Cambridge Assessment International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/32**

Paper 3 Specialist Options: Theory **February/March 2021**

1 hour 30 minutes

6792383291

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. Any blank pages are indicated.

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Psychology and abnormality

Answer **all** questions.

1 **(a)** Outline **two** common obsessions in obsessive-compulsive disorder (OCD). [2]

(b) Describe the study by Lovell et al. (2006) on a cognitive treatment for OCD. [4]

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

2 **(a)** Describe the treatment and management of impulse control disorders and non-substance addictive disorder. [8]

(b) Evaluate the treatment and management of impulse control disorders and non-substance addictive disorder, including a discussion of quantitative data. [10]

Psychology and consumer behaviour

Answer **all** questions.

3 **(a)** Explain what is meant by a 'partially compensatory' strategy in consumer decision-making. [2]

(b) Describe the procedure of the study by Knutson et al. (2007) on pre-cognitive decisions in consumer decision-making. [4]

(c) Explain the effectiveness of the controls used in the study by Knutson et al. [6]

4 **(a)** Describe what psychologists have discovered about personal space and consumer behaviour. [8]

(b) Evaluate what psychologists have discovered about personal space and consumer behaviour, including a discussion about generalisability. [10]

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Psychology and health

Answer **all** questions.

5 **(a)** Explain what is meant by 'hypochondriasis'. [2]

(b) Describe the study by Savage and Armstrong (1990) on practitioner consulting style and patient satisfaction. [4]

(c) Explain **two** strengths of the study by Savage and Armstrong. [6]

6 **(a)** Describe what psychologists have discovered about measuring stress. [8]

(b) Evaluate what psychologists have discovered about measuring stress, including a discussion about validity. [10]

Psychology and organisations

Answer **all** questions.

7 **(a)** Identify **one** physical and **one** psychological work condition. [2]

(b) Cowpe (1989) tested a safety promotion campaign.

Describe this safety promotion campaign. [4]

(c) Explain **one** strength and **one** weakness of this safety promotion campaign. [6]

8 **(a)** Describe what psychologists have discovered about attitudes to work. [8]

(b) Evaluate what psychologists have discovered about attitudes to work, including a discussion of practical applications. [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.

Question number

Psychology and abnormality

1(a) One common obsession is a fear of contamination, infection or illness, e.g. constant intrusive thoughts that door handles carry germs that will make the person ill. A second is a need for order and symmetry, where the person feels intense anxiety unless objects are arranged exactly or evenly, e.g. books lined up perfectly.

1(b) Lovell et al. (2006) compared CBT (exposure and response prevention) for OCD delivered by telephone with the same therapy delivered face to face. 72 out-patients with OCD, aged 16 to 65, from two hospitals in Manchester were randomly allocated to one of the two groups. The face to face group had ten weekly one-hour sessions. The telephone group had two face to face sessions (session 1 and session 10) and eight 30-minute telephone sessions. Symptoms were measured with the Yale-Brown Obsessive Compulsive Scale (Y-BOCS) and the Beck Depression Inventory, and a client satisfaction questionnaire was also given. Both groups improved and there was no significant difference between them at the six month follow-up, so telephone treatment was concluded to be as effective as face to face treatment.

1(c) One strength is that participants were randomly allocated to the telephone or face to face group. This means that any differences between patients, such as how severe their OCD was, should be spread evenly across the two conditions, so the similar improvement can be put down to the therapy and not to the type of patient. The study also used standardised quantitative measures (Y-BOCS and

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Beck) before and after treatment and at six months, so the groups could be compared statistically and the longer-term effectiveness of the shorter, cheaper telephone sessions could be checked, which makes the findings useful to health services.

One weakness is that there was no no-treatment control group. Because both groups received therapy, we cannot be sure the improvement was caused by the therapy rather than by time or natural recovery. In addition, the Y-BOCS, Beck and satisfaction measures are self-reports, so patients may have reported fewer symptoms or more satisfaction than they felt because of social desirability, which lowers the validity of the conclusion that both methods are equally effective.

2(a)

Biochemical: Grant et al. (2008) pooled data from 284 participants with gambling disorder in double-blind, placebo-controlled trials of opiate antagonists, nalmefene (16 weeks) and naltrexone (18 weeks). Symptoms were measured using a gambling version of the Y-BOCS. Participants on the opiate antagonists showed a greater reduction in symptoms than those on placebo, higher doses gave greater reductions, and people with a family history of alcoholism responded best. Younger participants were more likely to respond to the placebo. This suggests opiate antagonists work by reducing the reward or urge linked with gambling, especially in people with a genetic predisposition.

Covert sensitisation (Glover, 2011) is a behaviour therapy where the unwanted behaviour is paired in the imagination with an unpleasant image or feeling, so the behaviour becomes associated with something aversive. Glover used it with a 56-year-old woman with a long history of shoplifting: she imagined the steps of stealing paired with unpleasant scenes, and afterwards her stealing greatly reduced.

Imaginal desensitisation (Blaszczynski and Nower): the therapist identifies the client's typical behavioural sequence when the urge appears and breaks it into four to six scenes. The client is taught progressive muscle relaxation, then imagines

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each scene, relaxing at the end of each one, and imagines leaving the situation without gambling. This lowers arousal linked to the urge. They practise at home with recorded instructions and keep a log. Mary, a 52-year-old gambler, used this to reduce her urge to gamble.

Impulse control therapy (Miller, 2010) says ICDs come from a feeling state, where an intense positive feeling becomes linked with a behaviour in memory. The Impulse Control Disorder Protocol, a modified form of EMDR, identifies the image and the feeling, rates it on the Positive Feeling Scale (0 to 10) and uses eye movements to process it. John, a 35-year-old poker gambler, had five sessions and at a three month follow-up his compulsion had not returned.

2(b)

Quantitative data is a strength of much of this research. Grant et al. used Y-BOCS scores, Miller used the 0 to 10 Positive Feeling Scale and Blaszczynski and Nower used 1 to 10 ratings of feelings and kept a daily count of practice. This means treatment groups can be compared objectively, e.g. drug against placebo, and improvement can be tracked across sessions. However, numbers do not explain why a patient improved or describe their symptoms in depth, and patients may interpret a scale differently, so one person's 8 may be another's 5. This makes comparing scores between patients less valid.

The treatments differ in how well their effectiveness is supported. Grant et al. used a large sample with a double-blind placebo design, so there is strong evidence that the drugs work. The cognitive-behavioural therapies are supported mostly by single case studies (Glover's shoplifter, Mary, John), which are detailed but cannot be generalised and have no control condition.

The biochemical approach is reductionist and on the nature side of the debate, treating the urge as a reward system problem. It also only manages symptoms and may have side effects, so the urge may return when the drug is stopped. The psychological therapies take a nurture view, teaching the person to control the

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urge, which may give longer lasting change, as with John at three months, but they need effort and motivation from the patient.

Covert sensitisation raises ethical issues because it deliberately causes distress.

Drugs are cheaper and quicker for many patients but therapy may be more cost-effective long term.

Overall, these treatments are useful, but the strongest evidence is for drugs and a combination of drug and cognitive-behavioural therapy is likely to be most appropriate.

Psychology and consumer behaviour

3(a) A partially compensatory strategy is where some features of products are compared before a decision is made. For example, in majority of confirming dimensions, two products are compared across all relevant features and the better one is kept, then compared with the next product, until one is left and bought.

3(b) Knutson et al. (2007) used 26 participants (12 female, 14 male), who were paid $20 and told that one trial would be chosen to count for real, so they would actually buy that product and it would be shipped to them. While having an fMRI scan, they completed the SHOP (Save Holdings Or Purchase) task. On each trial they saw a labelled product for 4 seconds, then its price for 4 seconds, and then chose whether or not to buy it. They then fixated on a crosshair for 2 seconds before the next trial. 80 products were shown in total.

3(c) The study used a standardised procedure: every participant did the same SHOP task with the same timings (4 seconds product, 4 seconds price, 2 seconds crosshair) and the same products in the same fMRI scanner. This was effective because all participants experienced exactly the same conditions, so differences in

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brain activity are due to their decisions and not to procedural differences, which makes the study replicable and reliable.

Participants were also screened for psychotropic drug use, ibuprofen, substance abuse and history of psychiatric disorder. This effectively reduced confounding variables that could have affected brain activity, which increases validity. Unclear data were excluded, e.g. 8 participants for excessive head movement and 6 for buying fewer than four items, so the scans analysed were accurate.

However, these controls reduce ecological validity. Lying in a scanner and choosing products on a screen at fixed intervals is not like real shopping, so the decisions may not reflect everyday consumer behaviour.

4(a) Personal space is the invisible boundary around a person that others should not enter; for a consumer it is the area around them that they do not want other shoppers or sales staff to enter. There are three theories. Overload theory says we keep personal space to reduce the amount of information we must attend to. Shops are busy, with products, prices and people, so shoppers keep their distance from others to avoid overload. Arousal theory says that invasion of personal space raises arousal, which we may interpret negatively, e.g. a customer feels angry when a salesperson stands too close and leaves without buying. Behaviour constraint theory says invasion limits what we can do, which can lead to aggression, e.g. customers fighting in crowded sales.

Robson et al. (2011) carried out a web survey of over 1000 American participants, who gave their details and how often they visited restaurants. Each was given one of three dining scenarios (romantic, with a friend or a business lunch) with tables 6, 12 or 24 inches apart, giving nine conditions, and rated 32 statements about their emotions and behaviour. The 6 inch distance made participants feel more crowded and less private, less satisfied with the table and have a less positive meal experience.

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Milgram et al. (1986) studied 129 naturally occurring queues in New York City, such as at train stations and betting shops. A confederate intruded between the 3rd and 4th person. Variations used one or two intruders and buffers (confederates standing passively in the queue). Observers recorded reactions: physical objections occurred 10% of the time, verbal 21.7% and non-verbal 14.7%. Two intruders provoked more objections and buffers reduced them. Milgram concluded a queue is a social system, and people just behind the intrusion are most likely to defend it.

4(b)

Generalisability is limited. Robson et al. had a very large sample of over 1000, recruited over the web, which gave a varied range of ages and backgrounds, but all were American and only people with internet access could take part. Milgram studied queues only in New York. Personal space norms differ between cultures, e.g. people in collectivist or crowded cities may accept closer distances, and queuing norms vary between countries, so the findings may not apply elsewhere.

Ecological validity differs. Milgram's study was a field experiment with real queues and people who did not know they were being studied, so behaviour was natural. Robson's participants only imagined being at a table, so what they said they would feel may differ from how they would behave in a real restaurant.

Data collection also differs. Robson used a self-report questionnaire, which can be affected by social desirability, while Milgram used observation, which is more objective but observers may interpret behaviour differently, so inter-rater reliability is important. Robson used standardised statements, so it is reliable and replicable.

Both produced quantitative data, which allows comparison between conditions (6 v 24 inches, one v two intruders), but does not tell us why people felt uncomfortable.

Ethically, Milgram's queue intrusions caused annoyance to people who had not consented and could not be debriefed, whereas Robson's survey was low risk.

Overall, the research has useful applications, e.g. restaurants should not place

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	tables too close, but it is mostly American, so conclusions should be applied to other cultures with care.
	Psychology and health
5(a)	Hypochondriasis is a persistent fear of having a serious medical illness. The person interprets normal bodily sensations as a sign of serious disease, e.g. believing that indigestion is stomach cancer.
5(b)	Savage and Armstrong (1990) studied 359 patients aged 16 to 75 at a general practice in London; after exclusions, 200 were used. Patients were randomly allocated to receive either a directing style (the doctor gave a firm diagnosis and told the patient what to do) or a sharing style (the doctor asked for the patient's views) of consultation. Satisfaction with the doctor's understanding of the problem, the explanation given and whether they felt helped was measured immediately after the consultation and one week later. Patients given a directing style were more satisfied, particularly those with a physical problem and those receiving a prescription.
5(c)	One strength is that patients were randomly allocated to the directing or sharing style. This means individual differences between patients, such as personality or how ill they were, should be spread evenly between the two conditions, so the higher satisfaction with the directing style can be put down to the consulting style itself. This increases the validity of the conclusion. A second strength is that satisfaction was measured twice, immediately after the consultation and one week later. This checks that patients still felt the same about the consultation and that their first ratings were not just a reaction in the moment, so the results are more valid and reliable. It is also a useful study, as it

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shows practitioners that a directing style may be best for patients with a physical illness or who need a prescription.

6(a) Stress can be measured physiologically. Recording devices such as fMRI measure brain activity by detecting changes in blood flow. Wang et al. (2005) scanned 32 participants (25 stress, 7 control) who were native English speakers screened for neurological and psychiatric disease. After a low-stress task of counting backwards from 1000, they did a stressful mental arithmetic task, being prompted to work faster and to restart after mistakes. Self-reports of anxiety and stress, heart rate and saliva samples were also taken. The stress condition produced more negative emotion, and the ventral right prefrontal cortex was found to play a key role in the stress response.

Sample tests measure hormones such as cortisol. Evans and Wener (2007) studied 139 adult train commuters, taking saliva cortisol during the morning commute and at home at a weekend. Mood was rated on a 5-point scale and motivation measured by persistence on a proof-reading task at the end of the commute. Carriage density did not affect stress, but seat density near the passenger raised both self-reported stress and cortisol.

Psychological measures are self-report questionnaires. Holmes and Rahe (1967) produced the Social Readjustment Rating Scale, a list of 43 life events (e.g. death of a spouse, loss of job), each with a score in life change units. The person ticks the events from the past 12 months and adds the scores; the higher the total, the higher the stress. Friedman and Rosenman (1974) argued that personality matters: Type A people are competitive, controlling and time-pressured, while Type B are relaxed. In an 8½-year longitudinal study of about 3000 healthy men aged 39 to 59, more than twice as many Type As developed coronary heart disease as Type Bs.

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6(b)	Validity is a key issue. Self-reports such as the SRRS have good face validity and are quick, but they are brief and quantitative, so they lack depth: a life event, e.g. divorce, may be a relief for one person and devastating for another, yet both get the same score. Answers may also be affected by social desirability or poor memory over 12 months. Physiological measures such as cortisol and fMRI are objective and not open to deliberate distortion, which improves validity. Studies that combine both, like Evans and Wener and Wang et al., are stronger because the self-report can be checked against biological data. However, physiological measures can be affected by other factors, such as caffeine, exercise or time of day for cortisol, and lying in an fMRI scanner is itself stressful and artificial, which lowers ecological validity. Generalisability varies. Friedman and Rosenman had a large sample, giving good population validity, but only men, so it may not apply to women. Evans and Wener only studied train commuters, and Wang's sample was small. Friedman and Rosenman's longitudinal design shows changes over time, which supports a link between Type A and heart disease, whereas Wang et al. is only a snapshot of stress in a lab. Evans and Wener's field study measured real commuting stress, so it has high ecological validity. These measures are useful, e.g. doctors can identify people at risk of stress-related illness. Overall, the most valid measurement of stress combines physiological and psychological measures.
	Psychology and organisations
7(a)	Physical work condition: the layout of the workplace, e.g. working in an open plan office. Psychological work condition: how a worker feels about being treated by colleagues, e.g. feeling bullied at work.

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7(b)	Cowpe (1989) evaluated a television campaign to reduce chip pan fires. Two 60-second adverts were shown on television. They showed how the fires start, through over-filling the pan and leaving it unattended, and then showed the containment actions needed to put the fire out: turn off the heat, cover the pan with a damp tea towel and leave the pan to cool. The adverts were shown in ten regional television areas of the UK between 1976 and 1984, and fire brigade records of chip pan fires were compared before, during and after the campaign.
7(c)	One strength is that it was shown in ten regions over a number of years. This means the effect could be checked in the long term as well as in many parts of the UK, so we can be more confident that the reduction in chip pan fires was due to the campaign and would work in other areas. It has useful practical applications, as even though the effect decayed over time, the cost of the adverts was judged worth it for the loss of life and property prevented. One weakness is that it lacks temporal validity. Few people use chip pans today, and people now skip adverts or watch streamed programmes, so a similar television campaign may not be as effective now. Also only quantitative fire statistics were collected, so we do not know why people changed their behaviour or whether other factors caused the fall in fires.
8(a)	Workplace sabotage: Giacalone and Rosenfeld (1987) asked 38 unionised workers at an electrical factory to rate how justifiable a list of reasons for sabotage were, and methods of sabotage, on a 1 to 7 scale (7 = totally justifiable). Methods included slowdowns, destructiveness, dishonesty and causing chaos. Workers were split into high-reason and low-reason acceptors. High-reason acceptors justified slowdowns and destruction of machinery or premises more than low-reason acceptors. Both groups accepted some reasons as justifying sabotage, but neither justified

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dishonesty.

Absenteeism: Blau and Boal (1987) proposed that job involvement and organisational commitment together predict turnover and absenteeism. Employees high in both (institutional stars) put a lot of effort into their jobs and value the organisation, so they should have the lowest absenteeism and turnover. Those low in both (apathetic employees) put in little effort and do not value the organisation, so they should have the highest levels, and they are also easy for the organisation to replace. Lone wolves (high involvement, low commitment) and corporate citizens (low involvement, high commitment) fall between these.

Measuring organisational commitment: Mowday et al. (1979) developed the 15-item Organisational Commitment Questionnaire (OCQ) using 2563 employees from 9 different organisations. It is answered on a 7-point scale and measures belief in the organisation's goals, willingness to put in effort for it and a desire to stay. They showed the questionnaire had good internal reliability and test-retest reliability, and good validity.

8(b) The research has strong practical applications. Organisations can use the OCQ to identify employees with low commitment who may become a problem in future, and Blau and Boal's model helps managers find staff with low involvement and work with them so they feel more involved, which should reduce absenteeism and turnover. Giacalone and Rosenfeld's findings allow managers to identify high acceptors of sabotage and address their grievances so they become low acceptors. However, using questionnaires to label workers may itself damage trust and attitudes.

The data are mainly quantitative, e.g. 1 to 7 ratings and OCQ scores. This allows comparison between groups and organisations and statistical analysis, but it does not explain why workers feel committed or would sabotage, so qualitative interviews would give more depth.

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The methods rely on self-report, so workers may give socially desirable answers, e.g. not admitting that sabotage is justified, which lowers validity. However, the OCQ was carefully developed and shown to be reliable and valid, and its standardised items mean it can be replicated.

Generalisability is mixed. Giacalone and Rosenfeld used only 38 unionised workers in one factory, so the findings may not apply to non-unionised or office workers. Mowday et al. used a large sample from 9 different organisations, so the OCQ is more generalisable.

Overall, the research is useful in practice, but more qualitative and cross-cultural research is needed.

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