Cambridge Assessment International Education

Example Candidate Responses
Paper 2

Cambridge International AS & A Level
Psychology 9990

For examination from 2018

Cambridge Pathway

Version 1.0

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Introduction

The main aim of this booklet is to exemplify standards for those teaching Cambridge AS & A Level Psychology 9990, and to show how different levels of candidates' performance (high, middle and low) relate to the subject's curriculum and assessment objectives.

In this booklet candidate responses have been chosen from June 2018 scripts to exemplify a range of answers.

For each question, the response is annotated with a clear explanation of where and why marks were awarded or omitted. This is followed by examiner comments on how the answer could have been improved. In this way, it is possible for you to understand what candidates have done to gain their marks and what they could do to improve their answers. There is also a list of common mistakes candidates made in their answers for each question.

This document provides illustrative examples of candidate work with examiner commentary. These help teachers to assess the standard required to achieve marks beyond the guidance of the mark scheme. Therefore, in some circumstances, such as where exact answers are required, there will not be much comment.

The questions and mark schemes used here are available to download from the School Support Hub. These files are:

June 2018 Question Paper 21

June 2018 Paper 21 Mark Scheme

Past exam resources and other teacher support materials are available on the School Support Hub:

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How to use this booklet

This booklet goes through the paper one question at a time, showing you the high-, middle- and low-level response for each question. The candidate answers are set in a table. In the left-hand column are the candidate answers, and in the right-hand column are the examiner comments.

Example Candidate Response – high	Examiner comments
Section A Answer **all** questions in this section. 1 In the study by Canli et al. (brain scans and emotions), one variable was investigated by comparing neutral and negative scenes. (a) Is this an independent or a dependent variable? Include a reason for your answer. *independent - the change between neutral and negative* (1) (2) *marks it independent* [1]	1 The wording of this particular question means that just answering 'independent' is correct. Beware, however, because 'independent' means different things in different contexts in psychology, so it is good practice to use the whole term. 2 Neither the concept that the independent variable is changed

Answers are by real candidates in exam conditions. These show you the types of answers for each level. Discuss and analyse the answers with your learners in the classroom to improve their skills.

Examiner comments are alongside the answers. These explain where and why marks were awarded. This helps you to interpret the standard of Cambridge exams so you can help your learners to refine their exam technique.

How the candidate could have improved their answer

- Although both parts of this answer earned full marks, it would be good practice to get into the habit of always specifying 'independent *variable*', as using just a single word could be insufficient in response to other questions. Note that an 'independent measures design' would be another case where a single word answer of 'independent' may not be adequate.
- Operationalisation is a concept that often leads to confusion. The simplest way to answer such as question would be to think 'How could I manipulate (or measure) this in practice?', then write a description.

This section explains how the candidate could have improved each answer. This helps you to interpret the standard of Cambridge exams and helps your learners to refine their exam technique.

Common mistakes candidates made in this question

In part (a) a common mistake was to give the dependent variable in place of the independent variable. The difference between these two variables is simply one of giving them the right names. One way to remember which is which is to think 'What is the researcher **IN**vestigating?' this is their **IN**dependent variable. The **depend**ent variable is exactly what it says, changes in this variable **depend** on, i.e. are caused by, the manipulation of the independent variable.

Often candidates were not awarded marks because they misread or misinterpreted the questions.

Lists the common mistakes candidates made in answering each question. This will help your learners to avoid these mistakes and give them the best chance of achieving the available marks.

Question 1

Example Candidate Response – high	Examiner comments
Section A Answer **all** questions in this section. 1 In the study by Canli et al. (brain scans and emotions), one variable was investigated by comparing neutral and negative scenes. (a) Is this an independent or a dependent variable? Include a reason for your answer. 1 *independent - the change between neutral and negative* 2 *marks it independent* [1] (b) Outline how Canli et al. operationalised this variable. *They used valence ratings to compare the neutral and* *negative scenes.* 3 [1]	1 The wording of this particular question means that just answering 'independent' is correct. Note, however, 'independent' has different meanings in different contexts in psychology, so it is good practice to use the whole term. 2 Neither the concept that the independent variable is changed by the experimenter, nor that the two conditions within the experiment are 'neutral' and 'normal', are sufficiently explained individually in this answer. However, together they make it clear that the concept is understood. Mark for (a) = 1 out of 1 3 This is an unusual answer as it does not simply define what is meant by being emotionally 'negative' or 'neutral'. Instead, it makes appropriate reference to the way that the operationalisation was achieved through the original valence ratings. Mark for (b) = 1 out of 1 **Total mark awarded = 2 out of 2**

How the candidate could have improved their answer

- Although both parts of this answer earned full marks, it would be good practice to get into the habit of always specifying 'independent variable', as using just a single word could be insufficient in response to other questions. Note that 'independent measures design' would be another case where a single word answer of 'independent' may not be adequate.
- Operationalisation is a concept that often leads to confusion. The simplest way to answer such a question would be to think 'How could I manipulate (or measure) this in practice?', then write a description.

Common mistakes candidates made in this question

In part (a) a common mistake was to give the dependent variable in place of the independent variable. One way to remember which is which, is to think 'What is the researcher **IN**vestigating?' this is their **IN**dependent variable. The **depend**ent variable is exactly what it says, changes in this variable **depend** on, i.e. are caused by, the manipulation of the independent variable.

Question 2

Example Candidate Response – high	Examiner comments
2 The study by Saavedra and Silverman investigated a boy with a phobia of buttons. (a) Identify the research method used in this study. Case study. 1 [1] (b) Suggest one advantage of the research method in this study. One advantage of the research method is ~~to~~ collecting quantitative data. Experimenters can interviewed the participants feeling about button and the ~~me~~ onset of the phobic. So they could collect more indepth data to understand the behaviour more, which increases validity 2 3 [2]	1 This is the only possible correct answer. Mark for (a) = 1 out of 1 2 The first sentence earns 1 mark. 3 Neither of the two sentences that follow would be creditworthy on their own. But together they make the point that this level of depth about the onset of the phobia is allowed for the behaviour to be understood, i.e. the answer is linked to the context, which is required for the second mark. Mark for (b) = 2 out of 2 **Total mark awarded = 3 out of 3**

How the candidate could have improved their answer

The candidate's answer earned full marks, however, the need for both of the sentences at the end of (b) illustrates how easy it is to make a relevant comment that is not linked to the study.

Common mistakes candidates made in this question

(a) Giving more than one answer. When a question asks for an identification of a term, it is essential that only one answer is given. If this candidate had written 'an experiment' and then 'case study' only their first answer would have been considered, so they would not have earned the mark.

Question 3

Example Candidate Response – high

3 Many of the core studies were laboratory experiments.

(a) Explain **two** similarities between a laboratory experiment and a field experiment, using any core studies as examples.

1 In both studies, variables are able to be controlled. In Piliavin's study, the attire of the victim (confederate) was similar throughout the study, as well as the way confederate fell in supine position. This ensures the validity is high. In lab experiment, questionnaires (FHI) in Laney's study was controlled, all participants completed the same standard questionnaires.

2 consists of more than 1 participants.
Procedures are standardised in both studies, such as in Laney's study all participants listened to the same recording of monotonous voice at 222 words per minute
In Piliavins study, confederate will offer help (to) victim after a specific time after the victim has fallen. [4]

(b) Explain **one** difference between a laboratory experiment and a field experiment, using any core study as an example.

In a laboratory experiment, there were high controls of extraneous variables such as the participants were told not to consume caffeine which would effect sleep in Demonts Kleitman.
In field experiment, extraneous variables such as (train delay, weather conditions) were difficult unable to control in the study by Piliavin. [2]

Examiner comments

1 This sentence earns the first mark for the generic similarity.

2 The candidate then goes on to give an illustration of their point about controls, using Piliavin et al. as an example of a field experiment to show that they can be controlled and valid, just as laboratory studies can.

3 The second point, however, is an extension of the first (as this gave an example of standardisation, which was credited), so this idea cannot earn further credit.
Mark for (a) = 2 out of 4

4 The candidate applies the reverse argument, and earns credit. Their example illustrates a good comparison as the examples are both contextualised to the studies mentioned.
Mark for (b) = 2 out of 2

Total mark awarded = 4 out of 6

How the candidate could have improved their answer

(a) The candidate needed another, different, similarity. They missed the two most obvious ones, that both types of experiment have an independent variable and both have a dependent variable. Either of these ideas should then have been illustrated with an example, as the candidate had done with the first similarity.

Common mistakes candidates made in this question

(a) Giving specific examples of experiments which happened to be similar in some way that was unrelated to both experiments. For example, to give two studies and say they both used volunteer samples or used many participants. This is not a way in which all laboratory and field experiments are similar. Another common mistake was to answer the question correctly in generic terms but then to use Milgram as an example of a laboratory experiment. Since the original Milgram study had no independent variable, it was not an experiment.

(b) Using Milgram as an example. Candidates should understand the key features of each research method which includes in the case of experiments having an independent as well as a dependent variable.

Question 4

Example Candidate Response – high	Examiner comments
4 What does standard deviation measure? Standard deviation measures the variance around the mean in a data set. (1) If the sta The higher the standard deviation ~~number~~, the more variance there is around the ~~mea~~ mean [2]	(1) Appropriate use of the term and this is then related to the mean. **Total mark awarded = 2 out of 2**

How the candidate could have improved their answer

This candidate gave an answer that differed from the mark scheme, using the term variance to indicate the idea of spread, which was perfectly acceptable and gave this in reference to the mean, earning full marks. However, they then continued their answer to describe how the standard deviation is interpreted. This was not required by the question and whilst answering in full is always advised, this was not relevant to the question being asked, so the time spent on it would have been better used elsewhere on the paper.

Example Candidate Response – middle	Examiner comments
4 What does standard deviation measure? Standard deviation measures the overall spread of data. Just as mean can tell us more than median, standard deviation can tell us more than range. [2]	1 The candidate scores a mark with their first sentence. **Total mark awarded =** **1 out of 2**

How the candidate could have improved their answer

Although what the candidate wrote in their second sentence was correct in itself, it did not answer the question. They needed to explain what it is that the standard deviation measures that the range does not, i.e. that it considers the average difference between each point and the mean (rather than just considering the two extremities).

Example Candidate Response – low	Examiner comments
4 What does standard deviation measure? Standard deviation measures a form of central tendency like mean, median, or mode. It shows another way to correlate the data. 1 .....[2]	1 This response is irrelevant. **Total mark awarded = 0 out of 2**

How the candidate could have improved their answer

The candidate knew a little about descriptive statistics but was unable to recall the correct information. T

Common mistakes candidates made in this question

Like the candidate above, many made attempts to answer the question that contained some correct but irrelevant information. Descriptive statistics such as the mean, median, mode, range and standard deviation are typically all taught at the same time. For some candidates, this is a lot of new terms and mathematical concepts together and they may need help and/or practice to consolidate their knowledge such as the suggestions above.

Question 5

Example Candidate Response – high	Examiner comments
5 From the study by Laney et al. (false memory): (a) Identify **one** ethical guideline that was followed in this study. Participants were given a debriefing where the true intentions of the experiment were revealed. [1] (1) (b) Outline how this ethical guideline was followed in this study. After the experiment was finished and false memories had been generated, participants were told how the study actually investigated false memory. [1] (2) (c) State why this ethical guideline was important in this study. Since deception was used and participants had false memories, it was imperative to have a debriefing to reverse some of the psychological damage done. [1]	(1) Debriefing is one of the possible correct answers. Mark for (a) = 1 out of 1 (2) This answer links to them being told the truth about the study, i.e. that they were told the real aim was to study false memories. Mark for (b) = 1 out of 1 Mark for (c) = 1 out of 1 **Total mark awarded = 3 out of 3**

How the candidate could have improved their answer

(a) This candidate could have saved themselves time by simply answering the question and identifying a guideline. The word 'debriefing' alone would have been sufficient. This would have given them the opportunity, for example, to add valuable detail to longer answers (such as questions 6 or 10).

(c) The answer was only just adequate. It would have been improved by indicating why having false memories had the potential to do psychological damage and therefore clearly explaining why debriefing was important.

Example Candidate Response – middle	Examiner comments
5 From the study by Laney et al. (false memory): (a) Identify **one** ethical guideline that was followed in this study. The participants were debriefed in the end. (Debrief) 1 [1] (b) Outline how this ethical guideline was followed in this study. At the end of the experiment the participants were told the true meaning of experiment and if their "memory" was false. 2 [1] (c) State why this ethical guideline was important in this study. Because it ensures that no damage is done to the participants, making the experiment more valid. 3 [1]	1 This is correct. Mark for (a) = 1 out of 1 2 This adequately contextualises the answer. Mark for (b) = 1 out of 1 3 This is correct but does not link the idea to the study. Mark for (c) = 0 out of 1 **Total mark awarded = 2 out of 3**

How the candidate could have improved their answer

(a) This candidate wrote a little more than what was required for the mark; either half of their answer would have been sufficient. However, it is sometimes useful for candidates to do this 'extension' for themselves to ensure they are answering the question. For example, starting a question asking for 'strengths' may well be easier if the candidate begins their response with 'A strength of…'.

(c) The response only described the reason why the guideline of debriefing was important in any study. To earn credit the response needed to refer to why this was necessary in this study. The candidate should have explained why the participants need to be debriefed following the particular procedure of inducing false memories about asparagus.

Example Candidate Response – low	Examiner comments
5 From the study by Laney et al. (false memory): (a) Identify **one** ethical guideline that was followed in this study. the participants weren't debriefed after the study 1 [1] (b) Outline how this ethical guideline was followed in this study. the researches didn't debrief them 2 [1] (c) State why this ethical guideline was important in this study. they weren't told the true aim of the study 3 [1]	1 This is incorrect. Mark for (a) = 0 out of 1 2 The candidate should have identified what was said in the debriefing. Mark for (b) = 0 out of 1 3 The question asks why and the candidate should have explained what it means to fail to debrief. Mark for (c) = 0 out of 1 **Total mark awarded =** **0 out of 3**

How the candidate could have improved their answer

This candidate had some knowledge of ethical guidelines, being able to name one, and had knowledge of what that guideline required. However, they had misread the question so gained no credit for their knowledge.

(a) Debriefing was 'followed' rather than 'not followed' (as the candidate claimed).

(b) The candidate needed to identify what would have been said to participants in a debrief in the Laney et al. study.

(c) The candidate again misunderstood, explaining what it means to fail to debrief rather than giving a reason why it would be important to debrief participants in a study about false memories. Therefore their answer needed to be both more accurate and made relevant to the study in the question.

Common mistakes candidates made in this question

Giving generic answers in parts (b) and (c).

Candidates should respond to 'in this study' and similar cues in questions that indicate the requirement to link their answer to a specific example.

Question 6

Example Candidate Response – high	Examiner comments
6 Describe what is meant by 'order effects', using any examples. Order effects mainly appear in repeated measure design. Same individuals were placed in different levels of independent variables. They may feel fatigue, tired, or they will have can understand the aim of the study or they may have familiar improved behaviour because they did that repeatedly not for their natural behaviours. These are called 'order effects'. In Yamamoto's study, the chimpanzees were asked to complete the task first in 'can see' condition, then 'cannot see' condition, the finally 'can see' condition again to avoid of order effects. [6]	1 This answer contains many useful points, each earning credit. For example that order effects occur in repeated measures designs and that they arise from fatigue/tiredness or from improvements due to familiarity. Finally, 1 mark for the definition, saying that order effects arise because of repetition, so are not 'natural behaviours'. **Total mark awarded = 5 out of 6**

How the candidate could have improved their answer

This is a well-informed answer. The response could have had a second example. In response to 'any example' candidates usually chose a core study but they did not have to; any other study could be used to illustrate the point as could any example of a possible study the candidate invented that adequately illustrated the point being made.

Example Candidate Response – middle	Examiner comments
6 Describe what is meant by 'order effects', using any examples. Order effects is the extraneous variable where the order in which the participants go through their conditions changes the results. Boredom, for example, is an order effect. If participants go through so many conditions in one period, they can get bored and not care about the study. this can reduce the validity of results and the experiment. Using repeated measures can increase order effects, as they are going through a condition more than once, this increases the chance of demand characteristics, as they may catch on to the real aim. [6]	1 The candidate starts well with the definition of order effects, then illustrates this with a description of boredom. Finally, they indicate why experiments using a repeated measures design are vulnerable to order effects. **Total mark awarded = 3 out of 6**

How the candidate could have improved their answer

This candidate had a description of the relevant effects of boredom, but did not identify these as a 'fatigue effect'. Their final comment about demand characteristics did apply to repeated measures designs but was independent of order effects, so was not relevant. Instead, they could have elaborated on the problem of repeated measures and the idea of how practice or fatigue could have had an effect and given some examples.

Example Candidate Response – low	Examiner comments
6 Describe what is meant by 'order effects', using any examples. Order effect is when participants start suspecting about 1 the real aim of the study due to doing tasks many times about the same topic. For example, in Bandura's study children were divided into 2 male groups, the aggressive model and the non-aggressive model. If each child was tested in every group, they would start to understand the pattern, and eventually understand the real aim of the study, creating demand characteristics as they would understand what behaviour was expected from them to have. [6]	1 The first sentence confounds the response to demand characteristics and order effects. In the example, however, they effectively describe what the problem of order effects would be if the study by Bandura et al. had been conducted using a repeated measures design, which earns credit. **Total mark awarded = 1 out of 6**

How the candidate could have improved their answer

This candidate needed a clearer understanding of the difference between demand characteristics (the features of a study that hint to the participants the aim being explored) and order effects. The candidate gave one creative example illustrating their understanding, but they should have given a second example, as the question specifically asked for examples in the plural.

Common mistakes candidates made in this question

Many candidates could have earned more marks by including one or two examples. Some responses demonstrating otherwise excellent understanding were unable to earn full credit as they had no examples at all. Candidates should be reminded that when asked for 'any examples' they should choose a core study, any other study or invent an example of a possible study that adequately illustrates their point.

Question 7

Example Candidate Response – high	Examiner comments

Section B

Answer all questions in this section.

7 Kaleem is planning to investigate sleep and dreaming. He needs to find participants.

(a) Outline one sampling technique that Kaleem could use to find a representative sample.

Kaleem could use the random sampling technique because there is no bias and every one has an equal chance of being in the study, this make the study more generalizable [2]

1

(b) Suggest two features of the participants that Kaleem should consider to make his sample representative.

1. Participants should have different sleep schedules

2. The age ~~of the participants~~ and gender of the participants should vary. [2]

2

(c) Explain why one of the features you suggested in part (b) would be important in Kaleem's study.

The age and gender of the participants should be varied because the sleep schedule and how the brains of people dream and work may depend or be influenced by the age and gender of the participants, [2]
Making the study more generalizable,

3

1 An appropriate technique is identified, earning 1 mark, and this is outlined with a comment about everyone having an equal chance of participation.
Mark for (a) = 2 out of 2

2 Two features are correctly identified (a range of different sleep schedules and age).
Mark for (b) = 2 out of 2

3 This response makes one creditworthy point about one feature (age).
Mark for (c) = 1 out of 2

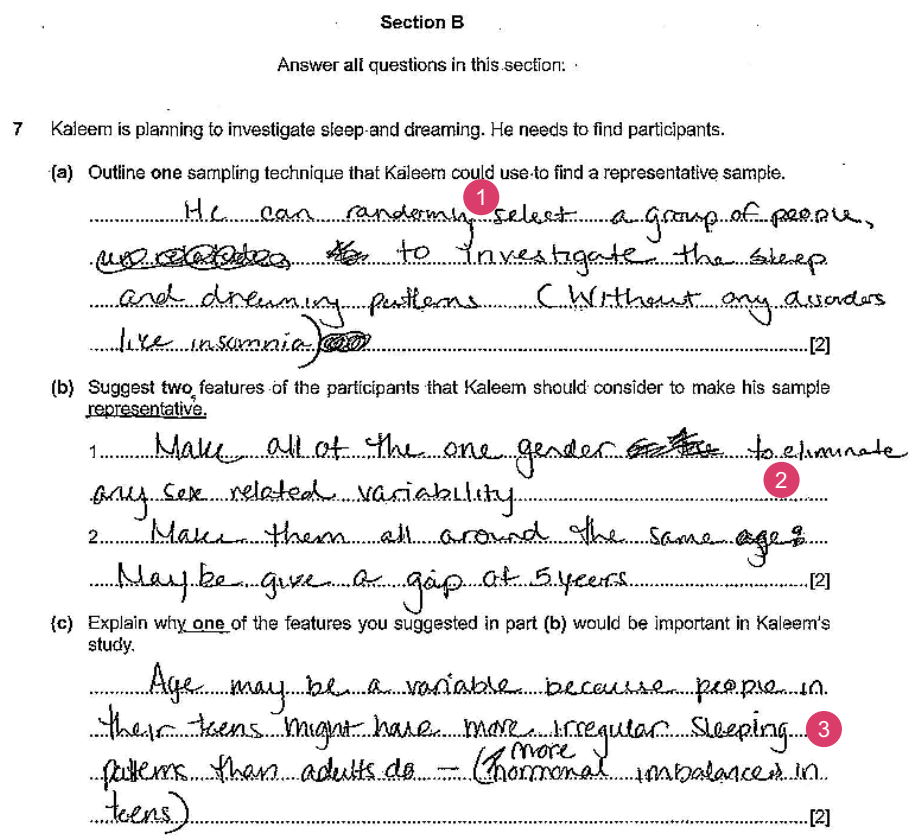
Total mark awarded = 5 out of 6

How the candidate could have improved their answer

(a) This answer was one of the two ways to achieve full marks. Alternatively, the candidate could have described how a random sample could have been obtained. Note that this question part did not need contextualising and this candidate did not do so.

(b) The candidate gave a simple answer and one that made answering part (c) easy.

(c) The question clearly stated 'one of the features suggested in part (b)', but this candidate referred to both age and sleep cycle, plus they introduced a third factor (gender). This response would have been better if it had focused on one of these, sleep cycles or age, and made a detailed comment about its relevance to this study.

Example Candidate Response – middle	Examiner comments
	1 'He can randomly select' earns a mark for identifying a suitable representative sampling technique. Mark for (a) = 1 out of 2 2 Although gender and age are possible variables, these are expressed as reducing rather than achieving a representative sample. Mark for (b) = 0 out of 2 3 The idea of a link between sleep in teens and hormones is identified, but no attempt is made at explanation. Mark for (c) = 1 out of 2 **Total mark awarded = 2 out of 6**

How the candidate could have improved their answer

(a) Although this candidate earned the identification mark for random sampling, they did not then follow up with an outline of what this was or how it was conducted, so they needed to fully follow the command word in the question.

(b) The candidate expressed their answer in such a way as to make the sample less representative rather than more, by restricting genders and age. In fact, they clearly stated this in '1' by adding that this would 'eliminate any sex-related variability'. The question only asked for the two features themselves, so sticking to 'gender' and 'age' could have earned the marks.

(c) The response to this question part started well. The candidate needed to explore this idea a little further, suggesting how changing hormones could be linked to sleep rather than just stating 'imbalanced hormones' as an isolated fact.

Example Candidate Response – low	Examiner comments
Section B Answer all questions in this section. 7 Kaleem is planning to investigate sleep and dreaming. He needs to find participants. (a) Outline one sampling technique that Kaleem could use to find a representative sample. Do a volunteer sample from a well known university [2] (b) Suggest two features of the participants that Kaleem should consider to make his sample representative. 1. Wide range of age 2. Healthy people [2] (c) Explain why one of the features you suggested in part (b) would be important in Kaleem's study. A wide range of ages is important to ensure that the sample is representative of the general population [2]	1 A volunteer sample is not very representative, so is incorrect. Mark for (a) = 0 out of 2 2 'Wide range of age' is an important variable so earns credit. However, to study only healthy people would be biased; a representative sample should be more diverse. Mark for (b) = 1 out of 2 3 This response repeats the information in part (b) of the question, rather than indicating why a wide range of ages would make the sample more representative. Mark for (c) = 0 out of 2 **Total mark awarded = 1 out of 6**

How the candidate could have improved their answer

(a) Although this candidate was aware of at least one sampling technique, they needed a clearer understanding of which techniques were more representative of the population. This was a common misunderstanding as 'random' was used in everyday speech in a non-specific way. Candidates need to understand the real meaning of 'random' before they can grasp what makes a sample representative.

(b) The candidate needed to give features e.g. 'age' and 'health'. In the case of a 'wide range of ages' their answer was acceptable, but by saying 'healthy people' they made the sample less rather than more representative.

(c) Here the candidate was on the right lines with having a wide age range but needed to explain why age might matter to the variable being considered in this study, i.e. sleep. This application to novel contexts is a requirement throughout the syllabus, so candidates need plenty of practice with examples of situations they have not previously encountered.

Common mistakes candidates made in this question

(a) Suggesting a non-representative sampling technique; most often volunteer sampling.

(b) Making suggestion of narrow groups that would make the sample less representative rather than giving the feature which needed to be considered.

(c) Not making reference to the objective of the study (about sleep) in explaining the importance of their suggested feature.

Question 8

Example Candidate Response – high

8 Penny is using cats and parrots in her experiment. Penny houses each animal alone and only gives them their daily food every evening. Her independent variable is the species. She thinks that parrots will share food because they are social animals whereas cats live on their own. To test this, two animals of the same species are put together with a small bowl of food every afternoon.

(a) Penny's dependent variable is whether the animals share the food.

Suggest how she could operationalise this dependent variable.

She could operationalize this by observing the positions of the the animals relative to the bowl and counting the number of food pellets eaten by each animal. The use of a camera would help this task. [2]

(b) Explain why the timing for the animals' daily feed is a potential ethical issue.

Some animals may be more hungry than others making them uncomfortable, ~~or at~~ Some animals prefer to eat at other times or through varied times of the day. [2]

(c) Explain why the housing of the parrots was less ethical than the housing of the cats.

Cats require more living space than parrots do to roam ~~room~~ around and be comfortable. [1]

(d) Penny has decided that she will be a covert observer.

Suggest why she chose to be a covert observer in her study.

She chose to be a covert observer so that the ~~this animals does~~ do not exhibit experimenter effects as Penny is the usual provider of food. This ensures ~~that~~ that the animals only interact with each other and not with Penny, as she it will affect how the animals share food with the with each other. [3]

(e) Write an operationalised non-directional (two-tailed) hypothesis for Penny's experiment.

If two different species: cats and parrots are placed with animals of the same species in front of a small bowl of food every afternoon, then there will be a difference in the number of food pellets shared between the species ~~from~~ two species. [2]

Examiner comments

1 The way to operationalise is identified (counting the number of food pellets) and detail is added with reference to the camera.
Mark for (a) = 2 out of 2

2 This makes an elaborate point about the discomfort experienced by different species of animals and why; because they prefer to eat at different times or throughout the day.
Mark for (b) = 2 out of 2

3 This response is not answering the question and is, in fact, arguing that the housing of cats was less ethical than that of the parrots.
Mark for (c) = 0 out of 1

4 The first point inappropriately uses the term 'experimenter effect', but the idea is clear regardless (that Penny affects the animal's behaviour as she is their usual provider of food). The justification that follows is worth 2 further marks for indicating that this ensures the animals only interact with each other (and not Penny) and that this would otherwise affect their feeding behaviour and thus their sharing.
Mark for (d) = 3 out of 3

5 This is a two-tailed hypothesis and both the IV (cats /parrots) and the DV (number of food pellets) are operationalised.
Mark for (e) = 2 out of 2

Total mark awarded = 9 out of 10

How the candidate could have improved their answer

(c) The candidate needed to read the question carefully to ensure that they were answering the question.

(d) The candidate used the term 'experimenter effect' incorrectly. This term does not feature on the syllabus precisely because it is so easy to misunderstand.

Example Candidate Response – middle

8 Penny is using cats and parrots in her experiment. Penny houses each animal alone and only gives them their daily food every evening. Her independent variable is the species. She thinks that parrots will share food because they are social animals whereas cats live on their own. To test this, two animals of the same species are put together with a small bowl of food every afternoon.

(a) Penny's dependent variable is whether the animals share the food.

Suggest how she could operationalise this dependent variable.

When the time comes for the cat and the parrot to eat, she could serve only one bowl and see if they shared or fought as to who will get the bowl. 1 [2]

(b) Explain why the timing for the animals' daily feed is a potential ethical issue.

The animals may be used to ~~eating~~ having more meals per day, and not only every evening. This would be restraining the animals of ~~the~~ their basic needs and an ethical issue. 2 [2]

(c) Explain why the housing of the parrots was less ethical than the housing of the cats.

Because parrots are usually kept in cages which ~~is~~ ~~very~~ ~~cats~~ ~~house~~ is not a natural environment to them. 3 [1]

(d) Penny has decided that she will be a covert observer.

Suggest why she chose to be a covert observer in her study.

A covert observer is an observer that the participants aren't aware of. Observing 'under cover' She probably chose this to avoid any bias if she were in the room. As the animals would probably behave differently. Maybe they are shy ~~and~~ animals or afraid ~~of~~ of Penny. 4 [3]

(e) Write an operationalised non-directional (two-tailed) hypothesis for Penny's experiment.

A non-directional hypothesis may be that the parrot ~~will share food~~ will share this food because it is a social animals. 5 [2]

Examiner comments

1 To record 'sharing' or 'fighting' is an identification of a simple way to operationalise sharing into nominal categories, so earns 1 mark.
Mark for (a) = 1 out of 2

2 The first point about animals being used to having more meals a day is just sufficient to identify an ethical problem. The same basic point is made in a less clear way with the idea that this restrains the animals' basic needs. As this is less detailed than the first point, it cannot be credited as an explanation, so just 1 mark here.
Mark for (b) = 1 out of 2

3 This response is not answering the question. In fact, it implies that the housing of parrots is not an ethical issue as it is similar to the way they are usually kept. Simply because this is 'not a natural environment' does not justify why it is unethical, so 0 marks.
Mark for (c) = 0 out of 1

4 This response makes a generic point about participants being unaware that they are being observed in a covert observation which reduces bias. This is then explained in this situation: that the animals may behave differently, being 'shy animals' (accepted as a description, ignoring the potentially anthropomorphic nature of the statement) or that they may be afraid of Penny.
Mark for (d) = 3 out of 3

5 This attempt at a hypothesis does not have both levels of the IV and is directional, so earns no credit.
Mark for (e) = 0 out of 2

Total mark awarded = 5 out of 10

How the candidate could have improved their answer

(a) The candidate needed to operationalise their chosen measure of the dependent variable. In this case, being a nominal categorisation, the simplest way to earn the second mark would be to define 'sharing' and 'fighting', e.g. to say 'sharing' is when both animals eat any amount of food etc.

(b) This response needed to answer the question and explain why their suggested ethical issue was potentially problematic. The initial point was very brief, so additions could have been about hunger being unpleasant for the animals, or that this may make them more aggressive so they may be injured. Alternatively, reference could have been made to an ethical guideline for animals such as to avoid 'pain and distress', which could have been related to either of these ideas.

(c) The response to this question needed to explore why it was less ethical for parrots than cats, not the reverse. To argue that housing was 'not natural' was inappropriate. Good animal housing does not have to be 'natural' to be adequate or even excellent, it simply has to provide effectively for the animal's needs (e.g. in terms of security, warmth etc).

(d) This attempt at writing a hypothesis began with the irrelevancy of rewriting part of the question. This is unhelpful, especially here where the key words are already written above the answer space and importantly uses up time. The candidate needed to include both levels of the independent variable (rather than just mentioning 'parrots') and say there would be a difference between them in terms of the dependent variable (of sharing food as stated). However, the variable of 'sharing food' also needed to be operationalised, i.e. the candidate needed to refer to how this would be measured.

Example Candidate Response – low

8 Penny is using cats and parrots in her experiment. Penny houses each animal alone and only gives them their daily food every evening. Her independent variable is the species. She thinks that parrots will share food because they are social animals whereas cats live on their own. To test this, two animals of the same species are put together with a small bowl of food every afternoon.

(a) Penny's dependent variable is whether the animals share the food.

Suggest how she could operationalise this dependent variable.

Penny could measure if/how the parrots and cats into groups and create a controlled condition through which she would observe their behaviour (if they share the food or not) X 3 [2]

(b) Explain why the timing for the animals' daily feed is a potential ethical issue.

Animals need to eat more than once a day and each animal has different needs, especially. In this case a cat has different eating needs than a parrot. [2]

(c) Explain why the housing of the parrots was less ethical than the housing of the cats.

Because parrots are not usually alone in their natural habitat. Cats are more used to live on their own. [1]

(d) Penny has decided that she will be a covert observer.

Suggest why she chose to be a covert observer in her study.

Penny could have chosen to be a covert observer because that way she couldn't influence the animal's behaviour in any way. If she was in the room animals could be more focused on her than they would be on the task itself. [3]

X 3 Penny could use a structured covert observation through a one-way mirror to observe animal's behaviour.

(e) Write an operationalised non-directional (two-tailed) hypothesis for Penny's experiment.

Animals will either share the food or that is in the bowl more bowl or choose not share the food. [2]

Examiner comments

Mark for (a) = 0 out of 2

1 This response begins well, identifying a potential ethical issue that some animals may need to eat more than once a day, but this is not explained, so just 1 mark.
Mark for (b) = 1 out of 2

2 This response uses the information from the question stem to identify why the situation is less ethical for parrots, so earns 1 mark.
Mark for (c) = 1 out of 1

3 The first mark is earned for relating the nature of covert observation to this study (that Penny could not, therefore, influence the animals' behaviour). A second point is made about this ensuring that the animals would be focused on the task (eating/sharing) rather than on her. As 'the task' is not specified, this is a generic point but one generic point is allowed in the mark scheme so this earns a total of 2 marks.

4 This answer does not identify a way to operationalise the dependent variable; it offers procedural details so cannot earn marks.
Mark for (d) = 2 out of 3

5 This is a non-directional hypothesis, so earns a mark but only one of the variables is operationalised so it cannot earn both marks.
Mark for (e) = 1 out of 2

Total mark awarded = 5 out of 10

How the candidate could have improved their answer

(a) The dependent variable needed to be identified in a way that could be measured, such as how much food each animal eats. The details given by this candidate could then have counted as appropriate elaboration of how this could have been measured, thus making the response worth 2 marks.

(b) This response needed some explanation, such as suggesting why the differences in feeding needs would have been problematic, such as if some of the animals were distressed by being hungry or were in pain if their hunger led to fighting and injury.

(c) A third point was needed, which was also linked to the stem. This could have been an extension of either idea, such as how she might have influenced them (e.g. they might hide from her if they were frightened or run to her if they recognised her).

(d) The second variable (the independent variable of animal species) also needed to be operationalised. This could have been done simply by beginning with 'Cats or parrots' in place of 'animals'.

Common mistakes candidates made in this question

(a) Although many candidates identified a way to operationalise, few gave the necessary details of how this could achieve a measurement of sharing. This was essential to earning both marks.

(b) Candidates needed to think about the ethical guidelines for using 'animals'. The relevant one here was 'pain and distress'. From this starting point, they could then have used the ideas they had about hunger, discomfort, increased aggression etc. to answer the question.

(c) Repeating the content of the stem was not enough to earn credit. It may be possible to use that information to create an answer, but this would need to be explained or elaborated for full marks.

(d) This was a 3 marks question and ended with 'in her study'. This meant that the response should have been detailed and linked to the study described in the question. This often was not the case.

(e) Not all candidates were able to structure an experimental hypothesis in terms of 'a difference between the two levels of the independent variable in terms of the dependent variable' so were unable to earn any marks. A second mistake was to operationalise only one of the two variables, thus only 1 of the 2 marks could be earned.

Question 9

Example Candidate Response – high

9 Don and Pinja are planning to test whether older or younger people lose their way more often, even when using a map. They will time how long it takes each participant to find their way between two places in their university, using a map. They are talking about how to find participants and how to start the study. They often see older people returning from the shops in the morning and younger people after school in the evening.

(a) Don wants to tell every participant where they are on the map at the start of the test.

Explain why this would be important.

This would be important to avoid participant variables, for example, some P's may already know their location without being told, affecting their travel time. However, the study is only testing the travel time, so by making each P start even by telling them their location, there will be less participant variables. [2]

(b) Pinja says they should test all the participants at midday rather than testing them whenever they see them.

Explain why this would be important.

This would be important since the time of day could be an extraneous variable. For example, a human's ability to follow directions on a map may be different between evening and morning. By testing everyone at the same time at midday, the confounding variable of time would be eliminated. [2]

(c) Identify two participant variables, other than age, and suggest how these could be controlled in this experiment.

1. One participant variable would be gender. There may be differences in a female's ability to follow a map and a male's ability to do the same. This difference could be controlled by using the same number of female/male older and younger participants.

2. Another participant variable would be ~~their~~ the university that participants attended. If P's studied at the university where the study takes place, they would already know the directions without a map. This issue could be controlled by using a short survey to see if P's attended the university and eliminating those that did, from the study. [4]

Examiner comments

1 The first mark is for explaining the problem with participant variables and the second for explaining the impact this would have on the experiment, i.e. affecting the measure of the dependent variable, travel time. Mark for (a) = 2 out of 2

2 Here, the candidate identifies another extraneous variable, that navigational ability might vary over the day, and continues to explain how this procedure eliminates the variable for the second mark. Mark for (b) = 2 out of 2

3 Here the variable of gender is identified and later in the response, the candidate effectively describes how this could be controlled, by using equal numbers of each gender.

For their second point, they identify the variable of where the participant studied, and controls this by surveying potential participants and ensuring those chosen all have comparable previous knowledge. They have therefore fully answered the question and score full marks. Mark for (c) = 4 out of 4

Total mark awarded = 8 out of 8

How the candidate could have improved their answer

Even though this answer scored full marks on each part, it is noteworthy that they gave more information than was required in part (c). Having identified their variable (e.g. 'gender') the candidate went on to explain why this variable could need controlling. This illustrated their understanding of the scenario, and could indeed have been the answer to a question but, on this occasion, it contributed to neither the 'identification' required nor to the suggestion of a way to control the variable, so could have been omitted to save time.

Example Candidate Response – middle

9 Don and Pinja are planning to test whether older or younger people lose their way more often, even when using a map. They will time how long it takes each participant to find their way between two places in their university, using a map. They are talking about how to find participants and how to start the study. They often see older people returning from the shops in the morning and younger people after school in the evening.

(a) Don wants to tell every participant where they are on the map at the start of the test.

Explain why this would be important.

This would control the experiment and make sure all participants begin knowing the same information. This increases validity and allows the experimenter that it is the independent/variable affecting the dependent [2]

(b) Pinja says they should test all the participants at midday rather than testing them whenever they see them.

Explain why this would be important.

This increases reliability because the experiment follows a certain step of the procedure at a specific time, which allows the experiment to be replicable. [2]

(c) Identify **two** participant variables, other than age, and suggest how these could be controlled in this experiment.

1 Some participants may be more familiar with the campus than others. These can be controlled by pulling participants from different areas inside and outside of campus.

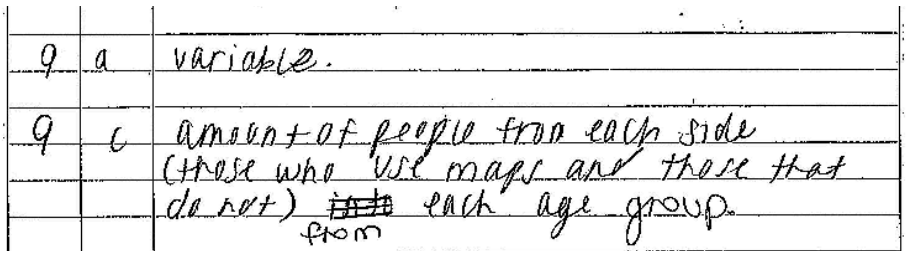
2 Some participants may be more used to using maps to go places. Participants could be asked using a questionnaire prior to the experiment, and experimenters could pull an equal [4]

Examiner comments

1 The candidate earns 1 mark for the idea that the procedure ensures all participants begin 'knowing the same', i.e. are starting from a standardised baseline.
Mark for (a) = 1 out of 2

2 This is just enough for 1 mark, as it is an explanation of the idea that this standardises the procedure.
Mark for (b) = 1 out of 2

3 The first point identifies familiarity with the campus as a variable and controls it effectively by taking people from different areas in the sample. Likewise, the second point identifies map use as variable, and controls it by ensuring that frequent and nonfrequent users are equally represented. This earns full marks.
Mark for (c) = 4 out of 4

Example Candidate Response – middle, continued	Examiner comments
	**Total mark awarded = 6 out of 8**

How the candidate could have improved their answer

(a) This response needed further explanation. For example, the candidate incorrectly identified the problem as one of validity. In fact, the point they made was one of reliability and recognising this would have enabled them to explain this.

(b) This was a vague point about standardisation. It needed to be clearer so that it could be elaborated upon effectively. The candidate could have explained why varying the time of day could have been problematic, for example, by suggesting what differences may have occurred during the day that made walking or navigating easier or more difficult.

(c) This was a clear answer which was more concise than the answer to (b) above which had additional, unnecessary, content.

Example Candidate Response – low

9. Don and Pinja are planning to test whether older or younger people lose their way more often, even when using a map. They will time how long it takes each participant to find their way between two places in their university, using a map. They are talking about how to find participants and how to start the study. They often see older people returning from the shops in the morning and younger people after school in the evening.

(a) Don wants to tell every participant where they are on the map at the start of the test.

Explain why this would be important.

So that they know where they're headed from 1

[2]

(b) Pinja says they should test all the participants at midday rather than testing them whenever they see them.

Explain why this would be important.

So its generalizable and no other outside factors can affect the experiment 2

[2]

(c) Identify two participant variables, other than age, and suggest how these could be controlled in this experiment.

1. How well they can read/see - asin participants if they have 20/20 vision 3

[4]

Examiner comments

1 Although this sounds convincing, the response lacks the key element of this being standardised. The participants are not simply being given information, they are all being given the same information for a purpose; so that they all have the same knowledge about where they are. This element is missing from this response, so it does not score a mark.
Mark for (a) = 0 out of 2

2 This procedure does not affect the generalisability of the results, so this response is irrelevant and does not earn credit.
Mark for (b) = 0 out of 2

3 An appropriate participant variable has been identified (eyesight). The candidate then begins to offer a way to control this, by asking about their vision. However, simply by knowing about individual differences the experimenter does not solve the problem. The candidate does not offer a second variable.
Mark for (c) = 1 out of 4

Total mark awarded =
1 out of 8

How the candidate could have improved their answer

- (a) For this response to earn credit, the candidate needed to explain why knowing 'where they're headed from' was important i.e. to include the idea that it achieves standardisation of the participants' experience so they all start from a shared baseline knowledge. This could have been presented as the reverse argument, that it would lack standardisation of some participants who knew where they were to start off with as they would be quicker than those who did not.
- (b) This response misused the term 'generalisable'. It was better to avoid terms and describe the problem than to use terms incorrectly. If the candidate had explored the idea of what 'outside factors' that affect travel time could have affected the participants, they could have found suitable ideas such as 'how busy it was' or 'whether they can see clearly to navigate'. These would have opened up the possibility of a full mark answer.
- (c) Here the response included an appropriate variable and the candidate embarked on the start of an answer about how this could be controlled, but did not complete this. After discovering whether participants have good eyesight or not, this then needed to be controlled for i.e. there needed to be some action based on this information. The candidate could have suggested including participants with a range of visual abilities, or asking participants with poor eyesight to wear their glasses for example.

Common mistakes candidates made in this question

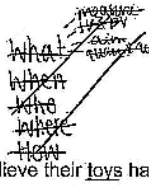
- (a) Candidates often gave too little information, identifying only that the participants needed to be informed, rather than explaining why this was necessary in any detail.
- (b) Again, candidates gave too little detail. Although possible ideas included some very simple suggestions (such as it being brighter/darker making navigation easier/more difficult) many did not come up with their own ideas. It is important that candidates are encouraged to develop ideas for themselves in response to practical designs. Note that the syllabus says 'apply knowledge of ... to a novel research situation' for a selection of different aspects of research methodology. Candidates should be encouraged to practise this skill.
- (c) Candidates often suggested suitable variables and gave details about why these would be a problem, without offering solutions for controlling these variables.

Question 10

Example Candidate Response – high

Section C

Answer all questions in this section.



10 Fajar has noticed that some of the younger children in her school believe their toys have feelings but the older children generally do not. She wants to find out more about what children believe and when beliefs change. She is planning to use a questionnaire.

(a) Describe how Fajar could conduct a study using a questionnaire to find out about the children's beliefs.

What: the aim of the study is to research a child's belief about toy's feelings & when this feeling leaves or changes. The IV (independent variable) is the age of the child & the DV (dependant variable) is the answers the children give in the questionnaire.

1 There will be one questionnaire with ~~two sections; A & B. A will have~~ closed questions (questions that have fixed responses) ~~& B will have open questions~~ & one interview ~~with unstructured questions~~ (unstructured not a structured (fixed set of questions)) tape recorded. All PS will do both the questionnaire & interview, one after the other (PS naturally exposed) Field experiment

When & Where: The PS will be given 30min for the questionnaire & the interview will be 30min. It will overall take 1hr & 15min (15min for debriefing) It will take place in ~~Stanford Univ~~ Fajar's school (after school in an empty classroom) ~~from 3-4pm~~ (number reasonable & fits criteria)

2 Who: The PS will be sampled using opportunity sampling from ages ~~4-7 years old~~ 2 - 13 years old. 44PS, 4 from each age (2 boys & 2 girls). Parents will

3 be sent consent forms to give or deny parental permission (PS will only be allowed to participate with parental consent.

HOW: Fajar will allow one child to come in (introduce himself) & give the child the questionnaire to answer with a pen. After 30min, he will ask the child to the interview questions while a tape recorder records the conversation. Afterwards the child will be given a small chocolate & will be allowed (fully debriefed) to ask any questions & can then go home.

4 questionnaire; 5 questions, do you love your toys? do they get sad? are they happy? ~~what~~ do they like to play? do your toys miss you?
interview; 1 question, do your toys have feelings? ..elaborate? ..... [10]

5

Examiner comments

1 Here the candidate says how they will be collecting their data with the questionnaire i.e. with closed questions that have fixed responses. They continue later to say how the questionnaire will be administered. This gives good detail for 'how' the questionnaire will be used.

The response also includes minor details of when and where the research will take place.

2 Here the response includes details of how 'younger' and 'older' will be operationalised and how the sample will be collected. This is a good level of detail for 'who' will be used as participants.

3 The response indicates good ethical awareness, including the need for parents to be given the chance to consent as the children are young, followed by a consideration of debriefing.

4 The suggested questions tackle the given issue, whether the participants believe their toys have feelings. A selection of appropriate questions is offered which explores this in different ways.

5 Overall, this response includes all three major elements in detail, has the minor element and appropriate reference to ethics. The use of terminology is accurate and the study would be replicable. This places the response towards the top of level 3.
Mark for (a) = 9 out of 10

Example Candidate Response – high, continued	Examiner comments
(b) Identify one weakness/limitation with the procedure you have described in your answer to part (a) and suggest how your study might be done differently to overcome the problem. ~~PS may present~~ A weakness may be social desirability (when PS answer under social pressures, giving answer they think are socially acceptable). The PS are talking to the researcher in an interview which means they might fear being judged & may therefore not be very honest - To overcome this the PS should be observed covertly (hidden observer) while talking to friends or be with a person they trust in order to give more honest answers - .....[4]	6 One weakness is identified (effect of social desirability) and this is explained in generic terms. There is then an explanation of how it could be overcome but this relates to the interview rather than the questionnaire which was the focus of the question. Nevertheless, the point being made does apply to questionnaires, so earns some credit, giving 3 marks rather than 4. Mark for (b) = 3 out of 4 **Total mark awarded = 12 out of 14**

How the candidate could have improved their answer

(a) The candidate did not quite follow the rubric as they had included an interview as well as a questionnaire. This was unnecessary detail. In the final part of this response, the candidate contradicted themselves, giving the prompt 'elaborate' in their questioning, when they had stated that they would be asking closed questions.

(b) As a result of incorrectly including an interview in their answer to part (a), the response to part (b), although sound in terms of psychology, was only partially relevant. It was essential to focus on the research method required when one was stated in the question.

Example Candidate Response – middle

Section C

Answer all questions in this section.

10 Fajar has noticed that some of the younger children in her school believe their toys have feelings but the older children generally do not. She wants to find out more about what children believe and when beliefs change. She is planning to use a questionnaire.

(a) Describe how Fajar could conduct a study using a questionnaire to find out about the children's beliefs.

She would collect participants of different age, between 5 and 10. Both females and males would be used. The study would be conducted in a natural environment such as their classroom, to reduce mundane realism and to reduce demand characteristics. All students were placed in the same class and at the same time with the same objects. They were all given a questionnaire about toys, and which include questions about toys and why do they like that toy the most and which one is their favorite. The questionnaire only include closed ended questions. This questionnaire could help record the data. The students will be told that the study is about their memories with their toys that they used to own when they were younger. The children would be surrounded in the classroom with toys that are familiar to them. A stooge would enter the room after they have played with the toys for 15 minutes. The stooge would act abusive towards the toys and then the experimenters would record the type of behavior conducted from the child. They would record the data on whether younger or older children feel offended or upset when their favorite toy is being abused.

[10]

Examiner comments

1 The candidate identifies the 'who' element of the study, operationalising the ages between 5 and 10. They also specify that they would include both genders, which gives additional detail. This response offers just enough detail for this aspect of the study.

2 Although specific wording of questions is not given, the areas which would be asked about are mentioned here. However, they are not directly relevant to the issue of believing that toys have feelings. They are, however, relevant to the design which follows.

3 Here, details are given about the nature of the questionnaire itself, with the 'how' element being satisfied and is then elaborated on by the description of the procedure which leads to the data about how the child feels. This last section therefore provides detail for the 'how' element.
Mark for (a) = 5 out of 10

Example Candidate Response – middle, continued	Examiner comments
(b) Identify **one** weakness/limitation with the procedure you have described in your answer to part **(a)** and suggest how your study might be done differently to overcome the problem. Deception was used as the students were told that the study was about the memories they had with the toys. This problem could be solved by telling them that the study was about whether toys have feelings or not. This would not affect demand characteristics as the children would not understand the difference between the purpose of the study. 4 [4]	4 The candidate raises an appropriate ethical issue relating specifically to the procedure they have designed. They suggested a solution, but are unable to justify this satisfactorily, so they earn 2 marks. Mark for (b) = 2 out of 4 **Total mark awarded = 7 out of 14**

How the candidate could have improved their answer

(a) The candidate produced an interesting design for a study, using a questionnaire to collect the data thus satisfying the requirements of the question. The detail of how the questionnaire collects the specific data required was not however, entirely clear. The candidate needed to elaborate at the end about how the questionnaire would measure whether the '…children feel offended or upset when their favourite toy is being abused'. In addition, it would have been difficult for this candidate to earn full marks as they would potentially find fulfilling the ethical criteria required for a top scoring answer difficult with this design.

(b) The candidate dismissed the idea of demand characteristics but in fact this could have provided them with a better answer. For example, the response could have suggested that the children could have worked out the aim of this study from the enactment by the stooge, and changed their responses to the final questions; perhaps because they felt embarrassed if they were upset by the abuse of the toy.

Example Candidate Response – low

Section C

Answer **all** questions in this section.

10 Fajar has noticed that some of the younger children in her school believe their toys have feelings but the older children generally do not. She wants to find out more about what children believe and when beliefs change. She is planning to use a questionnaire.

(a) Describe how Fajar could conduct a study using a questionnaire to find out about the children's beliefs.

She could administer questionnaires to the children in her school that contain questions like, "Do you have a friendship with any of your toys?", "Do you talk to them?", "If no, what age did you stop imagining them as friends, if you ever did?" She could then compare their answers to the other kids' and determine the approximate age that these children stop having such big imaginations. She could include questions like "what is your approximate age" with options like 5-7, 8-10, 11-13, 14-16, and so on depending on the highest and lowest ages in her school. She could then average their answers even more in broader age groups to make it more generalizable.

[10]

(b) Identify **one** weakness/limitation with the procedure you have described in your answer to part (a) and suggest how your study might be done differently to overcome the problem.

One weakness would be it's not highly representative of all students. She could broaden the study and give more kids the opportunity to answer the questions. The more generalizable it is, the more accurate the results will be.

[4]

Examiner comments

1 The response starts well with some appropriate questions, giving a detailed indication of 'how' the study would be conducted.

2 The response includes an appropriate way to collect data on the children's ages so satisfies the 'who' element at a basic level.
Mark for (a) = 4 out of 10

3 This is a generic and vague answer that does not relate directly to the study designed in part (a) so cannot earn credit.
Mark for (b) = 0 out of 4

Total mark awarded = 4 out of 14

How the candidate could have improved their answer

(a) To improve the 'who' element of the response, the candidate could have included how the sample could be obtained and other details about them such as genders, where from etc. Apart from the examples of questions, there was no specific information about the nature of the questionnaire, such as whether it would consist of open or closed questions or both, or how it would be administered. This meant that the response could not exceed 4 marks. To improve on this, the candidate needed to include this element to give them access to the next marking band.

(b) Some of the ideas mentioned in this response could have been made relevant to the response from part (a), making them potentially creditworthy. For example, if the response in (a) gave details of where the sample had been taken from, a judgment could have been given in (b) with specific comments about why it was not generalisable in respect of the children's likely beliefs.

Common mistakes candidates made in this question

(a) Candidates should design their study using the method stated in the question if there is one. A number of candidates did not do this. Also, as the final candidate above had done, there was a tendency to include justification or evaluation in the design of the study. This is not necessary and does not earn credit.

(b) Many candidates gave generic or superficial answers to this part of the question. Candidates should specifically review the procedure of the study they have designed.

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