GCE A LEVEL

1290U30-1

S23-1290U30-1

THURSDAY, 25 MAY 2023 – AFTERNOON

PSYCHOLOGY – A2 unit 3
Implications in the Real World

2 hours 30 minutes

ADDITIONAL MATERIALS

A WJEC pink 16-page answer booklet.

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Do not use gel pen or correction fluid.

Answer **three** questions in Section A.

Answer **one** question in Section B.

Write your answers in the separate answer booklet provided following the instructions on the front of the answer booklet.

Use both sides of the paper. Write only within the white areas of the booklet.

Write the question number in the two boxes in the left hand margin at the start of each answer

for example, | **0** | **1** | .

Leave at least two line spaces between each answer.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part-question.

You are reminded that Section B of this paper is synoptic and so will test understanding of the connections between the different elements of the subject.

You are reminded of the necessity for good English and orderly, clear presentation in your answers. Assessment will take into account the quality of written communication used in your answers.

© WJEC CBAC Ltd.

stemup.co.uk

SECTION A: The study of behaviours

Answer **three** questions in full.

0 1 **Addictive behaviours**

a) Briefly describe the characteristics of addictive behaviours. [5]

b) Briefly describe **one** method of modifying addictive behaviours. [5]

c) Of all the explanations of addictive behaviours, the biological explanations allow for a more detailed account.

With reference to this statement, evaluate biological explanations of addictive behaviours. [15]

0 2 **Autistic spectrum behaviours**

a) Briefly describe **two** methods of modifying autistic spectrum behaviours. [5+5]

b) Only the biological explanations can fully explain autistic spectrum behaviours.

With reference to this statement, evaluate the biological explanations of autistic spectrum behaviours. [15]

0 3 **Bullying behaviours**

a) Outline the characteristics of bullying behaviours. [5]

b) Briefly describe **one** individual differences explanation of bullying behaviours. [5]

c) Mr Dale has recently started working as the Head of Year 7 and would like to make changes to the way his school modifies bullying behaviours.

With reference to **either** Creating a Peaceful School Learning Environment (CAPSLE) **or** Olweus Bullying Prevention Programme, discuss the strengths and weaknesses of using this method to modify the bullying behaviours at Mr Dale's school. [15]

© WJEC CBAC Ltd.

stemup.co.uk

0 4 **Criminal behaviours**

a) Briefly describe how social psychological explanations could be applied to modifying criminal behaviours. [5]

b) Briefly describe and evaluate **one** of the individual differences explanations of criminal behaviours. [10]

c) Briefly describe restorative justice as a method to modify criminal behaviours and discuss its strengths and weaknesses. [10]

0 5 **Schizophrenia**

a) Briefly describe **one** individual differences explanation of schizophrenia and evaluate its strengths and weaknesses. [10]

b) Briefly describe and evaluate the use of antipsychotic drugs to modify schizophrenia. [10]

c) Briefly explain how social psychological explanations could be applied to modifying schizophrenia. [5]

0 6 **Stress**

a) Describe **two** biological explanations of stress. [10]

b) Evaluate stress inoculation training as a method of modifying stress. [10]

c) Briefly explain how individual differences explanations could be applied to modifying stress. [5]

© WJEC CBAC Ltd.

stemup.co.uk

SECTION B: Controversies

Answer **one** of the questions.

Either,

0 7 **Ethical costs of conducting research**

Ethical guidelines are designed to protect the individual, but may stop psychologists from truly benefitting society.

With reference to this statement, evaluate the use of ethical guidelines in psychological research. [25]

Or,

0 8 **Sexism**

With reference to historical and social context, discuss whether you believe psychology can ever be free from sexism. [25]

END OF PAPER

© WJEC CBAC Ltd.

stemup.co.uk

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

Question number

0 1 (a) Addiction is a compulsive need to engage in a behaviour or take a substance despite harmful consequences. The DSM-5 (2013) classifies substance use disorders using eleven criteria, such as craving, using more than intended, failed attempts to cut down and continued use despite social or health problems (2 to 3 criteria is mild, 6 or more severe). Importantly, DSM-5 added gambling disorder, the first behavioural addiction, showing that addiction does not need a substance.

Griffiths (2005) proposed six components that must be present: salience (the activity dominates thinking, feelings and behaviour), mood modification (it produces a buzz or escape), tolerance (more of the activity is needed for the same effect), withdrawal symptoms (unpleasant physical or psychological states such as irritability when it stops), conflict (with relationships, work or the person's own goals) and relapse (returning to the behaviour after abstinence, often quickly reaching earlier levels).

0 1 (b) Aversion therapy is based on classical conditioning: the addictive behaviour is paired with an unpleasant stimulus so that it becomes associated with discomfort rather than pleasure. In the treatment of alcohol addiction the drug disulfiram (Antabuse) is used. It changes the way the body metabolises alcohol by blocking the enzyme that breaks down acetaldehyde, so if the person drinks, acetaldehyde builds up and causes nausea, vomiting, flushing, headaches and a racing heart.

Before therapy alcohol is a neutral stimulus and the sickness is an unconditioned response to the drug (the unconditioned stimulus). After repeated

Question number

pairings, alcohol becomes a conditioned stimulus that triggers the conditioned response of nausea, so the person avoids drinking. The patient takes disulfiram daily, usually under supervision, alongside counselling. A variation, covert sensitisation, pairs imagined drinking with imagined unpleasant scenes instead of a drug.

0 1 (c)

Biological explanations include addiction genes, dopamine and the idea of addiction as a disease of the brain. The statement claims they give a more detailed account than psychological or social explanations, and in terms of the precise mechanisms involved this is partly true.

The dopamine explanation is detailed at the level of the brain. Addictive drugs and activities increase dopamine in the mesolimbic reward pathway, from the ventral tegmental area to the nucleus accumbens, producing pleasure that reinforces the behaviour. This is supported by animal research where rats press a lever to stimulate this pathway, and by evidence that gambling wins also raise dopamine, so it can explain behavioural addictions as well as drug use. It also explains tolerance, as receptors become less sensitive. However, much of the evidence comes from animals, so generalising to humans has limited validity, and dopamine release does not explain why most people who try drugs or gamble never become addicted.

The addiction genes explanation adds detail about vulnerability. Twin and adoption studies suggest that around half of the variation in alcohol addiction is heritable, and Blum et al. (1990) found the A1 variant of the DRD2 dopamine receptor gene in 69% of alcoholics compared with 20% of non-alcoholics. A strength is that this explains why addiction runs in families and why only some users become addicted. However, concordance rates are never 100%, so genes cannot be the whole story; the DRD2 link has not always replicated, and the gene has been linked to many conditions, so it is a general risk factor rather than an 'addiction gene'. This suggests a diathesis-stress account is more valid.

Question number

The disease of the brain model argues that repeated use physically changes the brain. Volkow and colleagues used PET scans to show reduced dopamine D2 receptor availability and reduced activity in the prefrontal cortex of addicts, which impairs self-control and explains compulsive use and relapse. This model is useful because it reduces stigma, encourages addicts to seek treatment and has led to effective drug therapies such as methadone and naltrexone, which supports the biological view. On the other hand, it may remove personal responsibility and is deterministic, implying addicts cannot recover without medical help, when many people quit without treatment.

A major weakness of all biological explanations is that they are reductionist and ignore context. Robins (1974) found that many US soldiers who became addicted to heroin in Vietnam stopped using it on returning home, which the biological model cannot explain, whereas social learning theory (peer and family modelling) and cognitive explanations (such as the gambler's fallacy) can explain why addiction starts and why cues trigger relapse. Much research also uses Western, mostly male samples, so there may be cultural and gender bias.

In conclusion, I agree that biological explanations allow a more detailed account of the mechanisms of addiction, especially how dopamine, genes and brain changes maintain it. However, detail is not the same as completeness: they explain vulnerability and maintenance better than initiation, so the most valid account combines them with psychological and social factors in a biopsychosocial model.

0 3 (a)

Olweus (1993) defined bullying as when a person is exposed, repeatedly and over time, to negative actions on the part of one or more other people. From this definition there are five key characteristics.

First, it involves negative actions, meaning intentionally inflicting injury or discomfort. Second, it is repeated behaviour over time rather than a one-off incident. Third, the bully intends to cause harm, so accidental hurt is not

Question number

bullying. Fourth, there is an imbalance of power: the victim finds it hard to defend themselves because the bully is physically stronger, older, more popular or part of a group. Fifth, there are different kinds of bullying: direct physical bullying (hitting, kicking), verbal bullying (name calling, threats), indirect or relational bullying (spreading rumours, social exclusion) and, more recently, cyberbullying through phones and social media. Bullying also involves roles such as bullies, victims, bully-victims and bystanders who reinforce or defend.

0 3 (b)

One individual differences explanation is cognitive biases, which are errors in thinking that occur when people process and interpret information about the social world. The key bias linked to bullying is the hostile attribution bias: the tendency to interpret ambiguous actions of others as deliberately hostile. For example, if a pupil is bumped in a corridor, a child with this bias assumes it was on purpose and retaliates aggressively.

Crick and Dodge (1994) explained this using a social information processing model with six steps: encoding cues, interpreting them, clarifying goals, generating possible responses, deciding on a response and acting it out.

Aggressive children show errors at several steps; they attend to hostile cues, interpret them as threats, generate fewer non-aggressive responses and evaluate aggression as likely to succeed. These biased cognitions, which differ between individuals, make some children more likely to bully others repeatedly.

0 3 (c)

I will discuss the Olweus Bullying Prevention Programme (OBPP), a whole-school method developed in Norway. It works at four levels: school level (an anonymous bullying questionnaire, a coordinating committee, staff training, clear school rules and better supervision of 'hot spots' such as corridors and playgrounds), classroom level (class rules against bullying and regular class meetings), individual level (serious talks with bullies, victims and their parents) and

Question number

community level (involving parents and local groups).

A major strength is the supporting evidence. In the original Bergen study, Olweus (1991) evaluated the programme with around 2,500 pupils in 42 schools and found reductions in bullying of about 50% or more over two years, as well as reductions in antisocial behaviour such as vandalism and truancy and an improved school climate. Ttofi and Farrington (2011) meta-analysed anti-bullying programmes and found they reduced bullying by about 20 to 23% and victimisation by 17 to 20%, with programmes inspired by Olweus being among the most effective. For Mr Dale this suggests the OBPP could make a real difference to his school.

A further strength is that it fits Mr Dale's position. As the new Head of Year 7 he could begin with the anonymous questionnaire to find out how much bullying there is, where it happens and what type it is, giving him a baseline to measure change. Year 7 is a time of transition when pupils are in new friendship groups and power imbalances form quickly, so clear rules and supervision of hot spots from the start could prevent bullying becoming established. Ttofi and Farrington also found programmes worked better with children aged 11 and over, which matches Year 7. Class meetings would also teach bystanders to defend victims, which is important because bullying is a group process.

However, there are weaknesses. Results outside Norway have been weaker; for example, a US evaluation by Bauer et al. (2007) found no significant overall reduction in victimisation, with positive effects mainly for some ethnic groups. This suggests the programme may be culturally biased, as Norwegian schools have small classes and strong welfare traditions, so Mr Dale cannot assume Bergen results will transfer to his school. The programme also depends on fidelity: it is time-consuming and costly, requiring training for all staff, and if teachers do not fully commit, effects are reduced. As Mr Dale has only just started, he may struggle to get whole-school support for a method he cannot run within Year 7 alone.

Question number

There are also ethical issues and social implications. Talks with bullies and their parents could label children, and victims may fear reprisals after reporting. However, the questionnaire is anonymous and the approach is non-punitive, which protects pupils, and a safer school benefits attendance and attainment. Compared with CAPSLE, which uses a psychodynamic approach focusing on power dynamics, bystanders and the 'gentle warrior' physical education programme (Twemlow et al., 2005), the OBPP has a larger evidence base and more practical, structured steps.

Overall, I would recommend that Mr Dale uses the OBPP, because it has the strongest evidence and its whole-school structure suits Year 7. To deal with its weaknesses, he should secure support from senior leaders, adapt it to his school's culture and repeat the questionnaire each year to check it is working.

0 6 (a) The first biological explanation is adrenaline, released through the sympathomedullary pathway. When a stressor is perceived, the hypothalamus activates the sympathetic branch of the autonomic nervous system, which stimulates the adrenal medulla to release adrenaline and noradrenaline into the bloodstream. This happens very quickly, within a few seconds, which is why it is called an 'adrenaline rush'. Adrenaline increases heart rate and blood pressure so the heart feels like it is racing, redirects blood towards the muscles causing a surge of energy or shaking limbs, relaxes the airways to get more oxygen to the muscles so breathing may become shallow and rapid, releases glucose for energy, speeds up brain activity to plan an escape and widens the pupils to let in more light. Side effects include sweating, feeling lightheaded and changes in temperature due to blood being redirected. The effects can last up to an hour, and once the threat has gone the parasympathetic nervous system returns the body to its resting state.

The second explanation is evolutionary adaptation. Evolution is the process by which traits, including physiological stress response systems, are shaped by

Question number

natural selection. Cannon (1932) described the stress response as 'fight or flight': in our ancestors' environment the stressors were mostly short-term physical threats such as predators, and individuals who could rapidly mobilise energy to fight or escape were more likely to survive and pass on their genes. The stress response is therefore an adaptation with a selective advantage. However, like all traits it has costs as well as benefits. Today most stressors, such as exams or work deadlines, are psychological and long-lasting, so the response is activated repeatedly without physical action, which leads to a mismatch. Selye's general adaptation syndrome describes this: alarm, then resistance, then exhaustion, when prolonged stress leads to illness. Taylor et al. (2000) added that females may have evolved a 'tend and befriend' response, linked to oxytocin, protecting offspring and seeking social support.

0 6 (b) Stress inoculation training (SIT) was developed by Meichenbaum (1985). It is a cognitive behavioural therapy that 'inoculates' people against future stress in three phases: conceptualisation (understanding their stressors and how they appraise them), skill acquisition and rehearsal (relaxation, positive self-talk, problem solving) and application and follow-through (using the skills in increasingly stressful real situations).

A strength is supporting research. Saunders et al. (1996) carried out a meta-analysis of 37 studies and found SIT reduced anxiety and improved performance under stress, and it worked with different groups and settings. Sheehy and Horan (2004) found that first-year law students given SIT sessions reported lower anxiety and stress than controls, and some improved their exam results. This suggests SIT is effective and has real-world validity. However, many studies use self-report measures, which may be affected by social desirability bias, and samples such as students may not generalise to people with more serious stress.

A second strength is that SIT tackles the cause of stress, the way people

Question number

appraise and cope with stressors, rather than only the symptoms. Compared with beta blockers, which reduce the physical effects of adrenaline but have side effects and stop working when the drug is stopped, SIT gives long-lasting skills and prepares people for future stressors, which is the point of inoculation. It is also flexible and can be adapted to individuals.

However, SIT has weaknesses. It requires a lot of time, effort and motivation, so people with busy, stressful lives may drop out, and it is more expensive than drugs because it needs a trained therapist. It may also be unnecessarily complex: it is not clear which of the three phases is effective, and relaxation alone might give similar benefits.

Ethically SIT is low risk, as there are no physical side effects and clients actively agree to each stage, but gradual exposure to stressors could cause short-term distress. Socially it is positive, because training employees, students or the armed forces could reduce stress-related illness and costs to society.

In conclusion, the evidence suggests SIT is an effective and long-lasting method of modifying stress, especially for motivated people facing predictable stressors, though its cost and time demands mean drugs may suit short-term acute stress better.

0 6 (c)

Individual differences explanations suggest that stress depends on personality traits such as hardiness, self-efficacy and Type A behaviour, so modifying stress involves changing these traits. Kobasa found that hardy people, who show commitment, control and challenge, cope better with stress. Maddi therefore developed hardiness training, teaching people to recognise stressful situations through 'focusing' on physical signs, to reconstruct stressful situations so stressors are seen as challenges that can be controlled, and to build confidence by taking on tasks they can succeed in. This also increases self-efficacy (Bandura), the belief that one can cope, which is also built in the skills and application phases of SIT. Similarly, as Type A personalities (Friedman and

Question number

Rosenman) are competitive, impatient and hostile, they can be counselled to slow down and manage hostility; Friedman et al. (1986) found such counselling reduced repeat heart attacks in Type A patients.

0 7

Ethical guidelines, such as the British Psychological Society's Code of Human Research Ethics, set out principles that psychologists must follow: respect for the autonomy, privacy and dignity of individuals, scientific integrity, social responsibility and maximising benefit while minimising harm. In practice this means obtaining informed consent, avoiding deception where possible, giving the right to withdraw, protecting participants from physical and psychological harm, keeping data confidential and debriefing. Research proposals must also be approved by ethics committees, which carry out a cost-benefit analysis. The statement suggests that, although these guidelines protect the individual, they may prevent research that would benefit society.

A major benefit of guidelines is that they give psychologists a moral responsibility to protect participants from harm. Historical studies show why they are needed. In Watson and Rayner's (1920) 'Little Albert' study, an infant was conditioned to fear a white rat and was never deconditioned, so he may have been left with a lasting phobia. In Zimbardo's (1971) Stanford prison experiment, guards became abusive and several prisoners showed acute emotional distress, so the study was ended after six days instead of fourteen. These studies show that researchers cannot always be trusted to protect participants when focused on their research aims, and that the individual's wellbeing deserves the same consideration as possible benefits to society. Today guidelines and ethics committees would prevent such harm.

Guidelines also protect society and psychology itself. Without informed consent and honesty, the public would lose trust in psychologists, making it harder to recruit participants. Guidelines can also stop research that would not benefit society or individuals at all, or socially sensitive research, as Sieber and Stanley

Question number

(1988) described, that could be used to justify discrimination against groups, for example research on race and intelligence. Guidelines therefore benefit society as well as individuals.

However, the statement argues that guidelines may stop psychologists benefitting society. Milgram's (1963) obedience study deceived 40 men into believing they were giving electric shocks, and caused serious distress, with sweating, trembling and three participants having full-blown seizures. Yet it found that 65% went to the maximum 450 volts, revealing how ordinary people obey destructive authority, which helps explain events such as the Holocaust and has influenced training in medicine and the military. Under current guidelines the study could not be repeated in full, and the knowledge it produced might never have been gained. Interestingly, Milgram's follow-up found that 84% of participants were glad to have taken part, which questions whether the harm outweighed the benefits.

Rosenthal and Rosnow (1984) argued that there are costs of not doing research: if a study is rejected on ethical grounds, the knowledge that could have reduced suffering is lost, and that is itself an ethical cost to society. Similarly, research methods with high ecological validity often require deception or lack of consent; Piliavin et al.'s (1969) subway study of helping behaviour could not have produced natural behaviour if participants had known they were being studied. Guidelines that demand full informed consent may lead to demand characteristics, lowering validity and therefore the benefit of findings.

Another weakness is that the cost-benefit analysis that ethics committees use is difficult to apply. It is not always possible to understand the true extent and impact of a study before it is carried out, as Zimbardo's study showed, and costs and benefits are judged subjectively by the committee. The duty to respect the rights and dignity of participants may be given more weight than the importance of the issue being investigated, so useful research on sensitive topics such as abuse or addiction may be rejected or watered down.

On the other hand, guidelines do not simply stop research; they encourage

Question number

psychologists to find ethical alternatives. Burger (2009) replicated Milgram's study but stopped at 150 volts, screened out vulnerable participants and repeatedly reminded them of their right to withdraw. He still found that about 70% of participants were willing to continue past 150 volts, similar to Milgram, showing that society can still benefit from ethically designed research.

Techniques such as presumptive consent, prior general consent, retrospective consent and full debriefing also allow deception studies to continue where they are justified. In addition, guidelines are updated over time to reflect changing social values, which shows they are flexible rather than rigid barriers.

In conclusion, I believe ethical guidelines are essential because history shows that, without them, individuals can be seriously harmed and public trust lost. Although they may prevent some valuable studies such as Milgram's, they do not stop psychologists from benefitting society overall; instead they push researchers to design creative, ethical studies like Burger's, and the cost-benefit approach allows important research to go ahead. The best balance is to protect the individual while still giving weight to the costs of not doing research.