

**MARK SCHEME for the October/November 2009 question paper
for the guidance of teachers**

9698/31	9698 PSYCHOLOGY Paper 31 (Specialist Choices), maximum raw mark 70
----------------	--

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the October/November 2009 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

PSYCHOLOGY AND EDUCATION

Section A

1 (a) **Explain, in your own words, what is meant by the term 'psychometric test'.** [2]
Typically: a standardised test that is reliable, valid and provides a statistical measure of performance.

(b) **Describe one type of psychometric test used in education.** [3]
Most likely answers will describe a type of test e.g. intelligence, aptitude or diagnostic or name a test such as the Wechsler.

(c) **Give one strength and one implication of psychometric tests.** [6]
Flexibility required here: could be two implications of assessment (e.g. labelling) two of categorisation or one of each. Are the two separable? Credit with flexibility.

2 (a) **Explain, in your own words, what is meant by the term 'gifted'.** [2]
Typically: educational ability of those who are statistically not normal being at the top end of the normal distribution curve. Some believe it is exceptional performance on an intelligence test. But where is the borderline between gifted and others set? Terman (1925) claimed IQ of 140 (approx 1 in 200); Ogilvie (1973) suggests IQ of 130 (1 in 40) and DeHaan and Havighurst (1960) suggest 120 (approx 1 in 10).

Others believe giftedness is a more specific ability such as in sport or music. Bridges (1969) and Tempest (1974) outline signs of giftedness, Bridges with seven (read at 3 years of age; enormous energy) and Tempest with nine (likely to be highly competitive; able to deal with abstract problems).

Hitchfield (1973) found teachers were not good at identifying giftedness.

Marland (1972) states that 'gifted and talented children are those identified by professionally qualified persons who by virtue of outstanding abilities are capable of high performance' The idea that giftedness is identifiable and measurable by professionals is backed up by **Lefrancois (1997)** who states that the most common way of defining giftedness is in terms of IQ scores, with anyone scoring between 130 and 140 described as borderline gifted, whilst those scoring above 140 are labelled gifted.

Sternberg and Wagner (1982) however, suggest that giftedness is characterised by insight skills that allow a person to separate relevant from irrelevant material, combine isolated pieces of information into a coherent whole and relate newly acquired information to that already in their possession.

Renzulli (1986) argues that giftedness is shown by those who display:

1. above average general or specific ability (which may be evidenced from achievement and/or an IQ score);
2. high levels of task commitment (or persistence and motivation);
3. high levels of creativity (which may be seen in the generation of novel ideas and/or problem solving).

Page 3	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

(b) Describe two types of giftedness. [6]

Mathematical giftedness: exceptional ability in the mathematical domain is usually determined by a checklist such as Straker's (1983) *Mathematics for Gifted Pupils*.

Musical giftedness: musical intelligence is the ability to use a fundamental set of musical elements, such as pitch, tone and rhythm. Whilst it is perhaps quite easy to recognise musical intelligence in an individual, it is very difficult to define. One attempt to measure musical intelligence is the Bentley Test for Music (1966) which involves assessment of four areas: pitch discrimination, tonal memory, rhythmic memory and chord analysis.

Giftedness and information processing: gifted people have been found to have specific information processing strategies. They learn quickly, transfer knowledge and skills to new situations with ease, are very aware of their own cognitive ability (meta-cognitive awareness), and process information flexibly. Sternberg (1988) proposed a theory of intelligence which can be used to explain the differences between gifted and non-gifted individuals and to determine ways of identifying giftedness. According to Sternberg intelligence has three components:

1. **Componential intelligence:** consists of what is normally measured in IQ tests, for example remembering facts and procedures and being able to adapt them to solve problems.
2. **Experiential intelligence:** refers to the ability to process information automatically and deal with novel tasks and situations.
3. **Contextual intelligence:** refers to the ability to direct intelligent activity and process information according to the demands of the situation and context.

Children could also be gifted in **sport**.

(c) Describe one way in which children who are gifted could be educated. [3]

How does an education system deal with gifted children? Three general approaches:

1. **Acceleration:** bright children are promoted to a higher class than normal. Good intellectually but bad socially and emotionally.
2. **Segregation:** bright children selected for particular schools. This may result in academic success in a particular ability but it is unfair, divisive and hard to implement.
3. **Enrichment:** done within a normal classroom and can involve extra-curricular activity and individualised learning programmes with independent learning possible. Some argue this is best as socially it is good and gives a much wider range of children opportunities to progress. In the USA Renzulli (1977) advocates an enrichment triad model (aka revolving door model) where children in top 25% on academic ability or creative potential or high motivation can be enriched – but only if they wish. Stanley's (1976) radical acceleration is for gifted mathematicians.

Page 4	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

Section B

- 3 (a) Describe what has been found out about individual differences in educational performance. [8]

Typically: any difference in the performance of an individual which differs from the norm.

Difficult to predict here as there are cultural differences in the performance of boys and girls.

UK data shows that except for level 3 maths, girls outperform boys in everything else.

Wide range of answers possible here. Any two factors from a long list including:

Biological: is the male brain and female brain different?

Social: socio-economic class (attitudes), type of family, position in family, expectation of family, time-orientation, competitiveness and self-fulfilling prophecy.

- (b) Evaluate what has been found out about individual differences in educational performance. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the strengths and weaknesses of psychological perspectives;
- the implications for teachers;
- whether theory applies in practice;
- comparing/contrasting differing approaches;
- the methods used to gather data;
- competing explanations;
- the implications for children;
- the implications for teachers.

- (c) Giving reasons for your answer, suggest how you, as a school teacher, could improve the performance of a group of girls who are performing poorly at school. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

The girls could be segregated from the boys.

They could be given extra classes to enrich their learning.

Appropriate reinforcement and reward strategies could be implemented.

Any evidence of learned helplessness could be worked on alongside changing any inappropriate attribution to improve motivation.

Page 5	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

4 (a) Describe what psychologists have discovered about motivation and educational performance. [8]

Traditional theories of motivation could be considered (such as Freud and instinct theory, Maslow's hierarchy of needs, etc) but these **must** be related to education in some way to be creditworthy (otherwise it could be an 'organisations' answer). Candidates can be motivated by many things and here they can legitimately write about self-efficacy, self-fulfilling prophecy, locus of control, attribution theory and similar aspects.

Most likely answers:

Behaviourist: emphasise extrinsic praise and reward. Brophy (1981) list guidelines for effective and ineffective praise.

Humanistic: emphasise intrinsic motivation. The theories of Maslow (1970) self actualisation, White (1959) competence motivation and Bandura (1981) self efficacy is relevant.

Cognitive: Attribution theory of Weiner (1974) is relevant as is Rotter's Locus of control.

Other: McClelland (1953) achievement motivation and Birney (1969) motivated due to fear of failure.

(b) Evaluate what psychologists have discovered about motivation and educational performance. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the strengths and weaknesses of psychological perspectives;
- the implications for teachers;
- whether theory applies in practice;
- comparing/contrasting differing approaches.

(c) Giving reasons for your answer, suggest ways in which teachers can motivate students. [6]

Mark scheme guidelines apply in that any reasonable suggestion is acceptable.

Reference to any of the above approaches acceptable: e.g. Brophy (1981) and effective praise. More likely will be simple Behaviourist strategies of positive reinforcement. Intrinsic motivation can also be worked on along with any negative attribution or learned helplessness.

Page 6	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

PSYCHOLOGY AND ENVIRONMENT

Section A

- 5 (a) **Explain, in your own words, what is meant by the term 'natural disaster'.** [2]
 Disaster and catastrophe are both a 'bad event', but the difference is that a disaster has 'natural' causes (natural disaster) and a catastrophe is technological (technological catastrophe).
- (b) **Give two examples of how people behave during a disaster or catastrophe.** [6]
 Candidates should look at how people behave during emergencies. Archea (1990) compares behaviours of people during earthquakes in Japan and America. Alternatively, Le Bon (1895) suggests people behave like wild animals with primitive urges and stampede and are crushed (e.g. 1903 Chicago theatre fire). Alternatively people may be crushed without stampeding (e.g. Hillsborough). Smelser (1964) suggests people don't panic in mines or submarines due to escape routes leading to safety. LaPierre (1938) looks at how panic develops. Alternatively Sime (1985) found in fire people seek companions first and do not behave as individual 'animals'. Drury and Cocking (2007) suggest panic is rare and Clarke (2002) suggests that 'we-ness' develops and people help each other.
- (c) **Describe one way in which psychologists can help people prepare for a disaster or catastrophe.** [3]
 Candidates may focus on what can be done to prevent panic and look at evacuation messages (e.g. Loftus) or the follow me/follow directions dilemma of Sugiman & Misumi (1988). One crucial factor is to have sufficient exits. Smelser (1964) suggests people don't panic if escape routes are sufficient.
- 6 (a) **Explain, in your own words, what is meant by the term 'community environmental design'.** [2]
 Typically: the design of buildings for public use. This most typically involves the design of shopping centres/malls but also the design of housing communities such as Newman's Clason Point.
- (b) **Give two examples of community environmental design.** [6]
 Whyte (1980) emphasised design features that promote positive social interaction. Studied urban plazas. Over several years they observed and filmed 18 plazas in NYC. Counted how many people used each plaza on pleasant days and began to relate usage to various features of the plaza. Used more if: number of amenities rise. (e.g. places to sit); drinking fountains and pools are present; accessible food outlets; trees; activities to watch (jugglers, etc.); sunny orientation; located on busy streets and not hidden away.
 Sidney Brower (1983) in yet another project suggested: keep the street front alive; give residents things to do and places to be; reduce the speed and number of cars; residences should open to the street, not from some central courtyard; and make parks more attractive to adults.
 Although not strictly community design, also creditworthy is the work of Newman (1976) who designed low-cost housing project – Clason Point in New York City. Clason Point consists of cluster housing of 12–40 families per cluster. Also Five Oaks, Dayton, Ohio (1994): streets closed, speed bumps introduced and divided into 'mini-neighbourhoods'.

Page 7	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

(c) Suggest *one* effect urban living may have on social behaviour. [3]

Social behaviour can include: anti-social behaviour and pro-social behaviour

Pro-social behaviour: Altman (1969) had participants knock on a door explaining that they were visiting a friend and that they had lost the address. They still had the number and could you possibly use their 'phone to call your friend. Do you think that people would let you in? Altman found that a woman was admitted to about 94% of the small-town homes but only to 40% of the city homes; a man was admitted to about 40% of the small town homes but only 14% of the city homes.

Amato (1983) study in 55 different Australian communities. A man limped down a street then screamed, fell over and clutched his leg which began bleeding profusely.

Small town (under 1,000 inhabitants) 50% stopped to help.

In a city of 20,000-30,000 this dropped to 25% Down to 15% in major cities with over 1 million inhabitants. These findings have been confirmed in studies carried out in countries such as Israel, Turkey, the Sudan, Australia and Britain.

Anti-social behaviour: study by Zimbardo – car left for few days. In city car totally vandalised; in rural area car left untouched.

Page 8	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

Section B

7 (a) Describe what psychologists have discovered about crowding. [8]

Candidates may look at distinctions between density (physical) and crowding (psychological). They may look at methods (laboratory and naturalistic) and both human and animal studies. The syllabus guidance notes suggest a look at performance, social behaviour and health.

- **Animal studies:** Dubos (1965) and lemmings; Christian (1960) deer and Calhoun (1962) rats.
- **Human studies:**
 - **performance:** Aiello et al. (1975b) found impaired task performance. In lab studies both Bergman (1971) and Freedman et al. (1971) report that density variations do not affect task performance. But task is crucial: no effect if task is simple; effect if task is complex. Saegert et al. (1975) in high social density supermarket and railway station found impairment of higher level cognitive skills (e.g. cognitive maps). Heller et al. (1977) suggests there is no effect on task performance when there is high social or spatial density and there is no interaction, but lots of effect when there is interaction.
 - **social behaviour:** helping: studies by Bickman et al. (1973) in dormitories and Jorgenson & Dukes (1976) in a cafeteria requesting trays be returned. **Aggression:** studies involving children. Price (1971; Loo et al. (1972); Aiello et al. (1979) all found different things. Crucial variable is toys given to children. Studies on male-female differences too. Candidates could look at crowding and attraction.
 - **health:** Paulus, McCain & Cox (1978) also found increase in density led to increase in blood pressure in prisoners. McCain, Cox & Paulus (1976) increase in density = more complaints of illness in prisoners. Di Atri et al. (1981) study in prisons showed higher blood pressure and pulse than when in more spacious conditions. Baron et al. (1976) found students in high density dormitories visit health centre more.

(b) Evaluate what psychologists have discovered about crowding. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the usefulness of studying animals;
- differing methodologies used to gather evidence;
- individual differences in the experience of crowding;
- ethical issues studies may raise.

(c) Using your psychological knowledge, suggest what may be done to reduce the negative experience of crowding in a public place. [6]

Suggestion can be any (candidate's choice). Most likely is to increase cognitive control e.g. Langer & Saegert (1977) or use a technique such as attention diversion.

Page 9	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

8 (a) Describe what psychologists have learned about crowd behaviour. [8]

Sears et al. (1991) define a crowd as people in physical proximity to a common situation or stimulus.

Additionally crowds must involve a number of interacting people; need not be face-to-face; need not be assembled in one place; members must influence one another.

Brown (1965) classifies crowds according to their behaviours:

- acquisitive crowd: Mrs Vaught (1928) where banks closed;
- apathetic crowd: responses to murder of Kitty Genovese;
- expressive/peaceful crowd: Benewick & Holton (1987) interviewed people attending the visit of the Pope to Britain in 1982;
- baiting crowd: in 1964 there was the case of a man, standing on the ledge of a building ten storeys high. The crowd below of some 500 people shouted to him to jump off the ledge;
- aggressive crowd (often referred to as 'mob psychology');
- escaping crowd (panicky & non-panicky).

Explanations of aggressive crowd behaviour: mob psychology of Le Bon (1895): Otherwise normally civilised people become 'barbarians' – wild and irrational, giving vent to irrational impulses. Turner (1974) proposed the emergent norm theory. Zimbardo (1969) deindividuation: each person is nameless, faceless, and anonymous and has diminished fear of retribution.

Laboratory studies of deindividuation

Zimbardo (1969) participants wore laboratory coats and hoods that masked their faces. Similarly, Prentice-Dunn and Rogers 1983, gave participants' the opportunity to give a 'victim' an electric shock. Milgram (1963) found that people were more willing to administer shocks when the participants could not see the victim and when the victim could not see them.

Deindividuation in children: Diener et al. (1976) looked at deindividuation in children, using Hallowe'en and Trick or Treat as the scenario.

Social constructionism and aggressive crowds: Reicher (1984b) who cites violent incidents involving aggressive crowds. His classic example is the 'riot' that happened in the St. Paul's district of Bristol in 1980.

(b) Evaluate what psychologists have learned out about crowd behaviour. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- comparing and contrasting explanations;
- how psychologists gather their data;
- the ethics of various studies;
- generalisability from studies: sample ethnocentrism; method.

(c) Giving reasons for your answer, suggest how crowds can be controlled. [6]

Most likely is study by Waddington et al. (1987) argue that public disorder is predictable (not the outcome of mob psychology) and problems can be avoidable. Crowds should be perceived as collections of individuals who share a social purpose and who are interpreting what is going on around them.

Five recommendations for successful crowd control:

1. Let the crowd self-police wherever possible;
2. Effective liaison should take place between police and organisers;
3. If police are involved they should use minimum force so are not perceived by crowd as causing trouble;
4. Those involved in managing crowds should be trained in effective interpersonal communication;
5. The police should be perceived as accountable and not able to do what they like.

Page 10	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

PSYCHOLOGY AND HEALTH

Section A

- 9 (a) **Explain, in your own words, what is meant by the term 'adherence to medical advice'. [2]**
Typically: the extent to which people carry out the instructions given to them by a medical practitioner.
1 mark basic, 2 marks elaboration.

- (b) **Outline two ways in which adherence to medical advice can be measured. [6]**
Any two from:

- **Subjective**
 - ask practitioner to estimate
 - ask patient to estimate (self report)
 - estimate of family member/medical personnel
- **Objective**
 - quantity accounting (pill count) where number of pills remaining is measured
 - medication dispensers which record and count times when used
 - biochemical tests such as blood or urine sample
 - tracer/marker method add tracer to medication e.g. riboflavin (vitamin B2) fluoresces under ultraviolet light
 - recording number of appointments kept

- (c) **Outline one way in which adherence to medical advice can be improved. [3]**
Most likely possibilities include:

- changing physician behaviour (DiMatteo & DiNicola, 1982); sending Dr's on training courses;
- changing communication style (Inui et al., 1976);
- change information presentation techniques (Ley et al., (1982);
- have the person state they will comply (Kulik & Carlino, 1987);
- provide social support (Jenkins, 1979) and increase supervision (McKenney et al., (1973).
- Behavioural methods: tailor the treatment; give prompts & reminders; encourage self monitoring; provide targets & contracts.

Candidates could focus either on improving the patient 'end' or that of the practitioner. Practitioner more logical as that could attend training courses (e.g. Inui) or they could be more patient-centred rather than doctor-centred. Any appropriate suggestion based on psychological evidence is acceptable.

In addition to changing any of the above features, such as changing to patient rather than doctor centred style, there are specific suggestions to change physician behaviour. (DiMatteo & DiNicola, 1982) suggest sending Dr's on training courses; alternatively changing communication style (Inui et al., 1976), Taylor (1986); change information presentation techniques (Ley et al., (1982). Tapper-Jones (1988) suggests using visual material such as diagrams. Emphasising key information and having the patient repeat what has been said. (Kulik & Carlino, 1987) all improve patient satisfaction.

Page 11	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

10 (a) Explain, in your own words, what is meant by the term 'managing stress'. [2]

Two aspects required here: a comment on stress and a comment on managing stress. Stress, a perceived inability to cope with demands causes both physiological and psychological reactions when not managed can lead to impairment in psychological and physiological functioning. Stress can be managed in various ways. See part (c) below.

(b) Outline *one* way in which stress can be measured psychologically. [3]

Most likely:

Physiological measures **not** allowed e.g. sphygmomanometer – recording blood pressure; galvanic skin response – recording skin conductivity; heart rate – pulse or ECG;

Physiologically by sample tests blood or urine samples – record levels of hormone (i) corticosteroids and (ii) catecholamines.

Psychologically by Questionnaire:

Holmes & Rahe (1967) Social Readjustment Scale.

Sarason et al. (1978) Life Experiences Survey. 57 items rated on a 7 point scale (+3 to -3) items such as 'major change in financial status'.

Dohrenwend et al (1978) PERI Life Events Scale. 102 items on a 'gain, loss or ambiguous' outcome. Are 11 topic areas (family, health, work, etc.).

Lewinsohn et al. (1985) Unpleasant Events Schedule. 320 items in categories on a 3 point scale.

Coddington (1972) Life Events Record. A non-adult version for children and adolescents.

Kanner et al. (1981) Hassles and Uplifts checklist.

Shaffer (1992) Hassles for students.

Friedman & Rosenman (1974) Type A personality and all subsequent work.

Psychologically by Questionnaire other causal factors (such as work) e.g. Professional Life Stress Scale.

(c) Outline *two* ways in which stress can be managed psychologically. [6]

Not allowed: medical/pharmacological solutions. Benzodiazepines (trade names valium, librium, etc.); beta-blockers (inderal).

Psychological solutions 1: (behavioural/cognitive strategies) can include progressive relaxation (Jacobsen, 1938); systematic desensitisation (Wolpe, 1958); biofeedback; and modelling.

Psychological solutions 2: (cognitive/behavioural) can include cognitive restructuring (Lazarus, 1981); rational-emotive therapy (Ellis, 1962) and multi-modal therapy (Lazarus, 1981); imagery (Bridge et al, 1988)

Alternative strategies involving meditation, hypnosis or yoga.

Providing social support may also help (e.g. Cohen & Willis, 1985).

Page 12	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

Section B

11 (a) Describe what psychologists have learned about the patient-practitioner relationship. [8]

Question stresses practitioners and patients and so should answers. Answers could focus on:

- Lorber (1975) distinguishes between 'good' and 'bad' patients;
- Diagnosis & information processing (Elstein & Bordage (1979) type 1 & type 2 errors);
- Interpersonal skills: non-verbal communications;
- Communication skills: accent, native language;
- Provision of information about illness; about diagnosis & treatment;
- Organisation of setting e.g. seating positions.

Attitudes of doctor (practitioner style) and attitudes patients (patient style).

Health beliefs of patient.

Candidates could also focus on one of the following:

1. Over-use of services: those with Munchausen's Syndrome; hypochondriasis.

2. Under-use of services:

Pitts (1991a) suggests the following:

- Persistence of symptoms; we are likely to take a 'wait and see' approach if we get ill & only seek advice if the symptoms last longer than expected.
- Expectation of treatment; we are only likely to seek medical advice if we think it will do some good. If we have had the same symptoms before and not received any useful treatment then we are unlikely to bother making an appointment.

People do not go to the doctors unless they feel it is important because we do not think we 'should waste their valuable time'. This perception means that many people do not seek advice even when they have developed serious symptoms. Safer (1979) found people delayed seeking treatment for up to two months.

(b) Evaluate what psychologists have learned about the patient-practitioner relationship. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- how psychologists gained their evidence;
- reasons why proposal of theories/models is difficult in this area;
- implications the evidence has for health care;
- psychological perspectives related to counselling situations.

(c) Using your psychological knowledge, suggest ways in which patients can be discouraged from misusing health services. [6]

Most likely possibilities include:

1. Changing physician behaviour (DiMatteo & DiNicola, 1982) such as changing communication style (Inui et al., 1976); change information presentation techniques (Ley et al., (1982).
2. Educating the public as to what is appropriate. A health promotion campaign. Use of fear appeal, providing information.

Page 13	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

12 (a) Describe what psychologists have discovered about lifestyles and health behaviour. [8]

Typically: the ways in which people live which may be harmful to their health or maintaining healthy existence through health protective behaviours.

Several models to choose from:

Candidates are likely to focus on one or more of three areas:

1. **General:**

Risk factors: behaviours associated with causes of death.

Heart disease: smoking, high cholesterol, lack of exercise, high blood pressure, stress.

Cancer: smoking, high alcohol use, diet, environmental factors.

Stroke: smoking, high cholesterol, high blood pressure, stress.

Accidents: alcohol use, drug abuse.

Infectious diseases: smoking, failing to get vaccinated.

What do people do to protect their health? **Primary Prevention (health behaviour)** consists of actions taken to avoid disease or injury. **Secondary Prevention (illness behaviour)** is where actions are taken to identify and treat an illness or injury early with the aim of stopping or reversing the problem. **Tertiary Prevention (sick role behaviour)** ranges from seeing a practitioner and filling a prescription to when a serious injury or a disease progresses beyond the early stages and leads to lasting or irreversible damage.

2. **Studies:**

Harris & Guten (1979) American study which found the three most common health protective behaviours were eating sensibly, getting enough sleep and keeping emergency numbers by the phone.

Turk et al. (1984) studied American nurses, teachers and college students. Found three highest in each category: nurses = emergency numbers, destroying old medicines, having first aid kit. Teachers = watching weight, seeing dentist regularly, eating sensibly. Students = getting exercise, not smoking, spending time outdoors.

Mechanic (1979) in a longitudinal study found little correlation (.1 or .2) between subjects tested when children and 16 years later.

3. **Models:**

Becker & Rosenstock (1984) The health belief model. Related studies: **Champion (1994)** used HBM to inform women about benefits of mammography. **Hyman et al. (1994)** perceived susceptibility not good predictor. Barriers and benefits better but ethnicity best. **Aiken et al. (1994)** regular place to go and practitioner recommendation much better predictor than HBM.

Ajzen & Fishbein (1975) Theory of reasoned action. Related studies: **Montano et al. (1997)** low income women questioned regarding attitude, subjective norm and intentions toward mammography. Found all significantly related to use. **O'Callaghan et al. (1997)** better predictor is past experience/behaviour.

Ajzen (1985) Theory of planned behaviour. As above model but adds perceived behavioural control.

Weinstein et al. (1998) The precaution adoption process model. Above merely identify variables. Stages people go through in their readiness to adopt a health related behaviour.

Prochaska et al. (1992) The transtheoretical model. Five stages of behaviour change:

- pre-contemplation – no intention of changing. Isn't a problem.
- contemplation – awareness of problem. Thoughts about changing but no action.
- preparation – plans made to change behaviour.
- action – plans put into action.
- maintenance – attempt to sustain changes and resistance to relapse.

Page 14	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

(b) Evaluate what psychologists have discovered about lifestyles and health behaviour. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the methods used by psychologists;
- comparing and contrasting health belief theories;
- ethical issues involved in research;
- generalisation of results from participants used.

(c) Using your psychological knowledge, suggest a community-wide campaign to reduce heart disease and improve lifestyle and health behaviour. [6]

Lots of possibilities here and candidates can usefully refer to studies of health promotion. As with all **section (c)** questions candidates should refer to a technique which is based on psychological knowledge rather than a common-sense, anecdotal suggestion. For example it would be legitimate to refer to a fear-arousal approach, or 'providing information', or through mass communication. For the latter, First Ladies of America went on television to raise awareness of breast cancer.

Most likely possibilities include:

- the three community study (Farquhar et al., 1977) 42,000 people
- Minnesota heart health programme (Blackburn et al., 1984) 350,000 people
- Pawtucket heart health project (Lasater et al., 1984) 170,000 people
- Pennsylvania county health improvement program (Stunkard et al., 1985), 220,000
- Stanford five city project (Farquhar et al., 1984) 359,000 people

Page 15	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

PSYCHOLOGY AND ABNORMALITY

Section A

- 13 (a) **Explain, in your own words, what is meant by the term 'model of abnormality'.** [2]
Typically: collection of assumptions concerning the way abnormality is caused and treated. Includes medical, psychological (behavioural, psychodynamic, etc.).
- (b) **Describe the behavioural model of abnormality.** [3]
Behavioural: disorders are maladaptive (faulty) learning. Usually classical or operant conditioning. Treatments can be systematic desensitisation or a reversal of reinforcers.
- (c) **Describe two behavioural treatments of abnormality.** [6]
There are a number of behavioural treatments:
- **Systematic desensitisation** is a therapy based on the principles of classical conditioning. It was developed by Wolpe in 1958, specifically for the counter-conditioning fears, phobias and anxieties.
 - **Cognitive behaviour therapy** changes the way a person thinks (the cognitive part) and the way a person behaves (the behavioural part). It may focus on how a person responds to a particular situation. This is done not by going back to the cause of the problem, but by focusing on the present symptoms. It works by looking at how a person thinks about an event has affected how he/she felt and what he/she did. If negative thoughts can be reinterpreted or changed for more positive or realistic thoughts, then the person will feel better and their behaviour will change. Sensky (2000) has used cognitive-behavioral therapy in the treatment of schizophrenia.
 - **Token economy:** Paul & Lentz (1977) found that the use of tokens were successful in reducing in bizarre motor behaviours and in improving social interactions with staff and other patients.
- 14 (a) **Explain, in your own words, what is meant by the term 'compulsive gambling'.** [2]
Typically: **gambling**, like kleptomania and pyromania, is an impulse control disorder where a person has to gamble to gain euphoria or relieve tension and typically includes feelings of gratification or relief afterward. Here the term compulsive is used and compulsions are recurring actions that the individual is forced to enact.
- (b) **Describe one explanation of compulsive gambling.** [3]
Most likely:
Behavioural: due to conditioning – the gambler was rewarded as a child and the thrill leads to seek the same sensation as an adult;
Psychodynamic: inability by ego and superego to suppress the urges of the id: 'I want';
Physiological: thrill seeking to achieve positive emotions;
Families also blamed for gambling; various studies argue for a genetic component as gambling is an addiction;
Cognitive: thrill seeking; faulty thought patterns. Impulse control disorder.
- (c) **Describe two ways in which compulsive gambling may be treated.** [6]
Most likely:
Medical: Some medications that are used for people with a gambling addiction are SSRI's, mood stabilizers and opioid antagonists.
Psychological: Cognitive-behaviour therapy most likely. This focuses on gambling-related thought processes, mood and cognitive distortions that increase one's vulnerability to gamble. Additionally, CBT uses skill-building techniques geared toward relapse prevention, assertiveness and gambling refusal, problem solving and reinforcement of gambling-inconsistent activities and interests.

Page 16	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

Section B

15 (a) Describe what psychologists have discovered about schizophrenia. [8]

Term from Greek schzein (split) and phren (mind).

Are 5 main **types**:

Hebephrenic: incoherence, disorganised behaviour, disorganised delusions and vivid hallucinations.

Simple: gradual withdrawal from reality.

Catatonic: impairment of motor activity, often holding same position for hours/days.

Paranoid: well organised, delusional thoughts (& hallucinations), but high level of awareness.

Undifferentiated/untypical: for all the others who do not fit the above.

There are a number of **explanations**:

Behavioural: due to conditioning and observational learning.

Psychodynamic: regression to oral stage.

Families also blamed for schizophrenia; as are twins.

Cognitive: breakdown in ability to selectively attend to stimuli in language, etc.

Genetics also play a role.

(b) Evaluate what psychologists have discovered about schizophrenia. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- points about different definitions and types;
- how schizophrenia is studied;
- comparing and contrasting explanations of cause;
- deterministic explanations;
- nature versus nurture.

(c) Giving reasons for your answer, suggest how a person with schizophrenia may be treated. [6]

Most likely:

- Psychosurgery – once popular but now highly unlikely.
- ECT very common and still used today.
- Chemotherapy – very popular.
- Behaviour therapy – less likely, but some token economy used.

16 (a) Describe what psychologists have learned out about abnormal affect. [8]

Typically: abnormal affect concerns disorders of mood and emotion, most typically depression and mania or manic-depression. Most likely: mania – person displays spontaneity, activity, has outbursts of exuberance, has heightened good humour and talkative and entertaining. They are often full of good ideas, plans and have grand visions. They are full of energy; appear to be physically inexhaustible.

Depression: are extremely despondent, melancholic and self deprecating. They may be physically lethargic; struggle to think out simple problems. They believe they are utterly worthless and have hopeless guilt.

Page 17	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

(b) Evaluate what psychologists have learned out about abnormal affect. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- points about defining and categorising abnormality;
- cultural and individual differences;
- comparing and contrasting explanations of cause;
- implications of individual and society.

(c) Giving reasons for your answer, suggest ways in which depression can be treated. [6]

Most likely:

- ECT (electroconvulsive therapy)/electroplexy is very common.
- Chemotherapy also common. Tranquilizers (e.g. chlorpromazine) for manic episodes and lithium for both manic and depressive episodes.
- Psychotherapy also a possibility but less common and less successful.

Page 18	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

PSYCHOLOGY AND ORGANISATIONS

Section A

17 (a) Explain, in your own words, what is meant by 'motivation and performance'. [2]
Typically: it is often assumed that if a worker is motivated that performance/output will be good/high. But this is not always true, as asked in question part (c).

(b) Describe *one* theory of motivation to work. [3]

Many to choose from. Only 3 marks, so answers should be brief.

- **Need theories of motivation:** individual needs
 - Maslow's **need-hierarchy** (1965): five tier hierarchy: physiological, safety, social, esteem and self actualisation. Starting with physiological each must be satisfied in order. Lots of attention received, but not much support; not a good predictor of behaviour and no useful application.
 - Alderfer's **ERG theory** (1972). Three levels: existence, relatedness and growth. Little support.
 - McClelland's **achievement-motivation theory** (1961): three work related needs: need for achievement (get job done, success, etc.); need for power (direct & control others; be influential); need for affiliation (desire to be liked and accepted; friendship). Methodology used: TAT (thematic apperception test): look at picture then relate story it suggests. Is a projective test & scoring can be unreliable. Good application: match profiles to jobs; achievement training programmes.
- **Job design theories:** if job well designed & satisfying needs = good motivation.
 - Herzberg's **two factor theory** (1966): job satisfaction & job dissatisfaction are two separate factors. Motivators = responsibility, achievement, recognition, etc. = job satisfaction. Hygienes = supervision, salary, conditions, etc. = job dissatisfaction. Some support but led to Job enrichment (redesigning jobs to give workers greater role).
 - **Job characteristics model** (Hackman & Oldham, 1976): workers must perceive job as meaningful (skill variety, task identity & task significance) responsible (autonomy) and gain knowledge of outcome (feedback). These can be scored. Also JDS (job diagnostic survey) is questionnaire measuring above characteristics.
- **Rational (cognitive) theories:** people weigh costs & rewards of job.
 - **Equity theory** (Adams, 1965) fair treatment = motivation. Worker brings inputs (skills, etc.) & expects outcomes (pay, etc.). Equality determined by comparison with others.
 - **VIE theory** (or expectancy) (Vroom, 1964): workers are rational & decision making & guided by potential costs (negative outcomes) & rewards (positive outcomes).
- **Goal setting theory** (Locke, 1968): for motivation goals must be specific, clear and challenging.
- **Reinforcement theory** (traditional): positive & negative reinforcers & punishment.

(c) Give *two* reasons why motivation and performance are not always related. [6]

Most likely:

- Systems and technology variables: inadequate systems, substandard tools and equipment, etc
- Individual difference variables: workers without basic skills and talents. New employees may be most motivated but least productive.
- Group dynamics variables: performance can be hindered by poor team workers even if rest of team are motivated. Group dynamics may hinder a motivated individual.
- Organisational variables: does each department work equally efficiently? Organisational politics may affect motivation and performance too.

Page 19	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

- 18 (a) **Explain, in your own words, what is meant by the term 'operator-machine system'.** [2]
Typically: Chapanis (1976) outlines the operator-machine system: human systems: senses, information processing/decision-making and controlling; machine system: controls, operation and display (feeding back to senses). Alternatively: the interaction between workers and tools or devices to perform a task.
- (b) **Give one example of an operator-machine system.** [3]
Any relevant example. These can range from a person using hammer and a nail to very complex systems such as an air traffic controller. Modern technology has increased O-M systems so it may be a person working with a computer.
- (c) **Describe two design factors involved in an operator-machine system.** [6]
This will involve: displays: visual such as the monitor and the keyboard to auditory such as sounds and alerts. Controls: the knobs, switches, buttons etc necessary to operate the machine e.g. a computer keyboard or other controls. *'Riggio' the recommended texts has 2 pages devoted to keyboard and computer controls.*

Section B

- 19 (a) **Describe what psychologists have discovered about leadership and management.** [8]
Many theories to choose from:
- Universalist theories** of leadership: *the great man theory* (Wood, 1913); McGregor (1960) *Theory X and Theory Y*.
 - Behavioural theories** of leadership: researchers at Ohio State University Halpin and Winer (1957) suggested *initiating structure and consideration*; researchers at the University of Michigan identified *task-oriented behaviours and relationship-oriented behaviours*. This extended into Blake and Moulton's (1985) *Managerial Grid*.
 - Charismatic** (or transformational) leaders have the determination, energy, confidence and ability to inspire followers.
 - Contingency theories** of leadership: Fiedler's contingency model (Fiedler, 1967); House's (1971) path-goal theory; Vroom and Yetton (1973) propose a *decision-making theory*; Dansereau et al. (1975) whose *leader-member exchange model*.
- (b) **Evaluate what psychologists have discovered about leadership and management.** [10]
NOTE: any evaluative point can receive credit; the hints are for guidance only.
- comparing and contrasting theoretical explanations;
 - the implications leadership style have for follower behaviour;
 - examining theoretical strengths and weaknesses;
 - how psychologists gain their evidence.
- (c) **If you owned a company, how would you improve leader-worker satisfaction? Give reasons for your answer.** [6]
Most likely: **Dansereau et al. (1975)** whose *leader-member exchange model* suggests that it is the quality of interaction between leaders and group members that is important. This model has received much acclaim due to the success it has achieved when applied to real life situations. E.g. **Scandura and Graen (1984)** found that following a training programme, where the aim was to improve the quality of leader-member relationships, both group productivity and satisfaction increased significantly.

Page 20	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE A LEVEL – October/November 2009	9698	31

20 (a) Describe what psychologists have found out about interpersonal communication systems. [8]

This is the passage of information between one person or group to another person or group. Candidates may well begin with a definition of communication and what it involves: sender, message and receiver (e.g. Hurier model for effective listening); encoding, channel and decoding.

Candidates may consider the varieties of communication: phone, face-to-face, meeting, memo, newsletter, employee handbooks, reports, e-mail, voice-mail, teleconference, etc.). Each has advantages & disadvantages. Another set of factors are:

- Organisational structures: downward, upward and horizontal/lateral.
- Barriers: filtering, censoring, exaggeration (knowledge is power.)
- Breakdown: impression management, self confidence, competence; mistrust; defensiveness; under communication.

Candidates can base their answers on communication networks (e.g. Leavitt's (1951) centralised and de-centralised).

(b) Evaluate what psychologists have found out about interpersonal communication systems. [10]

NOTE: any evaluative point can receive credit; the hints are for guidance only.

- the implications of various communications for speed;
- individual preference and/or satisfaction;
- comparing and contrasting alternative communication techniques;
- how psychologists gather evidence in this area.

(c) Giving reasons for your answer, suggest a suitable communication network for a production manager and a team of workers assembling a toy. [6]

The most suitable network for this task is a wheel formation. This is a centralised type because the supervisor will be at the centre co-ordinating activity to the workers on the spokes of the wheel. Any other type of network would not be suitable. The supervisor will have more satisfaction with this network because they are in control whereas each worker will feel less satisfied. However, because the supervisor controls, communication is much quicker and more efficient as the supervisor will make decisions.