



Definitions and Concepts for AQA Psychology A-level

Option 3: Addiction

Acetylcholine: A neurotransmitter that binds to nicotinic acetylcholine receptors. Nicotine mimics its effects.

Addiction: A condition characterised by a strong desire to engage in a behaviour or use a substance, often despite harmful consequences and difficulty stopping.

Antisocial personality characteristics: Characteristics such as impulsivity and antisocial behaviour that may be associated with increased vulnerability to addiction.

Aversion therapy: A behavioural treatment that associates an unwanted behaviour with an unpleasant stimulus or consequence to reduce the behaviour.

Behavioural interventions: Treatments that aim to change addictive behaviour by modifying learned associations and behavioural consequences.

Cognitive biases: Systematic errors in thinking that distort judgement, such as overestimating the likelihood of winning when gambling.

Cognitive restructuring: A CBT technique in which irrational thoughts and beliefs are identified, challenged and replaced with more realistic alternatives.

Conditioned stimulus: A previously neutral stimulus that, through association with another stimulus, comes to trigger a learned response. Cues associated with smoking can trigger cravings.

Continuity principle: The idea that an association is more likely to form when a behaviour and its consequence occur close together in time.

Counter-conditioning: Learning a new response that competes with or replaces a previously learned response associated with an addictive behaviour.

Covert sensitisation: A behavioural treatment in which a person imagines the addictive behaviour alongside an unpleasant consequence to reduce its appeal.

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Cognitive Behavioural Therapy (CBT): A treatment that aims to change unhelpful thoughts and behaviours, in this case those associated with addiction.

Cue reactivity: A learning theory explanation proposing that environmental cues previously associated with nicotine consumption (e.g., lighters, social settings) act as conditioned stimuli that elicit conditioned responses, such as physiological arousal and cravings.

CYP2A6 gene: A gene that codes for an enzyme involved in nicotine metabolism. Genetic variations can affect how quickly nicotine is broken down and may influence vulnerability to nicotine addiction.

Desensitisation hypothesis: Dani and Heinemann's (2001) explanation that repeated nicotine exposure desensitises nicotinic acetylcholine receptors, changing their response to acetylcholine and contributing to nicotine addiction.

Diathesis: An underlying vulnerability that increases the likelihood of developing a disorder or addiction, particularly when combined with environmental stressors.

Dopamine: A neurotransmitter involved in reward and motivation. Dopamine activity in the brain's reward pathways contributes to the reinforcing effects of nicotine.

Dopamine antagonist: A substance that blocks dopamine receptors and reduces the effects of dopamine.

Expectancy theory: The idea that behaviour is influenced by expected outcomes. In gambling, expectations of rewards can encourage continued gambling.

Extinction: The weakening of a learned response when the reinforcement or association maintaining it is no longer present.

Functional analysis: A CBT process used to identify the situations, thoughts, emotions and consequences that trigger and maintain addictive behaviour.

Gambler's fallacy: The mistaken belief that a particular outcome becomes more likely after a run of opposite outcomes, such as believing a win is due after several losses.

Genetic predisposition: An inherited tendency that increases a person's vulnerability to developing an addiction.

Impulsivity: A tendency to act quickly without fully considering the consequences, which may increase vulnerability to addictive behaviours.

Mesolimbic system: A brain reward pathway involving dopamine transmission that contributes to the rewarding effects of addictive substances.

Nucleus accumbens: A brain region involved in reward processing. Dopamine activity in this region contributes to the reinforcing effects of nicotine.





Partial reinforcement: A reinforcement schedule where a behaviour is rewarded only some of the time rather than every time, making the behaviour highly resistant to extinction (the partial reinforcement effect).

Peer pressure: Influence from people of a similar age or social group that encourages someone to adopt particular behaviours, including smoking or gambling.

Physical dependence: A state in which the body has adapted to a substance, so reducing or stopping it can produce physical withdrawal symptoms.

Protective factors: Factors that reduce vulnerability to addiction, such as supportive relationships, positive peer influences and effective coping strategies.

Prochaska's six-stage model of behaviour change: A model describing behaviour change through precontemplation, contemplation, preparation, action, maintenance and termination. Change may be cyclical, and relapse can occur.

Psychological dependence: A perceived need for a substance or behaviour to experience pleasure, cope with emotions or feel normal.

Receptor desensitisation: A reduction in a receptor's responsiveness following repeated stimulation. In nicotine addiction, repeated nicotine exposure desensitises nicotinic acetylcholine receptors.

Relapse: A return to an addictive behaviour after attempting to stop or reduce it.

Self-efficacy: A person's belief in their ability to carry out a behaviour or achieve a goal, such as successfully quitting smoking.

Stress: A psychological or physical response to challenging circumstances that may increase vulnerability to addictive behaviour or make quitting more difficult.

Tolerance: A reduced response to a substance following repeated use, meaning that a larger amount may be needed to achieve the same effect.

Upregulation: An increase in the availability or sensitivity of receptors following reduced stimulation. Changes in nicotinic acetylcholine receptors contribute to withdrawal after nicotine use stops.

Variable reinforcement: A reinforcement schedule in which rewards occur unpredictably. Unpredictable rewards can maintain behaviours such as gambling.

Ventral striatum: A brain region involved in reward and motivation that includes the nucleus accumbens and contributes to reinforcement.

Withdrawal syndrome: A collection of physical and psychological symptoms that occur when an addictive substance is reduced or stopped after dependence has developed.

