Chapter 1.1

1 1 mark for any of the following:
• Increased CO₂/lower pH/chemoreceptor
• Release of adrenaline
• Increased sympathetic impulses/decreased parasympathetic impulses
• Increased rate of firing of the SAN
• Increased strength of contraction
• Increased heart rate
• Increased stroke volume

2 1 mark for any of the following:
• The SAN controls heart rate
• Sends out an impulse and the atria contract/atrial systole takes place
• Impulse then travels to the AVN
• Slight delay at the AVN to allow the ventricles to fill up with blood
• Impulse then goes to the bundle of His
• and into the Purkinje fibres
• and ventricular systole takes place/ventricles contract

3 1 mark for any of the following:
• Lower exercising heart rate for any given load/greater heart range
• Stroke volume increases
• Increase in ejection fraction/increased strength of contraction
• Maximal cardiac output increases
• Cardiac muscle has lower demands for oxygen during exercise

4 1 mark for any of the following:
• Contraction of the heart/stroke volume/ejection fraction
• Blood flow/cardiac output
• Elasticity
• Blood vessel diameter/vasoconstriction/vasodilation/lumen size
• Health factors such as atherosclerosis/level of fitness

Chapter 1.2

1 1 mark for each of the following:
• A definition of diffusion – high concentration/partial pressure to low concentration/partial pressure, down a concentration/diffusion gradient
• At the alveoli there is a short diffusion pathway.
• There is a high pO₂ in the alveoli and a low pO₂ in the blood, so oxygen moves from the alveoli into the blood.
• There is a high pCO₂ in the blood and a low pCO₂ in the alveoli, so carbon dioxide moves from the blood into the alveoli.

2 1 mark for each of the following:
• The increase in carbon dioxide is detected by chemoreceptors.
• Chemoreceptors send nerve impulses to the respiratory control centre in the medulla oblongata of the brain.
• The medulla oblongata then sends nerve impulses to the breathing muscles via the phrenic nerve/sympathetic system.
• This increases the rate of contraction of the diaphragm and external intercostal muscles so breathing increases.

3 1 mark for any of the following:
• Carbon monoxide from cigarettes combines with haemoglobin in red blood cells much more readily than oxygen.
• This reduces the oxygen carrying capacity of the blood
• which increases breathlessness during exercise.

Chapter 1.3

1 1 mark for any of the following:
• Muscle spindles detect changes in muscle (fibres)
• Cause stretch reflex
• Designed to prevent overstretching/protective
• Aim of PNF to override the stretch reflex
• Golgi tendon organs/GTO/activated/detect overstretching of muscles
• Causes the muscles to relax/autogenic inhibition
• Allows greater range of movement than the initial stretch/greater range of movement

2 1 mark for any of the following:
• Slow twitch fibres/type I
• Small motor neurone size
• High mitochondrial density
• High myoglobin content
• Large capillary density

3 1 mark for any of the following:
• Size of motor units recruited – larger for greater contraction/smaller for less powerful
• Multiple unit summation
• Number of units recruited – more or less
• Type of muscle fibre size determines force of contraction; fast twitch fibres rather than slow twitch fibres for more powerful contractions
• All or none law/all or nothing law/or explanation/action potential or threshold is reached/contraction occurs in all of the fibres in the motor unit
• Wave summation
• Frequency of impulse/innervations
• Tetanus/tetanic for powerful contraction
• Spatial summation
• Rotating the frequency of the impulse to motor units to delay fatigue/some work while others rest or equivalent

Chapter 1.4

1

<table>
<thead>
<tr>
<th>Joint</th>
<th>Joint action</th>
<th>Main agonist</th>
<th>Type of contraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elbow</td>
<td>Extension</td>
<td>Triceps</td>
<td>Concentric</td>
</tr>
<tr>
<td>Shoulder</td>
<td>Extension</td>
<td>Latissimus dorsi</td>
<td>Concentric</td>
</tr>
</tbody>
</table>

2

<table>
<thead>
<tr>
<th>Joint</th>
<th>Joint action</th>
<th>Agonist</th>
<th>Type of contraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ankle</td>
<td>Dorsi – flexion</td>
<td>Gastrocnemius</td>
<td>Eccentric</td>
</tr>
<tr>
<td>Knee</td>
<td>Flexion</td>
<td>Quadriceps</td>
<td>eccentric</td>
</tr>
</tbody>
</table>

Chapter 1.5

1 One mark for any of the following:
• Stored ATP
• ATP/PC system
• Phosphocreatine is broken down
• into phosphate and creatine.
• Energy is used to re-synthesise 1 ATP.

2 One mark for any of the following:
• Anaerobic
• During the first few seconds, ATP breaks down to ADP + P + energy.
• The gymnast will then use the ATP/PC system.
• Phosphocreatine is broken down into phosphate and creatine.
• Can last up to 10 seconds/limited supply.
• The anaerobic glycolytic system then takes over.
• Glycolysis occurs
• where glucose is broken down to pyruvic acid.
• Lactic acid is formed.
• Two molecules of ATP are re-synthesised.

3 One mark for any of the following:
• ATP/PC levels decrease during exercise.
• As ATP and PC are supplying the energy during the work interval
• 30 seconds is insufficient for full restoration/only 50 per cent replenished.
• 2–3 minutes are needed for full recovery.

4 One mark for any of the following:
• Lactate sampling – taking blood samples to measure the level of lactic acid/lactate
• Ensures training is at the correct intensity/can monitor improvements over time
• Provides accurate/objective measure
• Measures OBLA/lactate threshold/occurs at 4 mmols

5 One mark for any of the following:
Definition:
• The amount of O2 consumed during recovery above that which would have been consumed at rest,
• Excess post-exercise oxygen consumption
Fast component:
• Restoration of ATP and PC
• Re-saturation of myoglobin with oxygen
Achieved:
• Restoration of phosphocreatine takes up to 3 minutes for 100 per cent/30 seconds for 50 per cent
• 2–3 litres of oxygen consumed
• Myoglobin replenishment takes up to 2 minutes
• Uses 0.5 litres of oxygen

Chapter 2.1

1 Consistent, learned, aesthetically pleasing and fluent
2 Gross because the performer uses large muscle groups to perform the triple jump
Closed because the sporting environment is stable
Serial because a number of discrete skills (hop, step, jump) are performed together sequentially, creating the full triple jump
Self-paced because the performer is in control of the speed and timing of the triple jump

Answers and quick quizzes at www.hoddereducation.co.uk/myrevisionnotes
3 Learning and performing a skill on one side of the body and then performing the skill on the opposite side with the opposite limb. E.g. learning to dribble a football with your right foot, then transferring it across and dribbling with your left foot.

Chapter 2.2
1 • open skills
• externally paced skills
• complex skills
• continuous skills
• practical example must reflect one of the above classifications e.g. receiving a pass is an open/externally paced/simple skill.
2 • helps athlete to selectively attend/keeps them focused/reduces distractions
• reduces arousal/anxiety
• increases motivation/confidence
• sends electrical impulses to working muscles
• reduces reaction time
• athletes can use it during rest periods/when injured

Chapter 2.3
1 Correct answer is B.
2 • the plateau
• set new goals
• use varied practice
• allow time to rest/recover/use distributed practice
• adjust coaching methods/work with a new coach
• offer positive reinforcement/praise/rewards
• ensure performer competes against realist competition

Chapter 2.4
1 Knowledge of performance:
• Coach should give the performer technical information to improve their actions.
• E.g coach tells hurdler to snap their trail leg down much quicker in order to improve their time.
Visual guidance:
• Coach will video the performer and while playing it back highlights their weaknesses.
• E.g. coach shows the footballer a video of him during a set piece and highlights that he is out of position and therefore cannot receive the ball. The coach demonstrates where the player should stand.

Chapter 2.5
1 • Focusing on the relevant environmental cues
• Disregarding the irrelevant cues
• Aids concentration
• Improves reaction time
• Filters out any distractions
• Controls arousal levels
• Reduces the chance of information overload in the short-term memory
2 • Practice: the more they respond to a stimulus, the faster their reaction and response times.
• Gain experience: actually participating in the activity regularly means they will respond faster.
• Improve fitness levels: the fitter they are, the quicker they can respond.
• Warm up: if their body and mind are prepared, they can respond quicker.
• Gain optimum arousal: if they are at the peak of their arousal, they will respond quicker.
• Anticipate: predicting that a movement will happen will speed up response time.

Chapter 3.1
1 • played locally
• played occasionally/annually
• simple rules/limited codification
• rural
• natural/simple
2 • Written rules as upper class were educated/literate
• Non-local as upper class could travel further field
• Played with specialist equipment in purpose built facilities as upper class were wealthy
• Played regularly with high skill levels as evident as upper class had lots of free time to play/practice
• Played by upper class males to mirror class divisions in society as reflected by the sporting activities played by the upper class and lower class

Chapter 3.2
1 During the first half of the nineteenth century, the initial effects were often negative, as outlined below:
• Migration of the lower classes into urban areas looking for work in the new factories being built led to a lack of space to play traditional mob games and overcrowding.
• Lack of leisure time: the shift from ‘seasonal’ to ‘machine’ time led to long 12-hour working days, six days a week; the Sabbath [i.e. Sunday] was a religious observance ‘day of rest’.
• Lack of income: low wages and poverty were evident, with little spare income for leisure pursuits.
• Poor health: along with poor working and living conditions that led to pollution, and a lack of hygiene, this also meant little energy to play sport.

AQA A-level PE
(b) Someone who receives direct payment for their participation in sporting activities

Chapter 3.3

1. Recognition of the need in society for greater equality of opportunity/equality legislation
   - Roles played by women in support of the war effort
   - Sporting/recreation/health and fitness opportunities – considered a right for all
   - Increase in leisure time available to participate in such sports
   - Increase in disposable income/economic independence
   - Increased influence of school PE programmes with wider variety of activities available
   - Increase in number of alternative activities available for women to participate in
   - Increase in number of sports clubs for women to join
   - Increased media coverage/positive role models to aspire to
   - Feminism/women’s rights movements/work of organisations such as Sport England/Women’s Sport Foundation etc.

2. Increased media presence and exposure
   - Increased ability of performers/spectators to travel further afield
   - Increased presence of advertising
   - Increased sponsorship has increased the amount of money available to sports/clubs
   - The influence of the golden triangle, i.e. increased links between the sponsor, the media and advertising
   - Increased dedicated sports channels on TV/radio, e.g. satellite TV stations such as Sky/ BT Sport

Chapter 3.4

1. (a) Brothers and sisters

2. Social issues refer to problems/conflicts that influence a considerable number of individuals who live in a society.

Examples include gender/disability discrimination, drug abuse, low activity levels and health/obesity problems.
3 Stereotyping:
- negative image/belief shared by society
- e.g. channelling women away from sport (causes unladylike sweating/development of muscles) and/or away from certain sports (e.g. boxing/rugby due to their aggressive/masculine nature)

Discrimination:
- acting on a prejudice/unfair treatment
- e.g. less access to clubs/coaches etc.

4 Increased health and fitness; decreased obesity
- Positive use of free time; keeps the individual out of trouble
- Increased job opportunities/development of employable skills
- Increased self-esteem/self-confidence via personal ‘success’
- Improvement in social skills/integration into the community/inclusion
- Improved morale

5 There has been an increase in disabled participation of 3.4 per cent in the six-year time period.
- But around 1 in 5 disabled people participate in sport compared to 1 in 2.5 non-disabled people.
- Therefore nearly twice as many non-disabled people regularly participate in sport compared to disabled people.

Common barriers which negatively affect such lower level disability sports participation include:
- negative self-image or lack of confidence
- relatively low income levels; high costs of participation such as membership fees and transport costs
- lack of access into and around facilities, e.g. facility front desk too high for disabled individuals to communicate with; doorways too narrow; no ramps within areas of a facility etc.
- lack of organised programmes
- low levels of media coverage/few role models to aspire to; lack of information available
- lack of specialist coaches/clubs/competitions; lack of adaptive/accessible equipment
- myths/stereotypes about the capabilities of people with a disability; lower societal expectations; safety concerns – disability participation traditionally considered dangerous.

A range of solutions to try to decrease the effects of such barriers for people with a disability and increase participation include:
- providing more opportunities for success; helping talented athletes reach the highest levels possible, e.g. the Paralympics
- Increased investment in disabled sport – subsidise it and make it more affordable
- providing transport to facilities and improved access into/around facilities, e.g. via local authority sport and leisure departments using specialist architects when planning facilities so that they meet the needs of disabled people
- improved technology, e.g. prosthetics/wheelchairs/adaptive equipment
- increased media coverage and promoting role models to relate and aspire to
- training of more specialist coaches; setting up more clubs for people with a disability
- educating people on the myths/stereotypes about the capabilities of disabled people and challenging inappropriate attitudes
- designing activities specifically for individuals with disabilities, e.g. goalball and boccia for the visually impaired, or modifying existing activities to enable involvement in them, e.g. wheelchair tennis and basketball etc.
- specialist organisations such as the English Federation for Disability Sport (EFDS) and Sport England working to support and co-ordinate the development of sporting opportunities for people with disabilities.

6 A significant gender gap still exists in student participation in physical activity [63 per cent male; 37 per cent female].
- The gender gap has slightly narrowed from 2015 to 2016 (relative female participation up 3 per cent in a year).
- An overwhelming number of participants are male, despite lots of national initiatives linked to females in this age group (e.g. This Girl Can).
- Barriers to participation still exist among late-teenage females.
- Stereotypical myths are still evident in society, e.g. the belief that women lack the aggression necessary for sports where this is key, e.g. in rugby.
- There is still far less media coverage of women’s sport compared to men’s.
- There are fewer positive/attainable role models in sport for other women to aspire to, e.g. as performers, coaches, officials, or in positions of power, making decisions on national governing bodies.
- There are fewer sponsorship opportunities/opportunities to become full-time sports performers.
- Negative impact of school PE programmes, e.g. rules on showering/kit; lack of appealing choice of activities. The Women’s Sport and Fitness Foundation (WSFF, now called Women in Sport) published a report called ‘Changing the Game for Girls’ in May 2012, which stated that just over half of all girls (i.e. 51 per cent) were put off physical activity by their experiences of school sport and PE. Just 12 per cent of 14-year-old girls were reaching the recommended levels of physical activity – half...
the number of boys at the same age; of the least active, 46 per cent of girls said they didn’t like the activities they did in PE, compared to 26 per cent of the most active.

- Lack of fitness, low levels of self-confidence, body image issues
- Costs of participation/lack of disposable income
- Fewer leagues/competitions/sports clubs available for women to participate in

Chapter 4.1

1 1 mark for any of the following:

Method A:
- Reduce glycogen levels by endurance training/exercise.
- For three days follow low-carbohydrate diet combined with tapering/reduction in training.
- Next few days follow high-carbohydrate diet combined with little or no training.
- Increase water intake (aids glycogen storage).

Method B:
- Day before competition complete 3 minutes of high-intensity exercise.
- ‘Carbo window’ opens immediately after exercise.
- Eat high-carbohydrate diet within 20 minutes of finishing exercise.
- ‘Carbo window’ closes after 2 hours.
- Increase water intake (aids glycogen storage).

Method C:
- Non-depletion protocol
- where training intensity is reduced the week before competition.
- Then three days before the competition a high-carbohydrate diet is followed with light-intensity exercise.

2 1 mark for any of the following:
- Increased body temperature/overheating
- Reduced sweating/reduced blood flow to skin
- Increased blood viscosity/blood becomes thicker
- Increased heart rate/cardiovascular drift
- Lower cardiac output
- Transportation of oxygen/carbon dioxide less efficient
- Decreased performance/slower reaction time
- Headaches/dizziness/cramp

3 1 mark for any of the following:
- Sodium bicarbonate is an antacid
- Increases the buffering capacity of the blood/neutralises the negative effects of lactic acid and hydrogen ions
- Reduces acidity in the muscle cells
- Delays fatigue
- Allows the performer to continue exercise at a very high intensity for longer

Chapter 4.2

1 1 mark from any of the following:

Frequency:
- Gradually increase the number of sessions completed per week/or equivalent example
- Increase the number of work periods in a set/number of sets
- Decrease the number of rest periods

Intensity:
- Gradually increase how hard you train/work period/weight/speed/distance
- Use Borg scale/percentage of 1 rep max/percentage of max heart rate
- Example of increased weight/speed/distance

2 1 mark for any of the following:

Parts of a cool-down:
- Reduce intensity of exercise
- Walk around/light jogging/aerobic activity
- Stretching (preferably static)

Benefits:
- Reduces heart rate
- Reduces body temperature
- Removes lactate/lactic acid
- Maintains venous return mechanism/skeletal/muscle pump
- Prevents blood pooling
- Reduces DOMS/muscle soreness

Chapter 4.3

1 1 mark from any of the following:

- Both methods use the same principle of using cold temperatures to aid recovery
- through vasoconstriction of the blood vessels therefore reducing inflammation and blood flow and
- getting rid of waste products such as lactic acid.
- The value of ice baths is that anyone can use one (you can do it at home).
- Cryotherapy chambers are only available to elite athletes.
- Cryotherapy is less time-consuming
- Returns the body back to normal quicker.

2 Achilles tendonitis is a chronic injury.
- It occurs after playing sport or doing exercise for a long time/overuse injury.
• It causes pain and inflammation of the Achilles tendon located at the back of the ankle.
• This is used for walking, running and jumping
• so when an elite performer does a lot of training it can be prone to tendonitis.
3 • Reduces pressure at injured area/reduces swelling
• Chamber delivers oxygen at high pressure
• 100 per cent pure oxygen
• Haemoglobin/red blood cells fully saturated with oxygen
• Excess oxygen dissolved in plasma
• Oxygen reaches parts of body that not normally saturated
• Increased white blood cell activity at injury site

Chapter 5.1
1 1 mark from any of the following:
• Law of inertia – body remains in a constant state of motion unless acted upon by a force
• Force is applied by the muscles
• Change in the state of motion from the run-up to the take-off
• Law of acceleration – magnitude of force governs the acceleration at take-off
• The direction of force also governs the direction of acceleration
• The more force that is applied, the more height is achieved
• Law of reaction – for every action force there is an equal and opposite reaction force
• The reaction force is a ground reaction force
• Ground reaction force needs to generate a large vertical component for high jumping
2 9 x 15 = 135 m

Chapter 5.2
1 Third-class lever

2 Mechanical advantage:
• when the effort arm is longer than the resistance arm
• can move a large load over a short distance and requires little force.

Mechanical disadvantage:
• when the resistance arm is longer than the effort arm
• cannot move as heavy a load but can do it faster/large range of movement.

Chapter 5.3
1

2 • Velocity is the rate of change of displacement and refers to how fast the player is moving towards the ball.
• Acceleration is the rate of change of velocity so a player will increase their velocity in order to accelerate towards the ball.
3 Air resistance and friction

4 There is a large horizontal force and a small vertical force, as the long jumper wants length not height.

Chapter 5.4
1 1 mark from any of the following:
• Changing the shape of the body causes a change in speed.
• Change in moment of inertia leads to a change of angular velocity/speed of the spin.
• Angular momentum remains constant (during rotation).
• Angular momentum = Moment of inertia x Angular velocity.
• Angular momentum is the quantity of rotation/motion.
• Angular velocity refers to the speed of rotation.
• Moment of inertia is the spread/distribution of mass around an axis/resistance of the body to move.
• To slow down (rotation), gymnast increases moment of inertia.
• This is achieved by extending body/opening out or equivalent.
• To increase speed (of rotation), gymnast decreases moment of inertia.
• This is achieved by tucking body/bringing arms towards the rotational axis.
2 1 mark from any of the following:
• Newton’s first law: a rotating body will continue in its state of angular motion unless an external force [torque] is exerted upon it.
• Therefore the dancer will continue to spin with constant angular momentum unless an external force acts on her.
• This is known as the principle of conservation of angular momentum.

Chapter 5.5

1 1 mark from any of the following:
   The foot:
   • applies force
   • gives acceleration/increases velocity.

   Weight:
   • affects the vertical component of flight
   • reduces/has a negative effect on velocity/decelerates.

   Air resistance:
   • is negligible
   • affects horizontal component
   • reduces/has a negative effect on velocity/decelerates.

2 1 mark from any of the following:
   • The badminton shuttlecock follows a non-parabolic flight path.
   • The shape of the shuttlecock means air resistance is the larger force.
   • Air resistance acts on the horizontal component.
   • Gravity acts on the vertical component.

3 1 mark for each label and explanation:
   • A large positive vertical component on release as the shot put travels up and away from the athlete
   • No vertical component at the highest flight point
   • Larger negative vertical component before landing due to the effects of gravity

Chapter 5.6

1 1 mark for any of the following:
   • If the angle of attack is too great, drag increases.
   • Lift also reduces, so the discus will not travel as far.

2 1 mark for any of the following:
   • Velocity – the faster something travels, the more the increase in drag.

   Cross-sectional area – a larger cross-sectional area increases drag/or the reverse.
   • The surface characteristics of a moving body – a more streamlined, aerodynamic shape reduces drag.

3 1 mark for any of the following:
   • The air that travels over the top of the spoiler of the racing car has to travel a shorter distance than the air underneath
   • so the air above the car travels at a slower velocity
   • which creates a higher pressure
   • and creates a downward lift force
   • increasing friction so the tyres maintain a firm grip on the track as the car travels at speed.

Chapter 6.1

1 • Personality is made up of traits and the influence of what you have learned from your environmental experiences. The interactionist approach combines the trait and social learning approaches.
   • B = f (P x E)
   • Behaviour is a function of an individual’s personality traits and the environment.
   • A performer will adapt to the situation they find themselves in, even behaving differently to how they normally would.
   • For example, a normally introverted rhythmic gymnast becomes extroverted when in competitive situations to attract higher scores from the judges.

Chapter 6.2

1 • Change cognitive/affective or behavioural attitude component
   • Create unease
   • Educate performer
   • Use significant other/role model
   • Give positive experience/ensuring success
   • Use positive reinforcement

Chapter 6.3

1 • Arousal increases with quality of performance up to an optimum point at moderate arousal.
   • Combination of high cognitive anxiety and high somatic anxiety
   • causes a sudden decrease in performance (catastrophe).
   • Performer can utilise stress management techniques to reduce over-arousal and continue performing.
   • Arousal/anxiety is increased further if performer fails to recover.

Answers and quick quizzes at www.hoddereducation.co.uk/myrevisionnotes
Chapter 6.4

1 Somatic anxiety:
   - Physiological symptoms of anxiety
   - Increased heart rate, increased blood pressure, increased sweat levels, muscle tension
   - For example, before the referee blows the whistle to start the match your heart races and you begin to sweat. You feel extremely tense in your neck/back.

Cognitive anxiety:
   - Mental/psychological symptoms of anxiety
   - Worry, irrational thoughts, confusion
   - For example, in the lead-up to the match you have irrational thoughts about tripping over the ball or missing an open goal.

Chapter 6.5

1 • Praise non-aggressive acts.
   • Punish aggressive acts.
   • Ensure the performer understands their specific role.
   • Give the performer responsibility.
   • Highlight non-aggressive role models/ensure their own behaviour is not aggressive.
   • Set process and performance goals rather than product goals within the team.

Chapter 6.6

1 Pride in achieving a personal best in the long jump

Chapter 6.7

1 NAF:
   • Exhibits avoidance behaviour
   • Has low self-efficacy/confidence
   • Dislikes competition and challenges
   • Will take the easy option
   • Gives in easily, especially if failing
   • Does not welcome feedback
   • May experience learned helplessness
   • Attributes failure internally
   • Dislikes performing in front of an audience

To achieve a NACH attitude:
   • Ensure success by setting achievable goals
   • Raise confidence/self-efficacy by giving positive reinforcement, praise and rewards
   • Highlight successful role models that have similar characteristics
   • Attribute internal reasons for success

Chapter 6.8

1 • Familiarisation training – allow an audience to watch training
   • Increase self-efficacy
   • Practise skills until they are grooved
   • Use selective attention to improve focus/concentration
   • Mental rehearsal, going over the performance in your mind
   • Imagery
   • Positive self-talk
   • Negative thought-stopping

Chapter 6.9

1 A performer lowers the level of effort they contribute to the team

Reasons:
   • Believe they are not a valued member of the group
   • Believe their input is not noticed
   • No clear role/unsure of position
   • Low self-efficacy/confidence, e.g. they believe that they are not good enough
   • Experience learned helplessness
   • Team mates are not trying so you also stop putting in effort
   • Poor leadership
   • Trait/state anxiety
   • Carrying an injury
   • Social inhibition/offensive crowd

Chapter 6.10

1 • Gives the performer a focus
   • Increases motivation
   • Increases confidence
   • Controls arousal/anxiety levels
   • Gives the performer a focus
   • Focuses efforts in training and game situations

Chapter 6.11

1 Learned helplessness is the belief that failure is inevitable; the performer attributes failure internally to low ability.

Ways to combat it:
   • Use attribution retraining
   • Set realistic/achievable process and/or performance goals
   • Raise self-efficacy
   • Highlight previous successful performances
   • Give positive reinforcement and encouragement

Chapter 6.12

1 Performance accomplishments:
   Coach should remind performers of past success in similar situations.
Example: remind the high jumper that she succeeded at a similar height in the last competition. 

Vicarious experiences: 
Coach should ask another performer that shares characteristics with the high jumper to model the skill. 
Example: ask a performer of similar ability, age and same gender to demonstrate the jump successfully.

Chapter 6.13

1 Characteristics: 
- Roles/task unclear 
- Group lacks motivation 
- Leader not respected by group members 
- Leader has poor relationship with group members 
- Group is unsuccessful 
- Resources/facilities limited 

Task-orientated leadership style required

Chapter 6.14

1 Somatic: 
- Biofeedback – use equipment to generate physiological data 
- Progressive muscular relaxation – tense, hold and relax each muscle group in turn 
- Breathing control – control the rate and depth of breathing 
- Centring – concentrate fully on your body and breathe in, as you breathe out, chant a word or phrase which is how you wish to perform (strong, focused, calm etc.) 
- Warm-up 

Cognitive: 
- Psychological skills training 
- Mental rehearsal – go over the performance in your mind without moving 
- Visualisation – re-live a successful performance (can be internal or external) 
- Imagery – recall a successful previous performance using all the senses 
- Positive self-talk – verbally tell yourself that you can achieve/use a mantra 
- Negative thought-stopping – replace any thoughts of failure with assertive thoughts of success

Chapter 7.1

1 (a) Voluntary with an emphasis on participation 
2 Three from: 
- It increases health and fitness and helps in the development of physical skills.

3 Suggested answers: 
- Less strain on the NHS/lower levels of obesity/CHD as health and fitness improve 
- Increased social control/lower levels of crime as individuals make more positive use of free time 
- Increased social integration/equality of opportunity via increased job opportunities in sport by different socio-economic groups/ethnic groups 
- Increased national pride as a result of increased standards of performances/successes of national teams which can result from a wider participation base with more people to potentially feed through it 
- Economic benefits to the sport and leisure industry/increased employment opportunities in the sector/benefits of regeneration due to money invested/spent on sport, e.g. as a performer/spectator/consumer 
- Increased skill levels can result in more employable/highly skilled population and increased morale 
- Increased social interaction results in a better community/improved community morale

4 Four from: 
- Develop positive attitudes to lead to healthy lifestyles; increase health and fitness 
- Increase participation in a variety of activities, develop physical skills/competencies 
- Develop personal and social skills; teamwork; communication; leadership; co-operation 
- Develop positive ethics; morality; sportsmanship 
- Experience and engage in competitive sports and activities outside school through community links, and/or links to sport clubs 
- Improve problem solving, decision making, cognitive skills, creativity; develop strategies and tactics in a range of activities 
- Increase the skills of self-analysis; learn how to plan, perform and evaluate; learn how to recognise improvements/own successes; increase self-esteem 
- Encourage lifelong participation; create a sporting habit for life

5 Three from: 
- Lack of time (e.g. time in the curriculum)

Answers and quick quizzes at www.hoddereducation.co.uk/myrevisionnotes
6 Suggested discussion points from:

<table>
<thead>
<tr>
<th>Physical recreation</th>
<th>Sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available to all/voluntary/choice</td>
<td>More selective/obligation/for some an occupation so with a job at stake winning is far more important</td>
</tr>
<tr>
<td>Viewed as a social occasion with friends so far more relaxed/informal than sport</td>
<td>Viewed as a test of ability against opponent(s) which makes it far more serious/intense</td>
</tr>
<tr>
<td>Emphasis on taking part/participation focus so less likely to become aggressive/violent</td>
<td>Emphasis on winning/serious/competitive</td>
</tr>
<tr>
<td>Self-officiated/self-regulated so decisions can be reached amicably with little controversy likely to stir aggression in participants</td>
<td>External officials enforce rules</td>
</tr>
<tr>
<td>Mainly intrinsic rewards so less on edge as winning for material gain is not a concern</td>
<td>Extrinsic rewards available for success, e.g. winning trophies/medals</td>
</tr>
<tr>
<td>Non-serious – end result not important so cheating to win/using gamesmanship are less likely</td>
<td>Serious/competitive – end result is important</td>
</tr>
<tr>
<td>Varied skill/fitness levels</td>
<td>Higher skill/fitness levels</td>
</tr>
<tr>
<td>Basic equipment and clothing used or worn</td>
<td>High-tech equipment and clothing used or worn</td>
</tr>
</tbody>
</table>

Chapter 7.2

1 (d) Supporting athletes 4 years away from the podium

2 Six from:

- There is simplicity of administration and record keeping, evident with clear/appropriate division of roles. Performers can be assessed via a clear database.
- Talent identification monitoring systems are used that are built on good practice and use appropriate/relevant tests linked to the physiological/psychological characteristics and techniques demanded in the focus sport(s); direction of performers to sports suited to them.
- Well-structured competitive programmes and development squads are provided at various levels appropriate to participants’ current level of performance and provide a structured route through to elite level.
- Specialist/high-quality training facilities to support progression are provided; testing facilities are of a high standard.
- Funding is allocated to young up-and-coming performers at different stages of their development (e.g. Lottery/WCPP).
- Talent spotting is undertaken via high-quality coaches/high-quality talent scouts.
- There is high-level provision of support services (e.g. sports scientists and physiotherapists) to support performers during their identification and progression.
- Organisations involved in Talent ID work together (e.g. EIS, UK Sport and NGBs).

3 3 marks for an explanation of the structure of the WCPP:

- World Class Talent: feeds into the pathway to identify those with potential to progress through the pathway and places them on the development programme involving training and competing.
- World Class Podium Potential: this consists of athletes whose performances have suggested realistic medal-winning capabilities 6–8 years from the poduim.
- World Class Podium: this is the top end of the pathway which supports athletes with realistic medal-winning chances at the next Olympic/Paralympic Games (i.e. a maximum of 4 years from the podium).

4 Advantages of Talent ID programmes:

- All potential performers are screened/nothing is left to chance.
- Individuals get directed to a suitable sport linked to their talents.
- The programme of development can be accelerated.
- They make the best use of funding/resources available.
- They increase the chances of winning medals.
- They help organisations work together/co-operate.

Disadvantages of Talent ID programmes:

- They may miss late developers.
- They require high levels of funding.

- Lack of money (e.g. high costs of specialist equipment)
- Lack of qualified/motivated staff
- Location of school (e.g. lack of access/long distance to travel to specialist facilities)
- Health and safety concerns
• They require large numbers to be tested to be of use.
• There are no guarantees of success.
• Many sports are in competition for the same talent pool; high-profile sports may attract more performers or the best performers.
• UK Sport has adopted a funding philosophy called ‘no compromise’ and bases its decisions on performances at major sporting competitions.
• UK Sport has adopted this approach to raise standards/performance levels among Team GB athletes/increased accountability of performers/NGBs.
• It is designed to make the best use of the funding available to elite sport by funding athletes/sports deemed to have the best chance of success (i.e. it is directed to potential medal winners.)
• Such an approach has increased Team GB medal chances and helps justify the large public/National Lottery investment in elite sport.
• Success breeds success; more medals bring more money; more success increases the profile of a sport (e.g. cycling).
• This approach encourages/gives incentives to athletes to reach the highest level possible.

Chapter 7.3

1 (c) Stretching the rules to their limit
2 Sportsmanship – fair play/playing by the unwritten rules/code of ethics
   Example: giving the ball back if opponents kick it out of play due to injury to one of your team; shaking hands at the start/end of a game
   Gamesmanship – stretching the rules to the absolute limit
   Example: time-wasting/sledging/injury time outs
3 Disagree with suggestion:
   • Performers are still seen as role models and need to act appropriately.
   • It is important to maintain good behaviour to secure commercial/sponsorship deals.
   • Sponsors are more likely to ‘recruit’ performers who display positive values.

Agree with suggestion:
• Win ethic/Lombardian ethic is now more common; winning is all important to ensure success and continued interest from sponsors
• Increased pressure to succeed to ensure media focus/coverage to promote products of sponsors
• Therefore more likely to cheat/display deviant behaviour, e.g. via professional fouls/over-aggression/rule-breaking
• Increased use of drugs/doping
• Increased use of gamesmanship
• Increased number of prosecutions/punishments/sanctions due to deviant acts/foul play

NB Not just increased pressure – need to specify for most points why/how pressure impacts on sporting ethics.

4
• Booking/sending off (on field)
• Fine/ban (off field)
• Club fine/points deducted
• Code of conduct for players
• Improve officiating via use of technology
• Cite player after game for foul play
• Fair Play Awards and campaigns

5
• Deviance – behaviour which differs/goes against the accepted norms applied by society/society’s values
• Increase in drugs use/doping issues/drug scandals, e.g. THG/EPO/Therapeutic Use Exemptions
• Increased simulation in sports such as football
• Increased gamesmanship to help gain an advantage and win (e.g. time-wasting)
• Evidence of increased deviance via higher levels of media coverage – highlights deviant acts in sport (e.g. elbowing off the ball/late tackles/high tackles)
• Illegal betting practices/bungs/match-fixing on the increase
• Increased Americanisation of sport (e.g. high rewards/salaries lead to a win–at–all–costs attitude; hyping of events; demand for sporting entertainment/spectacle
• Increased movement away from ‘amateur ideals’ of sport
• Increased commercial involvement also leads to a win–at–all–costs/Lombardian ethic

Chapter 7.4

1 Four from:
• Kick-off times imposed by police (early to avoid/decrease alcohol consumption)
• Control of alcohol sales; pubs banned from opening prior to kick-off
• Introduction of all-seater stadia/crowd segregation/football promoted as family-friendly entertainment
• Tougher deterrents/prosecution of violent individuals
• Specific laws passed, e.g. against trespass on pitch
• Violent individuals banned from grounds/travel abroad
• Increased security at events/increased policing/police ‘intelligence’
• Use of CCTV to monitor fan/spectator behaviour in and around grounds
• More responsible media reporting prior to matches
2 • Pressure to win from media/fans/sponsors
• Pressure to win linked to the importance of the event
• Financial rewards at stake
• Fear of losing contract in a hire-and-fire world
• Retaliation against a performer (e.g. foul play) or the crowd (e.g. chants) or decisions of officials
• Development of win-at-all-costs attitude/frustration with own performance and/or that of the team (i.e. you are losing)

3 Example synoptic question
Theories/reasons:
• Instinct/trait theory – aggression is innate/born with aggression.
• Frustration-aggression hypothesis – sport tends to increase aggression, e.g. a poor refereeing decision/a goal is blocked by an opponent.
• Social learning – aggression is learned, e.g. via observation/imitation/watch and copy; it is possible to learn that aggression can lead to success which makes it increasingly likely, especially when it is not punished or is accepted as the norm.
• Aggressive-cue hypothesis/cue arousal – aggression occurs if a socially acceptable cue is present; acts are committed aggressively if they are reinforced by the team or coach.

Strategies could include:
• Supporting the decisions of match officials when dealing with violence by performers by using a TMO/video replays to check decisions being made, changing/clarifying rules on violent acts (e.g. ‘high tackles’) and training officials to develop the skills necessary to diffuse or calm down match situations which could potentially develop into aggressive behaviour.
• Punishing violence by performers missed by officials after the match by using video evidence and taking retrospective action as appropriate to the offence committed. This might be against the performer and/or the club itself if it is deemed not to be in control of its players. Fines and/or point deductions might be imposed on clubs for repeat offences of violence among its players.
• Using post-match video evidence where individuals have been cited by referees as performing violent actions worthy of further investigation, e.g. the rugby league ‘on-report’ system allows a referee who sees what they believe to be an act of foul play to highlight the incident immediately to independent reviewers.
• Promoting performers with good disciplinary records as positive role models in their sport.
• Imposing punishments for violent actions on the field of play (e.g. sin bin/booking/sending off).
• Introducing education campaigns and/or awards/rewards linked to fair play, for example the FA and its Respect campaign: West Ham

• Developing codes of conduct for performers.

Chapter 7.5

1 [c] Increased endurance
2 Four from:
• Physiological benefits (e.g. increased power/endurance)
• Psychological benefits (e.g. increased aggression/confidence)
• Win-at-all-costs attitude
• Financial rewards/fame
• Pressure from coaches/peers/media to win
• Levels playing field (others doing it, can’t win if don’t)
• Belief won’t get caught/effective masking agents
• Poor punishments/lack of effective deterrents

3 Three from:
• Aid in the assimilation/storage of protein
• Decrease in fat in the muscles
• Increase ability to train for longer and train at a higher intensity
• Increase ability to train more frequently/have a faster recovery time due to quicker repair of the muscles
• Increase in muscle size/mass/strength

4 Four from:
• Testing: random testing/out-of-competition testing/’whereabouts’ system
• Education/anti-doping culture: education programmes for athletes/coaches; create a strong anti-doping culture/promote ethically fair, drug-free sport (e.g. 100% Me)
• Co-ordination: improve co-ordination between organisations involved in drug detection (e.g. WADA, UKAD, NGBs)
• Punishment: harsher punishments (e.g. life bans/return of medals or career earnings/loss of sponsorship deals)
• Investment in technology: increased investment/funding into new testing programmes/new technology
• Role models: promote successes of positive role models; name and shame drugs cheats

5 Difficulty in keeping testing procedures/practices up to date; cheaters always try to keep one step ahead of the testers (e.g. via developing new drugs/masking agents to avoid detection)
• Difficulty sometimes in classifying which drugs are illegal and which are acceptable to use for medical reasons
• Sometimes sponsors continue to support athletes despite positive drugs tests resulting in bans; athletes continue to take drugs as motivated by high financial rewards available for success achieved as a result of taking them
• There is a battle which is hard to win against the illegal support/encouragement to take PEDs, e.g. via coaches/fellow competitors and even via the state/government as in the case of Russia
• Different countries/sports have different policies/procedures for testing/punishments linked to PEDs
• Difficulty in issuing an appropriate ban/clean athletes may be ‘unfairly’ banned, e.g. Russian athletes in Rio 2016
• Very high costs are associated with drug testing, both financially and time-wise
• Legal challenges against positive results/bans (e.g. appeals of various Russian athletes to the Court of Arbitration of Sport to compete in Rio)
• Difficulty in gaining access to athletes to administer tests/out-of-competition testing is sometimes difficult to administer

Chapter 7.6

1 (d) Pre-match banning orders on fans who are known trouble makers
2 Three from:
• Increased protection for those involved, for example:
  • increased spectator safety (e.g. via all-seater stadia)
  • increased performer safety (e.g. via legal actions against players and fans for assault causing actual bodily harm)
  • against officials/coaches failing in their duty of care, allowing them to be prosecuted for negligence
• Anti-discriminatory (e.g. on the basis of racial issues)
3 • Games played at specified kick-off times imposed by the police (e.g. early kick-offs at local derby matches)
• Control of alcohol consumption/alcohol sales in and around grounds prior to and during matches (e.g. by banning pubs opening where trouble makers are known to gather)
• Removal of perimeter fencing and terraces leading to all-seater stadia which meet health and safety requirements (e.g. of local authorities)
• Tougher deterrents; prosecution of violent/racist individuals; banning orders from grounds at home and abroad
• It has made trespass onto the field of play illegal
• Use of CCTV/increased security at matches via increased policing/stewarding
• Use of shared intelligence between police forces at home and abroad
• Control of ticket sales/prosecution of ticket touts

Chapter 7.7

1 (c) Increased pressure to get decisions right
2 There are a number of advantages to elite sport as a result of the golden triangle, including the following:
• Increased income to the sport allows events to be televised. This money can be spent at all levels of the sport, funding participation initiatives at grassroots level, as well as providing finance to support elite athletes at the top of their profession.
• Increased promotion of the sport can attract more fans and increase its popularity.
• Increased sponsorship/income from business sources pays for advertising at grounds/sporting events.
• Sports are organised and funded better to improve the way they are run (i.e. in a more professional manner).
• Improved facilities benefit performer and spectator alike.

However, there are also a number of possible disadvantages to elite sport resulting from its links to the media and sponsorship. These include the following:
• Sensationalist media reporting may sometimes focus too much on negative aspects of a sport.
• The media/sponsors can dictate kick-off times/scheduling of sports events to the detriment of performers/fans.
• The media/sponsors can change the nature of a sporting activity (e.g. introducing more/longer breaks in play to allow for advertising).
• The media only televise/focus on already popular, high-profile sports.
• Sponsors/the media can be too demanding on elite performer/coaches (e.g. in relation to personal appearances and giving interviews).
• Sponsorship deals can increase the pressure to win in order to maintain lucrative contracts with companies willing to pay for an association with successful sports/sports performers.

3 Sponsorship – the provision of money and/or support for a commercial return
Benefits to company:
• Increased sales/promotion of a product
• Increased brand awareness and improved company image linked to the healthy image of sport
• Opportunity for corporate hospitality
• Decrease in the amount of tax the company pays as sponsorship is tax deductible

4 There are a number of possible reasons why an elite performer should consider the nature of a potential sponsor before deciding whether or not to accept a deal:

Answers and quick quizzes at www.hoddereducation.co.uk/myrevisionnotes
• As elite performers, they are role models and strongly influence the behaviour of others, so sponsorship from a junk food company or product association with alcohol might not be considered appropriate. Such products do not reflect the nature of sport, which is more about health and fitness.
• Performers have a social duty to others and need to consider carefully the ethical nature of any sponsorship deal.
• to ensure it does not negatively affect their reputation and potentially endanger future commercial support. For example, sportswear companies which are accused of the unethical manufacturing of goods might require careful consideration before a decision is reached on a potential deal.
• Elite performers need to look at the level of control a sponsor is potentially exerting on them before deciding whether or not to accept a sponsorship deal (e.g. what are their demands for personal appearances, filming of commercials and so on?).

Possible counter-arguments which can be used to explain why elite performers should not have to consider the nature of a potential sponsor before deciding whether or not to accept a deal:
• If a product is legal, elite performers have a right to accept a sponsorship deal if they so wish.
• It is unfair to expect elite performers to engage in a protest or statement when there are financial considerations at stake and their livelihood is at risk.
• Performers do not ask to be role models so they should be able to accept a sponsorship deal if they choose to do so.
• Indeed, they could argue that if they do not accept the sponsorship deal on offer, someone else will!

5 Positive effects:
• Increased performance standards; players of a higher standard providing a high level of excitement and entertainment
• Improved quality of facilities; larger, higher quality stadia resulting from increased investment
• Improved viewing experience via innovations such as changes in ball colour, creation of team merchandise to create team loyalty via the purchase and subsequent wearing of a team’s kit
• Increased access to watch sport; more opportunities to watch events ‘live’ as more competitions, events and matches are taking place.
• Development of more variations of a sport format which provide alternative viewing experiences
• More funding available to provide entertainment (e.g. cheerleaders/pop stars) at sports events
• Rule changes introduced provide extra interest and extra excitement for the spectator (e.g. Twenty20 cricket)
• Increased funding for improved technology at a ground (e.g. video screens) and at home (e.g. interactive technology, HD coverage of sport and referee links)
• Increased excitement in the audience while awaiting the decisions of off-field officials (e.g. Hawk-Eye in tennis)
• Increased awareness of and knowledge of sport; creation of role models for fans to idolise
• Increased elimination of negative aspects of sport (e.g. hooliganism/player violence)

Negative effects:
• Increased costs to watch sport (e.g. on pay-per-view satellite channels)
• Loss of the traditional nature of the sport (e.g. via the wearing of coloured clothing in cricket)
• Increased number of breaks in play to accommodate adverts and decisions of officials
• Fewer tickets available for the fans; more are allocated to sponsors and corporate hospitality
• Changes in kick-off times to maximise viewing figures (i.e. scheduled at prime time), which is not always in the best interests of the long-distance travelling fan who wishes to watch an event live
• Minority sports likely to receive less coverage; major sports likely to dominate the TV schedules and become ‘over-exposed’
• Links to team or player merchandise are sometimes viewed negatively due to their high cost and regularity of change

Chapter 7.8

1 (b) Increased disruption to a sporting event as a result of lots of referee referrals
2 • Wheelchairs for track racing
   • Throwing frames for discus/shot put
3 • Officials using technology can be wrong; over-reliance on technology; loss of respect for official’s decision being final.
   • Specific technology used must be accurate/have a high level of reliability.
   • It changes the nature of the sport.
   • Costs limit technology to certain events.
   • Breaks in play can be disruptive for performers and fans if they take too long.
4 • Technological developments for officials lead to a correct outcome, which leads to fewer disputes/increased player confidence in the right decision being reached
   • Increased performer safety (e.g. cricket helmets)
• Increased performer comfort [e.g. clothing/footwear improvements]
• Increased performer ability/skill/technique development [e.g. body suits in athletics; modern-day footballs; golf club design]
• Increased analysis of performance [e.g. Dartfish]
• Improvements in training/recovery from training [e.g. compression wear]
• Improved sports surfaces which allow better/more consistent performance/increased usage
• Improved drug detection

5 Increased sense of crowd excitement/involvement [e.g. awaiting decisions via big screen, Hawk-Eye]
• Improved experience of watching sport at home [e.g. 3D/HD/split-screen coverage]
• Increased excitement from watching top-level performances resulting from technological advances
• A wider range of sports are more accessible as a result of media advances/satellite technologies.

6 Positives/benefits:
• Improve motivation/goal setting
• Cheaper than employing a personal trainer
• Good for accurate monitoring of progress

Negatives/limitations:
• Initial cost
• Not a short cut to fitness
• Requires computer literacy/understanding of technology used

7 It has increased/improved:
• access to sport/physical activity [e.g. synthetic surfaces enable play all year round and increase the quality of play; among disabled athletes, e.g. prosthetic limbs]
• comfort, which leads to increased likelihood of participation
• the ability to closely monitor exercise patterns/effects
• safety of participation [e.g. equipment such as helmets in cycling gives more confidence when taking part].

It has limited or decreased participation by/due to:
• high costs of technology
• providing a range of (inactive) alternatives to physical activity/sports [e.g. Segways may decrease physical activity/health levels as they replace walking].

8 For:
• Increased proportion of accurate decisions/increased fairness
• Increased entertainment due to tension/drama as they await decisions/replays
• Increased accountability of officials in elite level/professional sport where results have significant financial implications
• Fairer sporting outcomes
• Increased expert debate for audiences to listen to

Against:
• Slows game down/prolonged interruptions in play
• Increased certainty of decision making may make sport less entertaining for some
• The crowd may influence outcomes if giant screens in stadium show replays
• TV producers in choosing replays might affect officiating [might affect third official on touchline if access to replay before a restart]
• Human error still not eliminated – may still be wrong/inconclusive
• Only available at highest levels for professional sport