



# CONTENTS

---

FOREWORD .....	1
PSYCHOLOGY .....	2
GCE Advanced Level and GCE Advanced Subsidiary Level .....	2
Paper 9698/01 Core Studies 1 .....	2
Paper 9698/02 Core Studies 2 .....	5
Paper 9698/03 Specialist Choices .....	7

## FOREWORD

---

This booklet contains reports written by Examiners on the work of candidates in certain papers. **Its contents are primarily for the information of the subject teachers concerned.**

# PSYCHOLOGY

## GCE Advanced Level and GCE Advanced Subsidiary Level

Paper 9698/01

Core Studies 1

### General comments

As in previous years, the marks achieved by candidates sitting this examination covered the entire mark range. It is a delight to award high marks to the answers of candidates who are prepared for the examination, who clearly show their understanding and who answer the questions directly and concisely. Equally it is frustrating to read the answers of candidates who are reasonably well prepared but who do not follow the rubric or who write too much for **Section A**, or who do not answer the questions set. Examiners want candidates to do well in examinations and each Report includes advice on how candidates can improve their examination performance.

As usual, candidates spent too much time on their **Section A** answers which did not leave enough time to write sufficient answers to the question in **Section B**. Frequently answers in **Section A** do not require detail to achieve maximum marks, as will be outlined below. To maximise marks the following strategy is suggested. **Section A** has fifteen questions that are worth 60 marks. **Section B** has one essay-type question worth 40 marks. As a rule of thumb 45 minutes should be spent on **Section A** (about 3 minutes per question) and 45 minutes should be spent on **Section B** (with about 10 minutes per question part and 5 minutes reading and thinking time).

Some answers to **Section A** questions require very little detail in order to achieve a maximum mark. For this Paper **Question 12** required only 2 numbers for part (a) and 2 numbers for part (b). The question does not ask for any description of the study (which was provided by a number of candidates). Other questions can be answered equally briefly: **Question 9 (a)** required two words and **Question 2 (a)** could also be very brief. Other questions do require a little more detail, particularly those which ask for a description. However, answers should be restricted to no more than a few sentences.

Many candidates did not answer the question in **Section B** efficiently. The question on this Paper, either **Question 16** or **Question 17**, requires consideration of *one* of the three studies listed, and not all three. The question states 'choose any *one* of the studies from the list below'. The questions then need to be answered specifically. If a question asks for findings, for example, marks will only be given for findings and not for details of the procedure. Part (c) wants advantages/strengths and disadvantages/weaknesses related to the one chosen core study. These should be clearly stated. Part (d) requires not only an alternative sample or method, but it also wants a comment on how the suggestion would affect the results. Candidates who take note of, and act on, these comments will have an advantage over those who do not.

### Comments on specific questions

#### **Section A**

##### **Question 1**

For part (a) most candidates were able to state successfully that a cross-cultural study is one where participants from more than one culture are studied. For part (b) candidates could choose any piece of evidence, whether anecdotal or not, included in the Derogowski review.

##### **Question 2**

Two types of answer were possible in response to (a). Candidates could either list two from 'naming question', 'belief question', 'memory question' and 'reality question' or they could give the actual question, 'where is the marble now' for example. For part (b) candidates had to show understanding of the study, and most candidates did this by correctly stating that autistic children were unable to answer the belief question correctly because they do not have a theory of mind.

**Question 3**

One main method used by the Gardners to train Washoe was behaviour-shaping through the successive approximations. This was aided by positive reinforcement and the use of rewards. The second method was imitation which was also developed through the use of positive reinforcement.

**Question 4**

In response to part **(a)** most candidates were able correctly to give the difference between the 'one question condition' of Samuel and Bryant (which was to ask only the post transformational question) and the standard Piaget 'two question condition' (which was to ask both the pre and post transformational questions. Children are said to become confused if they are asked the same question twice, which explains why children make fewer errors in the one question condition: the required response to part **(b)**.

**Question 5**

This type of question about ethical issues has become a regular feature and on this occasion it was asked in relation to the Bandura, Ross and Ross study. Although any two ethical issues could have been included, the most commonly used were that the children themselves did not give consent, they were not given the right to withdraw and they were not debriefed. As the hypothesis was that children would imitate what they see, to have children watch aggressive behaviour is not ethical.

**Question 6**

Part **(a)** asked for a description of the Oedipus complex. Many candidates assumed it was desire for the opposite sex parent but more specifically it is where boys fall in love with their mother and want father removed (as distinct from the Electra complex). For part **(b)** many answers could have been given, and they were, but many provided evidence that Hans was in the phallic stage rather than specifically Oedipal. Perhaps the most commonly correct piece of evidence concerned the giraffe episode, where the two giraffes were Hans' mother and father.

**Question 7**

This question on sleep and dreaming simply required evidence for and against the relationship between REM sleep and dreaming. One piece of evidence supporting this relationship is that when participants were woken from REM sleep most (91/152) reported having a dream. However, one piece of evidence that challenges this is that the other 39/191 participants did not report having a dream when they were woken from REM.

**Question 8**

A split brain is where the two hemispheres are surgically divided by cutting the commissural fibres. An answer stating the above would gain the full two marks for part **(a)**. For part **(b)** candidates could give any piece of evidence to show that split brain patients have, in effect, two minds. Most candidates were able to answer this part correctly.

**Question 9**

Part **(a)** of this question on the Raine, Buchsbaum and LaCasse study required the naming of two cortical areas that were studied. Any two from lateral prefrontal, medial prefrontal, parietal, occipital, temporal, cingulate received credit. Although the question specified cortical areas, those candidates who included sub-cortical areas also received full credit. Part **(b)** required one difference between the NGRI's and the control group. There were many differences but the main ones are that the NGRI's had less activity in the prefrontal and parietal areas and more activity in the amygdala and hippocampus areas.

**Question 10**

In the Milgram study participants showed extreme tension by sweating, by digging fingernails into their flesh and, in three cases, by having a full-blown violent seizure. The conflict experienced by participants revolved around wanting to continue, having been paid for the study and wanting to please the experimenter but not wanting to continue because of the harm and suffering they were inflicting on the learner.

**Question 11**

For part **(a)** the location was a carriage of a subway train in New York not stopping between the 125th Street stations. Any two aspects received two marks. Part **(b)** required a methodological problem. Those candidates choosing to refer to an ethical problem also received credit on this occasion. Most precisely one fundamental methodological problem was the fact that the observers could not always get a clear view of what was happening from where they were seated.

**Question 12**

Candidates always find questions of the Tajfel study confusing, and this question confirmed this. In the study, when presented with the matrix, participants had three choices: to pool the resources of both groups and take as much as they could from the experimenters (which is maximum joint profit); to take as much as they could, irrespective of what the out-group received (which is maximum in-group profit) or to take less for themselves but to maximise the difference between themselves and those in the out-group (which is maximum difference). On the matrix presented in this question, maximum joint profit would be the highest total of any two numbers which, in this case, were 9 and 24. Maximum in-group profit would have been 24 and 9 because the in-group would receive 24, the highest amount (even though the out-group would receive 9). Maximum difference, part **(b)**, was 20 and 2 because the difference between these two numbers is 18. In the actual study the boys could have gone for 24 and 9 and got more profit (but only 15 more than the out-group) but instead they went for the smaller amount 20 and 2 (because this was 18 more than the out-group).

**Question 13**

Part **(a)** asked what is meant by the term 'moron'. According to the study it is a person with a low mental age initially set at 16 but reduced to 12. Part **(b)** asked who the morons are and why. The morons in this study are the American nation (a nation of morons) because their army recruits scored an average mental age of 13 years. This may seem rather poor but, crucially and not surprisingly, those tested from every other nation achieved scores that were even lower than this.

**Question 14**

There were several aims of the Hrabka and Grant study, and any one from the following would have been sufficient: to replicate the 1939 study by Clark and Clark; to see how racial awareness developed; and to see how attitudes change over a thirty year period. Most candidates were able to answer part **(b)** correctly in that they provided an appropriate conclusion arrived at by Hrabka and Grant.

**Question 15**

In the study by Rosenhan participants gained admission by telephoning the hospital for an appointment and reporting fake symptoms (that they could hear voices). Part **(a)** caused few problems for most candidates. Part **(b)** saw candidates draw on a range of possible answers, such as the fact that they were diagnosed as having schizophrenia, that they were detained for a period of time, that they took notes on the staff, that the staff ignored them, amongst others.

**Section B****Question 16**

In part **(a)** most candidates were able to outline the self report measures that were used in their chosen study whether it be Freud, Hodges and Tizard or Thigpen and Cleckley. However a significant number of candidates took it as an opportunity to describe the whole study. Most of these answers tended not to refer to self report measures and so did not score very many marks. Candidates must answer the questions set if they are to be successful. Part **(b)** simply asked for an outline of the main findings, and although most candidates were able to do this successfully, many candidates yet again took the opportunity to describe the whole study.

What distinguished the good from the very good answer was the range of findings and the detail included. Part **(c)** often caused most problems for candidates as the requirement was to consider both the advantages and disadvantages of self report measures. The optimal strategy was to provide two arguments for and two arguments against. Candidates are reminded that the question did request that the chosen study be used as an example to illustrate the advantages and disadvantages.

In part (d) all candidates made reasonable suggestions for ways in which a different method could be used to gather data. On the one hand the more able candidates often provided more detailed explanations of how their suggestions would work, and on the other, there were those who could not develop their suggestions beyond a few sentences or so. Not all candidates went on to consider the effect their suggestion would have on the results, as the question asked.

### Question 17

This was a popular question, but again suffered the same fate as **Question 16** in that despite being specific and asking for findings, it led candidates to describe the whole study. Some candidates do see this as another **Section A** question and write a very brief answer. They are reminded that whereas **Section A** questions attract 2 (or occasionally 4) marks, questions in **Section B** are always worth 10 marks, and so more detail is required in answers.

Part (b) produced some good answers, with candidates being able to describe the sample and how the participants were selected.

Part (c) required a consideration of both the advantages and disadvantages of using a restricted sample of participants. Whilst most candidates could provide a number of disadvantages, such as inability to generalise, very few could extend their range of advantages beyond the 'they are easily available' type of comment.

Part (d) caused one or two problems for some candidates, but most were able to make appropriate suggestions of what a different sample might be. As with **Question 16** it was insufficient to answer only half the question. The other half of the question 'and say what effect this would have on the results of the study' carried 5 marks and so to ignore it was costly.

Paper 9698/02

Core Studies 2

### General comments

Overall the Paper was answered well with very few candidates making rubric errors. Some candidates did not appear to have studied the Core Studies in sufficient detail to be able to answer the questions well, but this did not apply to the majority of candidates who demonstrated impressive knowledge and understanding. As always, some candidates failed to read the questions carefully enough and missed the specific answer required, despite the considerable knowledge displayed. A few candidates selected one study on the essay questions rather than using all of the studies listed which restricted the marks they could obtain. In part (b) of the essay questions some candidates focused on the same problem repeatedly for each of the studies, again this restricted the marks that could be awarded since the question asks for 'problems'. However, the majority of candidates attempted the questions with the technique required demonstrating effective instruction and preparation. There were some impressive answers to part (c) of the essays by candidates who were able to make a range of points supported by psychological evidence, with well-expressed arguments extending beyond the specific studies.

### Comments on specific questions

#### **Section A**

#### **Question 1**

Most candidates were able to identify two ethical issues raised by the Piliavin study. Good answers went on to explain why the issue had arisen e.g. the difficulty in debriefing participants in field studies.

#### **Question 2**

- (a) There was some confusion as to what was meant by a 'psychometric test'. Acceptable answers referred to the IQ and memory tests whilst reference to the Ink Blot test, hypnosis, and the EEG test were not credited. For full marks details of the results of the test were also required which some candidates failed to do.

- (b) This question was answered very well and many candidates obtained full marks even though some were answered incorrectly. Answers included issues about reductionism, validity and experimental bias.

### Question 3

- (a) This question was generally answered well, often referring specifically to differences in IQ found between the immigrants and other Americans.
- (b) Good answers referred to the control of immigration, however some candidates merely referred to the use of the tests for allocating recruits to positions in the army.

### Question 4

- (a) This question was well answered by most candidates who referred to the estimation of dots. Weaker answers incorrectly referred to the age of previous friendships.
- (b) Some candidates were uncertain as to what the term 'reductionist' meant. The better answers explained that Tajfel's explanation/experiment was too simplistic considering the complexity of discrimination in everyday life.

### Question 5

- (a) Many candidates were able to describe characteristics of the sample including age, sex, and occupation. Where the candidate was uncertain they sometimes merely described the conditions of the experiment.
- (b) This question was not generally answered well. Candidates did not focus on usefulness, just describing the results of the study.

## Section B

### Question 6

This was the most popular question, which looked at ecological validity. Some candidates merely described all aspects of the studies listed while others only covered one or two studies; the question requires the candidate to cover all of the four studies listed. Good answers referred to how the studies were different to everyday life including aspects of the location, procedure and the specific tasks participants were required to do. Part (b) sought problems of studying behaviour in everyday life, however many candidates described problems of the four studies listed often referring to the problems of laboratory research without reference to the specific question asked. In part (c) most candidates used terminology but often did not refer to any psychological evidence to support arguments and were therefore restricted to the lower band of marks.

### Question 7

This was a less popular question, referring to measurement and validity. Part (a) was generally answered well with many candidates able to describe what was measured in each of the studies listed. Part (b) elicited good answers from some candidates who were able to discuss problems of validity including the use of dolls in two of the studies, the problem of imitation rather than genuine use of language by Washoe, and the problem of ethnocentric bias. Weaker answers merely claimed that the measures were valid with little discussion. Part (c) was answered well by the majority who offered some excellent insights into the difficulties of accurate measurement in psychology.

### Question 8

This was the second most popular question. Part (a) was answered well by some candidates who were able to explain what each study showed about how children develop. However weaker answers merely described the study with no specific consideration of the question asked. Part (b) again obtained a range of answers some of which provided accurate points relating to the advantages and disadvantages of studying children, weaker answers did not offer any examples from the studies listed. Part (c) answers were generally good with many good points for and against generalising from children to adults with better answers referring to psychological evidence as examples of points made.

<p><b>Paper 9698/03</b> <b>Specialist Choices</b></p>
---

### General comments

The quality of some answers is very impressive and such candidates achieve excellent marks. On the other hand there are many candidates who, despite a number of Reports such as this, still fail to realise how marks can be maximised on this Paper.

For 9698 Papers 1 and 2 (Core Studies 1 and 2) candidates must have a detailed knowledge of twenty specified psychological studies. This means that when examination questions are asked, candidates answer in psychological terms referring specifically to the Core Studies. Many candidates do not adopt a similar approach for Paper 3, the Specialist Choices Paper. For this Paper candidates frequently write answers in very general terms, often based on common sense, as if they have studied very little or no psychology. This means that marks fail to be gained because candidates do not show Examiners that they have studied psychology. The most explicit way to demonstrate that psychology has been studied is to quote the name of the psychologist(s) who conducted a piece of research. In fact a look at the Question Paper for this year (and for the last few sittings) reveals that questions frequently ask "Describe one study..." or "Describe two studies..." which should be answered quoting a piece of appropriate psychological research, along with the name of the person doing the research.

Two important points to note: it is not assumed that the studies referred to for specialist choices will be covered in the same depth as Core Studies. For Core Studies every detail needs to be known and that is why only twenty studies are covered. For Specialist Choices, studies should to be taught in significantly less detail, here range being more important than depth. Second, whereas Core Studies are specified in the Syllabus, studies for Specialist Choices are not. This is deliberate for it gives Teachers the opportunity to teach any study they wish, provided that the studies relate to the topic area of the Syllabus. For example, in the Psychology and Education option **Question 2 (a)** asked for a brief description of one theory of motivation. The one theory is not specified and any theory of motivation in education can be used – whatever theory has been taught. Any appropriate theory would receive credit. Appropriate examples appear in the indicative content of the mark scheme – not only for this question, but for all options and questions appearing on this Examination Paper.

### Comments on specific questions

*Psychology and education*

#### **Section A**

##### **Question 1**

Candidates were able to describe what is meant by the term 'educational environment' without too much difficulty, most answers stating that it concerns features of the architecture and contents of any area where education takes place. For part **(b)** design faults could involve physical features, such as the lack of windows/light or some aspect of the design of the classroom, such as seating arrangements. The teaching style adopted by a Teacher is not an appropriate feature of this Syllabus section 'design and layout of educational environments'. For part **(c)** candidates could choose one design weakness and comment on how it may be improved. To state 'have more windows' is appropriate for one mark, but reference to an actual named psychological study, would achieve the other two marks allocated (see general comments).

##### **Question 2**

This question concerned motivation in educational performance. Most candidates were able to say correctly what this was, as required in part **(a)**. Part **(b)** required one theory and again this was largely successfully done. For part **(c)** answers were variable. Whilst candidates were able to describe a theory such as 'the behaviourist theory' in part **(b)** many could not take it a step further and say how the theory could be used to improve motivation.

**Section B****Question 3**

Educational performance in schools is assessed in many ways and most, if not all, were included in the candidates' responses. Quite a number focused on how their work was assessed via essays and examinations, while others looked at the more formal assessment of performance by IQ testing. Both approaches were legitimate. In part (b) candidates covered a number of issues including both cultural and individual differences. In (c) the number of ways in which the candidate's knowledge of psychology could be examined was disappointing with most candidates suggesting it should be done through examination!

**Question 4**

In response to this question candidates often became confused between learning style and teaching style. A learning style is that preferred by the pupil or student; a teaching style is that operated by the teacher. However, as this essay question is general, confusion of the two was not a problem. In part (b) evaluation was reasonable, with candidates looking most frequently at the implications of styles for both teachers and learners. For part (c) candidates could suggest any style for teaching their psychology course and, although reasonable suggestions were made, they were frequently not supported by psychological evidence.

*Psychology and environment*

**Section A****Question 5**

Despite climatological determinism being the first sub-section of the climate and weather section of the Syllabus, many candidates could not say what climatological determinism was. It is simply where behaviour is determined by the weather. Two studies which show the negative effects of climate/weather on social behaviour could be any on aggression e.g. Goranson & King (1970) or helping e.g. Page (1978) or attraction e.g. Griffit (1970). For part (c) the most frequently cited effect on health was seasonal affective disorder.

**Question 6**

Part (a) required an explanation of urban living and its definition is as the term suggests – living (having a place of residence) in a relatively densely populated area. For parts (b) and (c) candidates could include several possibilities depending on what prevails in the country in which candidates live. One type of urban housing design is high-rise blocks of flats (e.g. Pruitt-Igoe in USA). An alternative is to build houses with 'parks and open gardens' and increase defensible space. An alternative (called urban homesteading in USA) is where occupants agree to 'code of conduct' in return for a house. Gentrification, also a possibility, is the growth of middle class housing in areas that were previously dilapidated.

**Section B****Question 7**

Not a popular question and one which is often confused with crowding. Collective behaviour concerns a number of people gathered together for a variety of purposes and in most cases it is a relatively pleasant experience. This is different from crowding and density for if people (and indeed animals) are crowded then by definition they feel negative. The area of collective behaviour is fascinating and relevant material includes the work of Le Bon on mob psychology and Zimbardo on deindividuation, where each person is nameless, faceless, anonymous and has diminished fear of retribution. In order to answer part (c) candidates needed to have studied relevant psychology and judging from answers presented this was not the case.

**Question 8**

For this question candidates could write entirely about personal space, entirely about territory or provide an answer based on a combination of the two. Answers covered the entire mark range, at the top end of the mark range candidates were fluent in quoting legitimate psychological research and in part (b) they provided coherent evaluation. On the other hand quite a number of candidates assumed they could answer this question using their common-sense understanding, and this produced answers at the bottom and of the mark range. In order to pass this examination, candidates must show they have studied psychology. Part (c) concerned the defence of either primary or public territory, with most candidates suggesting the use of a territorial marker such as a bag or coat.



*Psychology and health***Section A****Question 9**

Both acute and chronic pain hurt; the difference is that acute pain is relatively short-term, whereas chronic pain is much more long-term. For part (b) pain in adults can be measured in many ways: self report/interview methods; rating scales: e.g. visual analogue scale and category scale; pain questionnaires: e.g. MPQ (McGill Pain Questionnaire); behavioural assessment: e.g. UAB; and psychophysiological measures: use of EMG, ECG & EEG. Many of these are inappropriate for children too young to talk (part (c)). For them some form of rating scale or behavioural assessment is appropriate.

**Question 10**

Most candidates were able to provide an explanation for the term 'lifestyle' whether it be psychologically based or not. Part (b) required two health enhancing behaviours and these generally could be categorised by type as either primary, secondary or tertiary. The work of Harris and Guten 'numbers by the phone' was also mentioned. As expected, the invitation to provide an example of one cultural difference in health behaviours (part (c)) produced a wide range of interesting answers.

**Section B****Question 11**

Essay questions such as this allow candidates the freedom to write about whatever aspect of the area they choose, and this was the case for this question on stress. Better answers were those from candidates who organised their answers and included some form of definition, a mention of the possible causes of stress (including physiological components), a description of measures of stress and, for some candidates, a mention of how stress can be managed. Evaluation in part (b) tended to be poor, simply because too much time was spent on part (a). Part (c) required candidates to write about how stress can be managed, though disappointingly many candidates simply suggested the taking of a drug rather than a psychologically-based technique.

**Question 12**

Equally popular to **Question 11**, this question produced answers at either end of the mark range. At the bottom end of the range one candidate wrote "*adherence is when I don't do what the doctor tells me*" and nothing more, whilst at the top end there were excellent answers covering a range of measures of adherence and explanations of why people do not adhere to advice. For part (c) candidates had little difficulty in suggesting ways in which adherence could be improved but again, suggestions based on psychological knowledge received more marks than those that did not.

*Psychology and abnormality***Section A****Question 13**

The term 'diagnosis' is where the practitioner weighs up evidence such as symptoms and decides what classified illness the patient has. For parts (b) and (c) candidates had a free choice as to what abnormality they chose to answer on. This produced quite a range of responses and although candidates had little problem with part (b) more difficulty was encountered when providing two problems with the diagnosis of their chosen abnormality.

**Question 14**

This was a very popular question where candidates achieved some excellent marks. For part (a) a model of abnormality is a set of assumptions concerning the cause and treatment of various types of mental illness. For part (b) most candidates chose either the medical, psychoanalytic or behavioural models, although a number of minor models were mentioned too. Part (c) also caused little difficulty, however some candidates described two treatments from different models, and according to the question that was not allowed.

**Section B****Question 15**

This general essay question on abnormal affect allowed candidates to relate all they knew, which in some cases was very impressive. Depression is one aspect of abnormal affect and mania is the opposite; and those people suffering from extreme mood swings are manic-depressive. Some candidates explored symptoms, others possible causes, and some candidates considered both. Part (c) asked for treatments and perhaps not surprisingly the two most common treatments, ECT and chemotherapy, are medically rather than psychologically based.

**Question 16**

This question was far less popular than **Question 15**. It allowed candidates to write about aspects of abnormality across different cultures. Rather than producing coherent, well structured answers, candidates often wrote nothing more than a list of general points. In part (b) evaluation was generally weak, with candidates often simply repeating, or expanding on what was said, in part (a). Part (c) followed a similar list-like pattern with generally uninspiring answers.

*Psychology and organisations***Section A****Question 17**

Communication involves: a sender, the message itself and the receiver (e.g. Hurier model for effective listening); it also involves the encoding, the channel and the decoding of the message. A communication network is simply the route through which the message is transmitted from the sender to the receiver. The most commonly quoted communication network is that outlined by Leavitt, including the 'wheel' and 'y' formations. Upward communication flow could involve 'team-briefing' and employee suggestion systems; grievance systems; open-door policies; employee surveys; participative decision making; corporate hotlines; brown bag meetings; and skip-level meetings are all relevant.

**Question 18**

An excellent definition of motivation to work is provided by Riggio, who says it is 'the force that energises, directs and sustains behaviour'. Part (b) asked for something different from the typical 'describe one theory of motivation' but despite this candidates still reverted to common-sense answers like 'pay more money'. Whilst this is sometimes used as a strategy, it is not common, with employers using a much wider range of more cost-effective strategies. Part (c) required candidates to think about why a motivated worker does not always perform well, and most candidates were able to provide appropriate answers which showed understanding.

**Section B****Question 19**

Human resource management is the all-encompassing term for performance appraisal, reward systems and personnel selection, and in this question candidates could focus on one or more of these aspects. As has been the case in other questions, some candidates had been well prepared and wrote structured answers showing good understanding. Others wrote answers which contained very little psychological theory and/or evidence. Part (c) led to a range of strategies being suggested, some nothing more than an interview, others referring to 'typically American' acronym-based techniques.

**Question 20**

A question on organisational work conditions always attracts those weaker candidates who think they understand what an 'organisational work condition' is, but who then struggle to include appropriate information in their answers. For future reference Riggio (1990) divides work conditions into physical conditions such as illumination, temperature, noise, motion, pollution and aesthetic factors such as music and colour; and psychological conditions such as privacy or crowding, status/anonymity and importance/unimportance. Vibration, body movement and posture (e.g. seating or lifting) can be added, and work schedules are also important.