

GCSE

Psychology

Unit **B543**: Research in Psychology

General Certificate of Secondary Education

Mark Scheme for June 2016

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

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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Annotations

Annotation	Meaning
	Correct response
BP annotation	Blank page

Question		Answer	Marks	Guidance	Levels of response
1		1 mark for 'to investigate whether there was a difference between individuals depending on their zodiac star signs'.	1	Allow similar response that pertains to an aim, i.e. do not credit statement of results or a hypothesis.	1 X AO3
2		1 mark for ticking the middle box 'There will be a difference in the personality scores depending on an individual's zodiac star sign.'	1	If more than one box is ticked, zero marks.	1 x AO3
3	(a)	<p>1 mark for identification of an appropriate sampling method.</p> <p>1 mark for an elaborated description of how the psychologist could have obtained her sample.</p> <p>1 mark for a response placed in context</p> <p>For example 'the psychologist could have used opportunity sampling [1], she could have just used 120 people who were available at the time [1] by perhaps using her colleagues at work or friends and family' [1].</p>	3	<p>The most obvious choices of sampling methods are opportunity and random, but allow descriptions of volunteer or stratified also.</p> <p>Identification of sampling method can be named or outlined.</p> <p>For full marks the response MUST be contextualised.</p> <p>Examples of context make reference to: 120, adults, zodiac signs.</p> <p>Reference to 'the psychologist' is not sufficient context.</p>	3 x AO3
3	(b)	<p>1 mark for identifying or outlining a weakness of the sampling method.</p> <p>1 mark for an elaborated response explaining how the specific sampling method has this weakness.</p> <p>For example 'one weakness of an opportunity sample is that it is biased [1] as the psychologist may chose participants who she knows will give her the result she is looking for' [1] or 'volunteer samples may be biased [1] because only a certain type of person would volunteer to take part' [1].</p>	2	<p>The response does not need to be explicitly contextualised to obtain full marks.</p> <p>Time consuming is only appropriate for random sampling, unless it is clearly qualified for other sampling methods.</p> <p>If candidates mention the unrepresentativeness of a random sample, it is important that this may be a possibility, rather than random samples are not representative.</p>	2 x AO3

Question			Answer	Marks	Guidance	Levels of response
					Guidance	Levels of response
4			1 mark for identifying quantitative data	1	.	1 x AO3
5			<p>1 mark for identifying a feature of closed questions. 1 mark for identifying a feature of open questions.</p> <p>For example 'closed questions are questions for which there are a set number of responses [1] whereas in open questions the respondent chooses their own answers' [1] or 'open questions allow the respondent to answer in depth [1] whereas in closed questions, the respondent has a limited choice (yes / no / multiple choice answer) [1].</p> <p>Open questions give qualitative data [1], closed questions give quantitative data [1]</p>	2	<p>If the candidate gets the difference correct but confuses open and closed questions, credit 1 mark.</p> <p>Allow reversals and opposites for 1 mark. Open questions give detail, closed questions do not (1 mark) Closed questions do not give details, open questions do (1 mark)</p> <p>Examples alone can receive credit – e.g. closed questions are yes/no answers.</p>	2 x AO3
6			<p>1 mark for stating the results of the study. 1 mark for an elaborated response which goes beyond merely stating the results.</p> <p>For example 'No difference was found in the personality scores depending on an individual's zodiac star sign [1] and so someone's star sign does not dictate what their personality will be like'[1], 'No difference was found in the personality scores depending on an individual's zodiac star sign [1] therefore she rejected her hypothesis [1]'. </p>	2	<p>For two marks candidates must go beyond what is in the source and therefore draw an inference from the source e.g. make reference to rejection of alternate hypothesis/ hypothesis being incorrect, or more general statements which draw a conclusion from the results.</p> <p>Elaborations that make reference to a relationship or correlation are not creditworthy.</p>	2 x AO3

Question			Answer	Marks	Guidance	Levels of response
					Guidance	
7	(a)		<p>1 mark for identifying any weakness of using a questionnaire</p> <p>For example 'people may exaggerate' [1], 'people may misunderstand questions' [1], people may give socially desirable answers [1], demand characteristics [1]</p>	1	<p>7 (a), (b) and (c) are sequential and when marking should be considered together. However, each part is marked independently; for example a candidate may receive zero marks for 7a, but can still be awarded a mark for 7b.</p> <p>Do not accept lying, not honest, untruthful but do accept exaggerate or underestimate.</p>	1x AO3
7	(b)		<p>1 mark for stating why it is a weakness.</p> <p>For example 'you may not find out their true personality characteristics' [1]</p> <p>Social desirability (to make their personality look good) [1]</p>	1	<p>Answer must be relevant to <i>this</i> study.</p> <p>Context must come from their answer to part (a)</p>	1 x AO3
7	(c)		<p>1 mark for stating the effect it would have on the findings of the study.</p> <p>For example 'the responses are inaccurate so results are invalid' [1]</p>	1	<p>Context must come from their answer to part (b)</p> <p>Credit should not be awarded for stating that results are inaccurate, unreliable, unrepresentative, untruthful or invalid in isolation.</p> <p>Candidates must demonstrate an understanding of the terminology they use. In order to achieve a mark there must be a qualified use of validity, reliability etc. It needs to be clear what is invalid/ unreliable.</p> <p>'It is unreliable' – 0 marks.</p> <p>The results/findings are unreliable – 1 mark.</p>	1 x AO3

Question			Answer	Marks	Guidance	Levels of response
					Guidance	
8			<p>1 mark for correctly matching structured interviews to the bottom definition 'interviews where the questions are pre-set'.</p> <p>1 mark for correctly matching unstructured interviews to the top definition 'interviews where there are no set questions'.</p>	2	If more than two lines are drawn from column A minus one mark.	2 x AO3
9	(a)		<p>1 mark for identifying an advantage of using interviews.</p> <p>1 mark for an explained response.</p> <p>For example 'one advantage is that because the interviewer is the present [1] if the interviewee doesn't understand questions, they can double check what questions mean [1]</p> <p>Interviews give rich and detailed answers [1]</p> <p>Interviews provide qualitative data which allows elaboration of answers [1]</p>	2	<p>An explanation of why it is an advantage of an interview is required for 2 marks.</p> <p>The answer can refer to any type of interview. For example where candidates give advantages specific to structured interview this needs to be clear in their response.</p> <p>References to reliability and/or validity are not creditworthy, as they refer to the effect it would have on the findings, which is not required by the question.</p>	2 x AO3
9	(b)		<p>1 mark for identifying a disadvantage of using interviews.</p> <p>1 mark for an elaborated response, which demonstrates how or why it is a disadvantage of an interview.</p> <p>For example 'one weakness is that people may lie / exaggerate [1] and give socially desirable answers to the psychologist instead of truthful ones' [1].</p> <p>Interviews are time consuming [1] because asking 120 people in-depth questions is a long process [1]</p>	2	<p>An explanation of why it is a disadvantage of an interview is required for 2 marks.</p> <p>The answer can refer to any type of interview. For example where candidates give disadvantages specific to structured interview this needs to be clear in their response.</p> <p>References to reliability and/or validity are not creditworthy, as they refer to the effect it would have on the findings, which is not required by the question.</p>	2 x AO3

Question		Answer	Marks	Guidance	Levels of response
10		<p>1 mark for identifying a way the psychologist in this study could have improved the reliability. 1 mark for an elaborated response demonstrating an understanding of how this would improve the reliability. 1 mark for recognising what reliability is. For example 'the psychologist could have asked another researcher to also carry out the study [1] to see if they got the same findings [1] If they did, it would mean the results are consistent[1].'</p> <p>To make sure the results have not occurred by chance [1] the study could be repeated [1] if the same or similar results are found then results are reliable [1]</p>	3	<p>No explicit contextualisation required, as long as it does not contradict the nature of the study.</p> <p>Reliability refers to consistency of findings. When referring to inter-rater reliability, the mention of an additional psychologist carrying out the research is required.</p> <p>No marks for just naming a type of reliability if there is no understanding.</p>	3 x AO3
11		1 mark for correctly ticking the first box 'as belief in astrology increases, belief in science decreases'	1	If more than one box is ticked, zero marks.	1 x AO3
12	(a)	<p>1 mark for identifying a null hypothesis predicts no difference. 1 mark for correctly identifying the IV and DV.</p> <p>For example 'There will be no difference [1] in the way males and females prefer to study' [1].</p>	2	<p>1 mark can be awarded where no difference is correctly identified but the IV and DV are not, for example 'there will be no difference in the way students study' [1].</p> <p>Reference to gender (males and females) and to studying behaviour must be present for 2 marks.</p> <p>Aims or statements of results – 0 marks</p> <p>Hypotheses can be present tense ('there is no difference'=1) future tense ('there will be no difference'=1) but not past tense ('there was no difference'=0).</p> <p>No effect is creditworthy.</p>	2 x AO3

Question			Answer	Marks	Guidance	Levels of response
					Guidance	
12	(b)		<p>1 mark for stating any feasible sample</p> <p>For example: School students / children GCSE students High school students Year 11 students</p>	1	<p>Context must be provided by identifying a group that are studying (not friends or neighbours).</p> <p>It must be an identifiable group that would represent the target population to be awarded the mark.</p> <p>Reference to 'students' is the target population, so not creditworthy. When specific students are identified e.g. GCSE students this is a feasible sample.</p>	
12	(c)	(i)	<p>1 mark for stating an appropriate observation type.</p> <p>For example 'I would use a non-participant observation' [1] or 'I would use a covert observation' [1].</p>	1	<p>Choices relate to participant / non –participant / covert / overt / structured / unstructured</p> <p>ALLOW combination e.g. overt participant</p>	1 x AO3
		(ii)	<p>1 mark for an unelaborated response stating a reason for their choice of observation in b) (i) 2 marks for an elaborated response clearly explaining the reason(s) for the choice of observation in b) (ii)</p> <p>For example ' I would use an overt observation so that it would be more ethical [1] as I could gain informed consent from my participants' [1] or 'I would use a covert observation because then my participants would be less likely to respond to demand characteristics [1] and so their behaviour would be more real' [1].</p>	2	<p>IF TWO features are given, e.g. covert non-participant observation two marks can still be awarded if only one feature is addressed</p> <p>IF NO RESPONSE / INCORRECT RESPONSE in (i) credit can still be awarded if type of observation is clear</p>	2 x AO3

Question		Answer	Marks	Guidance	Levels of response
	(d)	<p>Details may include: Sample, sampling method, time/location of observation, details of types of behavioural categories to be observed, controls, data analysis techniques, use of a tally chart/observational schedule, where observers would be located while observing, conducting pilot study etc</p> <p>1 mark for identifying a basic procedure and/or one feature of the procedure 2 marks for outlining a reasonable feasible procedure 3 marks for describing, within the time constraints, a feasible procedure.</p> <p>For example 'I would observe male and females studying in the library [1], whilst watching them I will use a tally chart to record whether they are working in groups or individually [1] and then I would display the totals for each of the groups using a bar chart [1]'.</p>	3	<p>Do not credit any aspect of the procedure that has been credited in any other question in section B (i.e. type of observation used or its justification, sample and ethics). Although, additional features of the sample (not given in 12b) and additional ethical features (not given in 12f) should be credited.</p> <p>Part c must be consistent with b (i) and (ii)</p> <p>Reference to observing males and females (gender differences) MUST be present for 3 marks. However, the identification of gender should not be credited as a specific feature.</p> <p>The mere identification of sampling method is not enough - description of how it is carried out is required.</p> <p>Data analysis techniques such as bar charts and pie charts can be credited, however scattergraphs are not creditworthy.</p> <p>Marks can only be awarded for features of an observational method.</p>	3 x AO3
	(e)	<p>1 mark for identifying that participant's behave differently from normal / change their behaviour. 1 mark for identifying that this occurs because the participants are aware that they are being watched.</p>	2	<p>For the second mark to be awarded, reference must be made to a change in behaviour.</p>	2 x AO3

Question		Answer	Marks	Guidance	Levels of response
				Guidance	
	(f)	<p>1 mark for identifying any one ethical issue either by name or by description. 1 mark for an elaborated response showing an understanding of why the issue needs to be considered.</p> <p>For ethical issues that may contradict the type of observation – maximum 1 mark.</p> <p>eg 'confidentiality (1) is important because participants have the right to have their identity protected (1)' Eg, 'right to withdraw' (1) because my participants will not know I'm observing them (covert) they will not have the opportunity to withdraw' (1)'. '</p>	2	<p>The issue can be identified more implicitly as part of the description.</p> <p>In order to achieve 2 marks the ethical issue must be consistent with the procedure used in 12 (d) and therefore the ethical issue must not contradict their type of observation.</p> <p>For example asking for informed consent in a covert observation from the participant – issue identified but it is not relevant to their investigation so therefore capped at 1 mark.</p> <p>If the same ethical issue is identified in 12 (d) the marks are awarded in 12 (f)</p> <p>If a candidate refers to protection from harm, check the relevance against the procedure.</p> <p>Debriefing or other ways of dealing with ethical issues are not creditworthy.</p>	2 x AO3
	(g)	<p>1 mark for identifying a strength of the observational method 1 mark for an elaboration of this strength in context of the candidate's investigation.</p> <p>For example 'one strength of observations is that they can be high in ecological validity [1] because students don't know they are being watched, they will study more naturally' [1].</p>	2	Refer back to (c) as the type of observation may give context	

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