus suggestions such as 'expensive' are only creditable if this has some relationship with a psychological or methodological factor of relevance.

PSYCHOLOGY

Paper 9990/31
Specialist Options: Theory

Key messages

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

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

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

These questions could ask the candidate to describe a theory, study or technique such as a self-report used by psychologists that is named in the syllabus or identified in one of the studies or theories named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies from the syllabus or a summary of the key features of the study. This question is worth four marks and the candidates should write a more extended answer. An error shown by some candidates was to describe a theory or technique that was from the incorrect part of the syllabus. There were a small number of general responses that were not specifically directed at answering the question.

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

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

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

This question will always come from one of the bullet points in the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the specification under the appropriate bullet point. For this exam, some of the answers did not give all of the studies/theories under the bullet point, used the incorrect bullet point or the description was brief. It is possible for the responses to achieve full marks by describing at least two of the studies, theories or techniques but this would need to be a very detailed description. Ideally, the response would describe three of the bullet points in detail with excellent understanding and good use of terminology throughout. These type of responses often achieved the top band. It is also important that the descriptions are linked to the topic area named in the syllabus. It could be useful for candidates to do revision notes with the title of each bullet point as the header in their notes.

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

This question will always ask the candidate to evaluate the theories, studies and/or techniques described in **part (a)** of the question. 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. However, most responses that evaluated 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 at least three issues tended to achieve higher marks as these responses were able to demonstrate comprehensive understanding with

good supporting examples from the theories, studies and techniques described in the **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. A conclusion at the end of each issue would be helpful in order to show excellent understanding of the issue under discussion. In order to achieve the requirements of the Level 3 and 4 band descriptors it would be best if the response was structured by issue rather than by study and/or theory. It would also be ideal for the response to start with the named issue to make sure the answer covers this requirement of the question.

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

General comments

The marks achieved by candidates for this session of the 9990 specification achieved across the full range of the mark band, which was very pleasing to see. Many of the candidates were very well prepared for the exam and showed good knowledge, understanding and evaluation throughout their responses. Some candidates were not as well prepared and showed limited knowledge and understanding with brief and/or superficial responses. These candidates often had limited evaluation skills.

Time management for this paper was good for the majority 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 few of the candidates attempted to respond to more than two topic areas but often did not attempt all of the questions for each option chosen. These responses achieved at the lower end of the mark band.

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

Comments on specific questions

Psychology and Abnormality

Question 1

(a) Most responses addressed the question and were able to achieve one mark by outlining the symptoms of hoarding disorder such as the inability to discard household items and/or the effect this disorder could have on their daily lives (such as unhygienic living conditions). A few responses also stated that the disorder is persistent or the person with the disorder experiences distress when attempting to get rid of the items they have collected. These type of responses achieved full marks.

(b) Most responses were detailed with good descriptions given of the Maudsley Obsessive-Compulsive Inventory. For example, many referred to the 30 items, true/false answers, sub-scales and examples of some of the questions asked in the inventory. Some of the responses were brief and stated that the inventory measured the symptoms of the disorder without giving any details of the self-report. Less successful responses included giving incorrect details of the inventory or describing the Y-BOCs rather than the MOCI. Most response gave an appropriate amount of detail, although a few over-wrote their responses which did achieve full marks but gave the candidate less time to answer all of the questions in the exam.

(c) Many responses gave clear points of comparison between the two inventories. Popular responses included stating that both inventories do collect quantitative data with examples given for each inventory. A common difference was time taken to complete takes longer for the Y-BOCS (about 30 minutes) as opposed to the 5 minutes for the MOCI. Other answers highlighted that the Y-BOCS is semi-structured interview whereas MOCI just uses a questionnaire. Less successful responses did not give examples from the self-reports.

Question 2

(a) Many responses were detailed, accurate and coherent with a good use of psychological terminology. Most referred to systematic desensitisation, CBT, and applied tension. Many also gave details of research studies that investigated these treatments for anxiety disorders. Other techniques for different anxiety disorders were also creditworthy including imaginal desensitisation and use of SSRIs. Weaker responses were often very brief with limited details given of the treatment and/or relevant study. For examples, suggesting patients could take drugs without referring to suitable drugs. There were other generic responses to changing the way people think. A few responses gave descriptions of treatments and studies for schizophrenia, rather than anxiety disorders, which was not creditworthy.

(b) The responses to this question covered the full range of the mark band. Better responses used the issues as a starting point and compared the treatments that had been described in **part (a)**. The vast majority addressed the named issue of the longitudinal research method. Some did provide analysis of this issue and discussed the strengths and weaknesses of this method and applied these to the relevant studies. However, some responses were not aware that a longitudinal study is where a change in behaviour is studied over a period of time. Therefore, the Ost and Westling study, which was carried out over 12 weeks, can be considered longitudinal rather than snapshot as some responses indicated. A range of other evaluation points were considered including nature versus nurture, usefulness, determinism, and effectiveness. The majority of responses took an approach of looking at two or three evaluation issues and applied these to their answers to **part (a)**, which was helpful. Less successful responses often evaluated the treatments in turn with few examples to back up their points and little analysis given.

Psychology and Consumer Behaviour

Question 3

(a) There were a number of good descriptions of playground design including the use of elements of nature including water and sunlight. Most responses were of an appropriate length for a two mark question and achieved full marks. A minority of candidates described the Friedman casino design, which was not creditworthy.

(b) There were a number of detailed responses which clearly described both the pleasure-arousal model and the cognition-emotion model of the effects of ambience. Better responses were able to give an example of one or both of the models and the effect on consumer behaviour. Although this was not a requirement of the question, those that gave examples were often able to achieve full marks as their example showed their understanding of the models. Some candidates did not answer this question and a few gave very brief or confused responses.

(c) For those candidates who gave a good response to **part (b)**, many were able to achieve at least Level 2 and some Level 3 for their response to this question. Those that gave confused or incomplete responses to **part (b)**, often achieved in Level 1 or gave no response to this question. Popular weaknesses included ignoring individual differences of consumers, reductionism and difficulties with application to everyday life for retailers.

Question 4

(a) Most responses achieved Level 1 or 2 for this question. Responses were taken from a variety of sections of the syllabus as many of the theories and studies are concerned with 'buying the product'. Some responses did describe the theory of planned behaviour by Ajzen, the black box model and the consumer decision model. Those responses that used other parts of the syllabus often did not link their response to 'buying the product' and therefore achieved a lower mark band.

(b) The majority of the responses to this question were evaluative although some responses described more studies and/or theories related to 'buying the product'. Those responses that were evaluative tended to structure their response by study/theory rather than by issue. Most attempted to discuss the named issue of usefulness although this was often done in a superficial way. Many candidates stated that the theories were useful to retailers without giving any examples or analysis of their point. Some candidates attempted to discuss other issues and raised points such as individual differences, reductionism and/or an evaluation of a study that had been described in **part (a)**.

Psychology and Health

Question 5

(a) This was often well answered by candidates with many achieving full marks. Some gave a general definition of fear arousal and how it is used as a strategy to promote health whereas others gave an example. Both types of responses were creditworthy. Popular examples included dental health and smoking. Those that achieved one mark gave a brief response and often did not link their answer to how fear arousal could be used to change health behaviour.

(b) There were some strong responses to this question with some giving a detailed description of the Yale Model of Communication with links made to how this model can be used to promote healthy behaviour. Most responses focussed on the message, the communicator and the audience. Some candidates over-wrote their answer and attempted to include all aspects of the model as well as detailed examples. Although these type of responses did achieve full marks, it left less time for the other questions in the exam. Other responses were very brief and just identified the parts of the model without giving any description of each part of the model could help to improve health behaviour. A significant number of responses focused on how doctors could change their behaviour towards their patients in order to improve adherence. These responses did receive some limited credit as they were describing the communicator element of the model.

(c) Most candidates could describe a strength of the model and many focused on the holistic nature of the model or its usefulness in terms of being an effective strategy for promoting healthy behaviour. Some of these responses were able to give examples to back up their response, which helped them to achieve Level 2. A few responses did also address a weakness of the model although many identified the weakness rather than explaining it and some candidates stated the model was reductionist without any explanation as to why they thought this, which meant this type of response was not creditworthy. Those that did explain a creditworthy weakness identified that the model does not explain how the change in health behaviour happens. A small number of responses then explained this weakness in some depth.

Question 6

(a) This was generally a very well answered question where responses showed that the candidates had been well-prepared. The majority described types of pain, Descartes' specificity theory and gate control theory. Less successful responses sometimes confused the theories or gave brief responses. Brief responses tended to outline the types of pain without a description of the theories. Many responses described some of the treatments for pain, which was not creditworthy for this question.

(b) A significant number of responses structured their answer by addressing each issue in term. Most responses considered the named issue of reductionism and applied this issue to each theory in turn. Some responses did provide analysis either by discussing the advantages and disadvantages of reductionism or by comparing the reductionist nature of each theory and providing a conclusion regarding reductionism at the end of their evaluation of the theories. Other issues included situational versus individual, usefulness, and generalisability. Some responses achieved in the lower levels of the mark band due to giving very brief responses or structuring their response by theory which meant these type of answers were often repetitive and superficial.

Psychology and Organisations

Question 7

(a) There were many good responses to this question and most wrote an appropriate amount for a two mark question. Some responses described both horizontal and vertical job enlargement whereas others focussed on one type of enlargement. Both types of responses could achieve full marks. Some responses gave examples, which helped them to achieve full marks. Less successful responses were often brief or identified 'horizontal and/or vertical' without any description of what this meant. A few candidates did not attempt this question.

(b) Most responses were able to at identify two methods of workplace sabotage. Popular responses included destruction of machinery and work slowdown. Better responses gave examples to help

them achieve higher marks. Less successful responses tended to be very brief with an identification of the workplace sabotage methods rather than a description.

(c) Level 2 and 3 responses to this question were from those candidates who had good knowledge of the Giacalone and Rosenfeld Study. Popular strengths included usefulness and strengths of quantitative data. Popular weaknesses included difficulties with validity and generalisability. Weaker responses tended to identify the strength and/or weakness without explaining each or giving an example from the study.

Question 8

(a) There were many good, well developed responses to this question. Most responses described the Hawthorne studies, the bullying at work study by Einarsen and the study by Oldham and Brass on open plan offices. Most were able to describe the procedures of the studies as well as some detailed descriptions of the results. Some responses were from other parts of the syllabus but were creditworthy if the response was linked to either physical or psychological work environments. Less successful responses tended to be brief or a superficial description of the relevant studies.

(b) Most responses were structured by evaluation issue with many of them beginning with the named issue of individual versus situational explanations. Some candidates did do some analysis of their evaluation points by providing strengths and weaknesses of the issue under discussion or making a comparison between the studies that had been described in **part (a)**. Popular evaluation issues included generalisability, ecological validity and usefulness. A significant number of weaker responses evaluated the studies from **part (a)** in turn and gave more superficial and repetitive responses.

PSYCHOLOGY

Paper 9990/32
Specialist Options: Theory

Key messages

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

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

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

These questions could ask the candidate to describe a theory, study or technique such as a self-report used by psychologists that is named in the syllabus or identified in one of the studies or theories named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies from the syllabus or a summary of the key features of the study. This question is worth four marks and the candidates should write a more extended answer. An error shown by some candidates was to describe a theory or technique that was from the incorrect part of the syllabus. There were a small number of general responses that were not specifically directed at the question.

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

These questions could require the candidate to explain two strengths or weaknesses of what they have described in the **part (b)** of the question. The question could also ask the candidates to make a comparison or to evaluate using a specific issue, although this type of question was not asked for this exam. This question is worth six marks so the candidate should write a more extended answer for each issue raised. Some responses were very detailed for one issue but then only briefly discussed the second issue. In addition, many of the responses were general and not specific to the theory, technique or study named in the question. To improve, responses should give specific examples to achieve the top band.

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

This question will always come from one of the bullet points in the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the specification under the appropriate bullet point. For this exam, some of the answers did not give all of the studies/theories under the bullet point, used the incorrect bullet point or the description was brief. It is possible for the responses to achieve full marks by describing at least two of the studies, theories or techniques but this would need to be a very detailed description. Ideally, the response would describe three of the bullet points in detail with excellent understanding and good use of terminology throughout. These type of responses often achieved the top band. It is also important that the descriptions are linked to the topic area named in the syllabus. It could be useful for candidates to do revision notes with the title of each bullet point as the header in their notes.

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

This question will always ask the candidate to evaluate the theories, studies and/or techniques described in **part (a)** of the question. 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. However, most responses that evaluated 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 at least three issues tended to achieve higher marks as these responses were able to demonstrate comprehensive understanding with

good supporting examples from the theories, studies and techniques described in the **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. A conclusion at the end of each issue would be helpful in order to show excellent understanding of the issue under discussion. In order to achieve the requirements of the Level 3 and 4 band descriptors it would be best if the response was structured by issue rather than by study and/or theory. It would also be ideal for the response to start with the named issue to make sure the answer covers this requirement of the question.

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

General comments

Many of the candidates were very well prepared for the exam and showed good knowledge, understanding and evaluation throughout their responses. Some candidates were not as well prepared and showed limited knowledge and understanding with brief and/or superficial responses. These candidates often had limited evaluation skills.

Time management for this paper was good for the majority 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 few of the candidates attempted to respond to more than two topic areas but often did not attempt all of the questions for each option chosen. These responses achieved at the lower end of the mark band.

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

Comments on specific questions

Psychology and Abnormality

Question 1

(a) Most responses addressed the question and were able to achieve one mark by outlining how dopamine can cause impulse control disorder. A significant number of responses gave very detailed descriptions of the 'reward deficiency syndrome' and had good knowledge of how dopamine can be lower in those with impulse control disorder as the disorder develops. Some responses were too lengthy for a two mark question.

(b) Most responses were detailed with good descriptions given of the Kleptomania Symptom Assessment Scale (K-SAS). For example, many referred to the 11/12 items, 0–4 and 0–5 rating scales, and examples of some of the questions asked in the inventory. Weak responses included giving incorrect details of the inventory or stated that the scale measured the symptoms with no other details. A small minority of responses evaluated the scale, which was not creditworthy. Most responses were of an appropriate length for a four mark question.

(c) Many responses gave both a strength and a weakness of the K-SAS. Most were able to achieve in Level 1 or Level 2 by identifying an issue and giving some development of this point. The vast majority of responses did not make the strength or weakness specific to the scale or kleptomania, although a few did give very developed responses. Many responses gave a number of strengths and weaknesses and were credited with the best point given. These type of responses often achieved Level 1 as although the response was of an appropriate length only one of the strengths and one of the weaknesses given was creditworthy. Popular points included strengths and weaknesses of quantitative data, applications of everyday life and issues with reliability and validity.

Question 2

(a) Many responses were detailed, accurate and coherent with a good use of psychological terminology. Most referred to SSRIs, cognitive treatments and exposure response prevention. Many also gave details of research studies that investigated these treatments for obsessive-compulsive and related disorders. Weaker responses were often very brief with limited details given of the treatment and/or relevant study. For example, suggesting patients could take drugs without referring to suitable drugs. There were other generic responses to changing the way people think. A few responses gave descriptions of treatments and studies for schizophrenia and impulse control disorder rather than obsessive-compulsive disorders, which was only creditworthy if directly linked to OCD.

(b) The responses to this question covered the full range of the mark band. Better responses used the issues as a starting point and compared the treatments that had been described in **part (a)**. The vast majority addressed the named issue of validity. Some did provide analysis of this issue and made comparisons of the validity of the treatments and/or studies described in **part (a)**. Weaker responses tended to state that the studies were valid or not without any discussion given. A range of other evaluation points were considered including usefulness, determinism, ethics and an evaluation of the methodology used in the studies described in **part (a)**. Weaker responses often evaluated the treatments in turn with few examples to back up their points and little analysis given. Some responses continued to describe the treatments from **part (a)** which was not creditworthy.

Psychology and Consumer Behaviour

Question 3

(a) There were a number of good descriptions of prospect theory in consumer decision making. Many candidates achieved one mark by stating that the theory refers to value and endowment. A significant number of responses did achieve full marks by giving an example of how prospect theory might apply to a consumer when making a decision to purchase a product or explained that it is where the consumer might value an item more when they own it as opposed to it being owned by someone else. A minority of responses were left blank or the responses gave an explanation of a different model of consumer decision making such as utility theory.

(b) Some responses were able to describe two variables that were measured in the Braun-LaTour et al. study on advertising. Popular responses included referring to whether the participant noticed that Bugs Bunny did not belong in the advertisement, reference to previous visits to Disneyland and rating the likelihood of visiting Disneyland in the future. Many of the responses referred to the various conditions of the studies conducted which was not creditworthy as these were not measured variables. There was also some confusion about the study where some responses described the variables measured in the Auty and Lewis study on product placement in films. This was also not creditworthy.

(c) For those candidates who gave a good response to **part (b)**, many were able to achieve at least Level 2 and some Level 3 for their response to this question. Those that gave confused or incorrect responses to **part (b)** often achieved in Level 1 or gave no response to this question. Popular strengths included strengths of laboratory experiments and the generalisability of the study. Some responses incorrectly stated the study was done in the field or done on children, which was not creditworthy.

Question 4

(a) Most responses achieved at least Level 2 for this question. Responses were taken from a variety of sections of the syllabus as many of the theories and studies are concerned with how the psychological environment influences consumers. Some responses did describe the three studies by Mackay and Olshavsky, Machleit and Gil et al. and some of these were very detailed and achieved in the Level 3 or 4 mark band. A significant number of candidates described studies from the physical environment but if these responses were linked to the psychological effect on consumers then the response did receive credit.

(b) The majority of the responses to this question were evaluative although some responses described more studies related to how the psychological environment influences consumers. Those responses that were evaluative tended to structure their response by study rather than by issue. Most attempted to discuss the named issue of determinism although this was often done in a superficial way. Many responses stated that the studies were useful to retailers without giving any examples or analysis of their point. Some responses attempted to discuss other issues and raised points such as validity, usefulness and an evaluation of a study that had been described in **part (a)**.

Psychology and Health

Question 5

(a) This was often well answered by a number of candidates with many achieving full marks. Some gave a general definition of how imagery can be used to treat stress whereas others gave an example. Both types of responses were creditworthy. Popular examples included thinking of a beach or forest. Responses then went onto explain that imagery can help to distract from stress. Weak responses included mentioning that imagery was thinking of a peaceful scene without linking this to stress reduction. In addition, some candidates described a therapist showing a picture of a peaceful scene, which was incorrect. There was some reference to the Bridge study but many of the responses that did this did not explain imagery as a method to manage stress and therefore were not creditworthy.

(b) There were some strong responses to this question with some identifying two drugs that can be prescribed for stress. Some also went onto briefly explain how the drug manages stress with identification of reduction in blood pressure or an increase in serotonin levels. Popular drugs identified included SSRIs, benzodiazepine and beta-blockers. However, some responses identified paracetamol and anti-acids. While these drugs do reduce some of the side effects of stress such as headaches and indigestion, their primary purpose is not to manage stress. A number of responses identified the drug but did not give any explanation as to how the drug manages stress or the explanation was incorrect. These type of responses generally achieved one or two marks.

(c) Most responses did explain both a strength and a weakness of the use of prescribed drugs for managing stress. Common strengths included effectiveness and the ease of use. The most common weakness was side effects with many responses giving a more detailed explanation of the various side effects caused by prescribed drugs. Most responses achieved Level 2 mark band by providing a brief, but good explanation of the strength and the weakness. Weaker responses often identified many strengths and weaknesses and were credited with the best attempt.

Question 6

(a) This was generally a well answered question where responses showed that the candidates had been well-prepared. The majority described what psychologists have discovered about health promotion in schools, worksites and communities by giving details of the Tapper et al., Fox et al. and Farquhar et al. study. Tapper et al. was described in the most depth with some responses giving impressive details of this study. Fox et al. was often well described but responses usually gave a very brief or sometimes confused description of the Farquhar et al study. Other studies such as the Janis and Feshbach study were also creditworthy and responses often gave clear descriptions of this study. Weaker responses tended to be brief or described one or two of the studies in a little bit of detail. A minority of responses did not describe any studies but instead gave an anecdotal description of how health promotion could be done in schools, worksites and communities. These type of responses received very limited credit.

(b) A significant number of responses structured their answer by addressing each issue in term. Most responses considered the named issue of generalisability and applied this issue to each study in turn. Some responses did provide analysis either by discussing the advantages and disadvantages of generalisability or by comparing the generalisability of each study and providing a conclusion regarding which study was the most generalisability compared to the others. Other issues included ecological validity, ethics and usefulness. Some responses achieved in the lower levels of the mark band due to giving very brief responses or structuring their response by study which meant these type of answers were often repetitive and superficial. Those that had provided anecdotal responses to **part (a)** were unable to do any evaluation for this question and often received no credit or Level 1 by providing definitions of some evaluation issues.

Psychology and Organisations

Question 7

(a) There were many very good responses to this question and most wrote an appropriate amount for a two mark question. Most responses could identify two causes of group conflict within an organisation. There were a variety of types of conflict given in the responses including personality clashes and conflict over roles and responsibilities.

(b) Most responses were able to attempt a description of the Belbin team inventory. Some responses described the self-report and were aware that there was also an observation done of employees. However, the vast majority of responses just described the roles that were identified by Belbin. Some of these responses were very long and received minimal credit for this question.

(c) Although many responses achieved in Level 1 for **part (b)** of this question, many were able to provide a strength and a weakness of the inventory by considering the application of the findings from the Belbin team inventory within an organisation. Many explained how the inventory could be used within an organisation by identifying which role would be most suitable for each employee. In addition, the most common weakness was to identify the difficulty that smaller organisations might have as Belbin did identify nine roles. Some responses were aware that Belbin has taken this into account and made recommendations for organisations with fewer than nine employees. Most responses achieved in Level 2 as they were either a bit brief or gave a number of different strengths and weaknesses and were only credited for the best of these.

Question 8

(a) There were many good, well developed responses to this question. Most responses described theories of leadership styles and a wide variety of theories were given in the responses. The most popular was to describe Fielder's contingency theory, Hershey and Blanchard's situational leadership and Muczyk and Reimann's styles of leadership behaviour. Some responses were from other parts of the syllabus but were creditworthy if the response was linked to leadership styles such as adaptive leadership by Heifetz. Weaker responses tended to be brief or a superficial description of the relevant theories. Some responses were anecdotal with the response describing what would make a good leader.

(b) Most responses were structured by evaluation issue with many of them beginning with the named issue of individual versus situational explanations. Some responses did do some analysis of their evaluation points by providing strengths and weaknesses of the issue under discussion or making a comparison between the theories that had been described in **part (a)**. Popular evaluation issues included cultural bias and applications to everyday life. A significant number of weaker responses evaluated the theories from **part (a)** in turn and gave more superficial and repetitive responses.

- This is a question paper about research methods, which requires candidates to answer a range of question types, including ones about the core studies in relation to research methods, terms and concepts used to describe or evaluate research methodology, and application of this knowledge to both familiar and unfamiliar contexts. Some flaws were evident in the usage of these skills in many candidates. It is therefore essential that candidates are prepared for the skills of recalling concepts and of using this knowledge.
- Practising how to apply ideas to novel scenarios is important to succeed on this paper. This could have helped candidates in two ways:
    - Candidates needed to be able to apply research methods terms and concepts to scenarios presented in questions. These can include: planning, criticising or developing designs or analysing data.
    - Candidates must take note of questions which indicate the need for a link. When a question says 'in this study', or makes direct reference to the scenario, responses must go beyond simply describing or evaluating, they must contextualise the answer in a relevant way. Candidates therefore need to be prepared for questions using this format and practice can help them to learn both how to extract relevant ideas and how to make novel suggestions based on scenarios.

- **Question 10** on this paper requires candidates to produce an original design for a novel research question; this 'creative' process requires practice. Furthermore, to learn to identify flaws in a design (whether their own, as in **Question 10**, or one from a novel scenario for example in ***Section B***) also relies on having had experience of practical problems in conducting studies. This is a high-level skill, and can be developed through practical work with designing and conducting small studies in class or through the discussion of novel scenarios. The overall format of **Question 10(a)**, and the nature of the mark scheme, is consistent between papers and years. Therefore, it is helpful to prepare candidates to use an essay structure, which can then be applied to the requirements of an individual question.

General comments

In general, candidates were able to access marks across the whole paper. However, very few were consistently able to access the additional marks for linking their response to the scenarios, thus limiting performance as a whole. Nevertheless, some candidates demonstrated a good grasp of definitions for a range of psychological concepts and so were able to access the basic marks with these.

Candidates across the ability range were able to demonstrate some knowledge of a range of aspects of research methods in this paper. Success was greater on more straightforward questions, such as **Questions 1(a)**, **1(b)**, **2(a)**, **2(b)**, **2(c)** and **4(b)**, than on more demanding ones, such as **Questions 7(a)**, **7(c)**, **7(d)(i)**, **7(d)(ii)** and **8(b)**. This examination tested a cross-section of psychology skills and, on some questions, candidates showed limited recall of facts, such as in **Questions 4(a)(i)**, **4(a)(ii)**, **5** and **8(a)**. Note especially that the limited success on **Question 7** and **8(b)** was largely attributable to difficulties with application to the scenario.

Question 10 was sometimes well-answered although responses often lacked one of the necessary key details for a laboratory experiment.

Although some candidates left some answer spaces blank, there was no observable pattern in questions that were left unanswered on this paper. Furthermore, candidates appeared to make appropriate use of additional paper for extended answers and some used the blank pages 11 and 12 to continue writing responses - which is acceptable. Whenever an answer is continued is it advisable to indicate this and to clearly label additional content with the correct question number and part, something that most candidates are already doing.

PSYCHOLOGY

Paper 9990/33
Specialist Options: Theory

Key messages

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

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

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

These questions could ask the candidate to describe a theory, study or technique such as a self-report used by psychologists that is named in the syllabus or identified in one of the studies or theories named in the syllabus. These questions could also ask the candidate to describe a part of one of the named studies from the syllabus or a summary of the key features of the study. This question is worth four marks and the candidates should write a more extended answer. An error shown by some candidates was to describe a theory or technique that was from the incorrect part of the syllabus. There were a small number of general responses that were not specifically directed at answering the question.

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

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

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

This question will always come from one of the bullet points in the syllabus. Candidates could describe the three or four studies, theories or techniques identified in the specification under the appropriate bullet point. For this exam, some of the answers did not give all of the studies/theories under the bullet point, used the incorrect bullet point or the description was brief. It is possible for the responses to achieve full marks by describing at least two of the studies, theories or techniques but this would need to be a very detailed description. Ideally, the response would describe three of the bullet points in detail with excellent understanding and good use of terminology throughout. These type of responses often achieved the top band. It is also important that the descriptions are linked to the topic area named in the syllabus. It could be useful for candidates to do revision notes with the title of each bullet point as the header in their notes.

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

This question will always ask the candidate to evaluate the theories, studies and/or techniques described in **part (a)** of the question. 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. However, most responses that evaluated 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 at least three issues tended to achieve higher marks as these responses were able to demonstrate comprehensive understanding with good supporting examples from the theories, studies and techniques described in the **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. A conclusion at the end of each issue would be helpful in order to show excellent understanding of the issue under discussion. In order to achieve the

requirements of the Level 3 and 4 band descriptors it would be best if the response was structured by issue rather than by study and/or theory. It would also be ideal for the response to start with the named issue to make sure the answer covers this requirement of the question.

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

General comments

The marks achieved by candidates for this session of the 9990 specification achieved across the full range of the mark band, which was very pleasing to see. Many of the candidates were very well prepared for the exam and showed good knowledge, understanding and evaluation throughout their responses. Some candidates were not as well prepared and showed limited knowledge and understanding with brief and/or superficial responses. These candidates often had limited evaluation skills.

Time management for this paper was good for the majority 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 few of the candidates attempted to respond to more than two topic areas but often did not attempt all of the questions for each option chosen. These responses achieved at the lower end of the mark band.

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

Comments on specific questions

Psychology and Abnormality

Question 1

(a) Most responses addressed the question and were able to achieve one mark by outlining the symptoms of hoarding disorder such as the inability to discard household items and/or the effect this disorder could have on their daily lives (such as unhygienic living conditions). A few responses also stated that the disorder is persistent or the person with the disorder experiences distress when attempting to get rid of the items they have collected. These type of responses achieved full marks.

(b) Most responses were detailed with good descriptions given of the Maudsley Obsessive-Compulsive Inventory. For example, many referred to the 30 items, true/false answers, sub-scales and examples of some of the questions asked in the inventory. Some of the responses were brief and stated that the inventory measured the symptoms of the disorder without giving any details of the self-report. Less successful responses included giving incorrect details of the inventory or describing the Y-BOCs rather than the MOCI. Most response gave an appropriate amount of detail, although a few over-wrote their responses which did achieve full marks but gave the candidate less time to answer all of the questions in the exam.

(c) Many responses gave clear points of comparison between the two inventories. Popular responses included stating that both inventories do collect quantitative data with examples given for each inventory. A common difference was time taken to complete takes longer for the Y-BOCS (about 30 minutes) as opposed to the 5 minutes for the MOCI. Other answers highlighted that the Y-BOCS is semi-structured interview whereas MOCI just uses a questionnaire. Less successful responses did not give examples from the self-reports.

Question 2

(a) Many responses were detailed, accurate and coherent with a good use of psychological terminology. Most referred to systematic desensitisation, CBT, and applied tension. Many also gave details of research studies that investigated these treatments for anxiety disorders. Other techniques for different anxiety disorders were also creditworthy including imaginal desensitisation and use of SSRIs. Weaker responses were often very brief with limited details given of the treatment and/or relevant study. For examples, suggesting patients could take drugs without referring to suitable drugs. There were other generic responses to changing the way people think. A few responses gave descriptions of treatments and studies for schizophrenia, rather than anxiety disorders, which was not creditworthy.

(b) The responses to this question covered the full range of the mark band. Better responses used the issues as a starting point and compared the treatments that had been described in **part (a)**. The vast majority addressed the named issue of the longitudinal research method. Some did provide analysis of this issue and discussed the strengths and weaknesses of this method and applied these to the relevant studies. However, some responses were not aware that a longitudinal study is where a change in behaviour is studied over a period of time. Therefore, the Ost and Westling study, which was carried out over 12 weeks, can be considered longitudinal rather than snapshot as some responses indicated. A range of other evaluation points were considered including nature versus nurture, usefulness, determinism, and effectiveness. The majority of responses took an approach of looking at two or three evaluation issues and applied these to their answers to **part (a)**, which was helpful. Less successful responses often evaluated the treatments in turn with few examples to back up their points and little analysis given.

Psychology and Consumer Behaviour

Question 3

(a) There were a number of good descriptions of playground design including the use of elements of nature including water and sunlight. Most responses were of an appropriate length for a two mark question and achieved full marks. A minority of candidates described the Friedman casino design, which was not creditworthy.

(b) There were a number of detailed responses which clearly described both the pleasure-arousal model and the cognition-emotion model of the effects of ambience. Better responses were able to give an example of one or both of the models and the effect on consumer behaviour. Although this was not a requirement of the question, those that gave examples were often able to achieve full marks as their example showed their understanding of the models. Some candidates did not answer this question and a few gave very brief or confused responses.

(c) For those candidates who gave a good response to **part (b)**, many were able to achieve at least Level 2 and some Level 3 for their response to this question. Those that gave confused or incomplete responses to **part (b)**, often achieved in Level 1 or gave no response to this question. Popular weaknesses included ignoring individual differences of consumers, reductionism and difficulties with application to everyday life for retailers.

Question 4

(a) Most responses achieved Level 1 or 2 for this question. Responses were taken from a variety of sections of the syllabus as many of the theories and studies are concerned with 'buying the product'. Some responses did describe the theory of planned behaviour by Ajzen, the black box model and the consumer decision model. Those responses that used other parts of the syllabus often did not link their response to 'buying the product' and therefore achieved a lower mark band.

(b) The majority of the responses to this question were evaluative although some responses described more studies and/or theories related to 'buying the product'. Those responses that were evaluative tended to structure their response by study/theory rather than by issue. Most attempted to discuss the named issue of usefulness although this was often done in a superficial way. Many candidates stated that the theories were useful to retailers without giving any examples or analysis of their point. Some candidates attempted to discuss other issues and raised points such as individual differences, reductionism and/or an evaluation of a study that had been described in **part (a)**.

Psychology and Health

Question 5

(a) This was often well answered by candidates with many achieving full marks. Some gave a general definition of fear arousal and how it is used as a strategy to promote health whereas others gave an example. Both types of responses were creditworthy. Popular examples included dental health and smoking. Those that achieved one mark gave a brief response and often did not link their answer to how fear arousal could be used to change health behaviour.

(b) There were some strong responses to this question with some giving a detailed description of the Yale Model of Communication with links made to how this model can be used to promote healthy behaviour. Most responses focussed on the message, the communicator and the audience. Some candidates over-wrote their answer and attempted to include all aspects of the model as well as detailed examples. Although these type of responses did achieve full marks, it left less time for the other questions in the exam. Other responses were very brief and just identified the parts of the model without giving any description of each part of the model could help to improve health behaviour. A significant number of responses focused on how doctors could change their behaviour towards their patients in order to improve adherence. These responses did receive some limited credit as they were describing the communicator element of the model.

(c) Most candidates could describe a strength of the model and many focused on the holistic nature of the model or its usefulness in terms of being an effective strategy for promoting healthy behaviour. Some of these responses were able to give examples to back up their response, which helped them to achieve Level 2. A few responses did also address a weakness of the model although many identified the weakness rather than explaining it and some candidates stated the model was reductionist without any explanation as to why they thought this, which meant this type of response was not creditworthy. Those that did explain a creditworthy weakness identified that the model does not explain how the change in health behaviour happens. A small number of responses then explained this weakness in some depth.

Question 6

(a) This was generally a very well answered question where responses showed that the candidates had been well-prepared. The majority described types of pain, Descartes' specificity theory and gate control theory. Less successful responses sometimes confused the theories or gave brief responses. Brief responses tended to outline the types of pain without a description of the theories. Many responses described some of the treatments for pain, which was not creditworthy for this question.

(b) A significant number of responses structured their answer by addressing each issue in term. Most responses considered the named issue of reductionism and applied this issue to each theory in turn. Some responses did provide analysis either by discussing the advantages and disadvantages of reductionism or by comparing the reductionist nature of each theory and providing a conclusion regarding reductionism at the end of their evaluation of the theories. Other issues included situational versus individual, usefulness, and generalisability. Some responses achieved in the lower levels of the mark band due to giving very brief responses or structuring their response by theory which meant these type of answers were often repetitive and superficial.

Psychology and Organisations

Question 7

(a) There were many good responses to this question and most wrote an appropriate amount for a two mark question. Some responses described both horizontal and vertical job enlargement whereas others focussed on one type of enlargement. Both types of responses could achieve full marks. Some responses gave examples, which helped them to achieve full marks. Less successful responses were often brief or identified 'horizontal and/or vertical' without any description of what this meant. A few candidates did not attempt this question.

(b) Most responses were able to at identify two methods of workplace sabotage. Popular responses included destruction of machinery and work slowdown. Better responses gave examples to help

them achieve higher marks. Less successful responses tended to be very brief with an identification of the workplace sabotage methods rather than a description.

(c) Level 2 and 3 responses to this question were from those candidates who had good knowledge of the Giacalone and Rosenfeld Study. Popular strengths included usefulness and strengths of quantitative data. Popular weaknesses included difficulties with validity and generalisability. Weaker responses tended to identify the strength and/or weakness without explaining each or giving an example from the study.

Question 8

(a) There were many good, well developed responses to this question. Most responses described the Hawthorne studies, the bullying at work study by Einarsen and the study by Oldham and Brass on open plan offices. Most were able to describe the procedures of the studies as well as some detailed descriptions of the results. Some responses were from other parts of the syllabus but were creditworthy if the response was linked to either physical or psychological work environments. Less successful responses tended to be brief or a superficial description of the relevant studies.

(b) Most responses were structured by evaluation issue with many of them beginning with the named issue of individual versus situational explanations. Some candidates did do some analysis of their evaluation points by providing strengths and weaknesses of the issue under discussion or making a comparison between the studies that had been described in **part (a)**. Popular evaluation issues included generalisability, ecological validity and usefulness. A significant number of weaker responses evaluated the studies from **part (a)** in turn and gave more superficial and repetitive responses.

PSYCHOLOGY

Paper 9990/41
Specialist Options: Application

Key messages

- What has been learned from the AS component of the syllabus should be transferred to the A2 component. For example, at AS candidates learn about methodology, such as experiments, which also apply to A2.
- Questions should be read carefully ensuring that the focus is on what the question asks rather than what is hoped that the question asks.
- All components of the question should be included in answers. For example, question part **(d)** for **Questions 1**, **2**, **3** and **4** required advantages and disadvantages (plurals) *and* a conclusion.
- In ***Section B***, **Questions 5**, **6**, **7** and **8**, methodological knowledge must be evident and detailed for top marks to be accessed. The procedure, however detailed is just one methodological aspect. For top marks answers must explain methodology rather than merely identify it.
- In ***Section C***, **Questions 9**, **10**, **11** and **12**, to access top marks answers must include a debate which has two sides, such as strengths/advantages and weaknesses/ disadvantages. Supporting evidence should also be provided.
- Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

Section A

(i) Candidates often did not address the 'stem' of the question in ***Section A*** when this is crucial to answering each question part that follows.

(ii) Answers must refer to the study the question is about. Many answers made general comments showing they knew nothing about the study itself (see specific questions below for examples).

(iii) Many answers correctly included advantages and disadvantages but many did not relate these to the question and so restricting marks. For example, to score one mark answers must include an advantage and this must be related to the question.

(iv) Many conclusions 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 automatically 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 one mark rather than two marks, so a little elaboration, explanation or example that goes beyond the basic sentence is always recommended. Candidates should always try to impress the examiner with their psychological knowledge.

Section B

Answers to **part (a)** questions in this section should include an appropriate design, have applied a range (four or five) relevant methodological design features, each of which *should be explained fully*, showing good understanding. Many answers listed features such as '*I would have a random sample*' and '*It would be an independent measures design*' without explanation of why it would be a random sample, or how this would be obtained.

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

Section C

It is essential that answers focus on the question that is set. Every question in this section invites candidates to consider the extent to which they agree or disagree with the statement. It does not ask candidates to describe everything they know about that topic area, and answers that fail to address the question will only achieve minimal marks. To score marks at the top end of the mark range answers must focus on arguments both for and against the statement, answers must the use appropriate evidence to support the argument, and at the very top of the mark range answers should show awareness of wider issues and evidence that is relevant.

Comments on specific questions

Section A

Question 1

(a) The perfect answer in response to this question is '*impulse control disorders (ICD's) are created when positive feelings, linked with specific objects or behaviour, form a state-dependent memory*'. Many candidates correctly explained this, but others provided partial answers by excluding one or more of the essential components.

(b) Many candidates struggled to answer this question, although some scored full marks. To clarify: EMDR was originally used to help remove *negative* or harmful thoughts or memories in people with PTSD. ICDP on the other hand targets *positive* feelings associated with an ICD and is more like a full therapy rather than just moving the eyes. EMDR can be used as part of the ICDP. EMDR can be assessed using the Subjective Units of Disturbance Scale and ICDP can be assessed using the Positive Feelings Scale. See mark scheme for details.

(c) Most candidates scored maximum marks by outlining covert sensitization (e.g. Glover, 2011) and imaginal desensitization (e.g. Blaszczynski and Nower, 2002). The important difference between these two is that in the former an aversive stimulus is paired with the undesirable behaviour whereas in the latter progressive muscle relaxation helps to desensitize the imagined behaviour. Some candidates confused the two, but marks were still awarded for the correct aspects. Some candidates wrote about other therapies but these were only credited if they could be applied to impulse control disorders.

(d) There were many excellent answers on case studies which included two advantages and two disadvantages and a conclusion, but these answers often only scored partial marks because there was no mention at all of impulse control therapy as the question required. Two marks are awarded for advantages and disadvantages and two marks are awarded for applying these to the topic area in question. A further mark is awarded for a conclusion. Attention to examination technique and the requirements of the mark scheme is very important.

Question 2

(a) Some candidates were aware that participants were tagged and their movements tracked by CCTV, but this detail provided only a partial answer. Data was also gathered by interview. Interviews were conducted on entry to the store (when the participant was tagged) and interviews were also conducted when exiting the store.

(b) Two advantages were required, and answers including only one were restricted to two marks. Many candidates appeared not to know the advantage of recording movements by CCTV. This does, for example, provide a 100 per cent accurate record of movement patterns; further, there is no researcher with them to influence behaviour; the data recorded is 100 per cent fact; the recordings can be replayed; recordings can be checked to assess reliability. All the advantages of interviews could also be legitimately included.

(c) This question required direct recall of two shopper types as described in the study by Gil et al. Surprisingly, because the identification of shopper types is the main feature of the study, many candidates could not outline two types, often guessing. Despite the question stating 'other than the raider' some candidates wrote about the raider type. Marks will never be awarded for re-writing the information provided in the question. Other candidates successfully outlined the specialist, the native, the tourist and the explorer, often scoring maximum marks.

(d) Many answers included two advantages and two disadvantages and some excellent points were made. For example, studying movement patterns can allow certain products to be placed in highly populated locations, and studying movement patterns provides information on how shops should be designed, such as 'store interior layout'. Disadvantages were less apposite with many general comments made, such as 'there will be individual differences' without application to movement patterns. More elaboration, a little more detail to show understanding, could lead to more marks being awarded.

Question 3

(a) Most answers included an example of an objective measure, such as medicine being detected in blood or urine, and scored one mark, but many answers did not earn the second mark because they could not explain what the term meant. Simply, an objective measure is fact; it is a measure that cannot be disputed. This is in contrast to a subjective measure, which is more anecdotal (e.g. where people *say* they have taken medicine).

(b) Most candidates scored full marks by identifying 'blood test' and 'urine test' and then going on to give an example of each in relation to adherence. Partial marks were sometimes scored because there was no example, or the examples were not related to adherence.

(c) Answers to this question also resulted in many maximum mark answers. Most commonly, the studies by Chung and Naya and the use of Trakcap, and the study by Sherman et al. obtaining repeat prescriptions were described. Some answers did not score full marks because answers were little more than a single sentence when at this level more detail, such as two or three sentences, is expected to achieve full marks.

(d) Answers to this question were similar to those of **Question 1(d)** where advantages and disadvantages (in this instance of biochemical tests) were provided but were not linked to the topic area of measuring adherence as the question required. For example, a candidate might write 'a biochemical test is reliable meaning that the same test can be repeated on every person' and this appropriate advantage scores one mark. However, if there is no mention of adherence at all, the second available mark cannot be awarded.

Question 4

(a) Some candidates failed to score marks because they re-wrote the question '*intrinsic motivation is intrinsically rewarding*' and to score both available marks there needed to an attempt to '*Explain what is meant by…*'. Intrinsic motivation is an internal desire to perform a particular task because it gives pleasure or develops a particular skill. It is where motivation comes from the actual performance of the job or task and gives a sense of achievement and satisfaction. Praise, respect, recognition, empowerment and a sense of belonging are key aspects.

(b) Some candidates misread the question and gave examples of intrinsic motivation and a few candidates wrote about Maslow's needs hierarchy. Those answering the question correctly referred to different types of extrinsic motivators, each type scoring one mark for identification and one further mark for an appropriate outline. Most common types included pay, bonuses, performance related pay and non-monetary rewards.

(c) The question required an outline of two cognitive theories of motivation, other than that by Adams. Some candidates wrote incorrectly about Adams, and some candidates again wrote about Maslow. Maslow, along with the theories of McClelland and Alderfer, are need theories, not cognitive theories, as defined by the syllabus and so scored no marks. Two appropriate theories were those proposed by Latham and Locke (goal-setting) and Vroom (expectancy theory). Candidates writing about these two theories often scored full marks.

(d) All **part (d)** questions in ***Section A*** require a discussion of advantages and disadvantages and this question part was no exception. Answers also must be related to the topic area as stated in the question. A formula (which could apply to any question part **(d)** in ***Section A***) could be followed: advantage plus example; advantage plus example. Disadvantage plus example; disadvantage plus example. Conclusion (not a summary). This would allow candidates to access the whole mark range. For this question, those applying examples had both intrinsic and extrinsic motivators to choose from, and a number of candidates usefully focused their answer on the needs of an individual and their attitude toward the nature of work as a determinant of motivator.

Section B

Question 5

(a) Most candidates opted to design an experiment in this 'free choice of method' question, and an experiment allowed comparison of antipsychotic drugs with either no treatment or some form of therapy as a control. Candidates should have been mindful that the study would be conducted on patients with schizophrenia who may think and behave very differently from people without schizophrenia. For example, they may not be able to complete a questionnaire.

(b) A number of candidates took the opportunity to write all they knew about schizophrenia, and often this had nothing to do with either the question or their design. Answers like this attracted no marks. What was needed for psychological evidence was a consideration of biochemicals to treat schizophrenia, including the different types (e.g. anti-psychotics and atypical anti-psychotics). For methodological evidence the focus should have been on longitudinal studies to assess long-term effectiveness.

Question 6

(a) The method of this question had to be an observation, although some candidates designed studies that did not involve an observation at all and scored no marks. The best answers designed a field experiment that allowed data to be gathered by observation. Some designs were excellent, but others emphasised the experiment too much with no more than 'and I would gather data using observation' when the answer should have emphasized all the essential features of observations.

(b) The study by Milgram was commonly quoted for psychological knowledge, but often Milgram's study was described rather than being used to explain how it informed the design in **part (a)**. For candidates applying this psychological knowledge correctly, there was a comment such as '*Milgram did this (with detail of some aspect), but my design was better because it did this instead (with explanation)*'. This technique is good because it is showing knowledge of the Milgram study and it is showing understanding of how that knowledge can be applied to the candidate's own design.

Question 7

(a) This question required candidates to use a questionnaire. Whereas some candidates knew about the various features of questionnaires and applied them to the question successfully, some candidates did not refer to a questionnaire at all, or confused terms, or made incorrect assumptions. Some candidates did not focus on 'the characteristics of people' as the question required. In candidates' designs, a typical open-ended question would ask 'why do you attend or not attend appointments'. This is correct, but it shows that the candidate has no knowledge of

possible reasons for failure to attend. Based on psychological knowledge a closed question could ask '*Why do you not attend an appointment. Is it because (a) you think the costs outweigh the benefits, (b) another possible reason*' and so on. This could then be used to answer **part (b)**.

(b) To continue from **part (a)**, psychological knowledge could then be to describe the cost-benefit explanation and how this leads to certain questions being asked in **part (a)**. The work by Safer et al. is also be relevant. In terms of methodology, answers were often vague about how the questionnaire would be administered, with often '*I would give a questionnaire*' without stating how this would be done, whether it be online, postal, 'in the street' or some other method. Some candidates decided to bring participants into a laboratory, though often failed to explain the reasons for doing this.

Question 8

(a) This question required candidates to use an interview, and knowledge of the features of this method are generally poor. For example, many candidates made the incorrect assumption that structured interviews only produce quantitative data and unstructured interview only produce qualitative data. Also lacking was knowledge of how the interview would be conducted, such as whether it would be via telephone or face to face. Many candidates assume that interviews need a check of reliability. If the data gathered is qualitative then yes, that would be an excellent design suggestion. However, if the data is quantitative is does not need two people to add up numbers.

(b) Methodological knowledge, as mentioned above, was often poor and some candidates compensated for this by using a range of different methods. '*I would also give them a questionnaire*'; '*I would observe them*' for example, but this does not help because the question does not require it and the information given is just as lacking in detail as interviews. Psychologically the work of Adams was known, but many candidates struggled to get beyond the basics of '*people are more likely to be motivated when they are treated fairly*'.

Section C

Question 9

Many candidates failed to score high marks because they did not answer the question set. The focus of the question was on scientific explanations and so the answer should have been based on the advantages and disadvantages of that with impulse control disorders used to illustrate. Many candidates read the question as a 'write all you know about impulse control disorders' and so achieved no more than bottom band marks. This is an applications paper, so questions will focus on how knowledge (in this instance 'biological explanations of ICD's') apply to an issue (in this instance 'scientific explanations'). Advantages should have focused on biochemical explanations being scientific in that their function can easily be tested with results being reliable and valid as data is mainly objective. Experiments can be conducted with variables controlled and cause and effect shown. Reductionism is also a key advantage.

Question 10

Answers in response to this question were generally disappointing and often consisted of two halves. The first half was a description of the AIDA model with no reference to cultural differences and the second half a discussion of cultural differences with little reference to the AIDA model. A pause for thought to relate these two halves into a coherent whole would have seen some much higher marks being achieved. As previously mentioned, this question is not about description. It is about using evidence to discuss to provide an answer to the 'to what extent' question. There are no right or wrong answers because each individual candidate can draw a different conclusion.

Question 11

Answers to this question were rather different from others because candidates often considered the advantages and disadvantages of taking drugs for stress and so were immediately linking all the necessary components (unlike answers to **Question 10** for example). Candidates also showed good knowledge of a range of different stress management techniques. A few candidates incorrectly wrote about measuring stress and a few candidates wrote about stress inoculation and the work of Meichenbaum despite this being about preventing stress rather than reducing it.

Question 12

Candidates opting to answer this question appeared to know many negatives of group conflict. They also knew about the different types and causes of conflict and they knew how conflict can be managed. The positives of group conflict were known much less, despite the 'positive effects of conflict' appearing on the syllabus. A few candidates did know the positives and they focused on conflict 'energising' a group, waking it up, or stimulating it into action. Another positive is that conflict can help to counteract groupthink because conflict might mean that individuals challenge each other more. Conflict can also create increased competition between group members, which might lead them to perform better perhaps leading to more positive outcomes.

PSYCHOLOGY

Paper 9990/42
Specialist Options: Application

Key messages

- What has been learned from the AS component of the syllabus should be transferred to the A2 component. For example, at AS candidates learn about methodology, such as experiments, which also apply to A2.
- Questions should be read carefully ensuring that the focus is on what the question asks rather than what is hoped that the question asks.
- All components of the question should be included in answers. For example, **Question part (d)** for **Questions 1**, **2**, **3** and **4** required advantages and disadvantages (plurals) *and* a conclusion.
- In ***Section B***, **Questions 5**, **6**, **7** and **8**, methodological knowledge must be evident and detailed for top marks to be accessed. The procedure, however detailed is just one methodological aspect. For top marks answers must explain methodology rather than merely identify it.
- In ***Section C***, **Questions 9**, **10**, **11** and **12**, to access top marks answers must include a debate which has two sides, such as strengths/advantages and weaknesses/disadvantages. Supporting evidence should also be provided.
- Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will never achieve top marks.

General comments

Section A

(i) Candidates often did not address the 'stem' of the question in ***Section A*** when this is crucial to answering each question part that follows.

(ii) Answers must refer to the study the question is about. Many answers made general comments showing they knew nothing about the study itself (see specific questions below for examples).

(iii) Many answers correctly included advantages and disadvantages but many did not relate these to the question and so restricting marks. For example, to score one mark answers must include an advantage and this must be related to the question.

(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 automatically 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 one mark rather than two marks, so a little elaboration, explanation or example that goes beyond the basic sentence is always recommended. Candidates should always try to impress the examiner with their psychological knowledge.

Section B

Answers to **part (a)** questions in this section should include an appropriate design, have applied a range (four or five) relevant methodological design features, each of which *should be explained fully*, showing good understanding. Many answers listed features such as 'I would have a random sample' and 'It would be an independent measures design' without explanation of why it would be a random sample, or how this would be obtained.

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

Section C

It is essential that answers focus on the question that is set. Every question in this section invites candidates to consider the extent to which they agree or disagree with the statement. It does not ask candidates to describe everything they know about that topic area, and answers that fail to address the question will only achieve minimal marks. To score marks at the top end of the mark range answers must focus on arguments both for and against the statement, answers must the use appropriate evidence to support the argument, and at the very top of the mark range answers should show awareness of wider issues and evidence that is relevant.

Comments on specific questions

Section A

Question 1

(a) Many answers scored no marks at all because the question was answered incorrectly with many answers describing the GAD-7 assessment, rather than explaining what generalised anxiety actually is. Candidates should always read and think about questions carefully before beginning their answer. Some candidates incorrectly suggested that 'it is anxiety that can be generalised'. Generalised anxiety disorder is where there is no specific object or situation (like a phobia), just general things with the associated symptoms of anxiety.

(b) Many candidates answered the question fully and scored full marks. However, many candidates only provided partial answers because although two advantages were provided, these were not always related to assessing anxiety. A further problem is that many candidates assumed that quantitative data is automatically objective. It is not; whether a number is objective (or subjective) is determined by its source. Objective data results from a measure that cannot be influenced, such as a physiological measure, whereas a subjective measure is where a false response can be given (for various reasons). The quantitative data from any questionnaire is therefore subjective.

(c) Two advantages of the sample were required. The first was the sampling techniques was random. Identifying this, along with the number was given one partial mark, but for the second mark a clear advantage was needed. A random sample does not automatically make the sample representative because the target population may be restricted. The main advantage is that there is no selection bias by the researcher. A second advantage was the sample size, and it was assumed by many that this automatically means it can be generalised. It cannot; the ability to generalize depends on whether the sample is representative. To illustrate, if Milgram had 4000 participants it would not be assumed that the sample could be generalised.

(d) Many answers included two advantages and two disadvantages and a conclusion, but only scored partial marks because there was no mention at all of assessing anxiety as the question required. A second flaw common in answers was the assumption that this was a study with a researcher telephoning healthy participants. The question was about using the telephone for a therapist to assess people with anxiety. This means that the potential patient is highly unlikely to give socially desirable answers or lie to the therapist because they want to get better; to resolve their anxiety problem.

Question 2

(a) Many answers scored one mark because often no reference was made to the data presented in table 2.1. The Question states 'Explain what the results in table 2.1 tell us' and so answers should have referred to data in the table. For example, 'high self-monitors prefer Irish mocha mint coffee (7.4) and so do low self-monitors (6.08)' would score full marks.

(b) Two differences were required, and answers including only one difference were restricted to two marks. Many candidates did not know the hard and soft sell terms and so guessed. Some candidates knew the terms but got them the wrong way around. In general, soft-sell refers to the image of the product, the image that it creates its packaging, its desirability. Hard-sell on the other hand it all about the product. Its quality, its functional value. Commonly stated is that 'it is the matter, not the manner'. For example, hard sell is how good something tastes; soft-sell is about the people who eat the product.

(c) Very few candidates answered this question correctly. Candidates frequently write in answers 'it is valid' but do not know what this actually means, and crucially for this question how validity is assessed. Assessing validity is raised in the Baron-Cohen et al. study in year 1 where judges are used to assess the pictures of eyes. The same applies in this study where judges were asked about the different sets of advertisements and if all ten agreed then the advertisement was judged as being valid and so used in the study.

(d) Many answers included two advantages and two disadvantages but often focused exclusively on students with no mention of consumer behaviour at all. To score full marks advantages and disadvantages must be related to the study or topic in question, i.e. consumer behaviour. Sometimes relevant conclusions were provided, but often a summary was provided instead and summaries score no marks. Some candidates interpreted students as children. In this instance, credit was given for the ambiguity, but in general children are under 16 years (and cannot give informed consent) and students are over 16, usually up to around 21 years of age.

Question 3

(a) Most answers scored full marks by stating that 'appraisal delay is the time from the noticing of symptoms to the conclusion that the person is ill'. Some answers incorrectly thought that appraisal delay was because the person concluded that they were *not* ill.

(b) Many answers scored zero marks because they showed no knowledge at all about the study by Safer et al. Some candidates made general comments that could be applied to any study such as 'one limitation is that it is reductionist' without any elaboration and scored no marks. To be awarded full marks any answer must make reference to the study that is being asked about. For example, many candidates stated that it was not possible to generalise from the restricted sample because there were only 93 participants and because they were all from four clinics in the same hospital. Answers like this scored full marks because there is a limitation that is based directly on the study in question.

(c) Many answers suggested the health belief model (because it is a model as the question required) and often received full credit when relating many of the features of the model to the question. Some answers mentioned the health belief model, but restricted their marks by referring to nothing more than costs and benefits. Other candidates scored partial marks by referring correct reasons but which were not part of a model, such as 'costs and benefits', and although sometimes these answers referred to the Bulpitt study, marks were restricted because the Bulpitt study is not a model.

(d) This question asked for advantages and disadvantages of conducting interviews in a practitioner's waiting room. There were many different interpretations of what the question actually required, such as the assumption that the interview was part of the person's medical assessment, whereas others assumed that it could be a study on something else, such as adherence. Credit was given to both these and any other approach taken. What determined marks was whether the interpretation taken was related to the advantages and disadvantages.

Question 4

(a) Many candidates failed to score marks because they merely re-wrote the question 'organisational commitment is commitment to the Organisation' and to score both available marks there needed to an attempt to 'Explain what is meant by…'. Candidates could have referred to acceptance of the Organisation's needs and goals, a willingness to put in extra effort to support the Organisation, to show loyalty toward it, for example.

(b) To be consistent with questions in other options, to score full marks candidates needed to give two advantages of using a 7-point scale and relate each to the OCQ. Some candidates did this successfully and scored full marks, but other candidates gave two advantages with no mention of the OCQ at all.

(c) The sample for the Organisational Commitment Questionnaire was representative for two reasons, claim Mowday et al. Firstly, the sample size was large with 2563 employees but more importantly, the sample were from nine different work organisations. Many candidates falsely assumed that a large sample automatically makes a sample representative. It does not. Secondly, the sample included workers from a wide range of occupations and included scientists and retail manager trainees. Whilst many candidates knew both these features and scored full marks, there were many others who stated nothing more than 'a large sample', 'included both males and females', guessing at the answer rather than showing relevant psychological knowledge from the study itself.

(d) All **part (d)** questions in ***Section A*** require a discussion of advantages and disadvantages and this question part was no exception. The question required a discussion of the usefulness of the OCQ. There were some excellent answers which followed a formula (which could apply to any question **part (d)** in this ***Section A***): advantage plus example; advantage plus example. Disadvantage plus example; disadvantage plus example. Conclusion (not a summary).

Section B

Question 5

(a) There were many designs proposed to answer this question and some were successful whilst others were not. The successful answers were coherent in that the design 'made sense' all the way through with all aspects being logical and showing that some thought had gone into planning the answer. Some answers were incoherent because they did not address the question or because the design contradicted itself. Some designs were unethical when forcing participants with an animal phobia to be in the same room with that animal. Unethical designs are unacceptable.

(b) A number of candidates took the opportunity to write all they knew about phobias, mentioning the work of Watson and Rayner and even of Freud. The former might be relevant to *developing* a phobia, but the psychological evidence included here should focus specifically on explaining the basis of the **part (a)** design. If a study has not informed the design in **part (a)** then it should not be included. In relation to methodological evidence, many answers included a *list* of features without pausing to *explain* any in detail and so scoring partial marks. Many answers gave general statements that showed little understanding. For example, 'I would have a large sample and this makes the study reliable and valid' when a large sample does not make anything valid or reliable. Candidates are advised to focus on a few design decisions, rather than a long list of meaningless statements, making sure they are done correctly.

Question 6

(a) Investigations of this question had to be a field experiment. This meant that common features of IV, DV, controls and experimental design should have been included and explained in detail. Some answers did not have an IV, and some got the IV and DV the wrong way around. Better answers had an IV of three or more different odours and one candidate had a 'fish smell' as a control. Better answers explained how data could be gathered on the effect of the odours on customer behaviour with questionnaires and observations being used. Often the data gathered was amount of money spent; length of time spent in the store, or just 'positive feelings of ambience'.

(b) In relation to methodological decisions, answers were generally coherent because candidates know the features of an experiment. What was often lacking was explanation of why three different IV odours were chosen, rather than two or four or more, or why certain odours were chosen. Similarly, there was very little explanation of why the DV was chosen. Psychological knowledge in the better answers showed a good understanding of the study by Chebat and Michon because answers in **part (a)** were often informed by this study. For example, they used a citrus smell, and that is why many candidates chose to use a citrus smell in their study. For one candidate rather than three pleasant odours, or a no-odour control, the fish smell was used because it 'should be clearly negative and so provide a good comparison'. This is very good technique: explaining the reasons underlying the design in **part (a)**.

Question 7

(a) This question required candidates to use an interview. Whereas some candidates knew about the various features of interviews and applied them to the question successfully, some candidates did not refer to an interview at all, or confused terms or made incorrect assumptions, such as structured interviews only produce quantitative data. Some candidates were unclear of what was meant by phantom limb pain (and so perhaps should have chosen the question from their other option). Some candidates compared current pain with future pain after receiving treatment. This approach was also incorrect because the question required a comparison of previous pain with current pain.

(b) In relation to methodology, candidates should have explained why they chose a structured interview over a semi- or unstructured interview; explained why they asked some of the questions they did; or explained the time period between gathering data on previous pain with data on current pain. Some candidates did this, but many did not. Some focused on the details of incorrect designs (e.g. current versus future) and some wrote about a range of different techniques to measure pain, such as the UAB, when the question was about interviews. Psychological knowledge should have focused on phantom limb pain. In many instances it did, but others incorrectly wrote about how to treat pain or about different measures.

Question 8

(a) Candidates had a free choice of method here, and the best answers chose an experiment, logically because they knew more terminology, although an interview or questionnaire would have been equally acceptable. Better designs compared one IV group with intrinsic motivation compared with another with extrinsic motivation, controlled various extraneous variables and then measured the DV, usually through a questionnaire or interview. Weaker answers were often missing knowledge of what intrinsic motivation actually is, with answers referring to nothing more than 'this group gets intrinsic motivation' when it should be a central component.

(b) As mentioned above, a knowledge of intrinsic motivation should inform the design in **part (a)**. For example, here there should be an explanation of what specifically the 'intrinsic motivation given to the group' is and it was chosen. Many candidates decided to write about Maslow and his hierarchy of needs without any reference at all to the question. Doing this scored no marks at all because it is description of information, it isn't applying knowledge to a question. The former is a relatively simple skill assessed elsewhere; the latter is more complex and what is always assessed in these ***Section B*** methodology questions.

Section C

Question 9

Many candidates failed to score high marks because they did not answer the question set. The focus of the question was on reductionism and so the answer should have been based on the advantages and disadvantages of reductionism with the cognitive approach of depression used to illustrate. Many candidates read the question as a 'write all you know about depression' and so achieved no more than bottom band marks. This is an applications paper, so questions will focus on how knowledge (in this instance 'depression') apply to an issue (in this instance 'reductionism'). Also noteworthy is that many candidates appear to know nothing more than the words 'this is reductionist' and often show no understanding about issue itself. Further, many candidates think that reductionism is negative. It is not; it is a fundamental component of the experimental method and is the way research is conducted.

Question 10

There were some excellent answers which included an impressive range of examples of situational factors. Included were the studies by Finlay, Turley and Milliman and many others from a wide range of different sub-topics. Knowledge, description and detail was often very impressive. However, marks were restricted because such answers failed to consider how individual factors affect behaviour in retail environments. Sometimes individual factors were not mentioned at all; sometimes nothing more than a sentence. These ***Section C*** questions always require consideration of two opposing viewpoints and if only one is considered then only half marks can be awarded, and if there is an imbalance marks will also be restricted.

Question 11

Like other answers for different options in this section many candidates described what they knew, such as different measure of pain in this instance, rather than organising and using information to address the question. Some candidates adopted the correct approach with a consideration of the advantages and disadvantages of a clinical interview, often making good points in favour of it, with supporting examples, and then stating why it is better than alternative measures, before going on to consider its weaknesses and how other measures could fill the gaps the interview leaves out. This question requires candidates to think and give their views; the question does ask 'to what extent do you agree…' which does require a different format or approach from merely describing information.

Question 12

Two components should have been involved in this answer: the use of questionnaires and the application, or use of them to measure sabotage. Three types of answer were evident: answers which largely described the study by Giacolone and Rosenfeld; answers which largely described the advantages and disadvantages of questionnaires, and those which applied the advantages and disadvantages to what they knew about sabotage and the study by Giacolone and Rosenfeld. The latter type of answer was by far the most successful approach.

PSYCHOLOGY

Paper 9990/43
Specialist Options: Application

Key messages

- What has been learned from the AS component of the syllabus should be transferred to the A2 component. For example, at AS candidates learn about methodology, such as experiments, which also apply to A2.
- Questions should be read carefully ensuring that the focus is on what the question asks rather than what is hoped that the question asks.
- All components of the question should be included in answers. For example, question part **(d)** for **Questions 1**, **2**, **3** and **4** required advantages and disadvantages (plurals) *and* a conclusion.
- In ***Section B***, **Questions 5**, **6**, **7** and **8**, methodological knowledge must be evident and detailed for top marks to be accessed. The procedure, however detailed is just one methodological aspect. For top marks answers must explain methodology rather than merely identify it.
- In ***Section C***, **Questions 9**, **10**, **11** and **12**, to access top marks answers must include a debate which has two sides, such as strengths/advantages and weaknesses/ disadvantages. Supporting evidence should also be provided.
- Psychological knowledge should be applied wherever possible. Anecdotal and common-sense answers will not achieve top marks.

General comments

Section A

(i) Candidates often did not address the 'stem' of the question in ***Section A*** when this is crucial to answering each question part that follows.

(ii) Answers must refer to the study the question is about. Many answers made general comments showing they knew nothing about the study itself (see specific questions below for examples).

(iii) Many answers correctly included advantages and disadvantages but many did not relate these to the question and so restricting marks. For example, to score one mark answers must include an advantage and this must be related to the question.

(iv) Many conclusions 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 automatically 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 one mark rather than two marks, so a little elaboration, explanation or example that goes beyond the basic sentence is always recommended. Candidates should always try to impress the examiner with their psychological knowledge.

Section B

Answers to **part (a)** questions in this section should include an appropriate design, have applied a range (four or five) relevant methodological design features, each of which *should be explained fully*, showing good understanding. Many answers listed features such as '*I would have a random sample*' and '*It would be an independent measures design*' without explanation of why it would be a random sample, or how this would be obtained.

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

Section C

It is essential that answers focus on the question that is set. Every question in this section invites candidates to consider the extent to which they agree or disagree with the statement. It does not ask candidates to describe everything they know about that topic area, and answers that fail to address the question will only achieve minimal marks. To score marks at the top end of the mark range answers must focus on arguments both for and against the statement, answers must the use appropriate evidence to support the argument, and at the very top of the mark range answers should show awareness of wider issues and evidence that is relevant.

Comments on specific questions

Section A

Question 1

(a) The perfect answer in response to this question is '*impulse control disorders (ICD's) are created when positive feelings, linked with specific objects or behaviour, form a state-dependent memory*'. Many candidates correctly explained this, but others provided partial answers by excluding one or more of the essential components.

(b) Many candidates struggled to answer this question, although some scored full marks. To clarify: EMDR was originally used to help remove *negative* or harmful thoughts or memories in people with PTSD. ICDP on the other hand targets *positive* feelings associated with an ICD and is more like a full therapy rather than just moving the eyes. EMDR can be used as part of the ICDP. EMDR can be assessed using the Subjective Units of Disturbance Scale and ICDP can be assessed using the Positive Feelings Scale. See mark scheme for details.

(c) Most candidates scored maximum marks by outlining covert sensitization (e.g. Glover, 2011) and imaginal desensitization (e.g. Blaszczynski and Nower, 2002). The important difference between these two is that in the former an aversive stimulus is paired with the undesirable behaviour whereas in the latter progressive muscle relaxation helps to desensitize the imagined behaviour. Some candidates confused the two, but marks were still awarded for the correct aspects. Some candidates wrote about other therapies but these were only credited if they could be applied to impulse control disorders.

(d) There were many excellent answers on case studies which included two advantages and two disadvantages and a conclusion, but these answers often only scored partial marks because there was no mention at all of impulse control therapy as the question required. Two marks are awarded for advantages and disadvantages and two marks are awarded for applying these to the topic area in question. A further mark is awarded for a conclusion. Attention to examination technique and the requirements of the mark scheme is very important.

Question 2

(a) Some candidates were aware that participants were tagged and their movements tracked by CCTV, but this detail provided only a partial answer. Data was also gathered by interview. Interviews were conducted on entry to the store (when the participant was tagged) and interviews were also conducted when exiting the store.

(b) Two advantages were required, and answers including only one were restricted to two marks. Many candidates appeared not to know the advantage of recording movements by CCTV. This does, for example, provide a 100 per cent accurate record of movement patterns; further, there is no researcher with them to influence behaviour; the data recorded is 100 per cent fact; the recordings can be replayed; recordings can be checked to assess reliability. All the advantages of interviews could also be legitimately included.

(c) This question required direct recall of two shopper types as described in the study by Gil et al. Surprisingly, because the identification of shopper types is the main feature of the study, many candidates could not outline two types, often guessing. Despite the question stating 'other than the raider' some candidates wrote about the raider type. Marks will never be awarded for re-writing the information provided in the question. Other candidates successfully outlined the specialist, the native, the tourist and the explorer, often scoring maximum marks.

(d) Many answers included two advantages and two disadvantages and some excellent points were made. For example, studying movement patterns can allow certain products to be placed in highly populated locations, and studying movement patterns provides information on how shops should be designed, such as 'store interior layout'. Disadvantages were less apposite with many general comments made, such as 'there will be individual differences' without application to movement patterns. More elaboration, a little more detail to show understanding, could lead to more marks being awarded.

Question 3

(a) Most answers included an example of an objective measure, such as medicine being detected in blood or urine, and scored one mark, but many answers did not earn the second mark because they could not explain what the term meant. Simply, an objective measure is fact; it is a measure that cannot be disputed. This is in contrast to a subjective measure, which is more anecdotal (e.g. where people *say* they have taken medicine).

(b) Most candidates scored full marks by identifying 'blood test' and 'urine test' and then going on to give an example of each in relation to adherence. Partial marks were sometimes scored because there was no example, or the examples were not related to adherence.

(c) Answers to this question also resulted in many maximum mark answers. Most commonly, the studies by Chung and Naya and the use of Trakcap, and the study by Sherman et al. obtaining repeat prescriptions were described. Some answers did not score full marks because answers were little more than a single sentence when at this level more detail, such as two or three sentences, is expected to achieve full marks.

(d) Answers to this question were similar to those of **Question 1(d)** where advantages and disadvantages (in this instance of biochemical tests) were provided but were not linked to the topic area of measuring adherence as the question required. For example, a candidate might write 'a biochemical test is reliable meaning that the same test can be repeated on every person' and this appropriate advantage scores one mark. However, if there is no mention of adherence at all, the second available mark cannot be awarded.

Question 4

(a) Some candidates failed to score marks because they re-wrote the question '*intrinsic motivation is intrinsically rewarding*' and to score both available marks there needed to an attempt to '*Explain what is meant by…*'. Intrinsic motivation is an internal desire to perform a particular task because it gives pleasure or develops a particular skill. It is where motivation comes from the actual performance of the job or task and gives a sense of achievement and satisfaction. Praise, respect, recognition, empowerment and a sense of belonging are key aspects.

(b) Some candidates misread the question and gave examples of intrinsic motivation and a few candidates wrote about Maslow's needs hierarchy. Those answering the question correctly referred to different types of extrinsic motivators, each type scoring one mark for identification and one further mark for an appropriate outline. Most common types included pay, bonuses, performance related pay and non-monetary rewards.

(c) The question required an outline of two cognitive theories of motivation, other than that by Adams. Some candidates wrote incorrectly about Adams, and some candidates again wrote about Maslow. Maslow, along with the theories of McClelland and Alderfer, are need theories, not cognitive theories, as defined by the syllabus and so scored no marks. Two appropriate theories were those proposed by Latham and Locke (goal-setting) and Vroom (expectancy theory). Candidates writing about these two theories often scored full marks.

(d) All **part (d)** questions in ***Section A*** require a discussion of advantages and disadvantages and this question part was no exception. Answers also must be related to the topic area as stated in the question. A formula (which could apply to any question part **(d)** in ***Section A***) could be followed: advantage plus example; advantage plus example. Disadvantage plus example; disadvantage plus example. Conclusion (not a summary). This would allow candidates to access the whole mark range. For this question, those applying examples had both intrinsic and extrinsic motivators to choose from, and a number of candidates usefully focused their answer on the needs of an individual and their attitude toward the nature of work as a determinant of motivator.

Section B

Question 5

(a) Most candidates opted to design an experiment in this 'free choice of method' question, and an experiment allowed comparison of antipsychotic drugs with either no treatment or some form of therapy as a control. Candidates should have been mindful that the study would be conducted on patients with schizophrenia who may think and behave very differently from people without schizophrenia. For example, they may not be able to complete a questionnaire.

(b) A number of candidates took the opportunity to write all they knew about schizophrenia, and often this had nothing to do with either the question or their design. Answers like this attracted no marks. What was needed for psychological evidence was a consideration of biochemicals to treat schizophrenia, including the different types (e.g. anti-psychotics and atypical anti-psychotics). For methodological evidence the focus should have been on longitudinal studies to assess long-term effectiveness.

Question 6

(a) The method of this question had to be an observation, although some candidates designed studies that did not involve an observation at all and scored no marks. The best answers designed a field experiment that allowed data to be gathered by observation. Some designs were excellent, but others emphasised the experiment too much with no more than 'and I would gather data using observation' when the answer should have emphasized all the essential features of observations.

(b) The study by Milgram was commonly quoted for psychological knowledge, but often Milgram's study was described rather than being used to explain how it informed the design in **part (a)**. For candidates applying this psychological knowledge correctly, there was a comment such as '*Milgram did this (with detail of some aspect), but my design was better because it did this instead (with explanation)*'. This technique is good because it is showing knowledge of the Milgram study and it is showing understanding of how that knowledge can be applied to the candidate's own design.

Question 7

(a) This question required candidates to use a questionnaire. Whereas some candidates knew about the various features of questionnaires and applied them to the question successfully, some candidates did not refer to a questionnaire at all, or confused terms, or made incorrect assumptions. Some candidates did not focus on 'the characteristics of people' as the question required. In candidates' designs, a typical open-ended question would ask 'why do you attend or not attend appointments'. This is correct, but it shows that the candidate has no knowledge of

possible reasons for failure to attend. Based on psychological knowledge a closed question could ask '*Why do you not attend an appointment. Is it because (a) you think the costs outweigh the benefits, (b) another possible reason*' and so on. This could then be used to answer **part (b)**.

(b) To continue from **part (a)**, psychological knowledge could then be to describe the cost-benefit explanation and how this leads to certain questions being asked in **part (a)**. The work by Safer et al. is also be relevant. In terms of methodology, answers were often vague about how the questionnaire would be administered, with often '*I would give a questionnaire*' without stating how this would be done, whether it be online, postal, 'in the street' or some other method. Some candidates decided to bring participants into a laboratory, though often failed to explain the reasons for doing this.

Question 8

(a) This question required candidates to use an interview, and knowledge of the features of this method are generally poor. For example, many candidates made the incorrect assumption that structured interviews only produce quantitative data and unstructured interview only produce qualitative data. Also lacking was knowledge of how the interview would be conducted, such as whether it would be via telephone or face to face. Many candidates assume that interviews need a check of reliability. If the data gathered is qualitative then yes, that would be an excellent design suggestion. However, if the data is quantitative is does not need two people to add up numbers.

(b) Methodological knowledge, as mentioned above, was often poor and some candidates compensated for this by using a range of different methods. '*I would also give them a questionnaire*'; '*I would observe them*' for example, but this does not help because the question does not require it and the information given is just as lacking in detail as interviews. Psychologically the work of Adams was known, but many candidates struggled to get beyond the basics of '*people are more likely to be motivated when they are treated fairly*'.

Section C

Question 9

Many candidates failed to score high marks because they did not answer the question set. The focus of the question was on scientific explanations and so the answer should have been based on the advantages and disadvantages of that with impulse control disorders used to illustrate. Many candidates read the question as a 'write all you know about impulse control disorders' and so achieved no more than bottom band marks. This is an applications paper, so questions will focus on how knowledge (in this instance 'biological explanations of ICD's') apply to an issue (in this instance 'scientific explanations'). Advantages should have focused on biochemical explanations being scientific in that their function can easily be tested with results being reliable and valid as data is mainly objective. Experiments can be conducted with variables controlled and cause and effect shown. Reductionism is also a key advantage.

Question 10

Answers in response to this question were generally disappointing and often consisted of two halves. The first half was a description of the AIDA model with no reference to cultural differences and the second half a discussion of cultural differences with little reference to the AIDA model. A pause for thought to relate these two halves into a coherent whole would have seen some much higher marks being achieved. As previously mentioned, this question is not about description. It is about using evidence to discuss to provide an answer to the 'to what extent' question. There are no right or wrong answers because each individual candidate can draw a different conclusion.

Question 11

Answers to this question were rather different from others because candidates often considered the advantages and disadvantages of taking drugs for stress and so were immediately linking all the necessary components (unlike answers to **Question 10** for example). Candidates also showed good knowledge of a range of different stress management techniques. A few candidates incorrectly wrote about measuring stress and a few candidates wrote about stress inoculation and the work of Meichenbaum despite this being about preventing stress rather than reducing it.

Question 12

Candidates opting to answer this question appeared to know many negatives of group conflict. They also knew about the different types and causes of conflict and they knew how conflict can be managed. The positives of group conflict were known much less, despite the 'positive effects of conflict' appearing on the syllabus. A few candidates did know the positives and they focused on conflict 'energising' a group, waking it up, or stimulating it into action. Another positive is that conflict can help to counteract groupthink because conflict might mean that individuals challenge each other more. Conflict can also create increased competition between group members, which might lead them to perform better perhaps leading to more positive outcomes.