Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/32**

Paper 3 Specialist Options: Theory **February/March 2020**

1 hour 30 minutes

You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

- Answer **four** questions in total:
  - Answer questions from **two** options.
  - For each chosen option, answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **4** pages. Blank pages are indicated.

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Psychology and abnormality

Answer **all** questions.

1 **(a)** Outline **one** cause of impulse control disorders or non-substance addictive disorder. [2]

(b) Describe the study by Grant et al. (2008) on the biochemical treatment of addiction to gambling. [4]

(c) Explain **two** weaknesses of the study by Grant et al. [6]

2 **(a)** Describe the characteristics, types and measures of anxiety disorders. [8]

(b) Evaluate the characteristics, types and measures of anxiety disorders, including a discussion of case studies. [10]

Psychology and consumer behaviour

Answer **all** questions.

3 **(a)** Explain what is meant by the 'disrupt-then-reframe' sales technique investigated by Kardes et al. (2007). [2]

(b) Describe how consumers would make purchase decisions according to the 'theory of planned behaviour' (Ajzen, 1991). [4]

(c) Explain **two** practical applications of the theory of planned behaviour that would help a company to sell products. [6]

4 **(a)** Describe what psychologists have discovered about environmental influences on consumers (cognitive maps of retail locations, crowding in retail environments, shopper movement patterns). [8]

(b) Evaluate what psychologists have discovered about environmental influences on consumers (cognitive maps of retail locations, crowding in retail environments, shopper movement patterns), including a discussion about reliability. [10]

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Psychology and health

Answer **all** questions.

5 **(a)** Outline how Fox et al. (1987) used a token economy in worksites to promote health. [2]

(b) Describe the procedure of the 'whole-school' Food Dude programme from the study by Tapper et al. (2003). [4]

(c) Explain **one** strength and **one** weakness of the study by Tapper et al. [6]

6 **(a)** Describe what psychologists have discovered about misusing health services. [8]

(b) Evaluate what psychologists have discovered about misusing health services, including a discussion about practical applications. [10]

Psychology and organisations

Answer **all** questions.

7 **(a)** Explain what is meant by 'job satisfaction'. [2]

(b) Describe the quality of working life (QWL) questionnaire (Walton, 1974). [4]

(c) Discuss the use of self-reports to measure job satisfaction. [6]

8 **(a)** Describe what psychologists have discovered about traditional and modern theories of leadership. [8]

(b) Evaluate what psychologists have discovered about traditional and modern theories of leadership, including a discussion of nature versus nurture. [10]

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Surname	StemUp Model Solution
Answer booklet	Write the question number in the left-hand margin at the start of each answer.

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Psychology and abnormality

1(a) One cause is positive reinforcement (operant conditioning). Engaging in the behaviour gives a reward, e.g. a gambler wins money or a kleptomaniac gets a thrill from stealing, so the behaviour is more likely to be repeated. Gambling works on a variable ratio schedule of reinforcement, so the gambler keeps playing because they "might" win next time, which makes the behaviour very hard to stop.

1(b) Grant et al. (2008) analysed data from two double-blind, placebo-controlled trials of opiate antagonists for pathological gambling: a 16 week trial of nalmefene and an 18 week trial of naltrexone. In total 284 patients were randomly assigned to receive either the drug or a placebo.
Symptoms were assessed using the Yale-Brown Obsessive Compulsive Scale modified for pathological gambling (PG-YBOCS), which measures gambling urges, thoughts and behaviour. Gambling severity decreased more in the patients taking nalmefene or naltrexone than in the placebo group. Individual differences were found: a family history of addiction, such as alcoholism, and receiving the higher doses of the opiate antagonists predicted a greater reduction in PG-YBOCS scores.

1(c) One weakness is low generalisability. The sample was 284 patients diagnosed with pathological gambling who volunteered for drug trials in the USA. People who volunteer for treatment may be more motivated to stop gambling than other gamblers, so the drugs may appear more effective than they would be in the wider population. The findings also may not apply to other impulse control disorders, such as kleptomania or pyromania, or to gamblers in other cultures.

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A second weakness is that the treatment is reductionist. Grant et al. treated gambling only at the biochemical level, by blocking opioid receptors so that gambling is less rewarding. This ignores the underlying reasons for the disorder, such as positive reinforcement from wins, negative thoughts about the self or stressful life events. If these causes are not dealt with, the patient may relapse when the medication is stopped, so a psychological therapy such as CBT may be needed as well. Medication can also take several weeks to take effect and may have side effects, such as nausea, which could make patients drop out of treatment.

2(a) Generalised anxiety disorder (GAD) is frequent and persistent worry and anxiety about a perceived threat in the environment. The threat is usually not very threatening, and the person may realise that their fear is out of proportion. Symptoms must last for several weeks and include apprehension, motor tension, e.g. restlessness, and autonomic over-activity, e.g. sweating and a racing heart.

A phobia is an extreme, irrational and persistent fear of an object or situation that leads to avoidance. Agoraphobia is fear of places or situations from which escape might be difficult, such as crowds or public transport, so the person may avoid leaving home. Specific phobias include blood phobia (haemophobia), an irrational fear of blood that can extend to needles; unusually, it causes a rise and then a sharp drop in heart rate and blood pressure, which can lead to fainting. Animal phobia (zoophobia) is a fear of a particular animal, often snakes, rats or spiders, where even hearing about the animal can trigger a fear response. Button phobia (koumpounophobia) is a rare fear of buttons, so sufferers avoid clothes with buttons.

Case studies include Little Albert (Watson and Rayner, 1920), a baby conditioned to fear a white rat by pairing it with a loud noise made by striking a metal bar; the fear generalised to other white, furry objects. Saavedra and Silverman (2002)

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	described a 9-year-old boy with button phobia based on disgust, and Freud described Little Hans and his phobia of horses. Measures: the Blood-Injection Phobia Inventory (BIPI) is a questionnaire of 18 situations related to blood and injections, with 27 possible responses (cognitive, physiological and behavioural), each rated from 0 (never) to 3 (always). The GAD-7 is a seven item questionnaire, e.g. "feeling nervous, anxious or on edge", where each item is rated from 0 (not at all) to 3 (nearly every day) over the last two weeks, giving a score out of 21; the higher the score, the more severe the anxiety.
2(b)	Case studies: Little Albert, Little Hans and the boy in Saavedra and Silverman are all single, male children, so the findings cannot be generalised to females or adults. They also each focus on a specific phobia of an object, whereas many phobias are of situations, such as flying or agoraphobia. However, it would be impossible for one study to cover every phobia, and case studies are very detailed, showing how a phobia develops or is overcome over time. Little Albert was also unethical, as he was caused distress and was not deconditioned, and Little Hans relied on Freud's subjective interpretation of reports from the boy's father, which lowers validity. Measures: the GAD-7 and BIPI produce quantitative data, so scores can be compared between patients and before and after treatment to see if therapy has worked. They are quick and standardised, which makes them reliable, and the GAD-7 has been shown to have good reliability and validity. However, they are self-reports, so they are open to social desirability, and patients may exaggerate or minimise symptoms. Fixed rating scales also give little detail on why the person is anxious. Characteristics and types: classification using DSM or ICD criteria, such as symptoms lasting several weeks, gives practical applications, as accurate diagnosis

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leads to appropriate treatment such as systematic desensitisation. However, there may be cultural bias, as what counts as excessive worry differs between cultures, and the measures were developed in Western countries. Describing anxiety as a set of symptoms can also be reductionist, as it ignores the person's wider life and the possible causes, such as learning or biology.

Overall, the characteristics and measures are useful and fairly reliable, but the case studies that support them are limited in generalisability, so they are best used alongside larger studies.

Psychology and consumer behaviour

3(a) The potential customer is first disrupted by a slightly confusing piece of information, e.g. "the price is now 100 eurocents", which interrupts their critical thinking. The seller then immediately reframes it with a positive message, e.g. "that's a euro, what a bargain", so the customer is more likely to accept it and buy.

3(b) According to Ajzen (1991), a consumer's purchasing decision is a function of their intention to perform the behaviour, e.g. to buy a particular brand. The intention is based on three factors: attitude towards the purchase, subjective norm (what important others think about it) and perceived behavioural control (how easy or difficult it is to buy, e.g. whether they can afford it). These factors are determined, respectively, by behavioural beliefs, normative beliefs and control beliefs. The stronger the intention, the more likely the purchase. The theory can therefore predict intentions and behaviour towards a single brand or product, and choice between different brands.

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3(c)	First, the company can use subjective norms. Since consumers are influenced by what others think, a company could advertise its product as the most popular brand on the market, or show friends and family approving of it. This makes consumers believe that people important to them would want them to buy it, which strengthens their intention to buy and so increases sales. Second, the company can increase perceived behavioural control. If customers feel they cannot buy the product, e.g. because it is too expensive or hard to find, they will not form a strong intention. The company could offer payment plans or financing and make these known through advertising, or produce the product with cheaper materials to lower the price. It could also make sure the product is available in the shops its customers visit and online. This removes barriers, so customers feel in control of the purchase and are more likely to buy.
4(a)	Cognitive maps: a cognitive map is a mental representation in which a person codes, stores and recalls the relative locations of places in order to find their way, e.g. where shops are, or where products are within a store. Mackay and Olshavsky (1975) studied 78 opportunity-sampled shoppers from 8 supermarkets in Indiana, USA. Shoppers gave self-reports of their preferences for the supermarkets and their reasons, e.g. price and quality, drew a map from their departure point to each supermarket and answered a questionnaire on, e.g., how long they had lived in the area. Preferences were related to the cognitive maps rather than the actual maps. Crowding: Machleit et al. (2000) carried out three studies. In study 1, 722 marketing students completed a questionnaire after their next shopping trip, rating perceived crowding (8 point scale), satisfaction (7 point scale), emotions (Izard's 10 emotions on 1 to 5) and prior expectations of crowding. The more crowded the store, the less positive the shopping experience. Study 2 replicated this with adults. Study 3 was a lab study where 231 participants read about a discount or upmarket bookstore and watched 55 second videos with different levels of

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crowding. Satisfaction fell as crowding increased in both stores, and this was mediated by expectations and personal tolerance of crowding.

Movement patterns: Gil et al. (2009) interviewed 480 shoppers, then followed them around the store on CCTV using a coloured tag, and interviewed them again on leaving. They measured trip duration, walking speed and which areas were visited. They identified four movement patterns (short trip, round trip, central trip and wave trip) and five shopper types (native, tourist, raider, explorer and specialist). Males were more likely to be raiders and females shopping alone were most often explorers.

4(b) Reliability: Mackay and Olshavsky and study 3 of Machleit et al. used controlled, standardised procedures. All participants in Mackay drew a map from their departure point to each supermarket and answered the same questions, and the maps were analysed by computer, which is highly reliable. In Machleit study 3 everyone saw the same films and read the same passages, so the studies could be replicated to check consistency. Machleit also replicated study 1 with an adult sample and got the same results, which shows reliability. Gil et al. is less reliable, as each shopper visited a different store and each trip was unique, so it is hard to repeat. However, the procedure and the quantitative measures, such as walking speed, were the same for every participant.

Validity: the controlled conditions reduce ecological validity, as watching a 55 second video of a crowded shop is not the same as being in one, and artificial tasks may cause demand characteristics. Gil et al. observed real shoppers in a real store, so it has higher ecological validity. Self-reports in all three studies are open to social desirability and poor memory, e.g. recalling a recent shopping trip, although Gil combined them with objective CCTV observation, which improves validity.

Generalisability: Mackay used only 78 shoppers in one part of the USA, and

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	Machleit mainly used students, so the findings may not apply to other groups or cultures.
	Ethics: Gil et al. filmed shoppers, but they agreed to wear the tag, so consent was given.
	Usefulness: the research has practical applications, e.g. retailers can manage crowding at busy times and place products where different shopper types will see them. Overall, the findings are fairly reliable and useful, but the controlled studies lack ecological validity.
	Psychology and health
5(a)	Fox et al. (1987) introduced a token economy in two open-pit mines in the USA. Workers were given trading stamps as tokens for every month without a lost-time injury, and bonus stamps for safety suggestions. The stamps could be exchanged for items at redemption stores, which reinforced safe behaviour and reduced injuries.
5(b)	In the whole-school programme, children aged 4 to 11 in a primary school watched episodes of the Food Dudes, heroic characters who eat fruit and vegetables to battle the Junk Punks, during lessons, and received letters from the Food Dudes. Fruit and vegetables were put out in front of the children at lunch and snack time. A child received a Food Dudes sticker for tasting a food, and a sticker and a small prize, such as a pencil, for eating a whole portion. This intervention phase was followed by a maintenance phase with no videos, in which letters and rewards became more intermittent. Consumption was measured at school, parents gave self-reports of what was eaten at home, and qualitative data was collected from parents and teachers.

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5(c)	One strength is that both quantitative and qualitative data were collected. Quantitative data, such as how many portions of fruit and vegetables were eaten at school and at home, allowed comparisons before and after the intervention and with a control school. Qualitative data from teachers and parents, e.g. about the children's enjoyment of the programme, gave detail on how and why the children responded. Collecting data from several sources also allows the findings to be checked against each other, which increases validity. One weakness is the risk of social desirability and demand characteristics. Parents reported how much fruit and vegetables their children ate at home, and they may have said consumption increased because they knew this was what the researchers hoped for, or simply because they were not sure what their child actually ate. Teachers who had put effort into the programme may also have been positive about it. This means the reported improvement, especially at home, may be exaggerated, lowering the validity of the conclusion that the programme works.
6(a)	Delay in seeking treatment: Safer et al. (1979) interviewed patients waiting at a clinic and found three stages of delay. Appraisal delay is the time taken to recognise a symptom as a sign of illness. Illness delay is the time from deciding one is ill to deciding to seek medical help. Utilisation delay is the time from deciding to seek help to actually going. Different factors predicted each stage: appraisal delay was longer when patients had painful symptoms or read about them, illness delay was longer when the symptoms were old rather than new, and utilisation delay was longer when people worried about the cost or believed the symptoms could not be cured. Patients who imagined serious consequences of their illness also delayed longer. Hypochondriasis: Barlow and Durand (1995) describe the central feature, according to DSM-IV-TR, as a preoccupation with fears of having a serious illness, based on

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misinterpreting benign bodily sensations. The person experiences physical sensations in a distorted way and takes a "better safe than sorry" approach, so they visit doctors repeatedly despite reassurance. There may be a genetic component, stressful life events involving death or illness may trigger it, and many sufferers experienced family illness in childhood, where the sick role may have been reinforced.

Munchausen syndrome is a disorder in which a person pretends to be ill or deliberately produces symptoms of illness in themselves. Aleem and Ajarim (1995) reported a case study of a 22-year-old woman who came to hospital with swellings on her body. She had been seen many times since the age of 17 and given various treatments. Staff became suspicious as there seemed to be no physical cause, and after she was admitted to the psychiatric ward nurses found a needle containing faecal material. When confronted, she became very angry, left the hospital and did not return.

6(b) Practical applications: Safer's findings can be used to identify patients who are likely to delay, e.g. those with old symptoms or worries about cost, and target them with leaflets, letters or advertising to encourage earlier visits, which could improve outcomes for serious illnesses such as cancer. The descriptions of hypochondriasis and Munchausen syndrome are useful to doctors, as they give detailed symptoms so these patients can be spotted and unnecessary treatment avoided. However, the research is less useful for treatment: Aleem and Ajarim simply report that the patient left, with no treatment put in place.

Methods: Safer used interviews, which give detailed, quantitative and qualitative data, but are open to social desirability and poor recall of when symptoms began. Aleem and Ajarim is a case study of one woman, so it is detailed but cannot be generalised to other patients with Munchausen syndrome, and it may be biased by the researchers' interpretation.

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Generalisability: Safer's sample came from one clinic in the USA, so the delay factors, such as cost, may not apply in countries with free health care or in other cultures.

Reliability and validity of diagnosis: hypochondriasis and Munchausen syndrome are hard to diagnose reliably, as doctors must rule out real physical illness, and patients with Munchausen syndrome deliberately deceive staff. There is a risk of misdiagnosing a genuinely ill person.

Reductionism and determinism: explanations that focus on genes or childhood experiences are deterministic, ignoring the person's free will, although Safer's stage model is more holistic as it includes beliefs, symptoms and practical factors.

Overall, the research has useful practical applications for identifying misuse, but it is limited by small or unrepresentative samples and by a lack of guidance on treatment.

Psychology and organisations

7(a) Job satisfaction is how an employee feels about their job, i.e. how content they are with it. A satisfied employee is happy with all aspects of their work, including the working conditions, hours, type of work done, supervision, pay and responsibilities.

7(b) The QWL questionnaire (Walton, 1974) assesses the feelings employees have towards their jobs, colleagues and company, and shows how these feelings affect the growth and profitability of the organisation. Employees answer on the basis of the last two weeks, using a Likert scale, e.g. from strongly disagree to strongly agree. It analyses eight key components: adequate and fair compensation (pay), safe and healthy working conditions, opportunity to use and develop skills,

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opportunity for growth and job security, social integration in the organisation, constitutionalism (rights at work), work and total life space (work-life balance), and the social relevance of the work.

7(c) Self-reports such as the QWL, the Minnesota Satisfaction Questionnaire (MSQ) and the Job Descriptive Index (JDI) give quantitative data, so they are quick to complete and score, and comparisons can be made between workers, departments or before and after a change. Because they are standardised they can be replicated, so they are reliable. They are also holistic, as they ask about many areas of work, such as pay, supervision and co-workers, which makes them more likely to be valid.

However, they are open to social desirability bias. Employees may say they are satisfied because they worry that answering "wrongly" could get them into trouble or affect their job future, so the results may not be valid. Likert scales can also cause acquiescence bias, where people agree with every statement, and the language of the QWL may make it inaccessible to some employees. Fixed answers also give little detail on why workers feel as they do, so an interview might be needed as well.

8(a) Universalist theories look at the characteristics and personal qualities of great leaders. Woods (1913) proposed the Great Man theory, which argues that leaders are born, not made. Such leaders may be charismatic or transformational, inspiring others with a vision, self-confidence and extraordinary behaviour.

Behavioural theories focus on what leaders do rather than what they are. The Ohio State studies identified two categories of leader behaviour: initiating structure (organising tasks and roles) and consideration (concern for the wellbeing of subordinates). The Michigan studies identified two types: task-oriented and relationship-oriented leadership.

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Adaptive leadership (Heifetz, 1997) says leaders must inspire their workforce to tackle whatever challenges arise and help them work to the best of their ability. Leaders should adapt their style to suit the current situation and market of the organisation. This involves making changes that let the workforce thrive, encouraging diversity and experimentation, finding new solutions and helping others find their own inner authority.

Scouller (2011) proposed three levels of leadership. Public leadership is influencing more than one person in a group setting, e.g. organising or delegating to the team. Private leadership is influencing one individual, e.g. building trust with an employee and helping them set goals. Personal leadership is the leader's own psychological, moral and technical skills and how they use them, e.g. time management and self-awareness. Scouller argues that personal leadership is the most powerful of the three, as it underpins the other two.

8(b)

Nature versus nurture: the Great Man theory supports the nature side, as it says leaders are born with the qualities needed to lead. This is deterministic and suggests training leaders is pointless. In contrast, the behavioural theories, adaptive leadership and Scouller's levels support nurture, as they see leadership as behaviours and skills that can be learned and developed, e.g. Scouller's personal leadership can be improved through self-awareness. The nurture view is more useful, as organisations can train their managers, although an interactionist view, where some people have a natural advantage that is developed through experience, may be best.

Cultural bias: most theories were developed in Western, individualist cultures such as the USA, and the Great Man theory focuses on men, so it is gender biased. Styles that work in the USA may not suit collectivist cultures.

Reductionism and the individual/situational debate: the Great Man theory reduces leadership to fixed traits of the individual and ignores the situation. The

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behavioural theories reduce it to two dimensions. Adaptive leadership is more holistic and situational, as it says the leader must change style to suit the challenge, and Scouller considers several levels at once.

Effectiveness: the Ohio and Michigan studies suggest leaders high on both consideration and initiating structure tend to be effective, but there is no single best style. Adaptive leadership is suited to fast-changing markets, while modern theories are harder to measure and test objectively.

Overall, modern theories are more useful than traditional ones, as they treat leadership as learnable and dependent on the situation.