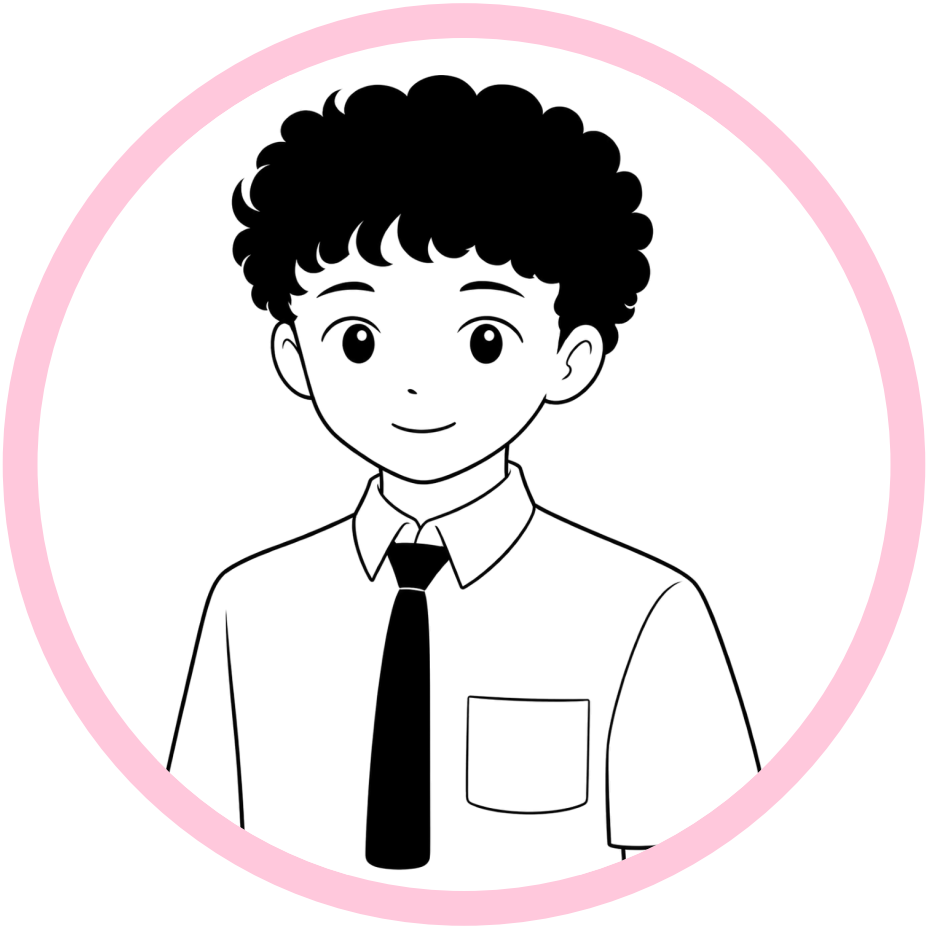
AQA A-LEVEL PSYCHOLOGY · 7182

PSYCHOLOGY



MARK SCHEME

3.3.10 RISK FACTORS IN THE DEVELOPMENT OF ADDICTION

SCORE	PERCENTAGE
/48	%

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Q1.

[AO2 = 4]

Level	Marks	Description
2	3 – 4	Knowledge of risk factors in addiction is clear and mostly accurate. The material is used appropriately to explain Dave's behaviour. The answer is generally coherent with effective use of terminology.
1	1 – 2	Some knowledge of risk factor(s) in addiction is evident. Links to Dave's behaviour are not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- genetic vulnerability (Dave's family smoke)
- stress (more responsibility at work – smoking may act to reduce stress)
- family and peers (Dave may have observed and imitated the behaviour – SLT)
- awareness of the interaction of different factors, eg genetic vulnerability and stress
- personality as a risk factor, eg may lack self-efficacy as demonstrated in his failure to quit smoking.

Q2.

[AO2 = 4]

Possible content:

- Median is 29.5 (29 + 30/2) for Group A and 24.5 (24 + 25/2) for Group B

1 mark for each accurately calculated median
2 further marks for explaining the median is the more appropriate measure because of the outlying extreme scores in each group which could have distorted the mean.

Accept answers based on unsafe level of measurement.

Q3.

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

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Evidence / theory is clear. Discussion / evaluation / application is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used

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		effectively. Minor detail and / or expansion of argument sometimes lacking.
3	9 – 12	Knowledge is evident. There are occasional inaccuracies. Evidence / theory is present. 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

Credit for knowledge of factors affecting vulnerability to addiction including genetic vulnerability, stress, personality, family influences and peers.

AO2 / 3

Credit for an application of knowledge to the scenario. The scenario contains references to a number of vulnerability factors relevant to Jenny, including age, stress and peer influence. There are also references to smoking in girls and the prevalent belief that smoking prevents weight gain.

One route to credit is to use research evidence that demonstrates how these factors affect vulnerability to smoking addiction. There are many research studies demonstrating the importance of these factors, including Bricker 2006 on peer influence, Amos and Bostock 2007 on age and gender and Childs 2007 on stress. Students may also refer to studies such as Ogden and Fox (1994) which demonstrates the use of smoking as weight control / diet strategy in teenage girls.

Although the question refers to factors, there are no partial performance criteria in this question. However, answers that cover one factor only are unlikely to gain high marks.

Q4.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding

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- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

AO1 = 4

AO1 credit is awarded for an outline of the biological approach to explaining smoking behaviour. It is possible for candidates to refer to all three stages of smoking addiction, but maintenance and relapse are more likely than initiation. The biological model may be presented generically or candidates may focus in more detail on a single biological explanation eg genetic or neurochemical. Examiners need to be aware of a breadth/ depth trade-off.

Possible content includes:

- The processes of physical dependency and tolerance
- Genetic factors
- Neurochemistry and the dopamine reward system
- The endogenous opoid system (encephalin and endorphins)
- Nicotine regulation model (Shachter 1977).

AO1 Mark bands
4 marks Sound Knowledge and understanding are accurate and well detailed. Organisation and structure of the answer are coherent.
3 marks Reasonable Knowledge and understanding are generally accurate and reasonably detailed. Organisation and structure of the answer are reasonably coherent.
2 marks Basic Knowledge and understanding are basic/relatively superficial. Organisation and structure of the answer are basic.
1 mark Rudimentary Knowledge and understanding are rudimentary and may be very brief, muddled and/orinaccurate. Lacks organisation and structure.
0 marks No creditworthy material.

AO2 / AO3 = 4

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For AO2 / AO3 credit, candidates are required to evaluate the biological explanation of smoking. This is likely to consist of research evidence to support or contradict the claims of the model.

Possible content includes:

- Twin studies demonstrating genetic influences (Kendler 1999)
- Identification of specific genes (eg: SLC6A3-9) which regulate dopamine (Lerman 1999) and influence relapse (Sabol 1999)
- Animal research (eg Corigall and Coen 1991, Harrison 2002) which supports the dopamine reward model

Candidates may also discuss the relative weakness of the biological model in explaining initiation compared with behavioural and/or cognitive approaches. The diathesis stress model may also be used for evaluation.

AO2/AO3 Mark bands
4 marks Effective Commentary and/or evaluation demonstrate sound analysis, understanding and interpretation. The answer is well focused and shows coherent elaboration and/or a clear line of argument.
3 marks Reasonable Commentary and/or evaluation demonstrate reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.
2 marks Basic Commentary and/or evaluation demonstrate basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration.
1 mark Rudimentary Commentary and/or evaluation are rudimentary, demonstrating a very limited understanding. The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.
0 marks No creditworthy material.

Q5.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

AO2 / AO3 = 6

AO2 / AO3 credit is obtained by applying knowledge of risk factors in the development of Andy's addiction to the internet.

The scenario contains references to the following risk factors associated with addiction in the context of internet games:

- Stress
- Personality factors such as lack of confidence and shyness
- Role of peers
- Age.

Candidates should identify some of the relevant risk factors from the scenario and elaborate on how / why these factors might have led to the addictive behaviour depicted. They may demonstrate the importance of factors using relevant research studies on vulnerability to other addictions. There is a breadth / depth trade-off here. Candidates who correctly identify all four factors will provide less detail than those who explore one or two factors in depth.
Both of these approaches can receive full credit. However, candidates who simply identify or name risk factors should be awarded a rudimentary mark.

AO2/AO3 Mark bands
6 marks Effective Explanation / application demonstrates sound analysis and understanding. Application of knowledge is well focused and effective. Ideas are well structured and expressed clearly and fluently.
5 – 4 marks Reasonable Explanation / application demonstrates reasonable analysis and understanding. Application of knowledge is generally focused. Most ideas are appropriately structured and expressed clearly.
3 – 2 marks Basic Explanation / application demonstrates basic analysis and superficial understanding. Application is sometimes focused. Expression of ideas lacks clarity.
1 mark Rudimentary Explanation/application is rudimentary demonstrating very limited understanding. The answer is weak, muddled and may be mainly largely irrelevant. Deficiency in expression of ideas results in confusion and ambiguity.
0 marks No creditworthy material is presented.

Q6.

[AO2 = 4]

Up to 4 marks for application of knowledge of social psychological factors to the example and for discussion. Award credit for the following explanations: conformity – young person will feel pressure to go along with the behaviour of others; difference between perceived and actual norms; reasons for pressure to conform in this situation eg normative influence – wants to be like other young people; type of conformity eg compliance (may not want to go along with them initially); cultural norms; SLT concepts eg modelling (of older peers) and identification with attractive / high status peers; positive reinforcement eg praise from other young people in the group; Reed & Rowntree's theory of social selection (1997) – young people may seek out a specific sub-culture for whom stimulant abuse is the norm.

Credit any relevant application of psychological concepts to the stem. Credit may be achieved for several points in brief or for a limited number of points in some detail. Credit also application of relevant evidence eg Garnier and Stein (2002) peer attitudes as predictors of behaviour.

Q7.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

AO2 = 6

The scenario contains references to a number of factors associated with smoking addiction ie low self-esteem, dieting in females, role models who smoke. Candidates could elaborate on how these factors would influence vulnerability to addiction; they could also suggest other appropriate factors eg external locus of control. Explanations of any appropriate factors are credit-worthy.

AO2 mark bands 6 marks
6 marks Effective Explanation demonstrates sound analysis and understanding. The answer is well focused and shows coherent elaboration. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.
5 – 4 marks Reasonable Explanation demonstrates reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration.

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Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.
3 – 2 marks Basic Explanation demonstrates basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.
1 mark Rudimentary Explanation is rudimentary demonstrating very limited understanding. The answer is weak, muddled and may be mainly irrelevant. Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.
0 marks No creditworthy material is presented.

Q3.

Students were required to apply their knowledge of vulnerability to addiction to a stem question and to discuss relevant research. Many schools / colleges seemed to have prepared students well for this type of question. Stronger students focused their responses on the factors clearly covered in the stem and wrote informed answers about the importance of peers in imitating smoking, along with relevant research on age and stress. It was pleasing to see students making use of Social Identity Theory in their responses. Weaker answers often reiterated the claim that 'research shows', but provided no clear detail of evidence.

Some students seemed to start from a pre-determined list of vulnerability factors (some of which were not alluded to in the stem and are no longer on the specification, such as self-esteem and personality) and described research with little relevance or reference to the stem material provided. Others made repeated reference to the importance of media and films in smoking in young people. These questions tested application of knowledge and those presenting such answers received a very basic mark indeed.

Q4.

This question produced some impressive answers with detailed and accurate AO1 and AO2 / 3. Students who did best structured their description of the biological model around the stages of smoking addiction (initiation, maintenance and relapse) presenting explanation followed by research evidence. Many answers achieved the full four marks for AO1 providing impressive detail about the possible genetic bases of smoking, the role of particular genes and the links to biochemistry.

Weaker students often focussed on reward pathways; description of these was often rather vague and terms such as 'down regulation' were used imprecisely. Weaker students also became sidetracked into generic evaluation (eg commentary on lack of concordance in twin studies and comments on issues and debates such as free will and determinism) receiving basic marks. Some students provided research studies which were weakly linked to smoking, for example cocaine addiction in rats. Such material could have gained credit if it had been used effectively and linked clearly and explicitly to smoking addiction.

Q5.

This was a challenging question for students. Credit was achieved by applying knowledge of risk factors in the development of addiction to the scenario provided (Andy). The scenario made reference to the four named factors on the specification: stress, peers, age and personality. Students could achieve credit by covering all of these in less detail or a couple of factors in greater detail. The most successful were those who identified a risk factor (eg stress) then went on to explain how and why this could influence vulnerability to internet addiction using relevant research findings.

Some students attempted to use material on self-esteem linking this rather tenuously to the personality trait of shyness / introversion with varying degrees of success. Other students persisted in going beyond the information provided in the stem to make speculative claims about genetics and family relationships which received minimal credit. Given that students are only requested to study the named risk factors, schools and colleges should concentrate on preparing students for these kinds of question.

Q6.

There were some low-scoring, largely anecdotal answers to this question. Evidently this is an area where students could usefully be encouraged to demonstrate their knowledge of psychology by making explicit reference to social psychological concepts such as conformity, normative influence etc in their responses.

Q7.

Generally, this was answered quite well and candidates were able to explain why Sally has become addicted. Strong answers included factors such as self esteem, genetics, modelling and weight regulation and candidates were able to support the explanations by reference to research or underpinning theory. It was also impressive to see other social reasons (apart from modelling) such as social identity theory. However, some well-informed answers about addiction could not access high marks because they had not applied their knowledge to Sally or to any of the particular features of her situation contained in the stem.