

## Past Exam Questions with Mark Scheme Suggestions:

### **Evaluate one or more psychological explanations for obesity. [8 marks]**

Possible AO3: • use of evidence to support/contradict psychological explanations, e.g. restrained eaters actually eat more – paradoxical effect (Wardle and Beales, 1988); disinhibited eating linked to attachment anxiety (Wilkinson, 2010); the ‘what the hell effect’ (Herman and Mack, 1975) • comparison with alternative explanations, e.g. genetic and neural • psychological explanations describe the thinking patterns associated with obesity but most do not explain the original cause • implications for dieting success and failure – perhaps obese people can learn to think about food intake differently • implications for the economy, e.g. cost of obesity to the NHS and other services • stigma and blame – whether or not obese people should take responsibility for their excess weight • broader debates, e.g. nature-nurture, determinism.

### **Outline the role of learning in food preference and outline one limitation of this explanation. [6 marks]**

Possible AO1: • food preferences are acquired through experience and association • role of classical/operant conditioning/reinforcement and social learning/modelling • cultural norms influence attitudes to certain foods leading to cultural differences in likes/dislikes (exposure hypothesis).

Possible AO3: • learning does not explain innate food preferences, e.g. preference for sweetness • evolutionary explanation better able to explain some food preferences, e.g. preference for fat due to biological drive for survival • classical conditioning better able to explain food aversions than preferences • not possible to explain complex behaviour using just one explanation – probably multiple influences.

### **Evaluate one psychological explanation for anorexia nervosa. [6 marks]**

Possible AO3: • use of evidence to support/contradict psychological explanation, e.g. Cooper et al (2007) negative cognitions in anorexia nervosa (AN) participants; Brockmeyer et al (2013) desire for autonomy in AN patients • social explanations, e.g. family systems can lead to blaming the family • cognitive explanations can lead to blaming the individual/making them feel responsible • usefulness when there is often limited scope for change, e.g. if the family or media is part of the problem it is difficult to change • problem of cause and effect – does the family or faulty cognitive processing cause AN or is it the other way round? • contrast with biological explanations.

Arya and Neela each have a six-year-old child. Arya says, "I cannot understand why he will only eat sweet things like peas and biscuits. He just spits out any new food that I give him." Neela says, "We don't have that problem. We always eat together, and he seems to like everything that we eat, especially roast dinners."

**Describe and evaluate two explanations for food preferences. Refer to Arya and Neela in your answer. [16 marks]**

Possible AO1: • evolutionary explanation – preference and avoidance aid survival and beneficial traits/behaviours are therefore bred into a population and become prevalent – specific genes code for specialised taste receptors (e.g. T1r2, T1r3 genes code for sweetness) • learning theory explanation – we learn to prefer certain foods through observation, imitation and modelling (social and cultural learning) or through direct reinforcement (operant conditioning) or through temporal association (classical conditioning) • classical conditioning can also explain avoidance of foods after a bad experience, e.g. vomiting can become a conditioned response (the Garcia effect) • specific examples of how preferences/aversions evolve or are learned, e.g. for sugar, salt, fat, bitterness etc.

Possible AO2: • Arya's reference to preference for sweet foods – foods that are sweet such as peas and biscuits may have evolutionary value – sugar provides body with fast-acting energy needed for survival • Arya's reference to neophobia – avoidance of new tastes – may have evolutionary value as any new food could be harmful/poisonous • Neela's reference to eating as a family refers to social/cultural learning through modelling – her child will observe and imitate behaviours/preferences of the parents and adopt the family norms • Neela's reference to roast dinners – foods high in fat have a survival value as they are high in calories.

Possible AO3: • use of evidence to support/contradict explanations • gut microbe theory – preferences evolve to the benefit of gut microbes and not to the benefit of the host human • individual differences in taste experience, e.g. some people are genetically more/less sensitive to bitterness which does not support the evolutionary explanation • links with fight or flight – anxiety leads to greater preference for fuel foods to provide more energy • larger number of receptors to distinguish bitter than sweet – perhaps because bitter food can be dangerous so need for fine discrimination • classical conditioning explains aversions better than preferences • power of innate influences versus culture and learning – chilli exposure • discussion of competing influences of parents, peers and media/advertising – implications including economic implications.

**Briefly outline and evaluate one study of taste aversion. [4 marks]**

Possible AO1: • Garcia (1977) – wolves and coyotes developed aversion (CR) to mutton/live sheep meat (CS) after induced sickness (UCR) pairing mutton with lithium chloride (UCS) • Bernstein and Webster (1980) – adult humans developed aversion (CR) to ice-cream (CS) after pairing ice-cream (UCS) with nausea-inducing chemotherapy sessions (UCR) • Garcia and Koelling (1966) – rats developed taste aversion (CR) to sweet water (CS) after pairing it with poison (UCS) – same effect did not occur when using electric shocks as the UCS.

Possible AO3: • analysis of implications – findings suggest a preparedness to develop aversions to keep us safe, consistent with evolutionary theory about innate mechanisms for survival • role of classical

conditioning is complex – pairings must be related to ingestion of a substance, e.g. electric shock do not give same effect • role of bitterness unclear – some bitter foods have protective effect on health • methodological issues, e.g. extrapolation across species.

**Charlene wants to be skinny like a super-model. She is dieting, eating very few calories. She has tried dieting before but always puts the weight back on afterwards. She thinks about food all the time and rewards herself occasionally by eating a giant pizza with chips.**

**Explain why Charlene's dieting might not be successful. [4 marks]**

Possible AO2: • Charlene's restrained eating may have a paradoxical effect – she is restricting food intake 'too few calories' but may end up eating more • Charlene is on a very restrictive diet – low-calorie diets have unpleasant side-effects which might lead to abandonment of the diet • Charlene shows intense pre-occupation with food, thinking about food all the time can lead to increased eating as forbidden foods become more salient • Charlene alternates between restriction and disinhibited eating which can lead to weight gain • Charlene has tried before but put the weight back on – 'yo-yo' dieting is a repetitive cycle of loss and gain • Charlene's past unsuccessful dieting attempts and her unrealistic target of being a skinny supermodel are indicators of likely failure.

**Outline one or more biological explanation(s) for anorexia nervosa. Compare biological explanation(s) for anorexia nervosa with the family systems explanation for anorexia nervosa. [16 marks]**

Possible AO1: • genetic transmission – anorexia is heritable through transmission of DNA/genes; familial link; twin studies/family studies/concordance rates/genome studies; polygenic; candidate genes, e.g. OPRD1, HTR1D, EPHX2 • reduced serotonin activity as demonstrated in lower levels of 5-HIAA in urine • role of dopamine is controversial – levels can be lower/higher/same as controls: increased dopamine in AN as demonstrated by higher levels of homovanillic acid; recovering AN patients have increased D2 activity • other transmitters – noradrenaline and GABA • low levels of leptin which controls satiety • other biological correlates – AN associated with birth complications and premature birth, poor maternal nutrition, season of birth, dysfunctional neural circuitry in the insula region.

Possible AO3: • role of the family – biological explanations implicate family passively through heritability whereas the family systems explanation sees family as actively responsible through their behaviour, e.g. high levels of control, enmeshment, over-protectiveness, rigidity, conflict avoidance etc. • family systems theory might better explain gender differences in incidence of AN – more prevalent in females – girls may be allowed less autonomy • family systems theory might better explain increase in incidence of AN over time – increased pressures of modern family life might mean families are more critical/less supportive/more dysfunctional • societal attitudes will differ – if the family are seen as the 'cause' then such families might be stigmatised • implications for treatment – biological explanation is consistent with a biological approach to treatment, e.g. medication, whereas the family systems explanation would indicate that family therapy is important • both explanations are deterministic – but different types of determinism • neither explanation can establish causality: in both cases the presumed cause might actually be a consequence, e.g. family might become dysfunctional as a result; altered neurotransmitter

levels might be an effect • comparison of evidence for each explanation, e.g. in terms of reliability/validity.

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