

GCE

# **Psychology**

Advanced Subsidiary GCE

Unit **G541:** Psychological Investigations

## Mark Scheme for June 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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#### **Annotations**

Annotation	Meaning					
TAE.	Attempts evaluation					
HOD	Benefit of doubt					
gen-	Context					
×	Cross					
EVAL	Evaluation					
	Extendable horizontal line					
rvvv	Expandable horizontal wavy line					
est.	Significant amount of material which doesn't answer the question					
[EACT	Not answered question					
<b>✓</b>	Tick					
<b>/</b> 4	Development of point					
	Omission mark					
?	Unclear					
KER	Good use of research/supporting evidence					

Q	Question		Answer					Guidance
1	(a)		Ethical issues could include: consent (although a bar is a public place); deception (observers posing as customers in the bar when really undertaking research); harm (potentially if become aware of being looked at); protection of participants (invasion of privacy, intrusion on personal interactions etc).					Context = bar (pub/café), couples, postural echoing / imitation of behaviour (to inc any of the listed behaviours).
			0 marks	The candidate has r	not provide	ed any creditworthy information		
		1 mark Clearly identified, but in general  CR attempt to identify ethical issue in context but could be clearer						
		2 Ethical issue clearly identified in context marks						
	(b)		For example, Consent could have been dealt with by placing a poster in the bar informing participants of the general nature of the research and that by staying in the bar it would be taken that they were Okay for this to happen.				2	Context = bar (pub/café), couples, postural echoing / imitation of behaviour (to inc any of the listed behaviours).  Accept comments relating to ways to deal with any
			0 marks	The candidate has r	not provide	ed any creditworthy information		appropriate ethical issue raised.
			1 mark	General attempt to show the ethical issube dealt with		OR attempt to suggest how the ethical issue could be dealt with in context but could be clearer		
			2 Clear suggestion of how the ethical issue could be dealt with marks in context					

Q	uestion					Guidance
2	(a)	which dif		esearch refers to the extent to bserve and rate (or code) the	2	Note – just stating that inter-rater reliability is when two (or more) observers compare their data / results is not, on it's own enough for full marks (as
		0 marks	The candidate has not provi	ded any creditworthy information		this only provides a way to check / assess the extent of inter-rater reliability). Award 1 mark here.
		1 mark		inter-rater reliability (e.g. simply stency', or it is when two or more ults etc). Lacks clarity.		If candidate simply states 'having two or more observers' = zero.
		2 marks	Clear description of inter-rate			Simply stating 'repeating the study to check for same/similar results' = zero.
	(b)	behaviou if exhibite of the co	aral categories to look out for a ed or not. A pilot study could be ding scheme and identify any	and the criteria for acknowledging be used to assess the ease of use problems so it can be amended.  ded any creditworthy information		<ul> <li>Context = bar (pub/café), couples, postural echoing / imitation of behaviour (to inc any of the listed behaviours).</li> <li>Note – having more observers does not in itself increase inter-rater reliability (cap at one mark whether in context or not). However, if other creditworthy things are included mark appropriately.</li> </ul>
		marks 1 mark		and not in the context of the		
		2 marks	Appropriate and detailed response, but not in the context of the research outlined in the source material	OR brief response that is lacking detail that is in the context of the research outlined in the source material		
		3 marks		s some clarity, but is outlined in butlined in the source material		
		4 marks	Appropriate, clear and detail context of the research outline	led response outlined in the		

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Question	Answer	Marks	Guidance  Note – it is not appropriate to have mean, median or range of values of the nominal data presented in the table (only mode is acceptable).  Accept total behaviours observed = 45.	
commo	any two findings. From, for example: folding arms was the most n behaviour engaged in by each couple; couples only touched se at the same time on 3 occasions etc.	4		
2 marks	s for each finding.			
0 marks	The candidate has not provided any creditworthy information		Note – frequency counts not needed for full marks (e.g. acceptable to just say 'folding arms was the	
1 mark	The candidate has stated a finding, but this lacks clarity, or is not in the context of the research outlined in the source material		most observed behaviour').	
2 marks	The candidate has stated a clear finding and this is in the context of the research outlined in the source material			

Num	Number of times couples performed behaviours at the same time as each other								
Fold arms together	Cross legs	Rest head on hand Drink at same Touch hair Touch			Touch nose				
12	8	10	7	5	3				

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Question	Answer		Marks	Guidance
couples participa naturally Weakne gets bus the beha aware of characte socializin	sses include: problems recording by; problems interpreting the action avioural categories listed; lack of the being monitored, especially where interpreting the action and provided by the cristics); ethical issues (e.g. invasing) etc.  The candidate has not provided brief attempt to outline strength clarity/detail (e.g. strength = high not in context context context of the research outlined in the source material context of strength context of strength context of strength context of strength context of the research outlined in the source material context of strength context of st	being monitored so act more being monitored so act more being behaviour accurately if bar ons of the couples and if they fit validity if participants become en interacting socially (demand ion of privacy when couples out ess.  d any creditworthy information h/weakness but lacks gh EV, weakness = ethics) and  OR strength/weakness lacking in clarity/detail, but attempt to discuss in context  th/weakness discussed in	6	Context = bar (pub/café), couples, postural echoing / imitation of behaviour (to include any of the listed behaviours).  Accept ethics (e.g. invasion of privacy etc) here.  Accept strengths related to data collected in this study (e.g. quantitative data, event sampling).  Accept reference to inter-rater reliability, but must be fully explained/justified.  Reference to reliability without making clear how/why it would be a strength is not creditworthy (e.g. 'a strength of this observation is that it is replicable').

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#### Section B

Questi	ion		Answ	ver	Marks	Guidance
5	p c V a ju	phone for college e Veaknes ages and ust one o	r texting; easier to obtain sam tc. sses could include: unreprese	oup more likely to use mobile uple as just from one class in one ntative sample; limited range of y types; all from London; all from kness.	6	Context = personality, text message(s) and mobile phones.  Reference to representative age <i>range</i> is not creditworthy as a strength.  Reference to sampling <i>method</i> must relate to a strength/weakness of the sample it produces in this study.
		0 The candidate has not provided any creditworthy information				Accept reference to size of sample as either a
		1 mark	Attempt to outline strength/w	veakness	s	strength / or weakness providing it is justified.
		2 marks	Strength/weakness clearly outlined but not in context	OR strength/weakness lacks some clarity/detail, but is in context		
		3 Strength/weakness clearly outlined in context marks				

Question		Answer	Marks	Guidance
6		nple There will be (or is) a correlation between ion/extroversion rating and number of words in mobile phone textes.	4	Note – simply referring to 'personality' instead of introversion / extroversion is not clear enough to credit reference to this variable (simply stating 'personality' could mean aggression, or humour
	0 marks	The candidate has not provided any creditworthy information		personality traits etc).
	1 mark	The candidate has written an appropriate alternate hypothesis but has simply stated 'there will be/is a correlation'. There is no indication of either of the measured variables		Use of the word 'difference' or 'affects / 'effects' = zero marks.
	2 marks	The candidate has written an appropriate alternate hypothesis but has only referred to one variable		Any reference to DV, 'link' or 'association' = zero.
	3 marks	The candidate has written an alternate hypothesis referring to both variables, but there is a lack of clarity about one of the measured variables or both  OR both variables clearly referred to but a general lack of clarity of the way the hypothesis is stated		Accept positive or negative correlations.  If both an alternate and null hypothesis is presented and it is not made clear which is which then = zero.
	4 marks	The candidate has written a clearly stated appropriate alternate hypothesis referring to both of the measured variables		The variables do not have to be fully operationalized for maximum marks.

Question		Answer		Marks	Guidance
7	expresse people; s end etc. scale ma what an i	s may include: quantifiable scale ed numerically, and easy numerically easy to understand scale Weaknesses may include: subjectly be too narrow (just 1 to 10); do individuals 'personality' is really left or strength, 3 marks for weaknet The candidate has not provided	cal comparisons across different, with clear definitions at each ctive interpretation of the scale; ses not allow full expression of ike etc.	6	Context = any aspect of personality (e.g. introversion/extroversion, outgoing, shy etc).
	1 mark	Attempt to explain strength/wea was measured, but lacks clarity			
	2 marks	Clearly explained strength/weakness of the way 'personality' was measured but not in the context of the information outlined in the source material	OR attempt to explain strength/weakness of the way 'personality' was measured in context		
	3 marks	Clearly explained strength/wea was measured in the context of source material			

Question		Answer	Marks	Guidance
8		ve correlation is where, as the values of one variable increase, es of the other tend to decrease, although not necessarily at the	2	Accept for one mark an appropriate sketch of a negative correlation presented on it's own.  Any reference to DV = zero.
	0 marks	The candidate has not provided any creditworthy information		Any reference to effect / affect of one variable on
	1 mark	Attempt to explain what a negative correlation is, but lacks clarity		another = zero.
	2 marks	Clear explanation of what a negative correlation is		

Que	stion		Answer	Marks 2	Guidance
9			graph is a visual display of two variables expressed numerically, ach axis and indicated at the intersection of the two values.		Reference to a dependent variable = zero.
		0 marks	0 The candidate has not provided any creditworthy information		Any reference to effect / affect of one variable on another = zero.
		1 mark	Attempt to explain how data is presented in a scattergraph ark		Accept sketches of scattergraphs used to help illustrate what is meant (if data or labels included
		2 marks	Clear explanation of how data is presented in a scattergraph		there should be no reference to a DV, if so = zero).

Question						Marks	Guidance
10	Aggression could be measured in many ways, for example: on an arbitrary scale 1 (not aggressive) to 10 very aggressive; how participants respond in a combat game (shoot to kill etc) after exposure to the films; level of punishment suggested for hypothetical crimes committed by a person; observation of aggressive behaviour after exposure to film (e.g. when interacting with others); physiological measures of aggression (heart-rate or blood pressure changes etc)					10	the actual measure of the DV. Details related to peripheral things, such as sample / sampling are not creditworthy here.  DV can be either quantitative or qualitative
	0 marks	The candidate has no	t provided	any creditwor	thy information		Examples of 'minor omissions'
	1-2 marks	Brief and/or unclear at to describe how aggre could be measured wi evaluation	ssion		n of a way to measure at has not been		<ul> <li>If unclear who is doing the rating and how (e.g. how recorded)</li> <li>If ends of rating scale not identified</li> </ul>
	3-4 marks	Clear description of he aggression could be measured, but minor omissions prevent full replication. No evaluar		aggression co	b both describe how buld be measured and ut lacking clarity/detail		No list of categories for observed aggressive behaviours
	5 marks	Clear description of how aggression could be measured that would allow full replication but no evaluation  OR Clear description of how aggression could be measured, but minor omissions prevent full replication with attempt at evaluation, but unclear			OR attempt to describe how aggression could be measured with clear and detailed evaluation		If more than one technique to measure aggression is presented it must be clear how they are combined for it to be fully replicable.
	6-7 marks	Clear description of how aggression could be aggression could be measured, but measured that would allow minor omissions prevent full		ould be measured, but ions prevent full			
	8-9 marks	to one issue	nd clear a	nd detailed eva	aluation with reference		
	10 marks	Clear description of he allow full replication at to two or more issues			measured that would aluation with reference		

Question	Answer						Guidance
11	An independent measures design is where participants only take part in one condition of the experiment. A repeated measures design is where participants take part in both (or all) conditions of an experiment.						Note – context is not required for full marks here (but may be used and is creditworthy).  Reference to 'task' or 'parts' or 'different
	0 marks	The candidate has r	ot provi	ded any credit	tworthy information		experiments' cap at 1 mark for the design referred to. Reference to 'conditions' is required
	1 mark	Brief, unclear outline what is involved in a independent measu design only	n	OR Brief, un is involved ir measures de			for full marks.
	2 marks	Clear outline of what is involved in an independent measures design only	what is	ear outline of s involved in ated res design	OR brief unclear outline of what is involved in both independent and repeated measures design		
	3 marks	Clear outline of what involved in an indep measures design, but unclear about a repermeasures design	endent ut	OR Clear outline of what is involved in a repeated measures design, but unclear about an independent measures design			
	4 marks	Clear outline of what is involved in <b>both</b> an independent					

Question		Answer		Marks	Guidance
12		s include: no individual difference evels of aggression are controlle	es as in independent measures, d for; fewer participants needed.	6	Context = aggression, violence, film etc
	second of in the first	esses include: carry-over effects periondition may be affected by fatignst condition);  for strength, 3 marks for weakne	jue or practice from participation		
	0 marks	The candidate has not provided			
	1 mark	Attempt to describe strength/we not in the context of the research material			
	2 marks	Clear and detailed outline of strength/weakness, but in general - not in the context of the research outlined in the source material	OR attempt to describe strength / weakness in context		
	3 marks	Clear and detailed outline of str			

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