Chapter 2

1 A laboratory experiment is conducted in an artificial environment whereas a field experiment is conducted in a natural environment.

2 a) They are not easy to replicate because, as the independent variable is naturally occurring, it is difficult to obtain a similar sample to repeat the study.
   b) As they are usually conducted in a laboratory, they lack ecological validity and so it is difficult to generalise the findings to real-life situations.

3 A participant observation is an observation in which the observer becomes part of the group whose behaviour is being observed whereas a non-participant observation is where the observer records participants' behaviour, usually from a distance, while not participating in the situation themselves.

4 One strength is that observations allow researchers to see whether what people say they do/will do is actually true. One weakness is that observers may see what they want to see, thus showing observer bias, which makes the findings invalid.

5 a) Because they are standardised, they are highly replicable, so similarities/differences and/or trends in behaviour can be identified.
   b) They allow large amounts of standardised data to be gathered from lots of people quickly and easily, making findings generalisable.

6 a) They do not allow a participant to qualify or expand on their answers so it is not possible to find out why a participant responded in the way they did.
   b) Responses are often influenced by demand characteristics and/or social desirability so findings lack validity as they are not the participants' honest responses.

7 To establish whether or not there is a relationship between the variables being measured.

8 Where an increase in one variable is accompanied by an increase in the other variable, i.e. as one variable increases so does the other.

9 One strength is that a correlation enables the researcher to see whether there is any relationship between the variables being measured. A weakness is that it does not allow cause and effect to be established.

Check your understanding

1 = D
2 = D
3 = D
4 = B
5 = C

Chapter 3

1 A null hypothesis predicts that there will be no difference or no relationship between the variables being measured whereas an alternative hypothesis predicts that there will be a difference or relationship between the variables being measured.

2 A one-tailed hypothesis predicts the nature of the effect of the independent variable on the dependent variable or the direction of the relationship between the variables being measured whereas a two-tailed hypothesis predicts that the independent variable will have an effect on the dependent variable or that there will be a relationship but does not specify the direction of the effect.

3 Where every member of the target population has an equal chance of being chosen to participate.

4 Because those who offer to take part will be keen, interested, have time available and are likely to possess similar characteristics which may be very different from those of the rest of the target population.

5 In a repeated measures design each participant takes part in every condition under test whereas in an independent measures design different participants take part in each condition under test.

6 Time sampling is when pre-determined behaviours are recorded at regular intervals whereas event sampling is when the number of behaviours within a specific time period are recorded.

7 Open questions allow participants to give full and detailed responses using their own words whereas closed questions offer a small number of alternative responses from which the participants must choose.
Check your understanding
1 = B
2 = D
3 = D

Chapter 4
1 Tally chart of behaviours displayed on the 10 a.m. train from _____ to _____ on _____

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chatting/Talking to neighbour</td>
<td></td>
</tr>
<tr>
<td>Reading a book</td>
<td></td>
</tr>
<tr>
<td>Reading a newspaper</td>
<td></td>
</tr>
<tr>
<td>Reading a magazine</td>
<td></td>
</tr>
<tr>
<td>Reading notes</td>
<td></td>
</tr>
<tr>
<td>Texting</td>
<td></td>
</tr>
<tr>
<td>Playing games on mobile</td>
<td></td>
</tr>
<tr>
<td>Talking on mobile</td>
<td></td>
</tr>
<tr>
<td>Using a computer</td>
<td></td>
</tr>
<tr>
<td>Looking out of the window</td>
<td></td>
</tr>
<tr>
<td>Sleeping</td>
<td></td>
</tr>
</tbody>
</table>

2 Gould’s study, ‘A nation of morons’.
3 By ranking all the numbers from lowest to highest and then finding out which is the middle score. If there are two middle numbers, they are added together and divided by two.
4 A scatter diagram should be used to display the two sets of data visually.
5 Bell shaped and rises gradually and symmetrically to show the distribution of scores. The points of the mean, median and mode are represented by the single point at the top of the curve.
6 A type 1 error is made when a researcher rejects the null hypothesis when it is true whereas a type 2 error is made when a researcher accepts the null hypothesis when it is not true.
7 By training the observers in a ‘trial run’ before the study actually starts to make sure that both observers rate and score behaviours in the same way. I would then correlate the ratings of both observers after the observation. If the two sets of ratings generate a positive correlation, I can feel confident that I have inter-rater reliability.
8 Participants may respond or behave in ways they think reflect what is acceptable in society rather than how they would actually respond or behave. They will then not be displaying their genuine or natural behaviour and so findings will be invalid.
9 Two ethical considerations are deception and informed consent. Because they do not know they are being observed, participants will not have consented to be part of the study and are deceived because they do not know they are part of a study. These issues can be managed by giving a debrief at the end of the observation so participants are told the aims and potential consequences of the observation.

Check your understanding
1 = A
2 = D
3 = A
4 = C
5 = B
6 = B
7 = C
8 = A
9 = A

Chapter 5
1 Enables an interested reader to quickly determine whether or not the report is relevant to his/her research interests.
2 In the method section.
3 Large amounts of raw data and calculations should not be placed in the results section, they should be placed in the appendices.
4 Peer reviews are useful as they allow specialists to judge whether or not the article submitted for publication would make a positive contribution to psychological knowledge. If the article is passed for publication, funding for further research on the topic may be forthcoming.
5 As editors tend to prefer to publish positive recommendations from peer reviews because these will increase the standing of their journal, a bias in publishing results can lead to a misperception of the true facts.

Check your understanding
1 = C
2 = B

Chapter 6
1 Improved understanding of the circumstances in which people will obey destructive orders.
2 The research linked to the above example is Milgram’s study of obedience.
Check your understanding

1 = A
2 = D
3 = C
4 = A
5 = C
6 = B

Chapter 9

1 The scientific investigation of how the thoughts, feelings and behaviours of individuals are influenced by the actual, imagined or implied presence of others.

2 The Nazi atrocities of the Second World War, which resulted in millions of innocent people being slaughtered on command.

3 Because there was no independent variable – there was only one group of participants, men drawn from the New Haven area of the USA.

4 One from:
   a) They thought the shock generator was real when in fact it was fake and administered no electric shocks to the learner.
   b) They thought the study was about memory and learning when in fact it was about obedience to authority figures.
   c) They thought they had an equal chance of being teacher or learner when in fact the draw was rigged so they were always the teacher.
   d) They thought the ‘learner’ was another participant like them when in fact he was a confederate.

5 One from:
   a) More participants obeyed than disobeyed.
   b) 65 per cent of participants went up to the full 450 volts.
   c) 100 per cent of participants went up to 300 volts.
   d) Many participants showed extreme signs of stress, such as sweating, trembling or laughing nervously.

6 People will obey others whom they consider legitimate authority figures even if what they are asked to do goes against their moral principles. This is illustrated by the fact that the majority of participants [65 per cent] obeyed the orders of the authority figure when asked to give electric shocks of 450 volts.

7 Disobedience is the refusal to obey orders and whistle-blowing is the action of exposing any kind of information or activity that is deemed illegal, dishonest or not correct within an organisation (public or private).

8 The sample was gathered through flyers posted in the university cafeteria. This means the sample may not have been representative as only those people who saw the flyers had the opportunity to volunteer. Therefore one should not generalise the findings of this study in relation to disobedience and whistle-blowing.

9 Participants were informed about their task, the potential benefits/risks of participation, and their right to withdraw at any time with no penalty. They were also assured of the confidentiality of the information collected and completed a consent form. Each participant was greeted in the laboratory by a male Dutch experimenter who was formally dressed and had a stern manner. The experimenter proceeded with a [seemingly unjustified] request for each participant to provide a few names of fellow students and then presented the cover story relating to the effects of sensory deprivation on brain function. The experimenter left the room for three minutes. Participants then moved to a second room where they were to write a statement to convince the students they had previously indicated to participate in the study. They were told to be enthusiastic and use two adjectives among ‘exciting’, ‘incredible’, ‘great’ and ‘superb’. They were not to mention negative effects of sensory deprivation. A mailbox and the research committee forms were also in this room. If a participant believed the proposed research on sensory deprivation violated ethical norms, they could anonymously challenge it by putting a form in the mailbox. The researcher told participants to begin and left the room for seven minutes. When they returned they invited the participant back to the first room where they completed two personality inventories, were probed for suspicion, fully debriefed and asked to sign a second consent form, this time fully informed.

10 To allow the participants to reflect on the action-based decisions they were about to make.

11 Only 36 per cent/a small percentage of the comparison group indicated that they would obey the researcher, with most believing they would be either disobedient or whistle-blowers. They predicted that only 18.8 per cent of the other students at the university would obey, predicting that the majority would either disobey or whistle-blow.

12 One from:
   a) Individuals tend to obey authority figures, even if the request is unjust. This was shown when more than 75 per cent of the participants in this study obeyed the request of the experimenter and wrote the letter.
   b) What individuals say they and others will do is often different from what actually happens.
Participants in the comparison group predicted that only a small percentage (18.8 per cent) of other students at the university would obey the experimenter and write the requested letter when in fact more than 75 per cent did actually obey.

13 Because it shows how the environment (in this situation being on the New York subway) and other people in that environment (in this case the drunk/lame, white/black victim and the other passengers) influence an individual’s behaviour (in this case whether or not they offered help to the victim in need).

14 Diffusion of responsibility is spreading of the responsibility for a situation among all the people present. Bystander apathy is the belief that someone else will do what is necessary to alleviate a situation. Therefore there is no need for the witnessing bystander to offer any help.

15 It was a study with IVs and DVs that was conducted in a natural environment. The IVs were the type of victim (lame or drunk), the race of the victim (black or white) and whether a model stepped in to help early (after 70 seconds) or late (after 150 seconds) from the critical or the adjacent area. The DVs were the frequency of help, speed of help, race of the helper, sex of the helper, movement out of the critical area and verbal comments made by bystanders. The natural environment was the New York subway/the A and D trains of the 8th Avenue line.

16 By smelling of liquor and carrying a liquor bottle wrapped in a brown bag. He stood near a pole in the critical area and 70 seconds after the train left the subway station he staggered forward and collapsed. He remained in a supine position on the floor until he received help. If no help was offered by the time the train stopped, the model helped him to his feet and they left the train together.

17 One from:
   a) The cane victim received spontaneous help more often than the drunk victim.
   b) The cane victim was offered help more quickly than the drunk victim.
   c) Overall the cane victim was offered help more times than the drunk victim.

18 Because bystanders/witnesses do not consider the lame person to be responsible for his condition, i.e. he can’t help it, whereas they tend to consider the drunk person to be responsible for his drunken condition, i.e. it is his own fault.

19 One from:
   • Reciprocal altruism holds that the incentive to help an individual is based on the expectation of potential reward in the future.
   • Social exchange theory holds that people calculate the rewards and costs of helping others, aiming to maximise the rewards and minimise the costs.

20 Two from:
   • To determine whether a city’s tendency to offer non-emergency help to strangers is a cross-culturally stable characteristic of a place.
   • To obtain a descriptive body of data on helping behaviour across cultures using identical procedures.
   • To identify country-level variables that might relate to differences in helping.

21 Two from:
   • Whether the victim dropped a pen.
   • Whether the victim had a hurt/injured leg.
   • Whether the victim was blind and trying to cross the street.

22 The hurt leg condition involved the researcher walking with a heavy limp and wearing a large and clearly visible leg brace. While walking, the experimenter accidentally dropped and unsuccessfully struggled to reach down for a pile of magazines as they came within 20 feet of a passing pedestrian.

23 Simpatia countries were, on average, more helpful than non-simpatia countries.

24 There are large cross-cultural variations in helping rates. This can be concluded because countries with the cultural tradition of simpatia were found to be, on average, more helpful than countries with no such tradition.

Chapter 10

1 That humans, like computers, are information processors. The brain receives, interprets and responds to information in a similar way to a computer, with the response being displayed through an individual’s behaviour.

2 Bartlett’s theory holds that individuals reconstruct the past by fitting new information into existing schemas.

3 A question phrased in such a way that the expected answer is suggested in the question itself.

4 Both were laboratory experiments that used an independent measures design.

5 One hundred and fifty students were divided into three equal groups. They were all shown a film clip of a multiple car crash. Afterwards
they were given a questionnaire which asked them to describe the accident and answer a set of questions about it. In the questionnaire there was a critical question about speed. One group was asked: ‘About how fast were the cars going when they smashed into each other?’ Another group was asked: ‘About how fast were the cars going when they hit each other?’ The third group were not given a question about vehicular speed. One week later, all participants, without seeing the film again, completed another questionnaire about the accident which contained the further critical question: ‘Did you see any broken glass – Yes/No?’

6 ‘Smashed’ produced the fastest speed estimates [mean speed 40.5 mph] and ‘contacted’ the slowest [mean speed 31.8 mph].

7 More participants who had the verb ‘smashed’ in the first questionnaire reported seeing broken glass than participants who had the verb ‘hit’ in the first questionnaire/ were not asked a question about vehicular speed in the first questionnaire.

8 That the verb used in a question influences a participant’s response. This can be said because participants in both experiments who were asked to make speed estimates when the verb ‘smashed’ was in the question gave higher estimates than participants who were asked with the verb ‘hit’ in the question.

9 To show that performance in a meaningful memory test is enhanced when the test takes place in the same environment in which the material was originally learned rather than when the test takes place in a different environment.

10 The participant’s performance on the short-answer and the multiple-choice answer tests.

11 The sample consisted of 39 individuals, both males and females, with a wide age range, who were acquaintances of the experimenters.

12 The sample was recruited by the eight experimenters who invited five participants each.

13 As a form of control/to make the experiment fair. The only sound any participant should have heard was the taped background noise played to the participants in the ‘noisy’ condition.

14 The mean number of correct answers was 6.7/ the standard deviation was 1.22.

15 The mean number of correct answers was 12.7/ the standard deviation was 1.64.

16 This study showed that performance in a meaningful test was better when both the learning and the test environments were quiet/silent, so students are likely to perform better in exams if they study for them in a quiet environment because exams are normally conducted in a silent/quiet place.

17 The cognitive process that enables individuals to select certain information while rejecting other information.

18 A cognitive process that allows individuals to attend to and respond to more than one piece of information at the same time.

19 By asking participants to say when the two messages – one into each ear – seemed to them to be of equal loudness.

20 Both experiments used a repeated measures design.

21 To find out the limits of the efficiency of the attentional block.

22 Most participants ignored the instructions presented in the passage they were shadowing.

23 In a situation where a participant directs his attention to the reception of a message from one ear and rejects a message from the other ear, almost none of the verbal content of the rejected message is able to penetrate the block set up. This can be said because the mean number of words recognised from the rejected message was only 1.9/7 whereas the mean number of words recognised from the shadowed message was 4.9/7.

24 A cognitive process in which an individual interprets, organises and elaborates on information that enters the brain via the eyes.

25 When attention is diverted to another task or object so the observer fails to see an unexpected object, even if the object appears in the centre of their vision.

26 To build on previous research by examining inattentional blindness for complex objects and events in dynamic scenes.

27 The Transparent/Umbrella woman condition, the Opaque/Umbrella woman condition, the Transparent/Gorilla condition and the Opaque/Gorilla condition.

28 Where the white team, the black team and the unexpected event [umbrella woman or gorilla], having been filmed separately, were made partially transparent and then superimposed to make one film.

29 That they would be watching two teams of three players passing basketballs and they should pay attention to the black/white team.

30 They were to keep a silent record of the total number of passes/total number of bounce and aerial passes made by the attended [black/ white] team.

31 One from:

a) 8 per cent of the participants who were watching the white team noticed the unexpected event/noticed the gorilla walk across the screen.
b) 25 per cent of the participants who were watching the black team noticed the unexpected event/noticed the gorilla walk across the screen.

32 One from:
   a) 100 per cent of the participants who were watching the white team noticed the unexpected event/noticed the woman with an umbrella walk across the screen.
   b) 58 per cent of the participants who were watching the black team noticed the unexpected event/noticed the woman with an umbrella walk across the screen.

33 Findings showed that although 54 per cent of the participants noticed the unexpected event of either a gorilla or a woman with an umbrella walking across the scene, 46 per cent actually failed to notice the event.

Chapter 11

1 The theory proposes that individuals learn their behaviour from each other via observation, imitation and modelling, which can occur even in the absence of the original model.

2 To show that learning can occur through the mere observation of a model and that the imitation of learned behaviour.

3 By the male model and, on occasions, a second observer observing each child through a one-way mirror and noting down at five-second intervals every display of imitative physical aggression, imitative verbal aggression, imitative non-aggressive physical and verbal acts, and partially imitative physical and verbal acts.

4 Each child was taken individually into a second room which contained a variety of very attractive toys. They were allowed to play with these toys but after about two minutes the experimenter took them away, saying they were reserved for other children. This was to make the children angry.

5 Girls imitated the verbal aggression of the female model more than boys.

6 One from:
   a) Boys imitated the male aggressive model more than girls.
   b) Boys imitated the male model more than girls for physical aggression.
   c) Boys imitated the male model more than girls for verbal aggression.
   d) Boys imitated the male model more than girls for gun play.

7 Children will imitate aggressive behaviours displayed by adult models, even if the model is no longer present. This was shown because children who witnessed either an adult male or an adult female model acting aggressively later displayed more imitative acts of aggression than children who saw either a male adult or a female adult acting non-aggressively when the adult model was no longer present.

8 Operant conditioning is a form of associative learning in which associations and connections are formed between stimuli and responses that did not exist before learning began.

9 To show that the use of a new inhaler – the Funhaler – would provide positive reinforcement and so lead young children to improved adherence to the prescribed medical regime.

10 Because the children took part in both conditions of the experiment – using their normal inhaler and then using the novel Funhaler.

11 The sample consisted of young children from Australia, both boys and girls, who suffered from asthma and used an inhaler. Their parents also formed part of the sample as on occasion they had to help the children use the inhalers and had to complete two questionnaires – one at the beginning and one at the end of the study.

12 60 per cent more children took the recommended four or more cycles per aerosol delivery when using the Funhaler compared with the standard inhaler.

13 This study shows how moral thinking develops through prescribed, identifiable stages which are invariant. Each child has to acquire the necessary skills before moving on to the next stage, starting at the punishment and obedience orientation stage of the pre-conventional level, progressing to the conventional level, and finally moving on to the post-conventional level. Not all children will reach the universal principles orientation stage, the highest stage of the post-conventional level.

14 Pre-conventional, conventional and post-conventional.

15 'Good boy–good girl orientation' and 'Law and order orientation'.

16 Hypothetical moral dilemmas.

17 One from:
   a) The value of human life is based on the empathy and affection of family members and others towards its possessor.
   b) The value of human life is seen as instrumental to the satisfaction of the needs of its possessor or of other people.

18 One from:
   a) Taiwanese boys aged 10 to 13 tended to give ‘classic’ Stage 2 responses.
b) Mexico and Taiwan showed similar results in that development followed the same stages, but the development through the stages was a little slower.

19 To directly test the effect of culture on children’s moral evaluations of lying and truth-telling.

20 a) Whether the participant heard a social story or a physical story.
   b) Whether the participant heard pro-social stories or antisocial stories.

21 By first using a randomisation table to compile two orders of the four stories and then reading the stories to half of the participants in each condition using one of the predetermined orders and the other half of the participants in each condition using the other predetermined order.

22 One from:
   a) Children from both the Canadian and Chinese cultures rated truth-telling very positively.
   b) Children from both the Canadian and Chinese cultures rated the antisocial behaviours similarly.

Chapter 12

1 Because it requires specialist equipment, trained operators are needed.

2 It shows that as a result of having their corpus callosum severed, the two hemispheres of the brain work independently and unlike a ‘normal’ brain do not transfer information from one side to another. This inability to transfer information means split-brain patients cannot do certain things a normal person can because the biology of their brain is different from that of a normal person.

3 The participant, with one eye covered, centred his gaze on a fixed point in the centre of an upright translucent screen. Visual stimuli on 35 millimetre transparencies were arranged in a standard projector and were then back-projected at one tenth of a second or less to the left of the central meridian of the screen so that the stimuli passed via the left visual field to the right hemisphere.

4 Information presented to the right visual field/RVF went to the left hemisphere so the participant could describe the information in speech and writing (with the right hand).

5 If an object was placed in a participant’s right hand, the information would be passed to the left hemisphere and could therefore be described in speech or writing (with the right hand).

6 People with split brains have two separate visual worlds, each with its own train of visual images.

The findings allow this conclusion to be drawn because if an image was flashed to the right visual field of a split-brain participant, they were able to identify the image in speech and writing, whereas if the same image was flashed to the left visual field they either said they had seen nothing or that they had just seen a flash of light.

7 This study builds on research conducted by Eigsti in 2006, which showed that performance on a delay-of-gratification task in childhood predicted the efficiency with which the same individuals performed a cognitive control task (go/no go task) as adolescents and young adults. Those who as preschoolers directed their attention towards rewarding aspects of the classic delay-of-gratification situation, such as focusing on cookies (high-temptation-focus group), had more difficulty suppressing inappropriate actions than did their low-temptation-focus counterparts.

8 Because the IV – whether the participant was a high or a low delayer – was naturally occurring and so could not be manipulated by the researchers.

9 Using programmed laptop computers sent to participants’ homes.

10 One from:
   a) Both low and high delayers performed with a high level of accuracy for correctly responding to ‘go’ trials during both the ‘cool’ (99.8 per cent correct) and ‘hot’ tasks (99.5 per cent correct).
   b) Low delayers committed more false alarms than high delayers.
   c) Low and high delayers performed comparably on the ‘cool’ task.
   d) Low delayers performed more poorly on the ‘hot’ task than the high delayers.
   e) Participants, who as a group had more difficulty delaying gratification at four years of age (low delayers), showed more difficulty as adults in suppressing responses to happy faces than the high delayers.

11 One from:
   a) (Inside the scanner) low delayers committed more false alarms than high delayers.
   b) (Inside the scanner) overall accuracy rates for the ‘hot’ go/no go task were uniformly high for ‘go’ trials with more variable performance to ‘no go’ trials.
   c) The right inferior frontal gyrus was involved in accurately withholding a response.
   d) Compared with high delayers, low delayers had diminished recruitment of the inferior frontal gyrus for correct ‘no go’ relative to ‘go’ trials.
12 One from:
   a) Humans and cats have cerebral cortices with similar lobes.
   b) The brains of both humans and cats are gyrencephalic, i.e. they have a folding surface.
   c) The brains of both humans and cats contain grey and white matter.

13 The kittens were reared in either a vertical or a horizontal environment, i.e. they were placed in only one of the two environments.

14 Two of the kittens (one reared in the horizontal and one reared in the vertical environment) were anaesthetised so that their neurophysiology could be examined.

15 One from:
   a) Horizontal plane recognition cells did not ‘fire off’ in the kitten from the vertical environment and vertical plane cells did not ‘fire off’ in the kitten from the horizontal environment so there was distinct orientation selectivity, showing the kittens suffered from ‘physical blindness’.
   b) The majority of cells in both cats were clearly binocular and in almost every way the responses were like that of a normal kitten.
   c) In the horizontally raised kitten there were no neurones in the vertical orientation.
   d) In the vertically raised kitten there were no neurones in the horizontal orientation.

16 One from:
   a) To lay down new memories.
   b) To facilitate spatial memory and navigation.

17 They had a wide range of navigational experience, which allowed the researchers to study the direct effect of spatial experience on brain structure.

18 Because the IV – being a taxi driver or a non-taxi driver – could not be manipulated by the researchers.

19 An automatic procedure that ‘normalises’ MRI scans to a template to eliminate overall brain size as a variable and then identifies differences in grey matter density in different regions of the brain.

20 To compare the volume of the anterior, body and posterior cross-sections of the taxi and non-taxi drivers’ hippocampi.

21 One from:
   a) Taxi drivers had significantly increased grey matter volume in the right and left posterior hippocampi compared with controls/non-taxi drivers.
   b) In the controls/non-taxi drivers there was a relatively greater grey matter volume in the anterior hippocampi compared with taxi drivers.

22 That there are regionally specific structural differences between the hippocampi of licensed London taxi drivers compared with those who do not drive London taxis. This was shown by the fact that taxi drivers had a significantly greater posterior hippocampal volume than non-taxi drivers.

Chapter 13

1 It looks at the differences between people rather than factors that are common to all people.

2 Although Freud believed all children pass through predetermined stages of psychosexual development, Little Hans showed his experience of the Oedipus complex, a feature of the phallic stage, in a unique way by having a phobia of horses.

3 Oral stage, anal stage, phallic stage, latency stage and genital stage.

4 Because Freud studied one participant – Little Hans – in great detail over an extended period of time. Little Hans was studied from about the age of two-and-a-half years until age five, during which time Freud was able to gather a large amount of data relating to Little Hans’ dreams, fears and fantasies.

5 Hans fantasised that in the night there was a big giraffe and a crumpled giraffe in the room. The big one called out because he, Hans, took the crumpled one away from it. The big giraffe then stopped calling out and Hans sat down on top of the crumpled giraffe.

6 Because he was going through the phallic stage of psychosexual development and experiencing the Oedipus complex.

7 The ability to attribute mental states to other people and to understand that others have beliefs, desires, intentions and perspectives that are different from one’s own.

8 The Eyes Task was comprised of photographs of the eye region of 25 different faces (male and female). The faces were taken from magazine photos. All photos were standardised to one size (15 × 10 cm) and all were black and white, with the same region of the face selected for each photo – from midway along the nose to just above the eyebrow. Each picture had a forced choice between two mental states printed underneath it, one being the target emotion, one being a foil. Each photo was shown
to the participant for three seconds and the experimenter asked the participant, ‘Which word best describes what this person is feeling or thinking?’ The maximum score on this test was 25.

9 This involved identifying the gender of the eyes used in the Eyes Task.

10 This involved judging photographs of whole faces displaying basic emotions (based on the Ekman categories). Six faces were used testing basic emotions: happy, sad, angry, afraid, disgusted and surprised. Participants had to state, from a forced choice of two mental states, which emotion was shown in each photograph.

11 Two from:
   a) The mean score for the autistics on the Eyes Task was significantly lower [16.3/25] than the mean scores on the Eyes Task for either the normal participants [20.3/25] or those with TS [20.4/25].
   b) The autistic group made significantly more errors on the Strange Stories Task than either the normal group or the group with TS.
   c) There was a greater range in correct answers in the autistic group [13–23] than in either the group of normal participants [16–25] or the group with TS [16–25].

12 Adults with autism possess an impaired theory of mind. This is because the mean score for the autistics on the Eyes Task (an advanced theory of mind test) was significantly lower [16.3/25] than the mean scores on the Eyes Task for either the normal participants [20.3/25] or those with TS [20.4/25].

13 A score given as a result of the division of an individual’s mental age (MA, their score on the test) by their chronological age (CA), which is then multiplied by 100 to get rid of decimals.

14 He saw them as a source of sufficient data to show that intelligence testing was objective and quantifiable and therefore scientific.

15 Two from:
   a) Gould aimed to identify the problematic nature of psychometric testing in general and the measurement of intelligence in particular.
   b) Gould aimed to identify the problem of theoretical bias influencing research in psychology, in particular how psychological theories on the inherited nature of intelligence and the prejudice of a society can dramatically distort the objectivity of intelligence testing.
   c) Gould aimed to identify the problem of the political and ethical implications of research, in this case the use of biased data to discriminate between people in suitability for occupation and even admission to a country.

16 The sample consisted of 1.75 million army recruits in the USA during the First World War. The recruits included white Americans, ‘Negroes’ and European immigrants.

17 The Army Alpha Test, the Army Beta Test and the Individual Spoken Examination.

18 Two from:
   a) The average mental age of white, adult males stood just above the edge of moronity at a shocking and meagre 13.04 (Terman had previously set the standard at 16).
   b) The data also showed that European immigrants could be graded by their country of origin, with the darker people of Southern Europe and the Slavs of Eastern Europe being less intelligent than the fair people of Western and Northern Europe.
   c) The black man had an average mental age of 10.41.

19 America is a nation of morons. This is because Yerkes found that the average mental age of white American adult males was just above the edge of moronity at 13.04.

20 One from:
   a) Patrick (2006) found that psychopaths exhibited no apparent intellectual deficits.
   b) Cleckley [1976] found that the language of psychopaths appeared to be less cohesive than that of non-psychopaths.

21 Two from:
   a) Both psychopaths and non-psychopaths were of similar ages (psychopaths: M = 39.71 years, non-psychopaths: M = 39.91 years).
   b) The psychopaths and non-psychopaths did not differ significantly in the amount of time since the homicide had been committed (psychopaths: M = 11.87 years, non-psychopaths: M = 9.82 years).
   c) Both the psychopaths and non-psychopaths had committed the same type of crime – manslaughter, second-degree murder or first-degree murder.

22 The Psychology Checklist-Revised which uses 20 criteria scored from 0 to 2 (maximum score = 40) was used to measure psychopathy. Those who scored 30 or above on this test were considered psychopaths.

23 Psychopaths used approximately twice as many words related to basic physiological needs when describing their murders than did non-psychopaths.

24 Psychopaths used less positive or emotionally intense language than did non-psychopaths.
Chapter 14

1. It allows one to appreciate that many behaviours are learned from the environment after birth so individuals can make efforts to ensure behaviours demonstrated by others in a person’s immediate environment are desirable rather than undesirable ones.

2. Psychoanalysis is required to discover the unconscious reasons for an individual’s behaviour. This can be time-consuming and expensive.

3. If one sees behaviour being caused by nature, one believes that behaviour is influenced by genetic, biological and physical factors, whereas if one sees behaviour being caused by nurture, one believes that behaviour is influenced through learning processes and the surrounding environment.

4. One particular influence on an individual’s behaviour, for example their biology, can be studied in isolation to see whether this factor is a genuine influence on the person’s behaviour.

5. It shows that the way questions are worded can influence the answers a person will give.

6. Informed consent: participants should have sufficient knowledge about a study to decide whether or not they want to agree to take part. Right to withdraw: participants should be aware that they can remove themselves, and their data, from the study at any time. Confidentiality: participants’ results and personal information should be kept safely and not released to anyone outside the study. It should not be possible to identify participants per se. Debriefing: a full explanation of the aims and potential consequences of a study should be given to participants at the end of a study to ensure that they leave in no worse state than they arrived. Deception: participants should not be deliberately misinformed about the aim or procedure of a study.

7. The study by Baron-Cohen et al. looks at the cognitive abilities in relation to theory of mind in two very vulnerable groups of people – autistics and people with Tourette syndrome.

8. Cause and effect: the idea that a change in one variable is responsible for the change in another. Replicability: the ability to repeat an original procedure in exactly the same way with either the same or different participants. Control of variables: where factors that could influence the findings are controlled/kept constant so that they do not become extraneous variables. Control of variables allows researchers to infer cause and effect.

Standardisation: the use of set procedures and data collection across different conditions and participants to limit the effects of uncontrolled variables.

Chapter 17

1. A surgical procedure involving the piercing of the skull to create a hole from which evil spirits were supposedly released.

2. To see whether medical staff could tell the sane from the insane and to test the validity and reliability of the DSM IV.

3. Pseudopatients called the hospital and arranged an appointment. On arrival they reported they had been hearing voices which were unclear, unfamiliar, of the same sex as themselves, and said, ‘empty’, ‘hollow’ and ‘thud’. All used fake names and those in mental health professions also used fake occupations. No other alterations of person, history or circumstances were made.

4. a) ‘Pardon me Mr/Dr/Mrs X, could you tell me when I will be eligible for ground privileges?’
   b) ‘Pardon me Mr/Dr/Mrs X, could you tell me when I am likely to be discharged?’

5. a) ‘Do you know where Fish Annex is?’
   b) ‘Pardon me, could you direct me to the Clinical Research Center?’

6. Staff were asked to apply a 10-point scale to rate each patient who arrived at admissions/ward according to the likelihood that they were a pseudopatient, with 1 and 2 reflecting high confidence that the patient was not genuine.

7. a) All the pseudopatients were admitted to the hospitals, where they remained for between 7 and 52 days (mean length of stay = 19 days).
   b) Seven out of the eight pseudopatients were diagnosed as schizophrenic, the other as having manic-depressive psychosis.
   c) When pseudopatients were finally discharged, they left with the diagnosis of ‘schizophrenia in remission’.
   d) There was a severe lack of privacy as personal hygiene and waste evacuation were often monitored and many toilets had no doors.

8. a) 88 per cent moved on with their head averted.
   b) Only 2 per cent paused to chat.

9. One finding was that 78 per cent of physicians stopped and talked to the young lady.

10. a) Although no pseudopatients actually presented themselves, out of 193 genuine patients who attended for psychiatric treatment, 41 were judged, with high
11 Medical practitioners cannot tell the same from the insane. This can be said because all eight pseudopatients were admitted to hospital where seven were diagnosed as schizophrenic and one as having manic-depressive psychosis.

12 An intense, persistent and irrational fear of a particular object, situation, place or activity which is accompanied by a compelling desire to avoid and escape it. The fear may be so intense that it interferes with the individual’s normal everyday functioning.

13 Because the researchers wanted to have a large sample size and this register contains information on all the diagnoses of all psychiatric patients in Denmark.

14 A population-based cohort of over 2.6 million individuals born in Denmark, alive in 1968 or born later than 1968 and who had an identifiable mother and father (checked through the Civil Registration System). All participants were aged ten years or over before 1 January 2007.

15 The confidentiality of all participants was maintained because all data available for register-based research does not include information that can lead to the identification of individuals.

16 a) The risk of schizophrenia in 270 offspring of 196 parent couples who were both admitted to a psychiatric facility with a diagnosis of schizophrenia was 27.3 per cent.

b) The risk of bipolar disorder was 24.9 per cent in 146 offspring of 83 parent couples who were ever admitted with bipolar disorder.

17 Because the risk of schizophrenia in 270 offspring of 196 parent couples who were both admitted to a psychiatric facility with a diagnosis of schizophrenia was 27.3 per cent compared with 7.0 per cent in 13,878 offspring from 8,006 couples with only one parent ever admitted for schizophrenia and 0.86 per cent in 2,239,551 offspring of 1,080,030 couples with neither parent ever admitted, the offspring of parents who are both diagnosed with schizophrenia are at a high risk of being diagnosed with the same disorder.

18 ECT involves administering an electric shock to the head for a fraction of a second, inducing a seizure similar to that experienced in epilepsy. In most cases the shock is bilateral because this is considered to be more effective than unilateral ECT. The seizure generally lasts between 15 and 60 seconds. A typical therapy course runs for 2 to 3 weeks, with the ECT being repeated 6 to 12 times in total.

19 Classical conditioning occurs when an emotional response, such as fear, becomes associated with a particular neutral stimulus. For example, a phobia of water (hydrophobia) may develop as a result of a non-swimmer falling into deep water (neutral stimulus), being submerged (unconditioned response) and thereafter developing a lifelong aversion to water (conditioned response).

20 If a person tends to always think negatively rather than positively, they will make thinking errors or biases which warp their emotions and behaviour, resulting in depression.

21 To review the recent history of the culturally validated medicalisation of (mis)behaviours and the social consequences in light of his earlier arguments.

22 a) There has been a blurring of distinctions between private and state psychiatry as now virtually all mental health care is the responsibility of the government and paid for by public money.

b) There is now a legal responsibility on mental health professionals to prevent patients causing harm to themselves or others, with psychiatry being thoroughly medicalised and politicised.

23 Because those who hold power, i.e. politicians, have declared mental illness to be a disease like any other and so it is medicalised in the sense that it can be diagnosed and treated appropriately.

24 Because whereas diseases of the body have causes, such as infectious agents or nutritional deficiencies, which can often be prevented or cured by dealing with these causes, individuals said to have mental diseases have reasons for their actions that must be understood.

Szasz believes ‘mental illness’ actually refers to the judgements made by people about the disturbing or socially unacceptable behaviours of other people. ‘Mentally ill’ individuals cannot be treated or cured by drugs or other medical interventions, but may be helped by people who respect them, understand their predicament and help them to help themselves overcome the obstacles they face.

25 a) Szasz claims that mental illness is a myth because it refers to the judgements made by people about the disturbing or socially unacceptable behaviours of other people; it is not a clearly identifiable brain disease that can be diagnosed and treated.

b) Over the past 50 years, psychiatry (in the USA) has become thoroughly medicalised and politicised because politicians have declared that mental illness is just like any other physical illness because it can now
be diagnosed using diagnostic statistical manuals, for example the DSM, and therefore treated accordingly.

26 A non-biological treatment could be cognitive behavioural therapy (CBT). This usually takes place once a week or fortnight for between five and 20 sessions. CBT involves helping those with depression to identify irrational and unhelpful thoughts so that they can be changed. Patients are shown the links between their thinking, behaviour and emotions, often through drawing diagrams, in order to illustrate how their thoughts affect their feelings and behaviour. If these thoughts can be changed from negative ones to positive ones, the patient can be made to feel better about themselves so they can re-establish their previous levels of activity and re-establish a social life. Therapy is collaborative between the patient and the therapist so agreement can be established about what the patient wants to change and how this might be done. This might be achieved by the therapist counter-arguing the patient’s negative thoughts or by reality testing, which involves the patient taking part in activities they used to enjoy and recording in a diary that they did, in fact, enjoy the activity. The therapist can then challenge the patient at the next session by pointing out that they are actually beginning to enjoy things again and that more positive thoughts and emotions are developing which will, over time, relieve the depression.

Chapter 18

1 One biological factor that could affect intelligence is the way male and female brains are organised. This can be investigated through the use of MRI scans. Haier et al. found that males have comparatively more grey matter than females in the frontal and parietal lobes of the brain, which are typically associated with motor skills and higher-level reasoning. They also found females have more grey matter than males in other areas of their frontal lobe and Broca’s area, regions of the brain important for speech and writing. These differences mean males tend to do better than females on spatial tasks whereas females perform better than males on language-based tasks.

2 The contribution of genetic effects to the variability in intelligence to be 25 to 50 per cent. Part of the remaining variance is due to environmental factors shared by children who grow up in the same family.

3 Because the researchers were looking for relationships between such factors as intelligence and biological factors, intelligence and environmental factors.

4 There were 112 families drawn from the Netherlands Twin Registry (NTR) and therefore from all over the Netherlands. The families had either MZ or DZ twins, plus a sibling aged between nine and 14 years old and two parents. The mean age of the twins was 9.1 years, the sibling 11.9 years. There were 23 male MZ twins, 23 male DZ twins, 25 female MZ twins, 21 female DZ twins and 20 DZ twins of opposite sex.

5 Families arrived between 9 a.m. and 11 a.m. Children were tested in separate rooms using a variety of cognitive tests, including the Raven’s Standard Progressive Matrices. Parents completed the Raven’s Advanced Progressive Matrices. The whole procedure took approximately five hours, including two short breaks and one longer lunch break.

6 a) 36/36. b) 36.7/60. c) 24/60. d) 6.0.

7 The correlation for the Rasch IQ estimates between the parents was significant and moderately high.

8 Through the use of Raven’s Progressive Matrices. These are non-verbal tests of intelligence in which test items are typically presented in a grid or matrix $6 \times 6, 4 \times 4, 3 \times 3$ or $2 \times 2$. The RPM provides an incomplete, novel pictorial stimulus which participants have to make meaningful, i.e. for each test item participants have to select the missing aspect in a series of stimuli in order to complete a pattern. There are three different versions of the test which are designed for participants of different abilities. The items on each test get progressively more difficult. Results of the RPM are based on calculations that take into account the difficulty of each item; however, the higher the score, the higher the intelligence.

9 Early maturation of the ventral striatum (often referred to as the ‘reward centre’) encourages adolescents to engage in more adult activities that reap rewards, such as drinking alcohol and taking drugs, and to seek independence from their families. This maturity in neurological function makes them more sensation seeking and draws them to novel behaviours. However, because the prefrontal cortex does not fully mature until later, adolescents do not manage the risk involved in such activities in the same way as adults, the anticipated rewards of the behaviour become dominant and risk-taking behaviour occurs.
10 a) Adolescents will exhibit greater behavioural sensitivity (accept more gambles) to increasing EV than adults.

b) Neurobiologically, VS activation will modulate in proportion to increasing EV more for adolescents than for adults.

c) Adults who behave like adolescents in terms of gambling behaviour will not exhibit hyperactive striatal activation.

11 Because the IV – whether participants were adults or adolescents – occurred naturally and could not be manipulated by the researchers.

12 The sample consisted of 19 healthy, right-handed adults (mean age 27.9 years, 11 female, 8 male) and 22 healthy, right-handed adolescents (mean age 15.6 years, 11 female, 11 male).

13 The gambling task involved participants being presented with a series of gambles with a 50 per cent probability of gaining the amount shown on one side of a ‘spinner’ and a 50 per cent probability of losing the amount shown on the other side. Each participant was given $20 to use as ‘playing’ money. They were also informed that there was an opportunity to win up to $20 more in addition to their playing money, but that there was also the chance that they would lose it during the gambling task. For each trial, participants decided whether or not they would be willing to play that gamble for their money. Participants were informed that one of the trials that they chose to accept would be selected at the end of the scan and played for real money, with that amount of money added to or subtracted from their overall payment of $20 for taking part.

14 There was more VS activation in adolescents than adults as EV increased.

15 Because there was more VS activation in adolescents than adults as EV increased, in relation to gambling, neural representations of value in adolescents compared with adults are linked to increased risk taking behaviour.

16 The process of interpreting, organising and elaborating on sensory information.

17 To see whether infants and young animals were able to perceive depth innately and therefore know not to cross over a visual cliff.

18 Because the same infant took part in both conditions – it was called by its mother from both the cliff side and the shallow side of the apparatus.

19 A board was laid across a large sheet of heavy glass which was supported a foot or more above the floor. On one side of the board a sheet of patterned material was placed flush against the under-surface of the glass, giving the glass the appearance as well as the substance of solidity.

On the other side a sheet of the same material was laid on the floor, making this side of the board become the visual cliff.

20 All of the 27 infants crawled across the shallow side to get to their mother.

21 Only three of the 27 children (11 per cent) crawled across the deep side of the cliff to get to their mother.

22 a) While still less than 24 hours old, a chick was found to never make a ‘mistake’ and always hopped off the board on the shallow side. b) At four weeks – about the earliest age a kitten can move about easily – kittens were found to invariably choose the shallow side of the cliff.

23 The fact that only 3 out of 27 (11 per cent) of the young children were prepared to try to cross the deep side of the cliff to get to their mother shows that children can perceive depth by the time they can crawl.

24 Sensory integrative (SI) therapy is a technique which aims to improve learning, visual and auditory perception and advance motor skills. It is a strategy that is particularly useful for children with sensory and perceptual difficulties and/or learning disabilities and involves an SI therapist conducting an initial assessment to ascertain the child’s sensory issues. The therapist then devises a personal treatment programme that uses appropriate techniques and equipment to meet the identified needs. The SI programme will involve fun activities that will encourage intrinsic motivation so the child is driven by internal rewards to undertake the activities. Play activities are usually multisensory and may include such activities as sitting or rolling on a bouncy ball to improve visual perception and balance, dancing to different types of music to improve sound perception and movement, feeling and manipulating toys made of several different materials to develop touch perception and hand–eye co-ordination.

25 a) The sensorimotor stage (0 to 2 years), during which the young child begins to explore the world through their senses and actions.

b) The pre-operational stage (2 to 7 years), in which the child starts to represent the world mentally through words and images, with the emergence of symbolic thought. Two key features of this stage are animism and egocentrism. Animism is shown through the young child thinking that inanimate objects have feelings like they do and egocentrism is shown through the child being able to understand the world from their own viewpoint only.
c) The concrete operational stage (7 to 11 years), in which the child is able to reason logically about concrete things and see things from the point of view of others. Key features of this stage are the development of conservation and reversibility. The ability to conserve is shown through the child understanding that something remains the same even though its appearance may change, while reversibility is shown through the child appreciating that even if the appearance of something had changed, if changed back to its original form it would be the same.

d) The formal operational stage (11+ years), in which the child starts to reason logically, form and test hypotheses and understand abstract concepts. According to Piaget, once a young person has achieved formal operational thinking, there is no further change in structure of thinking, only in the complexity, flexibility and level of abstraction.

26 To examine some of the major implications of the interactive, instructional relationship between the developing child and his elders for the study of skill acquisition and problem-solving.

27 This was a controlled observation in which participants were observed as they tried to complete a predetermined building task with intervention and guidance from a tutor as necessary.

28 a) If the child ignored her and continued to play with connecting blocks.
   b) If the child took up the blocks which the tutor had just assembled and manipulated them.
   c) If the child tried to make something with blocks presented for construction by the tutor in a way more or less similar to her own method.

29 a) Direct assistance (in which the tutor either presented or specifically indicated the materials for assembly).
   b) A verbal error prompt (which characteristically took the form, ‘Does this (a mismatched construction) look like this one (a matched construction)?’)
   c) A straightforward verbal prompt to get the child to make more constructions, for example: ‘Can you make more like this?’

30 a) None of the three year olds could put four blocks together correctly, while all the four and five year olds did so at least once.
   b) Older children were less likely to ‘deconstruct’ their assemblies than younger children: median for four year olds = 5.0, for five year olds = 4.0.
   c) Overall, the median total amount of help received by the three year olds was 20.0, by the four year olds it was 19.0 and by the five year olds it was 10.5.
   d) 63 per cent.

31 ‘Direction maintenance’ involves the tutor keeping the learner on task in spite of any distractions. ‘Frustration control’ involves the tutor employing strategies to making problem-solving less stressful.

32 The older a child is, the better they are at problem-solving because the five year olds received significantly less help than either the four year olds or the three year olds to successfully complete the task. The five year olds had a median of only 10.5 direct interventions to help them complete the task compared with 19.0 for the four year olds and 20.0 for the three year olds.

33 An abbreviation formed from the initial letters of other words which can be pronounced as another word, phrase or sentence.

34 ‘Richard of York gave battle in vain’, which represents the colours of the rainbow – red, orange, yellow, green, blue, indigo, violet.

35 A close affectional tie or emotional bond that one animal or person forms between themselves and another specific animal or person. It is a tie that binds them together in space and endures over time.

36 A period of time between about six months and three years of age in humans during which a baby can most easily form an attachment. This is a biologically programmed period and if an attachment is not formed during this period, it may be too late.

37 Because naturalistic studies of the attachment–exploration balance are time consuming. They believed a short-cut alternative in a controlled laboratory environment – the Strange Situation (in which the child, with and without their mother, is exposed to stressful episodes of different kinds) – could be used to observe the interaction between attachment behaviour, exploration, separation anxiety and fear of the strange.

38 Direct assistance (in which the tutor either presented or specifically indicated the materials for assembly).

39 a) Mother carries the baby into the room.
   b) Mother puts the baby down in a specified place and then sits quietly in a chair, participating only if the baby seeks her attention.
   c) A stranger enters the room, sits quietly conversing with the mother for one minute, then gradually approaches the baby, showing him a toy. After three minutes the mother leaves the room.
   d) If the baby is happily engaged in play the stranger remains sitting quietly. However,
if the baby is inactive the stranger tries to interest him in the toys; if the baby is distressed the stranger tries to distract or comfort him. If the baby cannot be comforted the episode is cut short, otherwise it lasts three minutes.

e) Mother re-enters the room, pauses in the doorway, giving the baby an opportunity to spontaneously move towards her. The stranger then leaves unobtrusively. Once the baby has again settled to play, the mother leaves the room again after pausing to say ‘bye bye’.

f) The baby is left alone for three minutes unless he is so distressed that the episode must be cut short.

g) The stranger enters and behaves as in episode 4 for three minutes unless distress requires the episode to be cut short.

h) The mother returns, the stranger leaves and the procedure ends once the reunion between mother and baby has been observed.

41 a) Proximity- and contact-seeking behaviours.
    b) Contact-maintaining behaviours.
    c) Proximity- and interaction-avoiding behaviours.
    d) Contact- and interaction-resisting behaviours.
    e) Search behaviour.

42 Overall, the babies showed little alarm.

43 The mean strength of search behaviour was moderate in episode 4, significantly stronger in episode 6 and moderate again in episode 7. Some infants cried minimally if at all in episode 6, yet searched strongly, some cried desperately, but searched weakly or not at all, while some both cried and searched. All but four participants reacted to being left alone with either one or other of these attachment behaviours.

44 a) Attachment behaviour is heightened in situations perceived as threatening, whether it is an external danger or an actual or impending separation from the attachment object that constitutes the threat.

b) Although attachment behaviour may diminish or even disappear in the course of a prolonged absence from the attachment figure, the attachment is not necessarily diminished; attachment behaviour is likely to re-emerge in full or heightened strength upon reunion.

45 The adoption of models of family-centred care (FCC), particularly in maternity units and children’s hospitals. Family-centred services encourage open visitation policies. For example, parents of hospitalised children often have permission to be with them 24 hours a day and some hospitals offer flexible visiting hours to allow family members to visit outside normal working hours. Another way FCC can create attachment-friendly environments is through involving parents or family members to participate in the patient’s care. For example, parents of a hospitalised child may be encouraged to read or play with them or a family member may be encouraged to help feed a sick relative.

46 A widely shared and oversimplified belief about the characteristics of those who belong to a particular social or physical category/group. They can be positive or negative, but if these traits are negative they form the basis for prejudice.

47 Boys are generally viewed as being tough, strong, physically oriented, able to defend themselves, unemotional, good at maths and science, lazy and messy, etc.

48 The adverts shown on television offer children models for how to act, interact and speak. Many of the models used in commercials for children map onto the significant foci of dominant ideology and therefore serve to reinforce gender stereotypes.

49 To find out whether television advertisers scripted their adverts differently for boys and girls, particularly in relation to linking toys to gender-stereotypical roles.

50 The content analysis research method.

51 To ensure that the sample included advertisements from a broad range of cartoon programmes.

52 a) Food items, mainly breakfast cereals, snacks and drinks.
    b) Toys.
    c) Educational and public service announcements, e.g. anti-drug messages.
    d) Recreational facilities or locales and fast-food restaurants, e.g. McDonald’s.
    e) Video and film promotions.

53 a) Adverts targeted to boys in which boys were depicted.
    b) Adverts targeted to girls in which girls were depicted.
    c) Adverts targeted to both boys and girls either because both genders were featured or because there was no gender content.

54 a) Action verb elements.
    b) Competition/destruction verb elements.
    c) Agency/control verb elements.
Chapter 19

1 Sheldon identified three body types and linked these to the likelihood of criminality. An endomorph has a fat and soft body shape with sociable and relaxed personal characteristics, a mesomorph has a muscular and hard body shape with aggressive and adventurous personal traits, and an ectomorph has a thin and fragile body shape which is accompanied by introverted and restrained personal characteristics. According to Sheldon, mesomorphs, because of their strong, muscular body shape and their aggressive and adventurous personality traits, were more likely to be criminals.

2 A PET scan identifies the brain areas that are working hardest by measuring their fuel uptake. PET scans allow researchers to examine the relationship between activity in the brain and actual mental processes. They work by measuring the level of metabolic activity occurring within the brain. First, the person having a PET scan is injected with a small amount of harmless radioactive material ‘bonded’ to a substance such as glucose. Since the brain’s primary source of energy is glucose, the areas which are most active absorb more of it. The glucose is broken down by the brain, but the radioactive material is not, and as it decays it emits positively charged particles called ‘positrons’ which are detected by the scan. This information is fed into a computer which produces different coloured images of the level of activity occurring throughout the brain, with the different colours indicating different levels of activity – for example, red indicates high activity, blue low activity.

3 Age, gender, schizophrenia (six in each group).

4 The experimental group consisted of 41 participants (39 men and 2 women) with a mean age of 34.3 years. They had been charged with either murder or manslaughter but were pleading not guilty by reason of insanity (NGRI). The control group of 41 participants (39 men, 2 women), none of whom had committed murder, were matched by age and gender and had a mean age of 31.7 years. Six schizophrenics in the experimental group were matched with six schizophrenic controls.

5 Most likely: the corpus callosum/the left side of the amygdala/the left side of the hippocampus/lower left area of the thalamus.

6 Most likely: the prefrontal cortex/left angular gyrus/corpus callosum.

7 Two from:
   a) Reduced activity (i.e. reduced glucose metabolism) in areas previously linked to violence.
   b) Abnormal asymmetries: reduced activity on the left, greater activity on the right. This applied to some of the areas identified in the hypothesis as being linked to violence.
   c) No differences in some areas, notably those structures associated with mental illness but not violence.

8 Murderers pleading NGRI have significant differences in the metabolism of glucose in a number of brain areas compared with non-murderers; they were found to have reduced activity in such brain areas as the prefrontal cortex, left angular gyrus and corpus callosum.

9 Information collected, usually from a crime scene, which can be presented as evidence in a court of law.

10 A copy of the crime scene examination report, which details the nature of the crime but does not provide any photographic images of the crime scene.

11 a) Does the written report of a crime, as routinely supplied with the fingerprint evidence, affect a fingerprint expert’s interpretation of a poor quality mark?
   b) Are the fingerprint experts emotionally affected by the circumstances of the case?

12 Because although designed to be as naturalistic as possible, with participants being asked to participate in work time, in a typical fingerprint
examination room within the New Scotland Yard Fingerprint Bureau, the task itself was artificially generated and participants were randomly allocated to one of two conditions. Furthermore, there was some control over the experimental conditions as in a naturalistic setting there would be no capacity to prevent the experts from asking each other’s opinions.

13. By asking participants to take part in only one condition – they were allocated to either the low-context or the high-context group.

14. The research was conducted anonymously and all candidates were given a unique reference number to endorse each of their question sheets.

15. This involved 35 participants being given an examination report referring to an allegation of murder. This was chosen because there is, inevitably, a victim and it carries the most severe sentence. The final wording on the examination report read: ‘Suspect then fired two shots at victim before decamping’, i.e. leaving the scene.

16. a) Whether the mark was a clear match (an identification).
   b) Whether the mark was not a match (not an identification).
   c) Whether there was not enough detail to undertake a comparison (insufficient).
   d) Whether the mark had insufficient detail to establish identity.

17. A total of 57 of the 70 participants indicated that they had read the crime scene examination report prior to examining the prints – 30 of the 57 were in the high-context scenario group. 50 per cent of the experts who had read the high-context scenario felt that they were affected by the information given on the examination report compared with 6 per cent who had read and reported that they were affected by the low-context scenario.

18. Overall no significant difference in outcome was observed between the two emotional groups.

19. Emotional context does not affect a fingerprint expert’s final decision. Findings showed the final decisions made by the experts to be very similar regardless of whether they were in the high-emotional context or low-emotional context group. Chi-square analysis showed p < 0.05.

20. The use of the filler-control method. This is similar to an identity parade and involves the fingerprint examiner being given six sample prints for comparison, instead of just one, with the set consisting of the comparison print from the suspect, together with five other plausible alternatives (fillers). The task is then not simply to decide whether the comparison print is a match for the latent print but instead to decide which print, if any, matches the evidence from the crime scene or victim. The fingerprint analyst works ‘blind’ to the information about which print belongs to the suspect and this means they can be more objective and avoid bias because they are not being asked 'Is this similar enough?’ but ‘Which is the most similar?’.

21. Report everything, recall in different temporal orders, mental reinstatement of context and recall from a variety of different perspectives.

22. Greet, personalise the interview and establish rapport, explain the aims of the interview, initiate a free report, questioning, varied and extensive retrieval, investigatively important questions, summary, closure, evaluation.

23. Orientation, listening, questions and answers, advice.

24. Mental context reinstatement, report everything, recall from a variety of perspectives, make retrieval attempts from different starting points.

25. Contextual reinstatement, possibly accompanied by the cautious use of imagery that a) limits the possibility of source monitoring confusions and b) is non-suggestive.

26. Because a standard interview differs from the CI in many ways and so does not provide a tight experimental control against which to measure the effectiveness of the cognitive techniques used for memory research employed specifically with the CI.

27. Because the GMI draws upon principles of contextual reinstatement like the CI and by encouraging the witness to mentally reinstate context, guides their memory.

28. Cognitive techniques, such as contextual reinstatement, are employed only with the CI.

29. Because it allows researchers to make some formal predictions about CI performance, many of which are not obvious or intuitive, and these predictions can be tested to determine what effects, if any, the CI has on retrieval and memory monitoring.

30. Interviewers should undertake a two-day CI training programme and training should be directed to a select group of officers who should be identified by potential.

31. The PEACE model comprises five elements: P = preparation and planning: interviewers are encouraged to plan their interviews carefully. Plans should be written down and include reference to such things as time lines, interview objectives, ‘facts’ that need to be verified and interviewee details such as vulnerability and possible language barriers. E = engage and explain: interviewers need to develop
a comfortable rapport with the interviewee and ensure the interviewee understands the purpose of the interview. A = account, clarification, challenge: the interviewer should first let the interviewee give their account of the event. They should then ask questions to clarify and expand on any unclear details. The interviewer should then challenge statements made by the interviewee if it appears they may be holding something back or not being totally honest. C = closure: interviews should be closed down appropriately by making sure the interviewee has all necessary contact details and is fully aware that they can contact officers again should they need to. E = evaluation: the interviewer should evaluate the interview to establish whether everything that needed to be covered has been covered and that all the required information has been gathered.

32 The language used by a witness or a defendant may influence jury decision making. Research has shown that male and female witnesses who frequently use ‘hedges’ – for example, ‘perhaps’ – while talking are perceived by jury members as less intelligent, less competent, less likeable and less believable than witnesses who do not.

33 ‘A Brummie-accented suspect will elicit stronger attributions of guilt than a standard-accented suspect.’

34 Accent – Brummie/standard, race of suspect – black/white, crime type – blue collar/white collar.

35 Because it then became a fair test. Had people from Birmingham been included they may have had a Brummie accent themselves and/or been used to hearing the accent and so might not have held the same negative biases against the accent as those not from the area.

36 A seven-point bipolar scale ranging from innocent to guilty, used to rate the suspect’s guilt; the Speech Evaluation Instrument (SEI), used as a measure of language attitudes.

37 The Brummie suspect was rated as more guilty than the RP suspect; the Brummie accent/black suspect/blue-collar crime had significantly higher guilt ratings than the other five conditions.

38 Because the suspect with a Brummie accent was rated more guilty than the suspect with a British RP/standard accent, attributions of guilt may be affected by accent in a British context.

39 Present evidence in story order. Research has shown that presenting evidence using story order – when lawyers present the evidence in the sequence that events occurred – is more effective in persuading a jury than presenting evidence in witness order – when lawyers present witnesses in the sequence they believe is most likely to persuade the jury, although this may not be the sequence in which the actual events occurred. Jurors construct a story in order to make sense of the evidence presented and will return the verdict that has the ‘best fit’ with their story. Presenting the case in the order in which events happened is a more persuasive strategy than presenting witnesses in an order that might have ‘most impact’ on the jury as jurors find this process fits more easily with their own narrative construction.

40 A type of policing that involves dealing with all kinds of crime rather than just serious offences. A zero tolerance policy imposes automatic punishment for breaking of stated rules, with the intention of eliminating undesirable conduct. Zero tolerance policies forbid people in positions of authority from exercising discretion or changing punishments to fit the circumstances subjectively; they are required to impose a predetermined punishment regardless of individual culpability, extenuating circumstances or history. This predetermined punishment need not be severe, but it is always meted out.

41 To describe how features of neighbourhoods can influence crime rates, the changing role of the police in the USA and strategies for maintaining order.

42 Disorderly people who are not violent or, necessarily, criminals, but disreputable or unpredictable people, such as drunks, addicts and rowdy teenagers.

43 Because he spent many hours walking with Newark foot-patrol officers to see how they defined ‘order’ and what they did to maintain it.

44 If a window in a building is broken and left unrepaired, all the rest of the windows will soon be broken because one unrepaired broken window is a signal that no one cares and so breaking more windows costs nothing.

45 Because the role of the police changed from maintaining order to fighting crimes and making arrests.

46 Because doing so would remove the ultimate sanction the police can employ to maintain neighbourhood order.

47 On the basis of either crime rates or calls for service.

48 Employ private watchmen/security guards; tenant organisations can hire off-duty police officers to patrol their buildings.

49 Increase the chance of detection. This can be done through the use of CCTV not only in public places but also around the outside of people’s houses. CCTV surveillance involves the placing of television cameras in potential crime locations through which activity can be monitored on remote screens. The purpose
dependency and emasculation (reinforced the arbitrary control shown by the guards, caused by their loss of personal identity, either as depression or as excessive obedience, remain silent.

Photograph taken, put in his cell and ordered to then given a prisoner’s uniform, had an ID naked, for a while in the cell yard. He was harmless deodorant and made to stand alone, each prisoner was stripped, deloused with a mock prison. Upon arrival at the mock prison experimenters and a guard participant to the was then blindfolded and driven by one of the being placed in a detention cell. Each prisoner having an identification file prepared and then standard procedure of being fingerprinted, police car. At the station they went through the them off to the police station in the back of a advised them of their legal rights, handcuffed with suspicion of burglary or armed robbery, due to start. A police officer charged them from their homes the day before the study was sunglass (to make eye contact impossible).

Friendships might have affected the study and/or role of either guard or prisoner.

A dispositional explanation for behaviour holds that it is a person’s nature and characteristics which determine their behaviour whereas a situational explanation holds that it is the conditions and features of the situation the individual is placed in that determine how they behave.

To investigate the effects of an environment on a group of students, and to see whether the roles they were randomly assigned to play would significantly influence their behaviour.

Through randomly allocating participants to the role of either guard or prisoner.

The self-selected sampling technique.

Because it was feared that any existing friendships might have affected the study and/or led to the breakup of those friendships.

To ‘maintain a reasonable degree of order within the prison necessary for its effective functioning’ without the use of any physical punishment or physical aggression.

In plain khaki shirts and trousers and reflective sunglasses (to make eye contact impossible). They also carried a wooden baton and whistle.

The prisoners were unexpectedly arrested from their homes the day before the study was due to start. A police officer charged them with suspicion of burglary or armed robbery, advised them of their legal rights, handcuffed them, thoroughly searched them and took them off to the police station in the back of a police car. At the station they went through the standard procedure of being fingerprinted, have an identification file prepared and then being placed in a detention cell. Each prisoner was then blindfolded and driven by one of the experimenters and a guard participant to the mock prison. Upon arrival at the mock prison each prisoner was stripped, deloused with a harmless deodorant and made to stand alone, naked, for a while in the cell yard. He was then given a prisoner’s uniform, had an ID photograph taken, put in his cell and ordered to remain silent.

Prisoners became extremely negative, shown either as depression or as excessive obedience, caused by their loss of personal identity, the arbitrary control shown by the guards, dependency and emasculation (reinforced by their uniforms which resembled frocks or dresses, lack of underwear, etc.).

The guards enjoyed and misused the power they felt they had been given. This was demonstrated through the increasingly extreme and unjust sanctions, punishment and demands made on the prisoners.

Prison guards can develop a pathology of power where they enjoy but misuse the power at their disposal. This was shown in this study, for example, by the guards, after the first day, redefining all prisoner rights as ‘privileges’ which had to be earned through obedient behaviour.

Social skills training, which aims to change the social behaviour of an offender and so enable them to reform. Offenders given social skills training are asked to take part in a series of training sessions which involves the use of modelling, role-playing, video-taped feedback and social reinforcement, all aimed at improving the offender’s ability to interact with others so that they are less likely to reoffend – they become reformed characters and so are less likely to reoffend.

Chapter 20

Selye’s GAS proposes that the body goes through three stages in response to stress: Stage 1 = the alarm reaction stage, in which as a response to a stressor the body prepares itself for fight or flight; Stage 2 = the resistance stage, in which the body tries to adapt or cope with the long-term demands of the stressful situation; Stage 3 = the exhaustion stage, in which, if the stressor is not removed, the body’s natural resources, such as energy, become depleted and the individual starts to develop negative physical symptoms such as high blood pressure and headaches.

A pattern of negative physiological states and psychological responses occurring in situations where people perceive threats to their well-being which they may be unable to meet’ [Lazarus and Folkman, 1984].

Is health-related quality of life worse in a community chronically exposed to aircraft noise than in a community not exposed? Is long-term aircraft noise exposure associated with elevated blood pressure in adults via noise stress as a mediating factor?

A small-scale trial run to try out the procedures of a study and to check for any problems.

1. Health-related quality of life (HRQoL); b) hypertension condition; c) noise stress; d) noise
sensitivity; e) noise annoyance; f) demographic characteristics; g) confounding factors.
6 a) Highly exposed areas around Sydney Airport and b) a suburb located in the western suburbs of Sydney.
7 A cover letter was compiled which explained that the study was one of environmental noise – not mentioning aircraft noise. The questionnaire, cover letter and a stamped, addressed, postage-paid envelope were sent to every home address (excluding apartments, commercial buildings, addresses for sale or lease and abandoned addresses) located in the aircraft noise affected area and in the control area (1,500 homes). However, households located close to railway lines, industrial areas and major highways were excluded. Noise measurements were collected at 26 stations around Sydney airport and three stations in the control area from 7 a.m. to 6 p.m. on various days from October 2003 to November 2004, i.e. only during day-time hours to avoid possible safety concerns for the recorder (researcher).
8 Finding 1: Participants living in the noise-affected area (around Sydney Airport) had a mean aircraft noise annoyance score of 6.27 compared with a mean aircraft annoyance score of 1.03 reported by the control group (those living in the Sydney suburb). Finding 2: When potential confounding effects were controlled for, the mean scores of physical functioning, general health, vitality and mental health of the aircraft noise exposure group were significantly lower than for the matched control group.
9 Offer cognitive behaviour therapy to people living in areas of high noise density as this has been shown to reduce stress caused by environmental noise. At the beginning of the programme participants would be assessed on how they react to high levels of noise, the impact high noise levels have on their quality of life, the effectiveness of their current coping strategies and their personality type. A combination of the following strategies would then be offered to help them overcome the stress caused by the high noise density: reassurance, explanation and support, relaxation therapy, general stress management and coping skills, and imaginal exposure therapy. Over a course of at least six sessions participants would experience those therapeutic strategies through discussions, training, handouts, CDs/DVDs. At the end of the programme, participants would be reassessed to see whether their stress levels had reduced.
10 A biological rhythm that repeats approximately every 24 hours.
11 That work schedules that rotate should do so by successive phase delays and that the interval between phase shifts should be as great as is practical.
12 Through the use of questionnaires which gathered data in relation to measures of worker satisfaction, worker health, personnel turnover, and productivity before and after the introduction of new shift work schedules.
13 The sample was comprised of 85 male rotating shift workers, aged 19 to 68 (mean age: 31.4 years), with a control group of 68 male non-rotating day and swing shift workers with comparable jobs, aged 19 to 56 (mean age: 27.3 years), at the Great Salt Lake Minerals and Chemicals Corporation plant in Ogden, Utah.
14 One finding was that participants felt that the schedule changed too often.
15 One finding was that there was a substantial increase on the schedule satisfaction index.
16 a) Because findings showed a substantial increase on the schedule satisfaction index after the introduction of the new shift work schedules, the application of circadian principles to the design of shift work schedules improve workers’ job satisfaction. b) Because findings showed a substantial improvements in the health index after the introduction of the new shift work schedules, the application of circadian principles to the design of shift work schedules improves workers’ health indices.
17 Fuel, heat, wildlife.
18 A cost–benefit strategy.
19 One hypothesis was: Attitude towards recycling is improved for households receiving an advocacy message, relative to unexposed (control) households. Another hypothesis was: Messages conveyed via social influence (i.e. from a personal acquaintance) result in a more favourable attitude towards recycling in a positively framed than in a negatively framed condition.
20 It took place in the natural environment of a north-eastern metropolitan community in the USA and the research manipulated an independent variable – the type of message received (positive/negative advertisement, positive/negative newspaper article, positive/negative personal letter) to observe the effect on a dependent variable – recycling attitudes and behaviours.
21 By the student assistants discretely observing and recording the contents of the test households’ recycling bins on the rubbish collection day of both the first and the following week of the study.
22 By asking the member of each household most involved with sorting and taking out the rubbish to complete a questionnaire.
23 Beliefs in the arguments raised by the messages, attitudes towards recycling, demographic information, attitudes towards the message received.

24 Overall, the households in the six experimental conditions showed a significant increase from the first to the second week in both number of recycling categories and the total number of items put out for recycling. Meanwhile, the control group showed no change with respect to either the number of recycling categories or the total number of items put out for recycling. Households which received positively framed messages expressed significantly more favourable attitudes towards recycling and stronger beliefs about statements that included the message’s rationale for participation in a recycling programme than households which received a negatively framed message. The greatest behavioural change came from a negatively framed message conveyed by a personal acquaintance.

25 Because those exposed to the positively framed message showed a significantly higher level of belief in statements that constituted that message’s rationale for participation in the community recycling programme than did individuals in the control group and those exposed to the negatively framed message, individuals prefer positively framed messages over those that expose them to the unpleasantness of the adverse consequences of failure to recycle.

26 Punishment: the government could introduce fines for failing to recycle certain items such as paper, clothes, plastic, metal. Any rubbish collector finding these in a household’s rubbish bin would fill in a duplicate form, with one copy being posted through the offender’s letter box (to inform them they had failed to follow recycling rules and that they could expect to be fined) and the other being handed in at the rubbish depot at the end of the shift. The manager of the rubbish depot would then pass these duplicate copies to the courts to issue fines.

27 There may be audience effects which can either enhance or impede performance levels. The presence of an audience increases the arousal level of the worker being observed. This increased arousal makes it likely that the worker’s dominant response will occur. If the skill the worker is expected to perform is simple, or if the worker is an expert, the dominant response is likely to be correct and they will perform well. If, however, the expected skill is complex or if the worker is a novice, the dominant response will be incorrect and the worker will perform badly.

28 To develop and evaluate a graphic configural vital signs (CVS) display designed to support rapid detection and identification of physiological deterioration.

29 Because the ICU nurses participated in only one of the two conditions – they were asked either to interpret data presented in a traditional numerical format or to interpret data using the specially developed CVS display.

30 To determine whether the CVS display facilitated quicker recognition of a ‘normal’ patient than the traditional numerical format.

31 All participants undertook standardised 20-minute training that included procedural instructions and explained elements and functionality of the CVS and the control display. Participants were then instructed that they were to verbally evaluate the patient’s physiologic status, interpret the data and recommend appropriate interventions as quickly and accurately as possible.

32 All participants performed the NASA-TLX to assess workload and answered on a seven-point Likert-type scale (1 = lowest to 7 = highest) questions concerning the clinical desirability of the CVS display and the realism of the study scenarios.

33 From the start of each scenario to the time when the nurse verbalised their assessment. If the nurse did not verbalise an assessment within 300 seconds, 300 seconds was coded as the response. Accuracy was determined by whether or not the nurse correctly identified the patient’s state.

34 Overall, participants in the CVS display condition identified the patient’s state more quickly than participants in the control display/traditional numerical format display.

35 Participants in the CVS display condition correctly identified the patient’s state more frequently than participants in the control display/traditional numerical format display.

36 Because participants in the CVS display condition correctly identified the patient’s state more quickly and correctly identified the patient’s state more frequently than participants in the control display/traditional numerical format display, providing patient information in a configural display with readily visible trends and data variability can improve the speed and accuracy of data interpretation by ICU nurses.

37 Research has found that people feel more comfortable and therefore more prepared to talk about private and sensitive subjects when consulting rooms are large and contain a large desk. Okken et al. conducted a study in which participants were asked to speak to
Now test yourself answers

Overcrowding can have a significant effect on well-being. Research by Huey and McNulty found that suicides among prisoners were strongly related to overcrowding. They analysed data on prison suicides in state and federal adult correctional facilities collected by the US Census Bureau in 1990 and 1995. Findings showed that all of the prisons that had at least one suicide in 1990 or 1995 had values on the overcrowding index above the grand mean, whereas all those that had no suicides fell well below the mean. Such findings therefore suggest that overcrowding is a critical feature of prison environments that dramatically raises the risk of suicide.

Research has shown that surgical patients often experience considerable anxiety and hospital confinements limit their access to outdoor environments almost entirely to views through windows. Therefore the view from the window may have either positive or negative effects on recovery.

The sample consisted of 46 patients who had undergone cholecystectomy (a common type of gall bladder operation) in a suburban Pennsylvania hospital between 1 May and 20 October 1972 and 1981. [Patients younger than 20 years or older than 69, patients who developed serious complications and those with a history of psychological disturbances were excluded.] Twenty-three (15 female, 8 male) patients were assigned to rooms with windows looking out over a natural scene while 23 (15 female, 8 male) patients matched on sex, age [within five years], being a smoker/non-smoker, obese/within normal weight limits, general nature of previous hospitalisation, year of surgery (within six years) and floor level were assigned to similar rooms with windows facing a brick building wall.

Five types of information were taken from each patient’s records: a) length of hospitalisation, defined as day of surgery to day of discharge, b) number and strength of analgesics each day, c) number and strength of doses for anxiety, including tranquillisers and barbiturates, each day, d) minor complications, such as persistent headache and nausea requiring medication, e) all nurses’ notes relating to the patient’s condition or course of recovery.

One finding was that patients with window views of trees spent less time in the hospital than those with views of the brick wall. Another finding was that more negative notes were made on patients with the brick wall view compared with patients with the tree view.

Because patients with window views of trees spent less time in the hospital than those with views of the brick wall, a natural scene has positive therapeutic influences.

An ‘emotionally charged bubble of space which surrounds each individual’ (Hall, 1959).

A physical area which is generally immovable.

Through the deliberate demarcation of a workspace by its occupant. A worker may mark their workspace with pictures, ornaments, trophies, etc., which indicate to others whose workplace it is and limits access others feel they have to that space.

The deliberate decoration or modification of an environment by its occupants to reflect their identities.

To guard against the negative physiological and psychological consequences of inadequate privacy regulation.

a) Men and women will personalise their offices differently, b) personalisation will be positively associated with satisfaction with the physical work environment, which will be positively associated with job satisfaction, which will be positively associated with employee well-being, c) workspace personalisation will be more integral to the well-being of women than men, d) companies that have more lenient personalisation policies will report higher levels of organisational well-being.

To gather data in relation to the four research questions and hypotheses to determine whether office personalisation is associated with employee well-being and to determine the effect of gender on this relationship.
The sample was made up of 23 employees – 15 women and 8 men.

Participants were asked about the personal items they had displayed and the importance of those items to them. They were also asked whether they thought that being able to personalise their workspace affected their satisfaction with the physical work environment, their job satisfaction and their overall well-being. They were asked how they would feel if their company prohibited personalisation.

It was found that women’s displays contained significantly more symbols of personal relationships, such as friends and pets, than men’s. Women’s displays also included more plants and trinkets than men’s but men’s displays contained more sports-related items than women’s.

It was found that employees in companies that allowed more personalisation had higher levels of employee morale than those in companies that did not encourage personalisation.

Men and women personalise their workspaces differently. Women personalise their workspaces more than men and place more importance on personalisation (of their workspace).

As territory can be defined as a physical area which is generally immovable, an office design strategy would be to allow employees to personalise their workspaces. Wells’ study showed that companies that allow more personalisation had a more positive organisational climate, a more positive social climate, greater levels of employee morale and reduced turnover. Therefore, by allowing personalisation of workspaces, employers will have a more content and satisfied workforce, which should lead to good production and performance levels.

Chapter 21

1. The general level of physical and psychological activation.

2. A negative emotion state in which an individual experiences high arousal accompanied by worry.

3. Drive theory explains the relationship between physiological arousal and performance. It holds that as an individual’s arousal increases, their performance improves. Three major factors influence performance: the complexity of the motor task, physiological arousal, learned tendencies to respond to a task in a certain way. The higher the level of physiological arousal, the more likely it is that the performer will adopt their dominant response to a situation, i.e. learned tendencies to respond to a task in a certain way. If the task is a simple one and the dominant response is the correct one, then higher arousal will be associated with better performance. Where the task is a complex one involving fine motor skills, or if the athlete has acquired bad habits and the dominant response is incorrect, high levels of arousal will inhibit performance. The theory therefore predicts that the best performances of high skill-level athletes will take place in high-level competition and that novices, who are more likely to have bad habits, are more likely to make mistakes when under pressure.

Using the Sport Competition Anxiety Test (SCAT). This was devised by Martens and measures trait anxiety. The test is a questionnaire comprised of 15 items. For each of the items the athlete has to select whether or not the term applies to them ‘rarely’, ‘sometimes’ or ‘often’. The test categorises athletes as low, average or high in trait anxiety. Two examples of items on the questionnaire are: ‘I am concerned about this competition’, ‘I have self-doubts.’

The inverted-U hypothesis proposes that performance initially increases with the increase in intensity of a stimulus, but then performance tails off if the intensity or frequency of the stimulus continues to increase. It therefore predicts a gradual tailing-off of performance once an optimal level of stress is passed and that once a performer has gone ‘over the top’ all that is required to reinstate peak performance is a slight reduction in stress.

Difficulties with the basic ideas, difficulties with evidence, difficulties with applying the model.

a) Fazey and Hardy claim that the inverted-U hypothesis fails to recognise the multidimensionality of the anxiety and arousal systems because although the inverted-U hypothesis describes the relationship between arousal and performance, it does not adequately explain the more important relationship between anxiety and performance. b) They also claim that there is a lack of predictive validity in practical situations because they found that when an athlete went ‘over the top’, the drop-off in performance was large and dramatic, and once performance levels dropped drastically it was very difficult to get performance back to even a mediocre level, suggesting that small reductions in the stress being experienced by the athlete made no real difference to performance once this stage had been reached.

That an athlete’s level of cognitive anxiety determines whether the effect of physiological arousal is smooth and small, large and
catastrophic, or somewhere between these two extremes.

9 a) That there will be catastrophic effects on performance levels when cognitive anxiety is high. b) That intermediate levels of performance are most unlikely in conditions of high cognitive anxiety.

10 Because Fazey and Hardy found difficulties with the basic ideas, evidence and applications proposed by the inverted-U hypothesis, the hypothesis is flawed.

11 The use of the relaxation technique known as progressive muscle relaxation (PMR). This involves tensing and then relaxing groups of muscles in turn over the whole body. In this technique, four sections of the body are relaxed in turn: the arms, the face, neck, shoulders and upper back; the stomach and lower back; the hips and legs. Athletes are taught to tense each muscle group before relaxing it, so that they can appreciate the difference in sensation between tensed and relaxed muscles. A PMR session lasts about 30 minutes. Numerous studies have shown that PMR is effective in inducing relaxation, but research has also shown that PMR alone seems to have little effect on performance. However, when combined with other techniques such as biofeedback and diaphragmatic breathing, it can be successful in enhancing performance.

12 Physical activity undertaken to develop physical fitness.

13 ‘A state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community’ (WHO).

14 Through the use of the Profile of Mood States (POMS) questionnaire. This was designed to measure the following mood states: tension, depression, anger, vigour, fatigue and confusion. The test has 65 items and for each item the respondent indicates on a five-point scale how they have been feeling in relation to the item for the past week, including the present day. The scale goes from ‘not at all’ to ‘a little’ to ‘moderately’ to ‘quite a lot’ and ends with ‘extremely’. Scores for the different mood states can be plotted on a line graph to give a profile. The POMS offers a general measure of depression, a key factor in determining an individual’s mental health state.

15 Anxiety, depression.

16 a) It helps the motor symptoms of Parkinson’s (PD) b) it has particular psychological benefits due to the mental challenges that dance steps and timing can provide, such as memory, learning and spatial awareness.

17 To test whether dance would enhance mood in a group of older people and to see whether this effect was different for those suffering from Parkinson’s.

18 a) Whether participants were sufferers of PD or whether participants did not suffer with PD. This was a naturally occurring variable which could not be manipulated by the researchers, b) whether participants took part in the long cycle time or the short cycle time. This was manipulated by the researchers.

19 By participants volunteering themselves by responding to either local advertisements or through contact with local Parkinson’s support groups.

20 In the long cycle time: the POMS (Profile of Mood States), in the short cycle time: the BRUMS (Brunel University Mood Scale).

21 Participants were asked to complete the POMS before the beginning of the first session and again a few days after the tenth session. They completed the BRUMS in the ninth week.

22 Dance classes lasted for 50 minutes and consisted of a ten-minute warm-up, 30 minutes of dancing and a five-minute cool-down. A five-minute break was given midway. Each class was based on rhythmic dancing to a strong beat, designed to be appropriate for the age, mobility and constraints of people with mild to moderate PD. They completed the classes standing, with the option to sit down if desired. The style of dancing changed every two weeks and consisted of Bollywood, Tango, Cheerleading, Old Time Music Hall and Party dancing based on the Charleston and Saturday Night Fever.

23 a) PD participants showed higher TMD scores throughout the study than participants in the control group, b) there was a significant reduction in mood disturbance over the long cycle time in all participants.

24 Because results showed there was a significant reduction in mood disturbance over the long cycle time in all participants, dance interventions can provide psychological benefits for the elderly.

25 The internal mechanisms and external stimuli which arise and direct behaviour.

26 The belief and expectation that an individual will be competent and successful in a particular task.

27 Intrinsic motivation comes from within the person, for example self-satisfaction, whereas extrinsic motivation comes from external rewards, such as trophies.

28 The mental practice or mental rehearsal in which a sportsperson thinks through or
imagines themselves performing a particular skill or achieving a particular goal.

29  a) To practise or run through routines privately, avoiding the arousal effects of an audience or the possibility of public failure, b) to consolidate and rehearse newly acquired skills from a training session, either during rest breaks or between training sessions.

30  The study conducted by Callow, Hardy and Hall. They examined the effects of MG-M imagery on the confidence of elite adult badminton players. The results showed that a 20-week imagery intervention improved the sport confidence for two of the players and stabilised the sport confidence of the third player.

31  MG-M imagery will be a significant predictor of both self-confidence and self-efficacy in young athletes.

32  By asking the participants to complete three questionnaires: the SIQ-C (to measure imagery), the CTAI-2C (to measure general self-confidence) and the SEQ-S (to measure self-efficacy in soccer).

33  The final sample consisted of 125 participants (56 male, 69 female), all of whom were soccer athletes aged 11 to 14 years who played in both house/recreation and travel/competitive soccer leagues from south-western Ontario. Players reported a mean of 6.11 years of soccer playing experience.

34  Using the Competitive Trait Anxiety Inventory – 2 for Children (CTAI-2C). It is a 15-item questionnaire that measures somatic and cognitive anxiety as well as confidence. As this study was interested only in the confidence sub-scale, the anxiety sub-scales were not employed. The confidence sub-scale consists of five items that are rated on a four-point Likert scale from 1 (not at all) to 4 (very much so).

35  a) Clearance was gained from the university’s research ethics board (University of Windsor, Windsor, Ontario), b) parental consent and player assent were obtained.

36  a) There was a positive relationship between the use of MG-M imagery and self-confidence in young Canadian soccer players, b) there was a positive correlation between the use of MG-M imagery and self-efficacy in young Canadian soccer players.

37  Because the use of MG-M was found to positively correlate with both self-confidence and self-efficacy, the use of MG-M imagery is a significant predictor of self-confidence and self-efficacy in at least young Canadian soccer players.

38  The use of positive language, positive feedback and encouragement to increase intrinsic motivation. Research by Vallerand and Reid (1984) showed that positive feedback increased levels of intrinsic motivation. Males were assessed on their intrinsic motivation and perceived competence and then randomly allocated to one of three conditions: positive feedback, negative feedback and no feedback. They were asked to maintain their balance throughout 20-second trials. Those given positive feedback scored highest on an intrinsic motivation measure (task reaction questionnaire) and subsequently performed better than those given either negative feedback or no feedback at all, suggesting that positive feedback can positively affect motivation.

39  The individual differences in patterns of thinking, feeling and behaviour.

40  Using Eysenck’s EPI – the Eysenck Personality Inventory. Participants are asked to respond to a number of questions, such as ‘Do you often long for excitement?’ ‘Are you usually carefree?’ ‘Do you find it hard to take no for an answer?’. Each question requires a Yes/No answer. A score is calculated from the answers and the participant’s position on the dimensions of extrovert–introvert and stable–neurotic can then be established.

41  Because different sports have different demands. For example, research has shown that rock-climbers have high sensation-seeking but low anxiety personalities whereas triathlon competitors have high achievement–motivation, autonomy, dominance and harm-avoidance personalities and team players tend to be more anxious and extrovert–avoidance than individual competitors.

42  To investigate what differences, if any, there would be in the personality profiles of participants with a high level of skill in the four sports of football, gymnastics, wrestling and karate.

43  By asking all participants to complete the 15-item lie test from the Minnesota Multiphasic Personality Inventory (MMPI).

44  American football, wrestling, gymnastics and karate.

45  The sample consisted of 81 American football players, 141 gymnasts, 94 wrestlers and 71 participants in karate. All participated at either regional or national level.

46  They differed on the following components of Cattell’s 16PF: a) shy versus venturesome, b) less intelligent versus more intelligent.

47  They differed on the following components of Cattell’s 16PF: a) trusting versus suspicious, b) group-dependent versus self-sufficient.
48 a) No differences in personality profiles were found between the American footballers and the wrestlers. b) The biggest overall difference in personality profiles was found between American footballers and gymnasts.

49 Because no differences in personality profiles were found between the American footballers and the wrestlers, the sports of American football and wrestling share many similar personality characteristics.

50 Through the use of personality tests to identify traits that may hinder an athlete’s performance. Using the Eysenck Personality Inventory (EPI), an individual’s position on the dimensions of extrovert–introvert and stable–neurotic can be established. If, for example, an athlete scores highly on the neuroticism dimension, it indicates that they may find it difficult to control their arousal levels. If they become over-aroused under pressure, their performance will be poor. If such a personality trait can be identified, the athlete’s coach or trainer can provide them with strategies to manage arousal levels so that they can improve their performance. Such strategies could include the use of biofeedback and relaxation techniques.

51 Social cohesion is the extent to which group members like each other and get on well, trust and support each other, whereas task cohesion is the extent to which group members work together and are committed to achieving common goals, such as winning a match.

52 a) The authoritarian style. An authoritarian leader dictates to the group who does what and how. Advice, ideas and comments are not asked for and the leader makes decisions without any group input. b) The democratic style. Democratic leaders encourage the involvement of the members of the group, ideas are listened to and individuals are encouraged to participate in decisions relating to the preparation and execution of group tasks, although the leader takes final decisions and oversees the structure of group work.

53 They can make coaches more aware of their behaviours, create expectancies concerning the likely consequences of various coaching behaviours, increase their desire to generate certain consequences rather than others, and develop or enhance their ability to perform desirable behaviours effectively.

54 a) There would be an increase in positive interactions between coaches and their players and positive interactions between team-mates. b) Young players with low self-esteem would give more pronounced differences in their perceptions of trained and untrained coaches.

55 The IV was whether the coach was assigned to the group who underwent the evening training session or whether the coach was assigned to the no-treatment (control) group. The DVs were the observed behaviours of the coaches during games, players’ perceptions of the coaches’ behaviours, and player attitudes towards themselves, the coaches, team-mates and the sport.

56 The final sample consisted of 18 coaches in the experimental group and 13 coached in the no-treatment, control group. Their mean age was 36.10 years and they had an average of 8.37 years of coaching experience. They were all Seattle-area, male, Little League Baseball coaches.

57 Coaches in the experimental group were contacted by telephone and invited to participate in an evening training session. At the session, the coaches were presented, both verbally and in written form, with guidelines that had been devised in relation to coaching behaviours. In addition to the guidelines, coaches were given a written brochure which contained concrete suggestions for communicating effectively with players, gaining their respect and relating to parents. The verbal presentation was supplemented by the modelling by the experimenters of both desirable and undesirable methods of responding to specific situations. In addition to the information-modelling portion of the training programme, behavioural feedback (in the form of behavioural profiles compiled after they had been observed during the first two weeks of the programme) and self-monitoring procedures (obtained by the coaches completing a self-monitoring form after each of their first 10 games of the season) were employed.

58 By 16 trained undergraduates who completed the Coaching Behaviour Assessment System (CBAS) for each coach.

59 Through the use of an adapted version of Coopersmith’s Self-Esteem Inventory.

60 The control group (of coaches).

61 The experimental group (of coaches).

62 Analysis of the 112 children who played for the trained coaches showed a significant increase in self-esteem scores compared with the 75 control group children who showed no change in self-esteem scores.

63 The trained coaches had a mean winning percentage of 54 per cent (losing percentage of 46 per cent) whereas for the untrained coaches this was 45 per cent (losing percentage 55 per cent).
Because children who played for the trained coaches indicated greater enjoyment in having played and a stronger desire to play in the future than children who played for the untrained coaches, training programmes can have a positive effect on young baseball players’ personal satisfaction and self-esteem.

Use team building to develop both task and social cohesion. This could be done by using Carron et al.’s four-point model which aims to a) increase team distinctiveness, e.g. by wearing a uniform, b) increase cohesiveness, e.g. by having social events, c) establish clear team goals, e.g. having a ‘goal for the match’, d) increase team communication, e.g. having productive team meetings. This strategy would be based on the following principles for team building: a) each player should be acquainted with the responsibilities of other team members, b) as coach, learn something personal about each team member and use it to gain cooperation, c) develop pride in the sub-teams within larger teams, e.g. the attack in a hockey team, d) involve players in decision making to make them feel ownership, e) set team goals and celebrate when they are attained, f) teach each team member about their responsibilities and convince them of their individual importance in relation to team success, g) allow team members to have disagreements, prevent the formation of cliques within the team, h) use routines in practice designed to teach team members how inter-dependent they all are, i) highlight the positive aspects of play, even if the team is losing.

The positive effects of being in the presence of other people.

Cottrell’s evaluation apprehension theory can be used to explain audience effects. Cottrell argued that the presence of others causes increased levels of arousal because individuals feel they are about to be evaluated/judged on their performance. If the performer is competent, they are likely to feel confident and the effect of the observer on performance will be positive. If, however, the performer is a novice or lacks confidence, the resulting anxiety from the belief they are about to be judged will have a negative effect on performance.

If an animal’s dominant responses are appropriate from the point of view of the experimental situation, the presence of others will enhance them and the resulting performance will be improved. If these dominant responses are largely inappropriate, however, performance in the presence of others will be impaired.

To provide evidence for drive theory using cockroaches.

a) Whether the cockroaches performed in pairs or alone, b) whether the cockroaches performed in pairs or alone with an audience, c) whether the cockroaches had to traverse a maze or a straight runway.

The starting latency and the time taken to reach the goal box so the guillotine gate could be lowered.

The mirror condition, the odour condition, the alone condition.

To test whether the cockroaches’ performance differed depending on whether they were alone or in pairs, with or without an audience or running in maze or a straight runway.

By placing a cockroach in the starting box and then removing its cover, turning on the floodlight and removing the guillotine door which separated the opening in the starting box from the runway or maze.

By timing how long it took the cockroach to start its run from opening the guillotine gate of the starting box until the last part of the cockroach’s body left the starting box.

By placing an egg carton impregnated with the odour of conspecifics inside the housing of the apparatus directly beneath the maze or the runway.

It took the cockroaches longer to negotiate the maze when an audience was present than when there was no audience.

Cockroaches with an olfactory stimulus took longer to traverse the straight runway than cockroaches without an olfactory stimulus.

To teach athletes how to manage and control arousal and anxiety levels so that the presence of spectators does not have a negative effect on performance. This could be done through the use of self-talk. This would involve the athlete being trained to perceive arousal as positive by talking to themselves. Effective self-talk involves individuals telling themselves to focus on the task in hand and consider the presence of spectators as a positive influence.