

**General Certificate of Secondary Education**  
**Psychology**  
**Unit B543: Research in Psychology.**  
**Specimen Paper**

**B543**

Time: 1 hour

Candidates answer on the question paper.  
**Additional materials:**

Candidate  
Forename

Candidate  
Surname

Centre  
Number

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Candidate  
Number

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### INSTRUCTIONS TO CANDIDATES

- Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each **question** carefully and make sure you know what you have to do before starting your answer.
- Answer **all** the questions.
- Do not write in the bar codes.
- Do not write outside the box bordering each page.
- Write your answer to each question in the space provided.

### INFORMATION FOR CANDIDATES

- The number of marks for each question is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is 40.

FOR EXAMINER'S USE	
A	
B	
TOTAL	

**SECTION A – THE SOURCE**

Answer **all** questions.

A psychologist wanted to investigate whether people were more likely to help someone they saw as being part of their in-group rather than their out-group.

He invited participants, who were all Manchester United fans, along to his Psychology department. However, they didn't realise that they were really taking part in a field experiment outside the building.

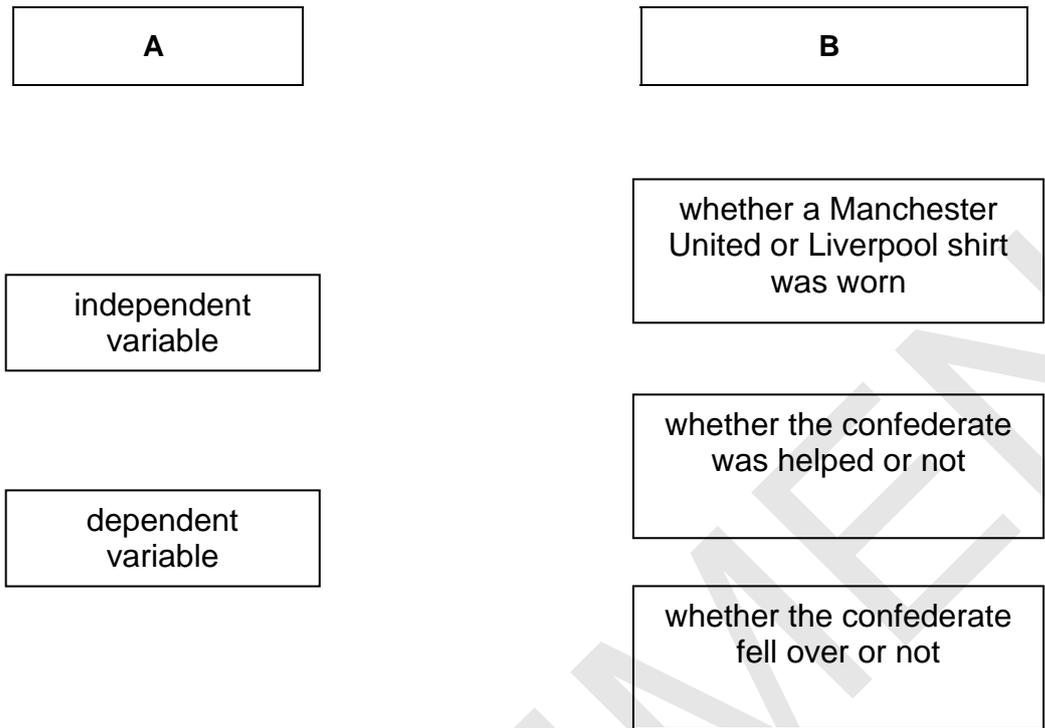
As participants approached the building, the psychologist had arranged for a confederate (someone working with the psychologist) to fall over outside. The confederate always wore either a Manchester United or a Liverpool football shirt. The results are shown in the bar graph below.



The psychologist found that more participants stopped to help the confederate when he was wearing the Manchester United shirt. He concluded that most football fans were showing their prejudice by not helping.

- 1 Give the aim of the study in the Source.  
 ..... [1]
- 2 State who the participants were in the study.  
 ..... [1]
- 3 The psychologist used a self-selecting sample.
  - (a) Name **one** other sampling technique that psychologists can use  
 ..... [1]
  - (b) Give **one** disadvantage of the sampling technique you have named in (a).  
 ..... [1]
- 4 State an alternate hypothesis for this study.  
 .....  
 ..... [2]

5 Look at the diagram below.  
Draw a line from each box in the A column to the correct box in the B column. [2]



6 The psychologist used a field experiment.  
(a) Explain what is meant by a 'field experiment'.  
.....  
..... [2]

(b) Outline **one** advantage of a field experiment.  
.....  
..... [2]

7 The psychologist carried out a covert observation. Explain the difference between a covert and an overt observation.  
.....  
..... [3]

8 Identify the experimental design used in the study by putting a tick next to **one** of the two experimental designs given below.  
repeated measures  independent groups  [1]

9 Explain why the psychologist used the same confederate in both conditions.

.....  
 .....  
 ..... [3]

10 The study has a number of problems associated with the ethical issues listed below.

**avoiding deception    avoiding distress    gaining consent    protecting confidentiality**

Complete the following table by choosing a different ethical issue from the list to match the problem described. [3]

ETHICAL PROBLEM	ISSUE
	The participants did not know they were taking part in a study.
	The participants really believed the confederate was in trouble when he was not.
	Participants who did not help may have felt guilty afterwards.

11 Using the bar graph, give the percentage of time that the confederate was helped when wearing a Liverpool shirt.

..... [1]

12 Explain what is meant by *cultural bias* in research.

.....  
 ..... [2]

**Section A Total [25]**

**SECTION B – PLANNING AN INVESTIGATION**

You have been asked to carry out an *observation* to investigate whether 5 year old boys play differently from 5 year old girls. The theory is that they play with different types of toys, play different types of games and interact differently in play.

13

(a) State a *hypothesis* for this investigation.

.....  
..... [2]

(b) Outline where you would draw the sample from for this investigation and why.

.....  
..... [2]

(c) Describe **one** *ethical issue* you would have to deal with when observing 5 year olds.

.....  
..... [2]

(d) Describe **one** control you would use in this observation.

.....  
.....  
..... [3]

(e) Briefly outline how you would carry out the observation to investigate whether 5 year old boys play differently from 5 year old girls.

.....  
.....  
..... [3]

(f) Describe **one** weakness of using an *observation* in this investigation.

.....  
.....  
..... [3]

**Section B Total [15]**

**Paper Total [40]**

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SPECIMEN

Section A – The Source		
Question Number	Answer	Max Mark
1	<p><b>Give the aim of the study in the Source.</b></p> <p>1 mark for “to investigate whether people were more likely to help someone they saw as being part of their in-group (rather than their out-group)” or similar response.</p>	[1]
2	<p><b>State who the participants were in the study.</b></p> <p>Manchester United fans or similar response e.g. football fans.</p>	[1]
3(a)	<p><b>The psychologist used a self-selecting sample.</b></p> <p><b>Name <u>one</u> other sampling technique that psychologists can use.</b></p> <p>1 mark for a relevant and accurate response e.g. opportunity sampling, random sampling, etc.</p> <p>N.B. Must be a named technique.</p>	[1]
3(b)	<p><b>Give <u>one</u> disadvantage of the sampling technique you have named in (a).</b></p> <p>1 mark for an appropriate response given the answer to (a) e.g. “opportunity samples tend to be biased”, “random sampling produces non-representative samples”, “stratified sampling is time consuming to do” etc.</p> <p>N.B. If credit not given for (a) then (b) can still be credited if the comment pertains to sampling.</p>	[1]
4	<p><b>State an alternate hypothesis for this study.</b></p> <p>1 mark for identifying this hypothesis predicts a difference.</p> <p>1 mark for accurate reference to variables.</p> <p>e.g. “There is a difference (1) in how much a Man Utd fan helps compared to a Liverpool fan (1)”</p> <p>N.B. Hypothesis can be one or two tailed.</p>	[2]





Section A – The Source										
Question Number	Answer	Max Mark								
10	<p>The study has a number of problems associated with the ethical issues listed below.</p> <p>avoiding deception    avoiding distress    gaining consent protecting confidentiality</p> <p>Complete the following table by choosing a different ethical issue from the list to match the problem described.</p> <table border="1"> <thead> <tr> <th>ETHICAL PROBLEM</th> <th>ISSUE</th> </tr> </thead> <tbody> <tr> <td>Gaining consent</td> <td>The participants did not know they were taking part in a study.</td> </tr> <tr> <td>Avoiding deception</td> <td>The participants really believed the confederate was in trouble when he was not.</td> </tr> <tr> <td>Avoiding distress</td> <td>Participants who did not help may have felt guilty afterwards.</td> </tr> </tbody> </table> <p>1 mark for each correctly placed response as shown above.</p>	ETHICAL PROBLEM	ISSUE	Gaining consent	The participants did not know they were taking part in a study.	Avoiding deception	The participants really believed the confederate was in trouble when he was not.	Avoiding distress	Participants who did not help may have felt guilty afterwards.	[3]
ETHICAL PROBLEM	ISSUE									
Gaining consent	The participants did not know they were taking part in a study.									
Avoiding deception	The participants really believed the confederate was in trouble when he was not.									
Avoiding distress	Participants who did not help may have felt guilty afterwards.									
11	<p>Using the bar graph, give the percentage of time that the confederate was helped when wearing a Liverpool shirt.</p> <p>1 mark for 20(%)</p>	[1]								
12	<p>Explain what is meant by <i>cultural bias</i> in research.</p> <p>1 mark for a brief, basic or unclear response e.g. “favouring one culture over another”, “a type of prejudice” “where researchers are biased towards one community or group”.</p> <p>2 marks for a developed or detailed response e.g. “where certain groups of people (1) are not properly represented in results (1)”, “where a study focuses on one society (1) whilst ignoring or underestimating others (1)” “focusing on one society (1) more than another equivalent society (1)”.</p>	[2]								
<b>Section A Total</b>		<b>[25]</b>								

Section B – The Investigation		
Question Number	Answer	Max Mark
13(a)	<p><b>State a <i>hypothesis</i> for this investigation.</b></p> <p>1 mark for an unclear or general statement (not a question) e.g. “boys play differently from girls”, boys and girls play with different types of toys”.</p> <p>Or 2 marks for a clear, specific statement e.g. “boys will play with trucks for longer than girls”, “there is no significant difference in the amount of space girls and boys use when playing outside”.</p> <p>Hypothesis can be null or alternate.</p>	[2]
13(b)	<p><b>Outline where you would draw the sample from for this investigation and why.</b></p> <p>1 mark for identifying an appropriate place to draw the sample from.</p> <p>Plus 1 mark for some justification of the above.</p> <p>e.g. “a local school (1) because I could watch them in the playground (1)”</p> <p>e.g. “a birthday party (1) if it was for 5 year olds (1)”</p> <p>The place will need to be somewhere that both sexes can be accessed and where their age could be identified.</p>	[2]
13(c)	<p><b>Describe <u>one</u> <i>ethical issue</i> you would have to deal with when observing 5 year olds.</b></p> <p>1 mark for identifying a relevant ethical issue or problem in the response.</p> <p>Plus 1 mark for explaining the problem/issue or saying how it would be dealt with;</p> <p>e.g. “because the children are under 16 (1) parental consent is needed (1) the children might be distressed about being watched (1) so should be told why I am there (1) children have the right to withdraw (1) so can stop the researcher from observing them if they are upset (1)”</p>	[2]
13(d)	<p><b>Describe <u>one</u> control you would use in this observation.</b></p> <p>1 mark for identifying the extraneous variable.</p> <p>Plus up to 2 additional marks for a description/explanation of how the variable would be controlled.</p> <p>e.g. “observer bias could be a problem (1) so I would use another observer (1) to check my observations with (1)”</p> <p>e.g. “I could ask the parents what their jobs were (1) to balance out the class backgrounds of the children (1) so that this didn’t make a difference to how they played”</p> <p>e.g. “children’s play patterns may be affected by others (1) so they should be observed individually (1) in their homes (1)”</p>	[3]

Section B – The Investigation		
Question Number	Answer	Max Mark
13(e)	<p><b>Briefly outline how you would carry out the observation to investigate whether 5 year old boys play differently from 5 year old girls.</b></p> <p>1 mark for an attempt to describe how investigation would be done. e.g. “I would sit in each child’s living room and watch them”</p> <p>2 marks for describing a reasonably feasible procedure e.g. “I would have a list of different toys written down (1) and use a stopwatch to time how long each child played with each toy (1)”</p> <p>3 marks for describing, in some detail, a feasible procedure e.g. “I would observe each child for one hour each day during each break time (1). I would write down each different type of game they played on to a sheet of paper (1) and then tally every time they played that game for more than one minute”</p>	[3]
13(f)	<p><b>Describe <u>one</u> weakness of using an <i>observation</i> in this investigation.</b></p> <p>1 mark identifying a limitation. 1 mark for explaining the limitation. 1 mark for explaining the limitation in the context of the investigation. e.g. “the observer may interpret play to suit her findings (1) for examples, highlighting when boys play aggressively but ‘missing’ girls aggressive play (1) – this would make the research unreliable (1)” e.g. “there may be an observer effect (1) where children behave differently because they know they are being watched (1) – such as boys not playing with ‘girls toys’ because they feel self-conscious (1)” e.g. “because the observation is taking place in a neutral environment (1) there is a lack of control (1) so other factors such as weather and amount of space available, may affect play patterns”</p>	[3]
<b>Section B Total</b>		<b>[15]</b>
<b>Paper Total</b>		<b>[40]</b>

**Assessment Objectives Grid (includes QWC)**

<b>Question</b>	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>	<b>Total</b>
<b>1</b>			<b>1</b>	<b>1</b>
<b>2</b>			<b>1</b>	<b>1</b>
<b>3(a)</b>			<b>1</b>	<b>1</b>
<b>3(b)</b>			<b>1</b>	<b>1</b>
<b>4</b>			<b>2</b>	<b>2</b>
<b>5</b>			<b>2</b>	<b>2</b>
<b>6(a)</b>			<b>2</b>	<b>2</b>
<b>6(b)</b>			<b>2</b>	<b>2</b>
<b>7</b>			<b>3</b>	<b>3</b>
<b>8</b>			<b>1</b>	<b>1</b>
<b>9</b>			<b>3</b>	<b>3</b>
<b>10</b>			<b>3</b>	<b>3</b>
<b>11</b>			<b>1</b>	<b>1</b>
<b>12</b>			<b>2</b>	<b>2</b>
<b>13(a)</b>			<b>2</b>	<b>2</b>
<b>13(b)</b>			<b>2</b>	<b>2</b>
<b>13(c)</b>			<b>2</b>	<b>2</b>
<b>13(d)</b>			<b>3</b>	<b>3</b>
<b>13(e)</b>			<b>3</b>	<b>3</b>
<b>13(f)</b>			<b>3</b>	<b>3</b>
<b>Totals</b>	<b>0</b>	<b>0</b>	<b>40</b>	<b>40</b>