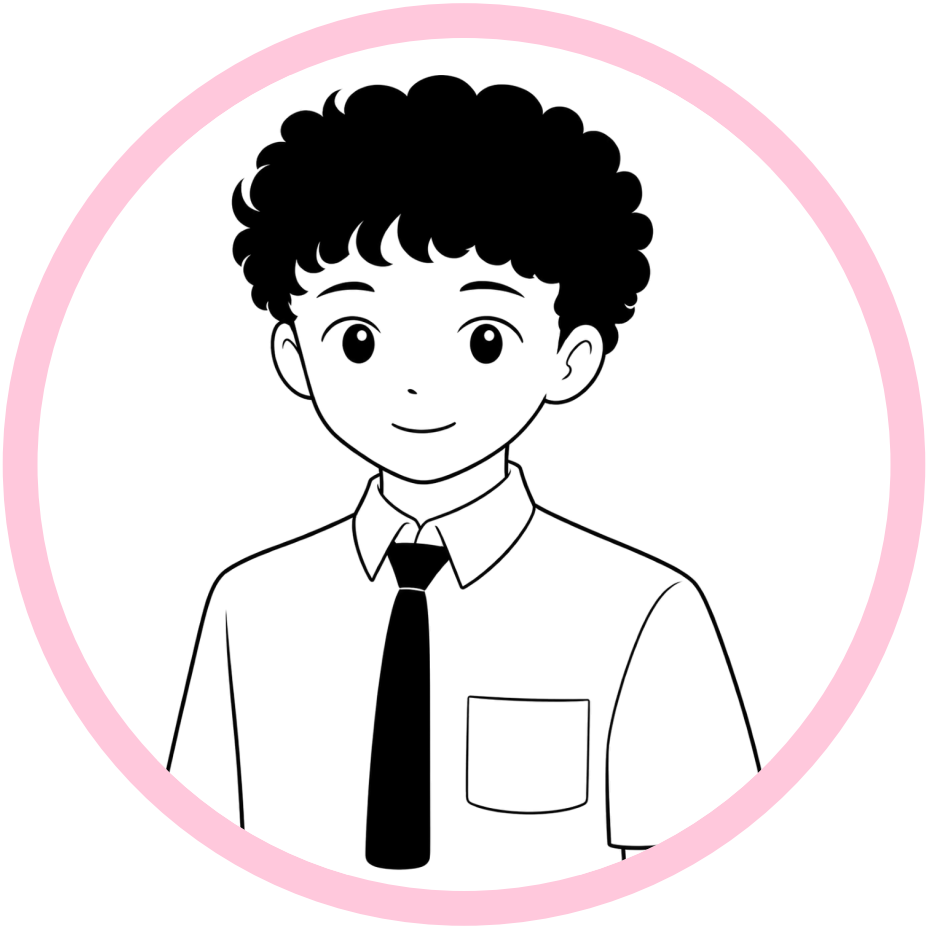
AQA A-LEVEL PSYCHOLOGY · 7182

PSYCHOLOGY



MARK SCHEME

3.3.4 SOCIAL COGNITION

SCORE	PERCENTAGE
/51	%

STEMUP

These questions belong to AQA, not to us.

The examination questions, mark schemes and examiner reports in this pack were written and published by AQA. They are past assessment materials, reproduced here so that students can revise from them.

What we do not own

STEMUP is not affiliated with AQA and does not own, and makes no claim to own, any of the question, mark scheme or examiner report material in this pack. AQA has not endorsed, approved or been involved in the production of it. AQA and the qualification titles used here belong to their respective owners and appear for identification only.

Where to find the originals

AQA publishes its past papers, mark schemes and examiner reports free of charge. Always check the current specification at aqa.org.uk before you revise, because content and wording can change between series.

If you hold the rights to any material in this pack and would like it amended or removed, contact admin@stemup.co.uk and we will act on it.

Q1.

[AO1 = 3 AO3 = 3]

Level	Mark	Description
3	5-6	Outline is clear, coherent and mostly accurate, with some detail. Strength is clearly explained. Specialist terminology is used effectively.
2	3-4	Outline is appropriate but has minor inaccuracy or lack of clarity. Strength is appropriate but lacks clarity. Specialist terminology is sometimes used appropriately OR one aspect at Level 3.
1	1-2	Outline is limited / very limited. Strength is muddled or absent. The answer lacks clarity and accuracy. Specialist terminology is either absent or inappropriately used. OR one aspect at Level 2.
	0	No relevant content.

Possible content:

- theory that suggests people with autism have problems taking the point of view of others (similar to egocentrism)
- possibly due to a failure of an innate theory of mind mechanism (ToMM)
- problem is one of mind reading sometimes called mind-blindness
- cannot understand other people's intentions / emotions
- tendency to take literal interpretations
- knowledge of theory embedded in evidence.

Possible strengths:

- use of evidence to support theory of mind explanations for autism, e.g. evidence that people with autism have difficulty with the Sally-Anne task / false belief tasks / Eyes task
- theory of mind accounts well for the communication and social deficits associated with autism
- consistent with biological findings in relation to autism
- application of the theory e.g. understanding autism and interventions.

Credit other relevant material.

[6]

Q2.

[AO3 = 2]

1 mark

C

1 mark

STEMUP.CO.UK

E

Q3.

[AO1 = 2]

1 mark – autism results from very specific form of impaired cognitive functioning or mindblindness

Plus

1 mark – lacking a theory of mind means people with autism cannot understand/appreciate the mental states of others

Q4.

[AO3 = 6]

Level	Marks	Description
3	5 – 6	Explanation of two limitations is clear and effective. The answer is coherent and well organised with effective use of specialist terminology.
2	3 – 4	Explanation of two limitations is mostly effective although one or both lack explanation. The answer is mostly clear and organised, with appropriate use of specialist terminology. **OR** One limitation is explained at top of Level 3.
1	1 – 2	At least one limitation is presented. Explanation lacks detail/is minimal/is muddled. Specialist terminology is either absent or inappropriately used. **OR** One limitation is explained at top of Level 2.
	0	No relevant content.

Possible limitations:

- Theory of mind describes a state but does not offer a causal explanation
- Evaluative comparison with other explanations
- Use of evidence against the theory of mind explanation for autism – some people with autism can take the perspective of others
- Broader scientific issues eg difficulty showing cause and effect; reductionism
- Only explains deficits – cannot explain islets of ability/special talents demonstrated by autistic savants

Credit other relevant limitations.

Q5.

[AO1 = 3]

1 mark for a correctly named level

Plus

STEMUP.CO.UK

2 marks for a clear and coherent outline of the named level

OR

1 mark for a vague or muddled outline of the named level

0 marks for an outline that does not match the named level

Possible content:

- Egocentric /undifferentiated
- Social informational role taking
- Self-reflective role taking
- Third party/mutual role taking
- Social/conventional system role taking

Q6.

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

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Discussion / evaluation / application is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge is evident. There are occasional inaccuracies. Discussion / evaluation / application is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge is present. Focus is mainly on description. Any discussion / evaluation / application is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge is limited. Discussion / valuation / application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

STEMUP.CO.UK

AO1

There is a range of material that could be relevant to this question. Selman's stages of perspective taking is directly focused on the understanding of others. Order of stages is crucial; however the age ranges of the different stages differs slightly from book to book so examiners should accept ages that are roughly in the appropriate range.

Development of theory of mind is also directly relevant to the question as it involves children's understanding of themselves as a precursor to understanding of others. Reference might also be made to the role of the mirror neuron system in social cognition.

Finally, candidates may present stages in the development of the self as it interacts with others eg imitation, gaze cueing, protoimperative pointing and pretend play. Such material may earn marks insofar as the focus of the answer is on the understanding of others.

AO3

Research evidence should provide effective material whichever approach is taken to the question, as there are many studies investigating the development of the self. This includes studies of both perspective taking and theory of mind. Implications of findings should be clear, and a consideration of inconsistent findings would be an effective source of. Methodological evaluation, such as the complicating role of language development and problems of working with small children, would be relevant insofar as it affects the validity and / or reliability of research findings. General commentary may include the rapid changes in methods of communication in the digital age, the problem of individual differences, and applications of research to eg education. Relevant discussion could include: cultural bias and differences, gender bias and differences, ethical issues, nature / nurture; applications of findings eg to education.

Q7.

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

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Discussion / evaluation / application is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge is evident. There are occasional inaccuracies. Discussion / evaluation / application is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5 – 8	Some knowledge is present. Focus is mainly on description. Any discussion / evaluation / application is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.

1	1 – 4	Knowledge is limited. Discussion / evaluation / application is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

AO1

The mirror neuron system was identified in monkeys in the 1990s. These neurons fire when an animal makes a meaningful movement and also when it observes another animal making the same movement. Humans are also assumed to have a mirror neuron system, so that neurons involved in, for instance, producing facial expressions, fire when facial expressions are observed in others. This firing is thought to activate the appropriate feelings associated with that facial expression, allowing us to experience the same feelings we identify in others. It is assumed that this could be the foundation of our abilities to understand and empathise with others ie the mirror neuron system is basic to social cognition.

Examiners should note that human research into mirror neurons often uses ‘MU suppression’ in the EEG as a measure of mirror neuron activity. Candidates are likely to refer to this.

AO3

It is likely that the fundamental research studies of De Pellegrino, Rizzolatti and others will feature in the discussion. These studies were single cell recordings carried out on monkeys, and established the existence of mirror neurons. There have been many similar studies since.

Research studies on human participants have in general used indirect techniques, such as EEG recordings (‘mu desynchronisation’), and this is an important evaluative point. Further commentary on the role of mirror neurons might include the problems in defining ‘social cognition’, problems in extrapolating from animals to humans, ethical issues and the more complex nature of human social behaviour.

Q1.

Most answers gained credit in Level 2. Occasionally, students wrote a great deal about theory of mind and barely mentioned autism. Other students presented long accounts of the Sally-Anne study but said little about theory of mind. The strength often lacked explanation, or, despite the question requiring only one strength, students presented a list leaving the examiner to try to disentangle them and award marks for the best.

Q2.

The vast majority of students were able to pick up at least one mark on this question, with many able to identify both relevant concepts.

Q6.

There were a number of different approaches to this question. Most popular was to focus on the development of theory of mind and understanding of others, using the classical smarties and Sally Ann studies of Wimmer & Perner, Baron-Cohen and others. Answers varied in the level of accurate detail, and also in the degree to which the focus of the answer was on the development of the understanding of others ie there needed to be some consideration of the ages at which theory of mind developed. However this requirement was sometimes ignored.
Better answers evaluated research on the theory of mind in terms of findings, methodology (eg the language used and whether the children genuinely understood the task), disputes over when theory of mind develops, and applications eg to the understanding of conditions such as autism.

An alternative but less popular approach used Selman's stages of perspective taking. Although detail of stages and ages was variable, this approach provided a logical structure to the answer that benefited students. Evaluation was often effective, in particular using applications to education and to therapy.

Q7.

This topic has not been examined before and there were clear centre specific effects, with some showing excellent knowledge and understanding and others clearly and completely unprepared. Better answers outlined the proposed role of mirror neurons in action understanding, their possible distribution in the brain, and how they might be involved in the development of theory of mind and in clinical conditions such as autism. Evaluation was usually through research evidence, from the early work on monkeys to later scanning studies on the human brain. General commentary often referred to the lack of direct evidence for mirror neurons in the human brain (the use of 'mu' desynchronisation as a measure of mirror neuron activity in the human EEG), and their proposed general role in social cognition, theory of mind, and empathy.

Weaker answers were muddled and confused, showing little understanding of mirror neurons and their proposed functions in the brain.

STEMUP.CO.UK