

Delegate Booklet

Course Title:

**Pearson Edexcel International  
A Level Psychology: Welcome to Pearson (Module 2)**

Course Code:

**YPS01-20102**





# About this event

Course Title:

**Pearson Edexcel International A Level: Welcome to Pearson (Module 2)**

Course Code:

**YPS01-20IO2**

## Aims and Objectives

By the end of this session delegates will:

- Understand the Assessment Objectives for the qualification.
- Understand the question types for the qualification
- Understand the mark schemes for the qualification
- Practise using the mark schemes using exemplar student work
- Learn about the support provided by Pearson around assessment and exemplars

This event can count as 2 hours of CPD.

**Please note:** this training consists of three modules.



# Agenda

Time	Item
08:00	Welcome & Introductions
08.15	Section one: Assessment Objectives (AOs)
08:25	Section two: Question types
08.40	Section three: Mark schemes
08:55	Break
09.00	Section four: Practice using the mark schemes
09.50	Section five: Support, resources and final questions
10.00	Finish



# Activity 1 - Question types

## What is wrong with these questions?

1. Assess what is meant by 'disordered thinking' as a symptom of schizophrenia. (2)
2. Outline the function of neurotransmitters as an explanation of schizophrenia. (4)
3. Describe the procedure used by Rosenhan (1973). (12)
4. Describe and evaluate the contemporary study by Suzuki et al. (2014). (16)



## Short-answer question mark scheme – example 1

### Question:

<p><b>1</b> One mental health disorder you will have studied is schizophrenia.</p> <p>(a) Describe what is meant by 'disordered thinking' as a symptom of schizophrenia. (2)</p>

### Mark scheme:

Question Number	Answer	Mark
<b>1(a)</b>	<p style="text-align: center;"><b>AO1 (2 marks)</b></p> <p>Credit up to <b>two</b> marks for an accurate description</p> <p>For example;</p> <ul style="list-style-type: none"><li>Disordered thinking is when a train of thought becomes muddled and confused (1) with sufferers often giving irrelevant or random points during speech (1).</li></ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>



## Short-answer question mark scheme – example 2

### Application question

#### Question:

**9** Kathryn used a correlation research method to investigate whether the number of violent video games played in childhood increased the number of incidents of violent behaviour in adulthood.

- (a) Suggest why Kathryn chose to use a correlation research method for this investigation instead of a longitudinal method.

(2)

#### Mark scheme:

Question Number	Answer	Mark
<b>9(a)</b>	<p style="text-align: center;"><b>AO2 (2 marks)</b></p> <p>Credit up to <b>two</b> marks for an accurate suggestion in relation to the scenario</p> <p>For example;</p> <ul style="list-style-type: none"><li>• A correlation method can look for a relationship between violent video games and behaviour in adulthood by sampling adults at just one point in time (1) which is less time consuming than following participants over a longitudinal time frame from childhood to adulthood to look at their violence as adults (1).</li></ul> <p><b>Generic answers score 0 marks.</b></p> <p><b>Look for other reasonable marking points.</b></p>	<b>(2)</b>



## Extended response question mark scheme – example

### Question:

**4** In social psychology, you will have learned about the following classic study in detail.

- Moscovici et al. (1969) Influence of a Consistent Minority on the Responses of a Majority in a Color Perception Task.

Evaluate the classic study by Moscovici et al. (1969).

**(8)**

### Mark scheme:

Question Number	Indicative content	Mark
<b>4</b>	<p style="text-align: center;"><b>AO1 (4 marks), AO3 (4 marks)</b></p> <p><b>AO1</b></p> <ul style="list-style-type: none"><li>• Moscovici et al. (1969) used a laboratory experiment in which participants were randomly allocated to either a consistent, inconsistent or control condition.</li><li>• 172 American female participants were used in total with each condition consisting of six participants; four naïve participants (the majority), and two confederates (the minority).</li><li>• All participants were offered a free eye test to establish good eyesight for example, whether they were colour-blind or not.</li><li>• Participants in their groups of six were asked to estimate the colour of 36 slides - all the slides were blue, but of differing shades.</li></ul> <p><b>AO3</b></p> <ul style="list-style-type: none"><li>• Moscovici et al.'s (1969) laboratory environment is artificial therefore having low ecological validity as it lacked the atmosphere of real-life situations in which minorities like pressure groups have influence over a majority.</li><li>• The sample used is not generalisable to those who are not female or American as others may not respond in the same way to a minority influence.</li><li>• Using standardised controls like testing for colour-blindness reduces extraneous variables that may have affected participant's ability to complete the colour perception task.</li><li>• Participants were randomly allocated into one of the three conditions of the experiment on minority influence which reduced experimenter bias.</li></ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(8)</b>



Level	Mark	Descriptor
<b>AO1 (4 marks), AO3 (4 marks)</b> <b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.</b>		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)





## Activity 2 - Mark scheme

### Question 1 - Short-answer question

June 2018 Question 7

Rosenhan (1973) conducted research to investigate the reliability of the DSM-IV when used to diagnose schizophrenia. Suggest three improvements that could be made to the research by Rosenhan (1973). (3)

### Question 1 – Mark scheme

Question Number	Answer	Mark
7	<p><b>A03 (3 marks)</b></p> <p>Credit <b>one</b> mark for each accurate improvement suggested.</p> <p>For example:</p> <ul style="list-style-type: none"><li>• To improve the ethics of the study Rosenhan could have gained consent from the management within the hospitals (1).</li><li>• Rosenhan could have used hospitals in different countries to increase the generalisability of the results (1).</li><li>• Observations could have been made of pseudo-patient experiences rather than just self-reported diaries to triangulate the data (1).</li></ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(3)</b>



## Question 1 – Response A

- 7 Rosenhan (1973) conducted research to investigate the reliability of the DSM-IV when used to diagnose schizophrenia.

Q07

Suggest **three** improvements that could be made to the research by Rosenhan (1973).

- 1 Rosenhan only conducted the study in USA hospitals available at WA. Therefore, he should have chosen other hospitals around the world to increase the generalisability.
- 2 Moreover, Rosenhan only measured the reliability of the DSM-IV. He should have made comparisons with other diagnostic tools such as the ICD in order to achieve concurrent validity.
- 3 Rosenhan only used 8 pseudopatients which only also included himself. Therefore, he could have used more pseudopatients in order to test reliability from different ethnicities and professions.



## Question 1 – Response B

- 7 Rosenhan (1973) conducted research to investigate the reliability of the DSM-IV when used to diagnose schizophrenia.

Q07

Suggest **three** improvements that could be made to the research by Rosenhan (1973).

- 1 Rosenhan should have informed the staff of hospitals beforehand about the ruse being set up to avoid deceiving the staff which would make the study unethical under BPS code of ethics (2009)
- 2 Rosenhan could have used a wider range of hospitals across different countries rather than just USA to increase generalisability.
- 3 Use a larger sample of <sup>female</sup> pseudopatients ~~because~~ to increase applicability of findings to females with mental health disorders



## Question 2 – application question

June 2018 Question 2c:

Michelle carried out a questionnaire to find out what factors people thought affected obedience. She conducted a thematic analysis on the qualitative data from her questionnaire and found the two most common themes were:

- Presence of an authority figure
- Proximity of an authority figure

(c) Explain one strength and one weakness of gathering qualitative data in Michelle's research. (4)

## Question 2 – Mark scheme

Question Number	Answer	Mark
2 (c)	<p><b>AO2 (2 marks) AO3 (2 marks)</b></p> <p>Credit <b>one</b> mark for accurate identification of one strength and one weakness related to the scenario (AO2). Credit <b>one</b> mark for justification of each strength and each weakness (AO3).</p> <p>For example:</p> <p><b>Strength</b></p> <ul style="list-style-type: none"><li>• Michelle's qualitative data about the factors affecting obedience will be high in validity (1) as the data will provide descriptive, detailed and realistic comments about obedience (1).</li></ul> <p><b>Weakness</b></p> <ul style="list-style-type: none"><li>• Michelle's thematic analysis of the qualitative data from her questionnaire may be subjective (1) which could lead to a biased analysis of the factors that influence obedience (1).</li></ul> <p><b>Look for other reasonable marking points.</b></p> <p><b>Generic answers score 0 marks.</b></p>	(4)



## Question 2 – Response A

(c) Explain **one** strength and **one** weakness of gathering qualitative data in Michelle's research.

\*

(4) Q02c

Strength

It allows for the participants to express their feelings and emotions and this can help better understand why the participant obeyed or rebelled and this helps the participant. It is not reductionist and this increases the validity of the data.

Weakness

It is hard to operationalise qualitative data to become objective so it is hard to score the observations (depends on experimenter so there's experimenter bias) and this decreases reliability.



## Question 2 – Response B

- (c) Explain **one** strength and **one** weakness of gathering qualitative data in Michelle's research.

(4) Q02c

### Strength

One strength of gathering qualitative data is that qualitative data give the respondent to express their opinion freely. Michelle must have got honest detailed opinion and views of her respondents in her survey.

### Weakness

One weakness is that gathering qualitative data is very time consuming.



## Question 3 – Mathematical Skills

June 2018 Question 4c

(2)

**Explain one weakness of the mean as a measure of central tendency.**

### Question 3 – Mark scheme

Question Number	Answer	Mark
4 (c)	<p><b>AO1 (1 mark), AO3 (1 mark)</b></p> <p>Credit <b>one</b> mark for accurate identification of one weakness. (AO1) Credit <b>one</b> mark for justification/exemplification of one weakness. (AO3)</p> <p>For example:</p> <ul style="list-style-type: none"><li>• The mean can be affected by extreme scores (1) which means it may not be an accurate representation of the majority of the scores. (1)</li></ul> <p><b>Look for other reasonable marking points.</b></p>	(2)

### Question 3 – Response A

(c) Explain **one** weakness of the mean as a measure of central tendency.

(2)

the mean can be influenced easily  
by anomalies as it is the average  
of every result.



### Question 3 – Response B

(c) Explain **one** weakness of the mean as a measure of central tendency.

(2)

It takes in count the extreme numbers and therefore the mean  
wouldn't be valid so that very large or small number has caused  
the mean to be too high or too low.





## Question 4 – Extended Response question

**Evaluate Bartlett's (1932) theory of reconstructive memory, including schema theory. (8)**

## Question 4 – Mark scheme

Question Number	Indicative content	Mark
<b>7</b>	<p style="text-align: center;"><b>AO1 (4 marks), AO3 (4 marks)</b></p> <p><b>AO1</b></p> <ul style="list-style-type: none"><li>• Reconstructive memory suggests that when information is absent we fill in the gaps.</li><li>• Schemas are units of knowledge that we use to help us fill in the gaps in our memory.</li><li>• Reconstructive memory is supported by evidence from a number of studies conducted by Bartlett.</li><li>• Memories are part traces that we encoded at the time of the event and part schemas of an event.</li></ul> <p><b>AO3</b></p> <ul style="list-style-type: none"><li>• Bartlett in the War of the Ghosts study (1932) found that participants filled in gaps in recall with their own schema for example, boats became a substitute for canoes.</li><li>• Bransford and Johnson (1972) showed how schemas help to encode and store difficult to understand or ambiguous information.</li><li>• Bartlett's research had minimal standardised controls when recalling was taking place, therefore the evidence underpinning the reconstructive memory theory lacks scientific rigour.</li><li>• Reconstructive memory simply describes memory traces that we encode at the time of event rather than explaining how it is reconstructed.</li></ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(8)</b>



Level	Mark	Descriptor
<b>AO1 (4 marks), AO3 (4 marks)</b> <b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.</b>		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning, leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)



## Question 4 – Response A

7 Evaluate Bartlett's (1932) theory of reconstructive memory, including schema theory.

(8) Q07

Reconstructive memory is when we can't remember the details of something so we add ideas to fill in the blanks from our schema. Bartlett states that our memory is not ~~as~~ like a tape recorder. ~~Schemas~~ Our schemas are ~~constructed with~~ constructed from our experiences.

Bartlett did a study called War of the Ghosts. Participants read a story and recalled after 15 minutes and after days, weeks, months and years. The results show that the story became shorter and new details were added to fill in the blanks. So this study supports the theory of reconstructive memory. Participants added new details from their schemas. ~~Barttt~~ Bartlett's theory of reconstructive memory is related to real life too. For example when we are recalling our dreams, we add details to fill in the blanks if we can't remember some details. These are ~~done~~ added from our schema.



#### Question 4 – Response B

7 Evaluate Bartlett's (1932) theory of reconstructive memory, including schema theory.

(8)

Q07

Bartlett's (1932) theory deals with daily memory. It focuses on how our memory is affected by experiences and knowledges. It suggests that there are schemas for ~~ex~~ certain things in our memory. We either assimilate, shape and ~~com~~fabulate our memories ~~on~~ experiences and schemas.

Bartlett conducted his study on Cambridge students where they were presented with a native ~~an~~ American story 'war of ghost'. He used serial reproduction where they were asked to recall the story at variable time intervals. It was found that the students reduced the number of words in the story and also replaced some words.

There are many evidences to support Bartlett's findings. Loftus conducted a scientific experiment <sup>on reconstructive memory</sup> and reported results similar to Bartlett's. Ian Hunter also confirms reliability of Bartlett's study.

However Bartlett only conducted his experiment on British students. So his findings cannot be generalised to people of other cultures. Although Bartlett had a standardised story he didn't have any controls, standardised instructions or any control of how often <sup>participants</sup> they ~~are~~ <sup>are</sup> to present their stories this makes the study highly subjective.

Response continued on the next page...





and also make it difficult to be repeated hence making it unreliable.

Barlett's theory however has proven to be useful in many aspects. For example, validation therapy has been based on this. It can also be used to help people with dementia by getting along with their schemas. Clive Weaving's case study supports Barlett's theory, Clive Weaving although couldn't remember much and had memory issues he could remember that he loved his wife.

Barlett used a story, instead of numbers or words ~~other memorable things~~ which gives the study ecological validity as it can be related to real life. But it can be also told to be not ecological valid as it's an lab experiment.

The main criticism of Barlett's theory is that he didn't show how memory is constructed or is transferred from short term to long term. Construction of memory is well explained by working memory model and transfer by multi store model. Therefore Barlett's theory can only be considered to be useful to a certain extent.



## Question 5 – Extended Response question with application

Question June 2018: Q8

**Damon and Elisa's psychology lecturer is teaching his class about the importance of good research design when planning an investigation. He suggests that in their planning they need to consider field experiments and laboratory experiments. The lecturer gives them a scenario from which they need to plan an investigation.**

Design and carry out an investigation to measure the short- term memory capacity of local 12- year old children.

The children will need to learn five number lists. The first list contains six digits and each following list increases by two digits, up to the final list of 14 digits. The children will be asked to recall the numbers from each list in the correct order.

**Damon decides to carry out a field experiment with children from a local school. Elisa decides to carry out a laboratory experiment, bringing children to one of the research rooms at the university.**

**Evaluate whether Damon's choice of a field experiment was a more appropriate method than Elisa's choice of a laboratory experiment for this research scenario.**

**You must make reference to the context in your answer. (12)**



## Question 5 – Mark scheme

Question Number	Indicative content	Mark
<b>8</b>	<p><b>AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)</b></p> <p><b>AO1</b></p> <ul style="list-style-type: none"><li>• Field experiments take place in a more natural environment for the participants.</li><li>• In laboratory and field experiments, researchers manipulate the independent variable.</li><li>• Field and laboratory experiments allow researchers to measure a cause and effect relationship between the IV and DV.</li><li>• Laboratory experiments take place in artificial, non-natural setting.</li></ul> <p><b>AO2</b></p> <ul style="list-style-type: none"><li>• Damon conducted his experiment in a local school where the children were in their familiar environment for learning.</li><li>• Elisa's and Damon's independent variable was the number of digits in each list.</li><li>• Elisa would find out if the change in digits had an effect on recall of numbers from the list.</li><li>• The children would not be used to the university research laboratory they were brought to for Elisa's investigation.</li></ul> <p><b>AO3</b></p> <ul style="list-style-type: none"><li>• A field experiment may be higher in ecological validity than a laboratory experiment so more natural behaviour is likely to be recorded.</li><li>• Manipulation of the independent variable can lead to artificial tasks which reduces the validity of the results.</li><li>• Cause and effects relationships could be considered more accurate from laboratory experiments as a result of the controls so results are more reliable than a field experiment.</li><li>• For certain participants like children, a laboratory experiment may be a distressing and uncomfortable environment making it less appropriate.</li></ul> <p><b>Look for other reasonable marking points.</b></p>	<b>(12)</b>



Level	Mark	Descriptor
<b>AO1 (4 marks), AO2 (4 marks), AO3 (4 marks)</b> <b>Candidates must demonstrate an equal emphasis between knowledge and understanding vs application vs evaluation/conclusion in their answer.</b>		
	0	No rewardable material.
Level 1	1-3 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	4-6 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Line(s) of argument occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques & procedures). (AO2) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	7-9 Marks	Demonstrates accurate knowledge and understanding. (AO1) Line(s) of argument supported by applying relevant evidence from the context (scientific ideas, processes, techniques & procedures). Might demonstrate the ability to integrate and synthesise relevant knowledge. (AO2) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	10-12 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Line(s) of argument supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). Demonstrates the ability to integrate and synthesise relevant knowledge. (AO2) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)





## Question 5 – Response A

- 8 Damon and Elisa's psychology lecturer is teaching his class about the importance of good research design when planning an investigation. He suggests that in their planning they need to consider field experiments and laboratory experiments. The lecturer gives them a scenario from which they need to plan an investigation.

### Scenario

Design and carry out an investigation to measure the short-term memory capacity of local 12-year old children.

The children will need to learn five number lists. The first list contains six digits and each following list increases by two digits, up to the final list of 14 digits. The children will be asked to recall the numbers from each list in the correct order.

Damon decides to carry out a field experiment with children from a local school. Elisa decides to carry out a laboratory experiment, bringing children to one of the research rooms at the university.

Evaluate whether Damon's choice of a field experiment was a more appropriate method than Elisa's choice of a laboratory experiment for this research scenario.

You must make reference to the context in your answer.

(12)

COS

Field experiment is done in natural settings and laboratory experiments are conducted in laboratories. Field experiment has ecological validity as it's done in ones natural environment where as lab experiment aren't usually ecologically invalid.

It's easier to control participant variables and situational variable in field experiment so making the study more <sup>valid</sup> variable. Lab experiments also uses standardised instructions making it reliable

Extraneous variable can also be controlled in field experiments but it's more difficult. However, field experiments are done at any one occasion

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and so makes it difficult to be repeated and hence check for reliability.

Laboratory experiments are more vulnerable to demand characteristics. For example - here the children brought to the research lab will appreciate the scientific status of the lab and may answer accordingly to impress the experimenter.

However, here both of them are using the same task which is artificial and lacks task validity. Eliza's laboratory research makes it more ethical as informed consent can be taken from the students. Where as in Damon's field experiment, the students might be unaware of the fact that they are being observed and may take as regular task that they do in school, so informed consent isn't taken from the student. This may make the students stress later on when they will know that they were observed. However this can be ~~not~~ compensated for by debrief where they will be informed that the whole reason of the experiment and the fact that the experiment isn't about any individual but memory in general.

Damon's experiment is likely to bring more natural and ecologically valid result but it's very difficult to observe which is because as the children are unaware of the study they may not pay much attention and just like other just how some students

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are less likely to complete their task, some may not complete it. This brings in the effect of extremes. It can be that those individuals have certain characteristics different in short term memory. Where as all in Elisa's study are more likely to complete their task.

Elisa will find it easier to derive cause and effect relationships because the other <sup>extraneous</sup> variables are well controlled.

However it can be said that Elisa's study is more reliable and scientific cause and effect relationships ~~are~~ can be more easily drawn where as Damon's experiment is more valid as it's in natural setting. All these variables <sup>are</sup> have their disadvantages and <sup>studies</sup> important and both the <sup>studies</sup> have their disadvantages ~~are~~ and advantages as discussed above. So it overall depends on who is able to conduct the experiment more efficiently and skillfully, trying to keep the in variables mind in there variable and trying to reduce the side effects where possible.





## Question 5 – Response B

- 8 Damon and Elisa's psychology lecturer is teaching his class about the importance of good research design when planning an investigation. He suggests that in their planning they need to consider field experiments and laboratory experiments. The lecturer gives them a scenario from which they need to plan an investigation.

### Scenario

Design and carry out an investigation to measure the short-term memory capacity of local 12-year old children.

The children will need to learn five number lists. The first list contains six digits and each following list increases by two digits, up to the final list of 14 digits. The children will be asked to recall the numbers from each list in the correct order.

Damon decides to carry out a field experiment with children from a local school. Elisa decides to carry out a laboratory experiment, bringing children to one of the research rooms at the university.

Evaluate whether Damon's choice of a field experiment was a more appropriate method than Elisa's choice of a laboratory experiment for this research scenario.

You must make reference to the context in your answer.

(12) 008

Field experiments are carried out in the real world  
lab experiments are designed and carried out in an artificial  
setting  
lab experiments are controlled  
Field experiments usually use opportunity samples  
Damon could go to the local school and enter one class room  
with 12 year old children  
Damon can set up the experiment as a game of recall rather  
than a test on memory capacity  
Elisa can gather her sample via volunteers

Response continued on the next page...



Eliza will need to get informed consent and debrief the children

Field experiments are based in the real world giving it ecological validity

lab experiments are artificial making it lack ecological validity

lab experiments are controlled increasing reliability because they can easily be replicated

opportunity sample may not be reliable because the kids may not want to take part or may feel bored