



Mark Scheme (Results)

June 2014

Pearson Edexcel GCE in Psychology
(6PS01/01) Unit 1: Social and
Cognitive Psychology

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General Guidance on Marking– GCE Psychology

All candidates must receive the same treatment.

Examiners should look for qualities to reward rather than faults to penalise. This does NOT mean giving credit for incorrect or inadequate answers, but it does mean allowing candidates to be rewarded for answers showing correct application of principles and knowledge.

Examiners should therefore read carefully and consider every response: even unconventional answers may be worthy of credit.

Candidates must make their meaning clear to the examiner to gain the mark. Make sure that the answer makes sense. Do not give credit for correct words/phrases which are put together in a meaningless manner. Answers must be in the correct context.

Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the Team Leader must be consulted.

Using the mark scheme

The mark scheme gives:

- an idea of the types of response expected
- how individual marks are to be awarded
- the total mark for each question
- examples of responses that should NOT receive credit (where applicable).

- 1 / means that the responses are alternatives and either answer should receive full credit.
- 2 () means that a phrase/word is not essential for the award of the mark, but helps the examiner to get the sense of the expected answer.
- 3 [] words inside square brackets are instructions or guidance for examiners.
- 4 Phrases/words in **bold** indicate that the meaning of the phrase or the actual word is **essential** to the answer.
- 5 TE (Transferred Error) means that a wrong answer given in an earlier part of a question is used correctly in answer to a later part of the same question.

Quality of Written Communication

Questions which involve the writing of continuous prose will expect candidates to:

- show clarity of expression
- construct and present coherent arguments
- demonstrate an effective use of grammar, punctuation and spelling.

Full marks can only be awarded if the candidate has demonstrated the above abilities. Questions where QWC is likely to be particularly important are indicated "QWC" in the mark scheme BUT this does not preclude others.

Unit 1: Social and Cognitive Psychology**Section A**

Question Number	Question	
1	Social identity theory was proposed by	
	Answer	Mark
	A Milgram (1974) B Sherif (1988) C Hofling (1966) D Tajfel (1970)	(1 AO1)

Question Number	Question	
2	In an autonomous state individuals perceive themselves as	
	Answer	Mark
	A acting as agents for others in authority B not in control of their own decision making C unable to disobey due to moral strain D able to choose their own actions	(1 A01)

Question Number	Question	
3	Which of the following might be best explained using cognitive psychology?	
	Answer	Mark
	<p>A Gang violence between different groups</p> <p>B The effect of culture on behaviour</p> <p>C How information is processed in your brain</p> <p>D The influence of genes on your behaviour.</p>	(1 A01)

Question Number	Question	
4	State cues are best described as found in the	
	Answer	Mark
	A individual B genes C context D environment	(1 A01)

Question Number	Question	
5	Which of the following is the fairest sampling technique, where everyone has an equal chance of being picked?	
	Answer	Mark
	A Opportunity B Random C Stratified D Volunteer	(1 A03)

Question Number	Question	
6	Laboratory experiments use controls and this produces reliable data. This makes laboratory experiments more	
	Answer	Mark
	A objective B subjective C qualitative D unethical	(1 A03)

Question Number	Question	
7	Which two of the following are true of Godden and Baddeley's (1975) study?	
	Answer	Mark
	<p>A There were 26 male participants in the study.</p> <p>B All the divers took part in all four conditions.</p> <p>C Divers were asked to recall words both on land and in the water.</p> <p>D The word lists were made up of ten words.</p> <p>E Words learned underwater were recalled best on land.</p>	(2 A01)

Question Number	Question	
8	Which two of the following examples best suit a qualitative approach to data collection?	
	Answer	Mark
	<p>A A study to see whether lack of sleep affects reactions times</p> <p>B A teacher studies the link between the number of essays students have written and their exam results</p> <p>C A psychologist investigates how a family copes with a relative who has recently left a psychiatric hospital.</p> <p>D An observational study into levels of physical aggression in boys and girls at a nursery.</p> <p>E A study to examine why family background might affect career choice.</p>	(2 A03)

Question Number	Question	
9	<p>Your teacher is demonstrating Levels of Processing theory and asks you a number of questions about a list of words.</p> <p>Which two of the following five questions would be likely to result in the highest level of recall?</p>	
	Answer	Mark
	<p>A Does it rhyme with 'car'?</p> <p>B Has it got five letters in it?</p> <p>C Is it something you would eat?</p> <p>D Is it in capital letters?</p> <p>E Is it a type of animal?</p>	(2 A01)

Section B

Question Numbers	General Instructions
Q10 Q12 Q13 Q14	Marking points are indicative, not comprehensive and other points be credited. In each case consider 'or words to that effect'. Each point is a marking point unless otherwise stated, and each point the candidate must be clearly and effectively communicated.

Question Number	Question	
10 (a)	Outline the procedure of Milgram's (1963) study on obedience from the point where lots were drawn to decide who would be the teacher and who would be the learner.	
	Answer	Mark
	<p>Must be procedure only, no credit for aim/results/conclusions No credit for any of Milgram's variations Only credit points about the study that are made after the lots were drawn Max 1 for amalgamating 2 or more brief but accurate points.</p> <ul style="list-style-type: none"> • They were shown the shock generator with 30 switches each showing a 15 volts increase in shock level from the last/eq; • The teacher was given a sample shock of 45 volts to demonstrate the shock was real/eq; • Both men were shown the next room in which was the chair where the learner (Mr Wallace) was to be strapped. The teacher watched Mr Wallace being strapped into the chair/eq; • At this point the two men were separated and the experiment began, with the participant being instructed to issue a shock each time the learner got an answer wrong/eq; • Only one in every four answers was right and there was a predetermined set of responses from the learner complaining about the shocks/eq; • Mr. Wallace began to complain about his heart and demanded to be let out, refusing to take further part/eq; • At the 300 volts level he pounded on the wall. He repeated this at the 315 volts level but from then on was silent/eq; • The experimenter delivered a standardised sequence of verbal prods to encourage the teacher to continue/eq; • 1 mark for a suitable example from: 'please continue'/ 'please go on'/ 'the experiment requires that you continue'/ 'it is absolutely essential that you continue'/ 'you have no other choice, you must go on'/eq; • They were also reassured by the experimenter that no permanent tissue damage was being caused by the shocks/eq; <p>Look for other reasonable marking points</p>	(4 A01)

Question Number	Question	
10 (b)	Outline one methodological weakness of Milgram's (1963) original study of obedience. Do not use an ethical issue in your answer.	
	Answer	Mark
	<p>No credit for ethical issues or applications to real life. No credit for any of Milgram's variations. If more than one weakness outlined mark all and credit the best. If no indication that the response is related to Milgram's study, either by use of specific aspects (eg. Shocks) or 'this or the' experiment, then 1 generic mark available</p> <ul style="list-style-type: none"> • Lacks ecological validity as it took place in Yale University which is an artificial environment for these participants (1st mark) and so does not represent real life/eq;(2nd mark) • Lacks (task) validity/(mundane) realism, as giving electric shocks is not a normal everyday activity (1st mark) so does not represent a real life behaviour (2nd mark)/eq; • Procedure may be prone to demand characteristics as participants may have guessed nature of experiment due to cues in the setting/eq; • The sample was all American and male which makes it difficult to generalise to other cultures (1st mark) and could therefore be seen as ethnocentric / androcentric/eq; (2nd mark) • A volunteer/self-selected sample was used which means the participants may have been more motivated (1st mark) and therefore more obedient to the instructions given by the experimenter/eq; (2nd mark) <p>Look for other reasonable marking points</p>	(2 A02)

Question Number	Question	
10 (c)	Milgram controlled situational variables in his 1963 original study of obedience. Explain why this is a strength of Milgram's (1963) original study of obedience.	
	Answer	Mark

	<p>No credit for weakness / Milgram variations Must make reference to an aspect of the study or max 1 mark.</p> <ul style="list-style-type: none">• The procedure is easy to replicate and can therefore be tested for reliability/eq;• Control over variables such as the word pair task in a controlled setting means it can be replicated/eq;• Control over variables such as the word pair task in a controlled setting means the procedure can be replicated and tested for reliability/eq; (2 marks)• The verbal prods were standardised throughout which means the procedure can be replicated and tested for reliability/eq; (2 marks) <p>Look for other reasonable marking points</p>	(2 A02)
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Question Number	Question	
11	<p>Imagine you want to investigate differences between the views of older and younger people about the football World Cup. Social psychology would suggest you use a survey for this kind of investigation.</p> <p>Write a plan showing how you would go about carrying out your survey.</p> <p>In your plan you may wish to include:</p> <ul style="list-style-type: none"> • sampling • procedure • types of question 	
	Answer	Mark
	<p>The plan must explicitly relate to the study outlined in the question. Eg. Include reference to age groups. Ignore underdeveloped lists or suggestions that are not viable.</p> <p>Refer to levels at the end of the question</p> <p>Possible elements that may be creditworthy include: Sampling, hypotheses, ethics, procedure, treatment of results, controls, types of questions/there are others.</p> <p>No credit can be given for elements which merely paraphrase the question.</p> <p>eg.</p> <ul style="list-style-type: none"> • advertise for participants (volunteer sample) to take part and obtain their informed consent • find as many ps as you can at any opportune moment such as from the town centre / college canteen / friends and family (opportunity sampling) • write a survey using possibly both open (qualitative) and closed (quantitative) questions about the world cup • An example of an open question might be "What are the strengths of the team you support?" • An example of a closed question might be "What are the chance of your team winning the world cup?" • The survey could be sent out by e-mail or through the post • In order to avoid distractions each participant could complete the survey individually in the classroom / home alone etc <p>Giving marks for detail and elaboration is important where appropriate so that the full range of marks is available. Answers must add to what has already been said to gain further marks.</p> <p>Read the whole answer and then allocate the marks.</p>	(5 A03)

Level	Mark	Descriptor
	0	Either no answer or a muddled answer where the examiner cannot determine how the study would be carried out / or it is not a survey (but please read the whole answer)
Level 1	1-2 marks	One step of how the survey would be carried out. It may be replicable, ideas lacking in detail, some irrelevant material. Answer shows a plan which is appropriate to the investigation with basic elaboration of points. One element done well or two elements done in less detail.
Level 2	3-4 marks	Answer shows a viable plan which is appropriate to the investigation with good elaboration of points. There is a mainly clear description of how the survey would be carried out allowing partial replication . Two elements done well or three or more elements in less detail.
Level 3	5 marks	The description of how the survey would be carried out is clear and enables reasonable replication - some components missing but others explained well, given time constraints for the answer. Answer shows a clear viable plan which is appropriate to the investigation with excellent elaboration of points. At least three elements explained well.

Question Number	Question	
12	<p>In the Cognitive Approach you will have studied a key issue of relevance to today's society.</p> <p>Describe the key issue you studied.</p>	
	Answer	Mark
	<p>1 mark per point / elaboration.</p> <p>1 mark is available for identification of an issue</p> <p>4 marks are available for elaboration of the issue. Marks here are for describing the issue not explaining it eg. 'EWT' is not itself the issue. How reliable or unreliable it is, is an issue. If more than one issue mark and credit the best.</p> <p>Max 2 marks if issue can be discerned but not fully expressed. Appropriate real life examples are creditworthy if they relate to the key issue – max 1 mark</p> <p>REJECT SOCIAL KEY ISSUES</p> <p>Possible key issues include:</p> <p>Is EWT reliable? Is flashbulb memory a special type of memory? Does the cognitive interview aid witness recall? Do psychology students revise more effectively? How can memory be improved in...those with amnesia...(must have a context)?</p> <p>There are others. Possible marking points:</p> <p>Is EWT reliable? (ID mark)</p> <ul style="list-style-type: none"> • EWT refers to the recalled memory of a witness to a crime or incident/eq; • Some argue that it is so unreliable it should not be the basis of criminal convictions/eq; • On the basis of unreliable EWT innocent people have spent many years in jail • If the testimony is fallible then the real perpetrator is free to commit more crimes./eq; • Others believe jurors are more likely to rely on witness testimony than scientific proof or forensic evidence/eq; <p>Why should psychology students revise more effectively than non-psychology students? (ID mark)</p> <ul style="list-style-type: none"> • Students who study Psychology are taught certain topics which might give them an advantage when it comes to revising for exams/eq; • Studying how memory works and what causes us to forget means Psychology students can apply their learning to everyday life to benefit them/eq; • Non psychology students may well be using revision techniques that are not appropriate for them due to no fault of their own, but just based on their subject choice/eq; 	(4 A01)

	<p>Is flashbulb memory a special type of memory? (ID mark)</p> <ul style="list-style-type: none"> • Some believe flashbulb memory is a special memory created by intense emotion/eq; • They are detailed memories of particular events such as national tragedies like the London bombings (etc.)/eq; • What is common is the degree of detail that can be recalled e.g. where we were and with whom etc/eq; • Others argue they are just rehearsed memories which are not in fact unusual at all/eq; <p>Does the cognitive interview aid witness recall? (ID mark)</p> <ul style="list-style-type: none"> • The cognitive interview is a technique used by the police during witness interviews to help them recall more accurately/eq; • It is designed to avoid the witnesses' memory being contaminated by past experiences or current events eg media coverage/eq; • It makes the witness focus on the detail of what they witnessed by using a range of different questioning techniques involving all 5 senses/eq; • Some believe the cognitive interview does not lead to better recall and is actually an ineffective tool used by the police/eq; • Police ask the witness to recall events in an unusual order, for example, or use a reconstruction of the event/eq; • Witnesses are encouraged to re-visit the scene of the crime where memories of the crime may be triggered/eq; <p>Look for any other reasonable marking points</p>	
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Question Number	Question	
13	<p>You are sitting with your friends on the bus on the way to school. Suddenly the bus comes to an emergency stop. You look out of the window to see an overturned tractor with lots of people running around. You are questioned the next day by the police about what you saw.</p> <p>Using concepts, theories and/or research from cognitive psychology explain why your later recall of the event might differ from others who saw the same incident.</p>	
	Answer	Mark
	<p>Concepts, theories and research from cognitive psychology include:</p> <p>Theories/ideas of Memory / Forgetting Results / Conclusions of research e.g. memory and forgetting studies but DO NOT CREDIT descriptions of the studies themselves.</p> <p>Terms and concepts can be drawn from (but are not limited to) the terms listed in the specification.</p> <p>e.g. Cue dependent</p> <ul style="list-style-type: none"> • Those interviewed away from the incident will not be aided by context cues and so may recall less detail than others questioned at the scene of the incident/eq; • Students may have felt distressed when witnessing the accident so that when asked the following day they are in a more calm state and so state cues do not match/eq; <p>e.g. Reconstructive memory</p> <ul style="list-style-type: none"> • Memory is not like a tape recorder so the students may fill in gaps in their memories to make their memory of the event more meaningful/eq; • Students may use schemas to organise memory of the incident and then reconstruct it when needed/eq; <p>e.g. Displacement</p> <ul style="list-style-type: none"> • As short term memory has a limited capacity, some details of the event may be displaced by other material, causing forgetting of important details for some others on the bus/eq; <p>e.g. LOP</p> <ul style="list-style-type: none"> • Those who used deeper processing are likely to remember more than those on the bus who used shallow processing/eq; <p>e.g. Multi store</p> <ul style="list-style-type: none"> • Some students may have thought about and rehearsed what they saw so transferred information into LTM and will be able to recall more details than those who did not transfer information from STM to LTM/eq; <p>e.g. Interference</p> <ul style="list-style-type: none"> • Students later learning / experiences may interfere with recall of what they saw (retroactive interference) so those 	(5 A02)

	<p>who were more 'active' after the event may recall less than those who were more 'inactive'/eq;</p> <ul style="list-style-type: none"> • Loftus and Palmer (1974) showed that post event information in the form of leading questions altered the accuracy of the recall/eq; • A student who has witnessed an accident before (proactive interference) may confuse details from the previous event with the current one, making their recall inaccurate/eq; <p>e.g. Spreading activation</p> <ul style="list-style-type: none"> • There may be individual differences in recall based on each classmates degree of associations in their semantic memory/eq; <p>e.g. Demand characteristics</p> <ul style="list-style-type: none"> • When being interviewed some may be more prone to saying things they think the police want to hear in a wish to please them/eq; <p>e.g. Use of the cognitive interview</p> <ul style="list-style-type: none"> • Others may be able to give much more accurate detail if the police use the cognitive interview asking them to recall events from different perspectives or in a different order/eq; <p>Look for other reasonable ways of expressing this answer</p>	
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Question Number	Question	
14	<p>One research method commonly used in the Cognitive Approach is the laboratory experiment.</p> <p>Describe the main features of the laboratory experiment as a research method.</p>	
	Answer	Mark
	<p>Suitable examples can gain credit. Ignore strengths and/or weaknesses. Points that include some evaluation may be credited if the description stands alone in its own right.</p> <ul style="list-style-type: none"> • There is an independent variable (IV), which is manipulated and a dependent variable (DV), which is measured/eq; • Set in a controlled / artificial setting away from the participants normal everyday environment/eq; • We predict any changes in the DV are dependent upon changes in the IV/eq; • A study of cause and effect involving two or more conditions (control and experimental)/eq; • It serves to find out whether a causal relationship exists, to see if one factor affects another/eq; • It involves the deliberate manipulation of one variable while trying to keep all others constant, so the effect of one variable on the one we are measuring can be seen/eq; • True laboratory experiments have random allocation of participants to conditions/eq; • There is a standardised procedure to ensure that all participants are treated the same/eq; <p>Look for any other reasonable marking points</p>	(4 A03)

Question Number	Question	
15 (a)	Describe the aim(s) of Godden and Baddeley's (1975) study.	
	Answer	Mark
	<p>No credit for procedure/ results / conclusion</p> <ul style="list-style-type: none"> To see whether words would be recalled better in the same environment or in a very different environment (1st mark) To investigate whether a natural environment can act as a cue for recall/eq; To test Cue dependency theory/eq; <p>Look for other reasonable marking points</p>	(2 A01)

Question Number	Question	
15 (b)	Some people view Godden and Baddeley's (1975) study as having high ecological validity, others think it has low ecological validity, and some even believe it has both.	
	Explain whether you think that Godden and Baddeley's (1975) study has high and/or low ecological validity? Explain your	
	Answer	Mark
	<p>Credit answers which argue high / low or both</p> <ul style="list-style-type: none"> The study took place in a real life setting and so has greater ecological validity than laboratory research/eq; The experiment was conducted in a realistic open water environment for divers (1st mark) so has higher ecological validity and results relate to real life situations/eq; (2nd mark) Divers were all members of the diving club so the diving environment would have been very familiar to them/eq; The procedure in learning unrelated words is not an everyday task and so lacks (task) validity/eq; Low validity as learning a word list especially unrelated 2-3 syllable words (1st mark) is an artificial task which is not carried out in everyday life/eq; (2nd mark) Word lists were broken into small sections to allow breathing in between, which created a very artificial pattern in the learning/eq; <p>Look for other reasonable marking points</p>	(3 A02)

Section C

Question Numbers	General Instructions
	Marking points are indicative, not comprehensive and other points should be credited. In each case consider 'or words to that effect'. Each bullet point is a marking point unless otherwise stated, and each point made by the candidate must be clearly and effectively communicated.

Question Number	Question	
16	<p>As part of the course requirements for cognitive psychology you will have conducted a practical using an experiment.</p> <p>Outline problems you came across when planning and/or carrying out your experiment and explain how you might have addressed (or did address) these problems.</p>	
	Answer	Mark
	<p>Appropriate answers might include some of the following problems, but this list isn't exhaustive.</p> <p>No credit for description of the experiment</p> <ul style="list-style-type: none"> • Because the sample was opportunity we could have deliberately picked people we knew had the desired characteristics • We could have used a random sample instead to overcome this by putting names into a hat as this would have made it fairer • Some participants may have told others about the study so they may have tried to give us the results they thought we wanted • We could have asked participants whether they had heard about our experiment beforehand and then excluded them if that was the case • All participants were 16 to 18 so we cannot generalise the results to older people • We could have widened our sample by asking family and friends from outside school / college to take part • We didn't test for dyslexia or other learning difficulties which may have accounted for any differences we found • We could have asked participants to fill in a short questionnaire beforehand to determine this • As it was an experiment we don't know if the participants behaviour was natural or a result of demand characteristics • We could have used the single or double blind technique to overcome this so neither we nor the participants would be aware of who was allocated to which condition. 	(5 A03)

Level	Mark	Descriptor
	0	No rewardable material or the candidate does not refer to their own experiment at least once
Level 1	1 mark	Candidate identifies at least one appropriate problem and/or solution. Answer is limited , lacking in detail, with basic elaboration of points.
Level 2	2 - 3 marks	Candidate gives at least two appropriate problems and their solutions with at least one elaborated .
Level 3	4 - 5 marks	A thorough answer, giving at least two problems and their solutions with good elaboration . Given time constraints and limited number of marks, full marks must be given when the

		answer is reasonably detailed even if not all the information is present.
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Question Number	Question	
17	<p>Following studies in the USA carried out by Milgram in 1963 and Hofling et al in 1966, obedience has been tested in many cultures across the world.</p> <p>Describe and evaluate one study of obedience from a country other than the USA and explain how findings from these studies help in understanding obedience in everyday life.</p>	
	Answer	Mark
	<p>Possible studies include:</p> <p>Meeus & Raaijmakers (1986) Slater et al (2006) Kilham & Mann (1971) There are others</p> <p>Must be a published study</p> <p>Refer to levels at the end of the indicative content</p> <p>A01 – These marks are gained by describing the study which must be of obedience from a country other than the USA A02 – For evaluating the study.</p> <p>E.g. Meeus & Raaijmakers (1986)</p> <p><u>AIMS:</u></p> <ul style="list-style-type: none"> • To investigate a number of possible problems which may undermine Milgram’s conclusions regarding obedience • To investigate the fact that Milgram’s design led to an <i>ambiguous situation</i> which may have <i>led to greater obedience</i> i.e. mixed messages that the shocks were dangerous but not harmful • To see whether more modern psychological-administrative violence creates more /less obedience as compared to Milgram’s method <p><u>PROCEDURE:</u></p> <ul style="list-style-type: none"> • 39 participants responded to a newspaper advert and were paid for their time • The research took place in a modern university building where participants were led to believe that they were taking part in a study into stress & performance • Participants believed that the Psychology department had been commissioned to select candidates for a job and each applicant was to take a test which would be administered by the participants • The test was vital to success, if applicants(who were confederates/stooges)failed the test they lost the job • Participants were asked to make 15 increasingly distressing remarks to the applicants regarding how they were getting on with the test “If you continue responding like this, you’re going to fail the test.” • “This job is much too difficult for you, according to this test.” • Participants also overheard the experimenter telling the 	<p>6 A01 6 A02</p>

'applicants' false information about the study (e.g. it would not affect their job chances)

- It soon became obvious that the 'applicant' was getting extremely distressed and that they would fail the test (and, therefore, not get the job)
- Two thirds of the way through the test the 'applicant' accused the researchers of giving false information and withdrew his consent to continue
- If the subjects refused to continue to make the stressful remarks they were prodded to continue by the experimenter
- A participant who made all the stress remarks was seen as obedient and those who refused to make all the stress remarks disobedient

RESULTS:

- 92% of the participants obeyed the experimenter to the end and made all the stress remarks
- The participants reported that they 'intensely disliked' making the stress remarks
- The participants were convinced that the applicant's test scores had been seriously affected by the stress remarks;
- 96% of the participants were sure that they were dealing with a 'real' situation

CONCLUSIONS:

- The researchers conclude that the level of obedience in their study was considerably higher than in Milgram's study
- Furthermore, this shows that it is easier "to obey orders to use psychological-administrative violence than to obey orders to use physical violence"

EVALUATION:

- Many participants were caused distress by their involvement they made it clear that they found the treatment of the applicant to be unfair, intensely disliked making the stress remarks, were relieved that the victim was not a real applicant and they had not in reality caused someone harm
- Participants were given full information about the design and purpose of the experiment and were debriefed a second time by mail a year later and again asked to fill out a questionnaire about the experiment
- In neither debriefing, however, were any indications seen that the subjects had suffered any serious negative effects from their participation in the experiment
- Participants were deceived as they thought the study was on stress and performance (not obedience) and that the applicants were real when in fact they were just actors
- The volunteer sample may be biased as these participants tend to be more motivated and perform better

APPLICATIONS:

- The findings can help explain real life atrocities such as genocide and the war against Iraq
- Fear of being bullied in the workplace has given rise to

'whistle blowing' Policies to protect who are autonomous.

E.g. Slater et al (2006)

AIMS:

- To study human responses to interaction with a virtual character using similar conflict created by Milgram's study
- To test whether the stress would be greater in a situation where the learner could be seen and heard in comparison to one where she would only communicate with the participant through text

PROCEDURE:

- 34 participants were recruited by posters and email on the campus at University College London, mean age was 29
- 23 were allocated to the Visible Condition (could see and hear virtual learner) and 11 to the Hidden Condition (could not see or hear her answers came through texts)
- Their task was to read out 32 sets of these 5 words to the learner, the first of which was a cue word and the others one of four possible words
- The learner was supposed to have memorised the words with the cue word beforehand/eq;
- On 20 out of the 32 trials the Learner gave the wrong answer, the later trials more likely to result in a wrong answer than the earlier ones
- On the desk in front of the participant was an 'electric shock machine' with a shock button, voltage indicators and a knob for turning up the voltage level
- The participant was instructed that each time the learner gave an incorrect answer he or she should press the shock button which and increase this by one unit each time
- In the Visible condition the learner responded to the shocks with increasing signs of discomfort, eventually protesting that she had 'never agreed to this' and wanted to stop
- In the second Hidden condition the learner was not seen or heard apart from a few seconds of introductions at the start of the experiment;
- Various physiological indicators (e.g., 'trembling or shaking', 'face becoming hot', 'perspiration') were measured via a questionnaire
- It was administered to participants in both groups before the experiment and then after the experiment

RESULTS:

- High scores on the questionnaire were found to correlate positively with anxiety, heart rate, skin conductance responses, respiration, face temperature, and blood volume All participants were aroused (skin conductance analysis), this was associated with stress (ECG analysis);
- The intensity was greater for those in the Visible condition compared with those in the Hidden condition
- Participants became distressed at giving shocks and even

	<p>showed care for the well being of the learner</p> <p><u>CONCLUSIONS:</u></p> <ul style="list-style-type: none"> • This shows that in spite of their knowledge that the situation was artificial the participants responded to the situation as if it were real <p><u>EVALUATION:</u></p> <ul style="list-style-type: none"> • Participants were caused increasing discomfort as witnessed by their physiological responses and later comments during the post-experimental interviews, and this discomfort was higher for those in the visible condition compared with those in the hidden condition; • Several participants withdrew from the experiment before the end due to simulator sickness • Some minimal cues from the learner may have been sufficient to cause a stress response in participants as seen in the pilot study • Virtual environments can provide a useful tool in psychology by providing an alternative methodology for laboratory based studies • This method could also be used beyond simple obedience studies and look at reasons for bystander behaviour in street violence (useful given the current level of perceived crime) • Unlike the Milgram experiments there was no need for deception here as all participants were made fully aware of the virtual learner <p><u>APPLICATIONS</u></p> <ul style="list-style-type: none"> • At demonstrations police officers would be expected to obey instructions from senior officers even if it goes against their own moral judgement. <p>Findings can explain the atrocities committed in Europe during the holocaust by Nazi soldiers obeying their hierarchy.</p>	
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Level	Mark	Descriptor
		<p>A01: Knowledge and understanding of obedience study</p> <p>A02: Application/evaluation of knowledge and understanding of obedience study</p>
	0	No rewardable material / purely Milgram/ Hofling study/ other US
Level 1	1-3 marks	<p>Candidates will produce brief answers, making simple statements showing some relevance to the question. Study described is incorrect but has been appropriately evaluated.</p> <ul style="list-style-type: none"> • Basic description of the study/ has mixed up studies • Little or no attempt at the analytical/evaluation demands of the question. Lack of relevant evidence. <p>The skills needed to produce effective writing will not normally be present.</p> <p>The writing may have some coherence and will be generally comprehensible but lack both clarity and organisation. High</p>
Level 2	4-6 marks	<p>Description OR evaluation only OR limited attempt at each OR one is in less detail than the other</p> <ul style="list-style-type: none"> • Some relevant description though likely to be limited • Some attempt at evaluation e.g. refers to at least one from methodological, ethics and real life application of study • May have some reference to obedience in everyday life <p>Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and /or spelling errors are likely to be present.</p>
Level 3	7-9 marks	<p>Candidate has attempted and answered two of the injunctions in the question well.</p> <ul style="list-style-type: none"> • Description includes both breadth and / or depth in appropriate detail. • Evaluation may include a range of factors eg. ethics and methodology - used appropriately • May have an application of obedience to everyday life <p>The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and /or spelling errors are likely to be present.</p>

Level 4	10-12 marks	<p>Candidate has attempted and answered <i>all injunctions</i> in the question well.</p> <ul style="list-style-type: none">• Description includes both breadth and depth in appropriate detail with elaboration.• Evaluation may include a range of factors eg. - ethics and methodology - used with detail and clearly explained.• Addresses the issue of application to everyday life. <p>The skills needed to produce convincing extended writing are in place. Very few syntactical and /or spelling errors may be found. Very good organisation and planning. Given time constraints and limited number of marks, full marks must be given when the answer is reasonably detailed even if not all the information is present</p>
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