Evaluation Skills

Guide to develop AO3 skills in preparation for exam questions

Think Critically

INTRODUCTION

Assessment objectives (AOs) are set by Ofqual and are the same across all AS and A-level Psychology specifications and all exam boards. The exams will measure how students have achieved the following assessment objectives.

This guide helps you develop the skills to ensure you meet the assessment objective criteria. It will focus on AO3 skills.

AO3:

Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to:

• make judgements and reach conclusions

• develop and refine practical design and procedures.

> AO3 skills require you to demonstrate your evaluation skills. The exam questions may use words like discuss, assess or evaluate. AO3 is the ability to show your critical thinking skills and make judgements or form arguments. Questions could also ask you to compare or explain strengths and weaknesses. It is expected that you use subject specialist terminology and that you are clear on your understanding of the definitions of each term you use. Make sure they are relevant and in context.

This guide will show you examples of exam questions along with their mark schemes, highlighting how you can maximise your AO3 marks. The examples come from AQA, Pearson Edexcel and Cambridge OCR.

Look at the responses given, can you see how it answers the question?

Short Answer Questions

Another explanation for forgetting is interference.

Evaluate the interference explanation for forgetting.

[6 marks]

Marks for this question: AO3 = 6

Level	Marks	Description
3	5–6	Evaluation is clear, accurate and detailed. Answer is organised and coherent. Specialist terminology is used effectively.
2	3–4	Evaluation is mostly clear but lacks detail/understanding in places. There is some appropriate use of specialist terminology.
1	1–2	Evaluation is limited/muddled showing limited understanding. The answer lacks clarity and accuracy. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:
- use of evidence from lab studies, eg. McGeoch and McDonald, as well as real-life, eg Schmidt, supports the effects of interference
- application of explanation, eg. avoiding similar material when revising for exams
- comparison with other explanations of forgetting
- evidence suggests interference can be overcome using cued recall
- interference does not apply in all cases, eg. with experts.

Accept other relevant material.

Do not credit evaluation of studies unless they are specifically linked to the explanation.

Evaluation skills include the analysis of supporting or conflicting evidence, so using a study can help justify your point. Evaluation points could be related to the usefulness or practical application of the topic or could relate to the methodology (particularly if the question asks you to evaluate a piece of research).

The two researchers compared their data to assess inter-observer reliability. This produced a correlation coefficient of +0.26

Outline **one** way in which the reliability of the two researchers could be improved.

[2 marks]

Marks for this question: AO3 = 2

2 marks for a clear and coherent suggestion of how reliability could be improved.
1 mark for a limited/muddled explanation.

Possible content:
- the researchers would need to revisit/redesign their behavioural categories (for reciprocal behaviour)
- to ensure there was no overlap/ambiguity
- that they were clearly defined/measurable/observable
- researchers could be trained (perhaps through the use of a pilot study) to apply behavioural categories more effectively.

No credit for use of additional observers, double-blind procedures or assessing reliability.

Accept other relevant content.

The questions could also use a key evaluation term in the wording, so make sure you know the definitions of each one. In this case if you do not know what reliability means you may not be able to answer this question.

Mr Jennings is a teacher who was instructing a group of 15 students to line up quietly in a queue during lunchtime in the school canteen. All of the students, except one, did as they were asked.

Explain **one** weakness of social impact theory.

(2)

AO1 (1 mark), AO3 (1 mark)

One mark for identification of a weakness (AO1).
One mark for justification of the weakness (AO3).

For example:

- One weakness is that social impact theory does not account for individual differences such as personality, and focuses only on situational factors like number of sources present (1). Those with a high authoritarian personality are more likely to obey as they believe in order and discipline, so the theory is an incomplete theory of social influence (1).

- Hofling (1966) found that low immediacy did not reduce the impact of the doctor's orders to administer a lethal dose to a patient, lowering the credibility of theory (1). 21 out of the 22 nurses still obeyed the order given over the phone, demonstrating blind obedience even when the doctor was not physically present (1).

Look for other reasonable marking points.

This question has one AO1 mark and one AO3 mark. The AO3 mark is for the justification of the weakness, just stating the weakness is only AO1.

Outline **one** way that using a self-report method **increases** the reliability of the data collected in this study.

[3]

Answer	Marks	Guidance
Possible answers: • Standardised questions that are the same for all participants means the method is replicable which allows for test-retest (external) reliability to be checked. • Questionnaires are easier to replicate (potentially with a large sample) • The use of closed questions as they are scored in more consistent way • The use of quantitative data allows split-half (internal) reliability to be tested (by comparing scores on one half of the test with scores on the other half). • Any other appropriate point.	Max 3	Context = stress (and any of the specific stress response categories – e.g. health, finances, relationships, work, family), 120. **NB: Only first response is marked.** Sample size can be accepted but in order to gain above 1 mark (weak attempt at outline – whether in context or not) it has to be explained in relation to statistical anomalies/outliers/flukes (and self-report), i.e. large sample makes it less likely for anomalies to skew results. In this context, questionnaire gathers quantitative data and therefore it is possible to gather data from a large sample (120 in the study).
Clear, detailed outline in context.	3	
Clear, detailed outline but not in context. **OR** attempted outline in context.	2	
Attempt, and/or brief outline (whether in context or not).	1	
The candidate has not provided any creditworthy information.	0	

This question has used an AO3 key evaluation term (reliability) so you must show your knowledge of this. However, as this is a research methods question the response is expected to be in context to the stem scenario.

Um, erm and ah

Disfluencies are disruptions in the flow of spoken language, including stuttering and hesitations, such as 'um', 'erm' and 'ah'. These often indicate emotions, such as feelings of anxiety and distress. A psychologist wants to investigate this further by conducting a correlation study to see if there is a relationship between the disfluencies a person makes and how anxious they feel while making a public speech.

Outline **one** strength and **one** weakness of conducting this study using the correlation technique. **[6]**

Answer		Marks	Guidance
Possible strengths: ▪ Collection of quantifiable data. ▪ Can provide ideas for experimental work in future. ▪ Easy to see patterns / trends (scatter diagram) in data. ▪ More ethical as there is no manipulation of variables. ▪ Can investigate difficult to manipulate variables ▪ Often higher in ecological validity ▪ Any other appropriate point. Possible weaknesses: ▪ Not possible to establish cause and effect. ▪ No details on why participants reacted / felt as they did. ▪ Often lack construct validity due to use of quantitative data ▪ Influence of third/extraneous variables ▪ Any other appropriate point.		Max 6 [3+3]	Context = disfluencies, uh, erm and ah, (public) speech, anxiety etc. **NB: Only first strength and first weakness is marked.**
For each strength and each weakness…			
Clear outline of strength/weakness in context.		3	
Clear outline of strength/ weakness but not in context.	**OR** attempted outline of strength/weakness in context.	2	
Brief and/or weak attempt to outline strength/weakness (whether in context or not).		1	
The candidate has not provided any creditworthy information.		0	

This answer is divided into two (3+3) as it specifically requested one strength and one weakness.

Extended Answer Questions

> Evaluate realistic conflict theory as an explanation of prejudice.
>
> (8)

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer**
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

This question has both AO1 and AO3 marks. This response will only focus on the AO3 skills.

AO3

- Ember et al. (1992) found that in tribal societies intergroup hostility increased when social or natural conditions meant that competition for resources became necessary, during periods of famine or natural disasters, warfare was more likely.
- Sherif (1954/1961) found the boys showed hostility towards each other during the first phase of the study where finite resources had not yet been introduced, which indicates that prejudice may not always be a result of competition for resources.
- Filindra and Person-Merkowitz (2013) found that a perceived increase in presence of immigrants correlated with restrictive immigration policy but only when pessimistic of the state's economy, showing competition for resources may cause prejudice.
- Social identity theory suggests that conflict is due to the mere presence of groups which can explain situations where prejudice arises without material objects or competition, which would limit the effectiveness of using a superordinate goal to combat prejudice if no initial competition actually exists.

Look for other reasonable marking points.

As this question is asking you to evaluate a theory, many of the evaluation points credited are for evidence. In AO3 questions try and balance your evaluation points to include both sides of the argument (both strengths and weaknesses).

In your studies of clinical psychology, you will have learned about one biological theory/explanation for schizophrenia other than the function of neurotransmitters.

Evaluate **one** biological theory/explanation for schizophrenia **other than** the function of neurotransmitters.

(8)

Level	Mark	Descriptor
		AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.**
	0	No rewardable material.
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AO1 (4 marks), AO3 (4 marks)

AO3

- Gottesman (1991) found the concordance rate for schizophrenia in monozygotic twins was 47% compared to 17% in dizygotic twins suggesting genes may play a role in schizophrenia.
- No study has found 100% concordance rate for schizophrenia in monozygotic twins, so whilst genes may play a role, other factors such as environmental stress could also be involved.
- Trubetskoy et al. (2022) found that the altered function of a variety of genes that were also implicated in neurodevelopmental disorders were also associated with schizophrenia.
- The cognitive explanation of schizophrenia says that it is caused by faulty thought processing, such as not being able to recognise your inner voice as coming from yourself, so it may not be caused by genes.

AO3 evaluation can also include alternative arguments or explanations. In this case the cognitive explanation is an alternative view to the biological for schizophrenia.

Discuss the neural explanation for obsessive-compulsive disorder (OCD) **and** the use of drug therapy to treat obsessive-compulsive disorder.

[16 marks]

Marks for this question: AO1 = 6, AO3 = 10

Level	Marks	Description
4	13–16	Knowledge of the neural explanation and drug therapy are generally well detailed. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of the neural explanation and drug therapy is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of the neural explanation and drug therapy is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR neural or drug therapy only at Level 3/4.
1	1–4	Knowledge of the neural explanation and drug therapy is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. OR neural or drug therapy only at Level 2/1.
	0	No relevant content.

This question has both AO1 and AO3 marks. This response will only focus on the AO3 skills.

Possible discussion:
- evidence to support/contradict the effects of neural mechanisms in OCD, eg. Thoren et al, Zohar et al, Hu, Saxena and Rauch
- many neural factors have been identified but these are not always present in all cases
- some findings in studies of abnormal brain functioning, eg. Aylward, have not been replicated
- success of SSRIs suggests that low serotonin is a causal factor
- not all patients respond to drug treatment which casts doubt on the explanation's validity
- treatment fallacy
- delayed effects of drug treatment (4–12 weeks in some cases) suggest other underlying mechanisms
- discussion of side-effects in drug treatment
- drugs are a passive treatment giving patients little insight into their condition or responsibility for their cure
- drugs are relatively cheap and easy to administer compared with other forms of therapy
- credit further reasoned comparison with alternative theories/therapies.

Note: that genetic explanations alone should not be credited unless there is an explicit link made between genes and levels of neurotransmitter/structural deficits.

Credit other relevant content.

As this question has 10 marks allocated to the AO3, you would be expected to give at least two strengths and two weaknesses. As the question is asking you to evaluate an explanation, supporting evidence and conflicting evidence will gain you more marks.

Discuss the validity of research into exercise and mental health. **[15]**

This question includes both AO1 and AO3 marks. This response only focuses on the AO3.

	15	PLEASE REFER TO APPENDIX 2
AO3 (13 marks) Candidates should analyse, interpret and evaluate research into exercise and mental health in relation to validity. As well as referring to the key research, candidates can refer to any research investigating exercise and mental health. Any relevant research is creditworthy. Answers may refer to: • Ecological validity - methodology, setting. • Population validity – aged, gender, sports, ethnicity, sampling technique. • Validity of measures – self report, observation. • Internal validity – extraneous and confounding variables. • Impact of bias – researcher, interpretation of subjective data. • Impact of demand characteristics, social desirability. Answers can be critical but can also defend the research (e.g. for reasons of control, or because of practical considerations such as availability of participants). Points about validity need to be discussed, rather than simply identified and illustrated. Other appropriate responses should be credited.		**Annotations** Level to be annotated on the left hand side. Answers need to be focused on the <u>research.</u>

This question was asking about an AO3 key evaluation term (validity) so the answer must only make reference to the different types. It is expected that you refer to research studies in your answer that are relevant to the topic area. Your examples from this will help consolidate your answer.

PRACTICE

Access past exam papers online to practice your AO3 skills. Do not forget to meet the criteria you must show your 'knowledge and understanding of scientific ideas, processes, techniques and procedures'.

REMINDER

AO3 skills require you to demonstrate your evaluation skills. The exam questions may use words like discuss, assess or evaluate. AO3 is the ability to show your critical thinking skills and make judgements or form arguments. Questions could also ask you to compare or explain strengths and weaknesses. It is expected that you use subject specialist terminology and that you are clear on your understanding of the definitions of each term you use. Make sure they are relevant and in context.