

# **Psychology**

General Certificate of Secondary Education

Unit **B543**: Research in Psychology

## **Mark Scheme for January 2012**

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All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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Question	Answer	Marks	Guidance
1	'to investigate whether there are gender differences in the way males and females communicate'	1	Allow similar response. The response must be an aim not a hypothesis and should be general rather than specific ie no specific reference to the DV.
2	1 mark for recognising that this hypothesis predicts a difference 1 mark for the accurate identification of both variables.  (For example 'Females will use more (1) interruptions than males will' (1) or 'males will use more (1) hesitations than females (1), or 'there will be a difference (1) in the way males and females communicate'. (1) Females use more interruptions (1) than males (1), There is a difference (1) in the way males and females communicate (1)).	2	The response should not be an aim or a question.  NB: hypotheses can be phrased in either the present or future tense, but not the past tense.  If both DVs are included in the prediction full credit can still be given.
3	Answers can refer to both the use of the opportunity sampling method being biased or to the sample size being small and unrepresentative.  1 mark for the identification of a problem pertaining to the sample in the source. 1 mark for elaborated responses demonstrating how or why it's a problem.  (For example 'Opportunity samples can be biased (1) as the researcher can choose whoever they want to be in their research'. (1); 'small sample (1) so one cannot generalise from the findings' (1))	2	No explicit reference to the source is required.  Candidates can identify a problem of opportunity sampling without naming the method itself and still can credit.  Mere identification of opportunity sampling does not gain credit.
4	Random sampling and self selected (volunteer) sampling are the most likely responses.	1	Allow other methods of sampling such as stratified, volunteer, snowball and systematic etc

Question		Answer	Marks	Guidance
5		1 mark for hesitations.	1	No mark awarded if both boxes ticked
6		1 mark for correctly recognising quantitative data is numerical data/numbers/digits/percentages/averages/statistics/can make bar charts etc.	1	Allow reversals of quantitative data eg data which is not descriptive/language/not qualitative.
7		1 mark for a recognisable bar chart where the direction of results is observable 1 mark for accurately labelling the X axis (to include: (verbal) communication – interruptions + hesitations - and male + female). 1 mark for accurately labelling the Y axis (to include: number in words and/or figures/scale). 1 mark for a clear and relevant title (to include: the IV and both DVs).	4	
8		1 mark for identifying a feature of participant observations 1 mark for identifying a feature of non participant observations 1 mark for an elaborated response clearly identifying how they differ with a specific and accurate reference to one of the types of observation eg participant observations tend to have an influence on group dynamics, participant observations allow for greater insight/empathy, non-participant observations allow for easier data collection.  (For example ‘in participant observations the researcher actually joins in with the group of people he is studying/is part of the experiment (1) In non participant observations, the researcher would observe the group from a distance (1). Therefore a difference is non-participant observations are more objective(1))	3	If a candidate provides one feature and the opposite feature, 1 mark rather than 2 should be awarded eg participant observation is joining in with the group/experiment, whereas non-participant observation is not joining in with the group/experiment (1)  If the candidate gets the types of observation muddled but the distinction correct, award 1 mark rather than 2 marks. If the candidate identifies a difference without referring to the types of observation, award 1 mark rather than 2.

Question		Answer	Marks	Guidance
9	(a)	<p>1 mark for recognising reliability refers to consistency/repeatable/replicability/how much results can be trusted.</p> <p>(For example 'reliability means if the results are consistent (1) or 'if something is reliable similar results will be found again' (1).</p>	1	<p>Allow definitions that pertain to reliability in observations, for example 'in observations it means all observers agree on what they are observing' (1)/all observers are interpreting the communication in the same way' (1))</p> <p>If the candidate refers to 'true', 'truthful' or 'accurate' = 0 marks.</p>
	(b)	<p>1 mark for recognising more than one observer is needed</p> <p>1 mark for showing an understanding of observers checking their observations to make sure they are the same, eg use of a standardised scoring system.</p> <p>Also accept responses that refer to better standardisation of observation schedule, pilot study, training.</p> <p>1 mark for contextualising the answer using the source material.</p> <p>For example, reliability could be improved by having more than just the one observer (1), then their recording could be compared to check (1) they are all interpreting the body language in the same way' (1),</p>	3	<p>Credit the term 'inter-rater reliability' as the outcome of using two or more observers but this must be considered as separate to how inter-rater reliability would be achieved eg use two observers (1) to achieve inter-rater reliability (1).</p> <p>Contextualisation does not have to be explicit but should not contradict what is in the study eg referring to <u>checking answers</u> would contradict this study and so limits the candidate to 2 marks.</p>
10		<p>1 mark for identifying an appropriate strength of overt observations eg more practical way to collect data.</p> <p>1 mark for elaborated responses demonstrating why or how it is a strength in this study.</p> <p>(For example 'a strength of overt observations is that they are more ethical (1) than covert observations because the participants have given consent to take part as they know they are being watched.' (1)</p>	2	<p>Contextualisation does not have to be explicit but should not contradict what is in the study eg referring to collecting data in <u>activities</u> or reference to <u>children</u> would contradict this study and so limits the candidate to 1 mark.</p>

Question		Answer	Marks	Guidance
11		<p>1 mark for vague responses referring to people behaving differently/unnaturally. 1 mark for clear descriptions encompassing the entire concept.</p> <p>(For example 'this is when people behave differently (1) because they <u>know</u> they are being watched and so their behaviour is not natural.' (1))</p>	2	Distinguish between being watched (0 marks) and knowing/being aware of being watched (1 mark).
12		<p>1 mark for each correctly identified feature of a case study.</p> <p>It involves an in-depth analysis It uses qualitative data.</p>	2	For each additional box ticked besides the two asked for, subtract 1 mark.
13	(a)	<p>Hypotheses can be directional, non-directional, null or alternate.</p> <p>1 mark for referring to (no) difference. 1 mark for including both variables in a clear statement.</p> <p>For example: There will be no difference (1) in the learning ability of participants who say they have slept well and those who say they have slept badly (1); Respondents who are good sleepers report higher rates of learning (1) than respondents who are poor sleepers (1); There will be a difference (1) between the amount of sleep a person gets and their ability to learn (1).</p>	2	<p>The response should not be an aim or a question.</p> <p>NB: hypotheses can be phrased in either the present or future tense, but not the past tense.</p>

Question	Answer	Marks	Guidance
(b)	<p>1 mark for providing an example of the type of question that could be used (the question can be open or closed)</p> <p>(For example, 'how many hours sleep did you get last night' (1), or 'how do you think your learning is affected by the amount of sleep you get?' (1))</p> <p>1 mark for briefly explaining why the question was chosen. 1 further mark for an elaborated explanation of why the question was chosen. (For example 'I would use closed questions so I would get quantitative data (1) which means I can put the data into a graph (1) or 'I would use open questions so I could get lots of detailed answers (1) this way I could get an individual view on how someone's learning is affected by the amount of sleep they get' (1))</p>	3	<p>If a definition of a closed or open question is given with NO explanation as to why the question choice is chosen, award 1 mark.</p> <p>Closed questions do not need to include a set of responses to gain credit.</p> <p>Do not credit a justification that is a mere rephrasing of the question given.</p> <p>It is possible to give credit where a candidate justifies the content of the question rather than the type of question though this must not be simplistic eg do not credit 'to find out how much sleep they had' but do credit 'to find out how much sleep they had as it would be difficult to find out any other way'.</p>
(c)	<p>1 mark for an attempt to describe how the investigation would be done (For example, 'I would firstly write a questionnaire asking people about how much sleep they have and how it affects learning'.)</p> <p>2 marks for describing a reasonable feasible procedure (For example, I would write a questionnaire asking people about how much sleep they had and then I would ask them to rate on a scale on much they think this is related to their ability to learn. I would ask them to think of the last time they had to learn something and see whether the amount of sleep they got affected it')</p> <p>3 marks for describing, in some detail within the time constraints, a feasible procedure (For example, 'I would write a questionnaire asking people about how much sleep they had and then I would ask them to rate on a scale on much they think this is related to their</p>	3	<p>No marks can be awarded for descriptions of question types or examples given in the previous question.</p> <p>Credit any features of the design not already asked for in other questions eg</p> <ul style="list-style-type: none"> <li>• Sample/target population</li> <li>• Sampling technique</li> <li>• Administration of the questionnaire</li> <li>• How the experience of sleeping would be measured</li> <li>• How learning ability would be measured</li> <li>• Details of controls</li> <li>• How data would be collected, displayed and/or analysed.</li> </ul> <p>If the answer reads like a list, marks are capped at 2.</p> <p>If there is no evidence of some contextualisation, marks are capped at 2.</p>

Question		Answer	Marks	Guidance
		ability to learn. I would ask them to think of the last time they had to learn something and see whether the amount of sleep they got affected it. I would plot the results into a graph to see whether the number of hours sleep is related to how well they learned. This would show me if people do not learn as well when they are tired'.)		
	(d)	<p>1 mark for the mere identification of an appropriate ethical issue (allow descriptions of), most likely answers include: protection, withdrawal, debriefing, consent.</p> <p>1 mark for explaining why it is a relevant ethical issue in relation to this investigation.</p> <p>(For example, 'one ethical issue I would need to consider is protection (1) as participants may feel uncomfortable talking about their learning ability especially if it is poor' (1))</p>	2	<p>Ethical issues can be either specific to sleep and learning or more general in relation to the study eg reference to ethics and the use of a questionnaire.</p> <p><b>NB: reference to 'questionnaire' can be considered contextualisation.</b></p>
	(e)	<p>1 mark for a vague response which states that social desirability is where participants may lie in questionnaires.</p> <p>1 mark for an accurate description of social desirability which includes reference to participants giving answers they think the researchers want to hear/they believe society expects of them.</p> <p>1 mark for placing the answer in context of the investigation in the source.</p> <p>(For example, (a) 'social desirability is when participants give the researcher the answer they think he or she wants to hear (1), it may be a problem in questionnaires as the participant may guess the aim of the investigation and so try to fit their answer in line with what the researcher is investigating (1), so participants may tell the researcher that they had a good nights sleep and it didn't affect their learning'. (1) (b) social desirability is where the participants</p>	3	

Question		Answer	Marks	Guidance
		answering the questionnaire do not give their honest answer (1), they give the answer they think makes them look good (1), so in this study they may say they had plenty of sleep so their learning was good when in fact they had little sleep (1)	2	
	(f)	<p>1 mark for the identification of a strength of using a questionnaire.</p> <p>1 mark for placing the strength in context of this study/explaining why it is a strength with reference to this investigation.</p> <p>(For example, 'one strength of using questionnaires is that all participants are asked the same questions and so it is easier to compare answers (1), this way it will be easier to see how sleep affects learning' (1) or 'one strength of using questionnaires is that we can see people's thoughts and feelings (1) this way we can see if the person being studied thinks their learning is affected by the amount of sleep they get'. (1))</p>	2	<p>Generic strengths of questionnaires, not contextualised can be awarded 1 mark eg questionnaires are often answered more honestly than interviews, as they are not face to face or questionnaires are easy to administer.</p> <p>Contextualisation does not have to be explicit but should not contradict the candidate's design of the investigation eg if the candidate has previously said they would go from door-to-door with questionnaires they cannot get full marks for saying 'questionnaires can access a lot of people at the same time'.</p> <p>Some strengths will therefore need to be qualified by a comparison to gain 2 marks eg what are questionnaires quicker than, what are they easier than, what are they more valid than?.</p> <p><b>NB: refer back to 13c.</b></p>

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