Introduction

The ‘Sports psychology’ section is a continuation of the AS section ‘Acquiring movement skills’. The focus at AS was upon how skills are learned and controlled. By way of extension, ‘Sports psychology’ addresses the important mental processes that work together to facilitate effective performance in sport.

In their separate ways, both ‘Acquiring movement skills’ and ‘Sports psychology’ demonstrate how sporting competence and participation can be increased. Through this, a common theme emerges, as both areas set out to encourage and sustain a balanced, active and healthy lifestyle.

In this chapter you will be focusing on personality and its influence on a healthy, balanced lifestyle.

Learning Objectives

By the end of this chapter you should have knowledge and understanding of:

- personality and its importance in producing effective performance and in following a balanced, active and healthy lifestyle
- attitudes and their influence on performance and lifestyle
- achievement motivation and its effect on performance and on following an active and healthy lifestyle
- attribution theory and the impact of attribution on performance and sustaining a balanced, active and healthy lifestyle
- aggression and its impact upon performance and behaviour.
Athletes display their own unique patterns of behaviour whilst engaged in sports performance. Some psychologists believe that quality of performance and participation in sport are determined by personality. It is unlikely that a definition of personality will be examined directly. To clarify the term is, however, important.

The term personality is derived from the word ‘persona’, which was a mask in Greek drama. This implies that a person may give the appearance of being unlike their true self, which makes the assessment of personality difficult. A psychologist named Allport defined personality simply as, ‘What a man really is!’; to which Whiting later added, ‘Not what he appears to be.’

Among the more recent definitions, two are important to us:

‘Personality is the sum total of an individual’s characteristics which make a human unique.’

(Hollander)

‘Personality represents those characteristics of the person that account for consistent patterns of behaviour.’

(Pervin, 1993)

In your exam, you will need to demonstrate knowledge of personality theories. These theories are based on three very different views or perspectives. Each perspective must be clearly understood.

The three views on personality development are known as:

1. trait perspective
2. social learning perspective
3. interactionist approach.

**Exam Tip**

Exam questions often ask for explanations of the three personality perspectives. You need to be aware of the drawbacks found in trait and social learning perspectives and the advantages of the interactionist approach.

**Trait perspective**

The trait theory of personality formation suggests that personality is made up of a range of different secondary traits inherited from parental genes. The trait view, therefore, maintains that all behaviour is innate and genetically programmed. For example, a person may have a natural inclination towards ambition, competition or aggression. Traits are thought to be stable, enduring and consistent in all situations.

Trait theory is depicted as:

\[ \text{Behaviour} = \text{Function of Personality} (B = F(P)) \]
The drawback with the trait approach is that, in reality, behaviour is not always predictable. It does not account for the fact that people adapt their behaviour in response to a particular environmental situation. Similarly, the influence that the environment and other people have on the shaping of personality is not considered.

There are two specific theories that belong to the trait perspective of personality that you need to understand. They are:

- personality types (Eysenck and Cattell)
- Narrow Band Theory Type A and Type B (Girdano).

**PERSONALITY TYPES**

Eysenck identified four primary personality traits or types. These personality types are arranged in Fig 8.3 on a two-dimensional model.

**KEY TERMS**

**Trait Theory**

People are born with established personality characteristics.

**Trait**

A single characteristic of personality that is believed to be a natural force or instinct causing an individual to behave in a predicted way.

**Genes**

Biological units of inheritance found in each individual cell in the body. A person’s genes determine their physical and psychological characteristics.

**Aggression**

An action intended to bring about harm or injury. Aggressive behaviour is undesirable and dysfunctional in the context of sport.

**Exam Tip**

The relationship between personality and arousal often features in questions on social facilitation and inhibition.

**Fig 8.3 Personality traits of introvert/extrovert and neurotic/stable**

**Reticular activating system (RAS)**

Introverts are more easily aroused than extroverts because of the sensitivity of an area of the brain called the reticular activating system. There is a greater likelihood that with increased stimulation the introvert will become over-aroused.

**Arousal**

A physical and mental state of preparedness.
<table>
<thead>
<tr>
<th>Personality type or primary trait</th>
<th>Description of personality type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrovert</td>
<td>• Affiliate well to other people</td>
</tr>
<tr>
<td></td>
<td>• Outgoing, gregarious and sociable</td>
</tr>
<tr>
<td></td>
<td>• Become aroused more slowly than introverts</td>
</tr>
<tr>
<td></td>
<td>• There is low sensitivity of the reticular activating system (RAS)</td>
</tr>
<tr>
<td>Introvert</td>
<td>• Tend to be shy and reserved</td>
</tr>
<tr>
<td></td>
<td>• Prefer isolation from others</td>
</tr>
<tr>
<td></td>
<td>• Become aroused more quickly than extroverts</td>
</tr>
<tr>
<td></td>
<td>• There is high sensitivity of the reticular activating system (RAS)</td>
</tr>
<tr>
<td>Neurotic</td>
<td>• Display extreme and unpredictable emotions in the form of mood swings</td>
</tr>
<tr>
<td></td>
<td>• Their moods are unreliable</td>
</tr>
<tr>
<td></td>
<td>• They experience high degrees of stress</td>
</tr>
<tr>
<td></td>
<td>• Their recovery from stress is slow</td>
</tr>
<tr>
<td>Stable</td>
<td>• Display predictable emotions in appropriate situations</td>
</tr>
<tr>
<td></td>
<td>• Their moods are predictable</td>
</tr>
<tr>
<td></td>
<td>• They tend not to experience intense stress</td>
</tr>
<tr>
<td></td>
<td>• Their recovery from stress is rapid</td>
</tr>
</tbody>
</table>

Table 1 Eysenck's four primary personality types

1 Extrovert and Stable
2 Extrovert and Neurotic
3 Introvert and Stable
4 Introvert and Neurotic.

Later, Eysenck (1975) added a third scale to his personality model which he termed psychoticism. Psychoticism is a measure of how tender or tough-minded people are. Eysenck used this third scale in a test to determine an individual’s personality profile. The test was called Eysenck’s Personality Questionnaire (EPQ).

Eysenck proposed the existence of four personality types and that one type belonged in each quadrant.

**Fig 8.4** Extroverted people perform best in conditions that stimulate high arousal. Introverts tend to be more aroused by events than do extroverts. This is due to differences in the individual’s reticular activation system (RAS)

**KEY TERMS**

**Tough-minded**

The term 'mental toughness' has been used only recently by psychologists. It describes qualities such as the capacity to cope with competitive pressure and readiness to return to competition after failure (Middleton, 2004).

**Personality profile**

An overall assessment of an individual's personality.
Cattell was also a believer in trait theory. Cattell, however, questioned whether personality could be understood by examining just three dimensions. Instead, he proposed that it was necessary to consider a much larger number of traits before a complete picture of personality could be revealed. Cattell examined 16 personality factors in a questionnaire called Cattell’s 16PF test.

**Social learning perspective**

Social learning theory, in direct contrast to trait theory, proposes that all behaviour is learned. Learning occurs by way of environmental experiences and through the influence of other people. Personality is, therefore, not genetically programmed.

Social learning theory is depicted as:

\[
\text{Behaviour} = \text{Function of Environment (B} \times \text{F(E))}
\]

**KEY TERM**

**Social learning theory**

All behaviour is learned from environmental experience.

**Vicarious**

Learning by watching the performance of another person.

**NARROW BAND THEORY**

Girdano was another trait theorist. He proposed that there are two distinct personality types – Type A and Type B.

<table>
<thead>
<tr>
<th>Type A characteristics</th>
<th>Type B characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly competitive</td>
<td>Non-competitive</td>
</tr>
<tr>
<td>Works fast</td>
<td>Works more slowly</td>
</tr>
<tr>
<td>Strong desire to succeed</td>
<td>Lacking in desire to succeed</td>
</tr>
<tr>
<td>Likes control</td>
<td>Does not enjoy control</td>
</tr>
<tr>
<td>Prone to suffer stress</td>
<td>Less prone to stress</td>
</tr>
</tbody>
</table>

**Table 2 Girdano’s Type A and Type B characteristics**

You will see links between the trait approach (including Narrow Band Theory) and the adoption of a balanced, active and healthy lifestyle when personality profiling is explained later in the section (see page 202–203).

**Task 1**

1. To carry out a Cattell 16 PF test, go to www.heinemann.co.uk/hotlinks, enter the express code 6855P and click on the relevant link. Consider whether there are links between the sport that you most enjoy and your personality profile.
2. Discuss the value of personality profiling as a way of selecting a team or when advising a person as to which sport to take up.

The social learning approach was presented by the psychologist Bandura. He believed learning was stimulated by environmental experiences. Two processes are involved in social learning:

- the behaviour of others being imitated through observation
- new behaviour being acquired after observation, but only when it is endorsed through social reinforcement.

For example, a sports performer who is inexperienced may be inspired by the positive attitude and commitment displayed in training by an experienced player. The novice elects to copy the desirable approach of the role model and receives positive reinforcement from both coach and peers. The process of reinforcement has facilitated learning.

Social learning is often termed vicarious learning and is most likely to take place in the following conditions shown in Fig 8.5.
**Psychological core**
This is the most internal of the personality levels and is thought to be the true self. Inaccessibility makes it the most difficult level to research but it is known to be stable and remains relatively constant over time.

**Typical responses**
Typical responses are changeable and are learned behaviours. They become modified as the person responds to environmental situations. They often reflect the makeup of the personality core.

**Role-related behaviour**
This is the most external of the personality levels. It is therefore the level that is dynamic and changeable. An individual may have to adjust in order to fulfil many different roles in one day, for example the role of student, coach or friend. Role-related behaviour is a direct consequence of the immediate environment.

While the core of personality, according to Hollander, provides the structure of true self, the changing and dynamic levels of personality allow learning to take place.

Interactionist theory is depicted as:

\[
\text{Behaviour} = \text{Function of Personality} \times \text{Environment} (B = F(P \times E))
\]

The interactionist view combines the trait and social learning perspectives. It proposes that personality is modified and behaviour is formed when genetically-inherited traits are triggered by an environmental circumstance.
The interactionist view supports the claim that typical responses emerge in accordance with changing environmental situations. Behaviour is therefore unpredictable. This approach offers an explanation why the personalities of sports performers can change in different situations.

**Exam Tip**

Although Hollander is not included on the specification, you should be aware of Hollander’s contribution to the interactionist approach to personality.

The interactionist approach is not simple. Any behaviour or response in sport can be the outcome of unlimited combinations of personality and environmental factors. For example, a player may respond positively to the autocratic leadership of a captain for most of the time, but this leadership style may trigger an aggressive response on one occasion. This unpredictable response from the team player may have been the result of frustration, a build-up of anxiety or even a lack of sleep prior to the game.

Despite these complexities, Bowers (1977) stated that the interactionist view alone explains twice as much as trait and social learning perspectives.

**Stretch and Challenge**

Discuss the implications of Hollander’s interactionist approach for the physical educator who wishes to improve the performance of an established athlete or as a base from which an individual may be encouraged to pursue a balanced, active and healthy lifestyle.

To get the most out of ‘Stretch and Challenge’ questions you must read ahead and look at other recommended texts. While you must address the question directly, it will become apparent that many other topics will relate and link to the task that has been set. If you are able to make and understand these connections, a deep and versatile understanding of A-level Sport Psychology will develop.

The effects of personality profiling on the adoption of a balanced, active and healthy lifestyle

A large volume of research has been undertaken into the relationship between personality and sporting behaviour. Differences between the personalities of athletes and non-athletes have been explored together with comparisons between successful and less successful performers. Of most interest to you is the research into whether personality factors are associated with:

- participation in general
- the choice of sport and physical exercise.

While social learning theory provides a strong explanation as to why vicarious processes draw young people to games and athletic activities, Eysenck et al. (1982), using the Eysenck Personality Questionnaire, proposed that people who were attracted to sport scored highly on the scales of extroversion and psychoticism.

Schurr (1977), using Cattell’s 16PF test, found athletes to be more independent and less anxious than non-athletes, but differences between the two groups were not significant. Using the same test, Francis et al. (1998) agreed with Eysenck in that he found hockey players to be higher in extroversion and psychoticism than non-hockey players.

In contrast, McKelvie (2003) found no differences in extroversion between athletes and non-athletes. In this study, however, athletes emerged as being more stable. Furthermore, performers in high-risk sports like surfing and mountaineering scored highly in extroversion while being low on the scale of neuroticism (Diehm and Armatas, 2004).

Research in this area is detailed but confusingly inconclusive. By way of a definitive statement on the subject, Weinberg and Gould (2007) propose:

‘No specific personality profile has been found that consistently distinguishes athletes from non-athletes.’

(Weinberg and Gould, 2007)
Personality profiling may not be helpful as a predictor of those who are likely to participate or excel in sport or physical activity.

While the inclination to participate in sport cannot be predicted by personality profiling, it may be that the identification of traits can be used by a psychologist to recommend participation in sport. Through this intervention, personality profiling may therefore help a person and lead them toward an active, healthy and balanced lifestyle.

Two examples are given below.

1. The competitive nature of Type A behaviour (see page 200) has been linked to anger and increased incidence of cardiovascular disease. Blumenthal (1988) proposed that aerobic exercise significantly reduced unhealthy cardiovascular reactions to mental stress. Thus Type A patterns of behaviour can be altered through exercise.

2. Exercise and increased levels of fitness appear to increase the self-esteem of those individuals who register initially as having low self-esteem (Biddle et al., 1995).

Although personality profiling may help a coach to get to know people and provide the motivation for the individual to change behaviour and lifestyle, it must be understood that sport and exercise can not fundamentally change overall personality (Gill, 2000).

You need to know that personality profiling helps when observing and questioning an individual. Getting to know the individual may help to formulate intervention strategies. Personality profiling has, however, only limited value.

EVALUATE CRITICALLY PERSONALITY PROFILING IN SPORT

Whether it is through displays of dysfunctional aggression, variations in cognitive processes or debilitating levels of stress and anxiety, all individuals differ in their response to sporting situations. These differences have preoccupied psychologists to the extent that countless studies have been undertaken to find a definitive link between personality and sport. Despite this, there remain serious limitations to personality profiling in sport. These limitations are listed below.

<table>
<thead>
<tr>
<th>Key word to identify limitation</th>
<th>Explanation of limitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proof</td>
<td>A link between personality types and sport performance cannot be proved. A psychologist named Martens believes that the relationship between sport participation and personality are doubtful.</td>
</tr>
<tr>
<td>Evidence</td>
<td>There is no evidence that an ideal sports personality exist, e.g. the most stable and extroverted squad member may not be the best player in the team, or the most appropriate to create team cohesion.</td>
</tr>
<tr>
<td>Subjectivity</td>
<td>Profiling results are often subjective. This means that conclusions may be influenced by personal opinions and are not totally supported by scientific evidence.</td>
</tr>
<tr>
<td>Invalidity</td>
<td>Profiling results are often inaccurate and invalid. Invalid means that tests do not measure that which they intend to measure.</td>
</tr>
<tr>
<td>Modification</td>
<td>The performer may unconsciously modify their behaviour to match up to the profile ascribed to them.</td>
</tr>
<tr>
<td>Reliability</td>
<td>Many profiles are calculated by using self-report questionnaire studies. The results of these studies are not always reliable as performers may not answer all questions accurately.</td>
</tr>
<tr>
<td>Stereotyping</td>
<td>There is a danger that profiling will stereotype a person.</td>
</tr>
</tbody>
</table>

Table 3 Limits of personality profiling

**KEY TERM**

**Team cohesion**

This term describes team work. It will be covered in Chapter 9 on page 230.
Attitudes and their influence on performance and lifestyles

An attitude is a mode of behaviour that is thought to be the typical response of an individual. Attitudes are invariably associated with personality and are believed to influence a response or behaviour in a given situation. Moody (1980), a leading sports psychologist, defines attitude as:

‘A mental state of readiness organised through experiences that influences the response of an individual towards any object or situation with which it is related.’

(Moody, 1980)

An attitude is an emotional response that can be enduring; meaning that it can last throughout life. Attitudes are also unstable, however, and can be changed.

Attitude prejudice could seriously reduce the possibility of a young person participating in sport. This could occur in two ways. Firstly, prejudice could be directed toward sport in general; secondly, the young person may be discouraged by being the victim of prejudice. With prejudice in mind, another definition of attitude is:

‘An attitude is a predisposition to act in a certain way towards some aspects of the person’s environment including other people.’

(Mednick)

For example, the coach may regard a talented sports player as lazy and disinterested because the player chooses to opt out of additional practice sessions. It may be that the player has good reason to withdraw from practice. In this situation, an unjustified negative prejudice could be displayed by the coach toward the player.
Undesirable prejudice is evident in gender issues. For example, negative feelings about their participation and performance has caused women to be an under-represented group in sport. Also, racism and ageism arise from negative prejudice.

Research tends to focus on negative prejudice, although positive prejudices do also exist. For example, the coach may favour a particular player; this is recognised as favouritism.

**ORIGIN OF ATTITUDES**

Attitudes are formed mainly through experiences. A pleasant experience in Physical Education, brought about when positive reinforcement follows success, is likely to promote a positive attitude towards sport and motivate the individual to engage in lifelong participation. Conversely, an unpleasant experience at school, such as failure, criticism or injury, would bring about a negative attitude. Sport then becomes the ‘object’ to be avoided in the future.

**Socialisation** is another key element in the formation of an attitude. In early childhood, parents play the most significant role by encouraging positive attitudes toward sport. In teenage years, the **peer group** has the most powerful influence. If a group of friends participates enthusiastically at the tennis club, it is likely that, in an effort to conform and gain acceptance, the reluctant individual may join in. The influence of the media is also an important factor in the process of socialisation and in itself can stimulate the formation of an attitude.

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**Fig 8.6 When the outcome is positively reinforced, pleasant, worthwhile experiences can encourage favourable attitudes toward physical activity**
The origin of an attitude could also stem from culture. Culture is a very complicated issue and can be determined by religion, race and peer groups. Social class is also linked to culture and in turn impacts upon attitudes in sport. For example, even in contemporary society, Rugby League is strongly associated with working-class origins, while membership at the private golf club continues to be dominated by a middle-class population.

The components of attitude

**THE TRIADIC MODEL OF ATTITUDE**

According to this model, an attitude comprises three components:

1. **Cognitive component**
   This component reflects beliefs and knowledge that an individual holds about the attitude object. For example, a person may know that jogging three times a week is psychologically beneficial. This component is also known as the information component.

2. **Affective component**
   This consists of feelings or an emotional response toward an attitude object and is therefore known as the emotional component. It is here that an evaluation of an attitude object is made. For example, jogging is a pleasurable activity.

3. **Behavioural component**
   This concerns how a person intends to behave or respond towards an attitude object. For example, the individual will continue to jog three times in the week.

**CHANGING ATTITUDES**

We need to explain two psychological theories that set out to change an attitude; these theories are:

1. Cognitive dissonance theory
2. Persuasive communication theory.

**COGNITIVE DISSONANCE THEORY**

This theory was described by a psychologist named Festinger and states that if two attitude components can be made to oppose or come into conflict with each other, then the individual experiences emotional discomfort. This emotional discomfort is called dissonance.

For example, an overweight person needs to improve their appearance and feel better about their image and physical condition. Through previously bad experiences they have learned, however, to dislike exercise and find it hard work. They therefore avoid exercise. In this case, all three attitude components are negative. After consultation, a personal trainer may indicate that a specific fitness programme at the gym would help weight loss and improve lifestyle. The subject has now been given the knowledge of the benefits of exercise and realises that participation is essential. Dissonance is now experienced because the cognitive knowledge component is in conflict with evaluation, which is the affective component. Once this happens the unfit person is more likely to follow an exercise programme.

If one attitude component can be changed to bring about cognitive dissonance there is then an increased possibility of changing the whole attitude. This change need not be restricted to the cognitive component. Both the evaluative and behavioural components can also be modified to bring about dissonance.

By providing a person with new and positive experiences, the affective component can be modified. For example, a student who has a negative experience through excessive physical contact in rugby may enjoy the indoor ‘tag’ version of the game and therefore change their attitude towards participation in that sport.

If a skill is simplified or if some form of guidance is used to make execution easier, the behavioural component of the attitude can be changed. For example, fitting the novice skier with short skis would give more control and reduce apprehension.
PERSUASIVE COMMUNICATION THEORY

Persuasive communication could be applied within cognitive dissonance as an additional technique in changing attitude. It is highlighted here as a separate theory. There are four elements to Persuasive Communication Theory.

1 **Persuader**
   This person needs to be one who is perceived to be significant and to have high status, for example the swimming instructor.

2 **Message**
   The message needs to be presented in a way that makes the recipient want to change an attitude, for example learning to swim will enhance the possibility of a balanced, active and healthy lifestyle.

3 **Recipients**
   The attitude is more easily changed if the recipient really wishes to be changed, for example the student understands the task and realises the benefits of learning to swim.

4 **Situation**
   Attitudes are easier to change if there are other persuaders present, for example other students help the persuasion by emphasising the social and physical benefits of swimming.

A CRITICAL EVALUATION OF ATTITUDES

Although it is assumed that attitudes direct an individual to behave positively or negatively toward an attitude object, attitudes in general are poor predictors of behaviour and may not necessarily indicate the likelihood of a desirable lifestyle choice. For example, a person may have a very positive attitude toward physical fitness but this alone will not guarantee that they will attend circuit-training sessions three times per week.

A psychologist named Dishman (1986) said that an individual’s positive attitudes and beliefs relating to the health benefits of exercise do not guarantee that they will commit to an exercise programme. Both social and situational factors can intervene to significantly influence actual behaviour, even when an attitude is well established.

Fishbein (1974) said that when attitudes become more specific, they are more likely to predict behaviour. For example, the student who is positive about fitness activities but specifically enjoys circuit training is more likely to attend a session. The most accurate predictor of behaviour according to Fishbein occurs, however, when a person makes a clear commitment of intent. For example, the student making the statement that they will definitely attend the extra football session arranged for after school.

This clear declaration is called behavioural intention and it arises when a positive attitude is reinforced by significant others. This emphasises the fact that social processes impact strongly on the origins of attitude formation and this has implications when making lifestyle choices.

‘Behavioural intention is determined by attitudes toward the behaviour and the social norms that relate to the behaviour.’

(Gill, 2000)

**REMEMBER**

Social learning perspective and vicarious learning were looked at during the study of personality (see page 200).
Achievement motivation

Achievement motivation links personality with the degree of competitiveness shown by an individual. Its main focus is the extent to which an individual is motivated to attain success.

KEY TERMS

Competitiveness
The degree to which a person has the motivation to approach and achieve success in sport.

Nature
A product of the genes of our parents; a genetically-inherited predisposition.

APPLY IT!

1. Organise a fitness activity group that will run during lunchtimes at your school. (You may already be assistant fitness instructors but teacher supervision will still be required).

2. Engage in market research by interviewing a sample of students (between 50 and 100) to find out their attitude toward fitness training and to enquire as to whether they would be interested in participating in a lunchtime fitness club.

3. Administer and evaluate the success of the fitness club.

4. Draw conclusions about the reliability of attitude as a predictor of behaviour.

5. How would you try to change a negative attitude that a person may have toward fitness training?

Some psychologists believe that a competitive inclination is a product of nature. Murray (1938) indicated that it was natural for one individual to strive to surpass another. Conversely, Bandura (1977) believed that a competitive drive was a product of learning. The theory most relevant to this section is an interactionist view proposed by Atkinson and McClelland (1976). It predicts that achievement motivation is generated through a combination of personality and situational factors.
Atkinson and McClelland (1976) view achievement motivation as a personality trait which is activated by a situation. The situation comprises the probability of success and the incentive value of success.

- **Probability of success** – the extent to which success is likely; for example, success is more likely if the task is found by the individual to be easy.

- **Incentive value of success** – the intrinsic value experienced by the individual after success has been achieved; for example, the harder the task the greater will be the incentive value because the probability of success is reduced.

**The characteristics of high and low achievement motivation personality traits**

**High Nach personality characteristics**

<table>
<thead>
<tr>
<th>High need to achieve</th>
<th>Low need to achieve</th>
</tr>
</thead>
<tbody>
<tr>
<td>High need to avoid failure</td>
<td>Low need to avoid failure</td>
</tr>
<tr>
<td>Approach behaviour is adopted</td>
<td>Avoidance behaviour is adopted</td>
</tr>
<tr>
<td>Challenge is accepted</td>
<td>Challenge is rejected</td>
</tr>
<tr>
<td>Risks are undertaken</td>
<td>Risks are declined</td>
</tr>
<tr>
<td>Shows persistence and perseverance when task is difficult</td>
<td>Curtails effort when task is difficult</td>
</tr>
<tr>
<td>Success tends to be attributed to internal factors</td>
<td>Success tends to be attributed to external factors</td>
</tr>
<tr>
<td>Failure tends to be attributed to external factors</td>
<td>Failure tends to be attributed to internal factors</td>
</tr>
<tr>
<td>Failure is seen as a route to success</td>
<td>Failure is seen as the route to further failure</td>
</tr>
<tr>
<td>Aspire to mastery orientation</td>
<td>Adopt learned helplessness</td>
</tr>
</tbody>
</table>

**Low Naf personality characteristics**

**High Naf personality characteristics**

### Remember

The interactionist approach was looked at during the study of personality (see page 201).

Fig. 8.9 identifies two personality traits that determine achievement motivation:

1. **High need to achieve (high Nach)**
   
   This is also associated with low need to avoid failure (low Naf). With these characteristics, the desire to succeed far outweighs the fear of failure. These performers are high in achievement motivation and are referred to as high achievers.

2. **Low need to achieve (low Nach)**
   
   This is also associated with a high need to avoid failure (high Naf). With these characteristics the fear of failure far outweighs the desire for success. These performers are low in achievement motivation and are referred to as low achievers.

The achievement motivation personality traits are shown in Fig 8.9 and Table 4 opposite.
The Atkinson and McClelland theory of achievement motivation is best at predicting behavioural responses in situations where there is a 50/50 chance of success. Such a situation is most likely to trigger the motivation to achieve in those performers with high achievement traits; they are likely to display approach behaviour and mastery orientation characteristics in these circumstances. The incentive value will be high when the chance of success is evenly balanced.

By contrast, performers showing personality traits that are associated with low achievement motivation would experience greatest anxiety in situations with a 50/50 chance of success. In the latter situation, low achievers are most likely to adopt avoidance behaviour and experience learned helplessness.

Approach or avoidance behaviours are most likely to arise when a person is in an evaluative situation. This is a situation in which an individual believes they are being assessed.
A drawback with achievement motivation theory is that achievement or success can be interpreted in many ways. Some performers regard success as victory over other people, for example a long jump athlete winning an event. These people are said to have ego goal orientation. Those with ego orientation believe that ability and comparison against others are the criteria for success. Ego goal orientation is also a ‘product’ goal (see Chapter 10, page 247).

Other performers judge on the basis of personal improvement in a given task, for example a second long jump athlete may view success as the achievement of an improved performance. These people are said to have task orientation. Those with task orientation value internal goals and believe that effort and comparison with self are the criteria for success. Task orientation can be achieved through ‘performance’ or ‘process’ goals (see Chapter 10, page 247).

The term achievement motivation is a general term and is used to cover achievement in all areas. This has led sport psychologists to focus onto sport-specific achievement motivation, which implies an inclination towards competitiveness.

**SPORT-SPECIFIC ACHIEVEMENT MOTIVATION (COMPETITIVENESS)**

Competitiveness in this context means the motivation to achieve in sport. Gill and Deeter (1988), using their own test called the Sport Orientation Questionnaire (SOQ), confirmed that the athletes were far more competitive than non-athletes. As a statement, this would appear to be obvious.

What is of greater significance is that the athletes favoured performance goals (task orientation) while non-athletes emphasised the importance of winning (ego orientation).

The type of goal set by the teacher as the measure of success in sport-related activities has, therefore, a significant influence upon the decision to adopt and sustain an active and healthy lifestyle.

The important association between sport-specific motivation (competitiveness), confidence and goal setting will be looked at in Chapter 10.

**TASK 4**

1. Divide into groups, preferably of no less than ten.
2. Look at the methods of fitness testing that are identified and explained in the Exercise and Sports Physiology section on page 411.
3. Select an agreed number of fitness tests and work through them several times during lessons over a number of weeks.
4. Log your individual results carefully after each session.
5. After compiling results over a number of weeks, put them into a group table or plot them on a graph.
Attribution theory

Attribution theory looks at the reasons given by coaches and players themselves to account for successes and failures in sport. The study of attribution has been shown by Weiner (1971) to have powerful implications for achievement-related behaviour. There are strong links between attribution and achievement motivation.

Weiner's model of attribution will be the focus of this section. This model is structured on two dimensions:

1. locus of causality
2. stability.

The locus of causality dimension indicates whether the attribution relates to factors that are either internal or external to the performer. Effort and ability represent internal factors while task difficulty and luck are external and are known as environmental variables.

Stability indicates whether attributions are stable or unstable. Stability refers to the degree of permanence associated with an attribution factor. A stable factor is considered permanent and unchangeable, for example ability. An unstable factor, by contrast, is temporary and can be changed. Luck is an example of an unstable factor.

Control, which will be considered later, is a third dimension of the attribution model. It is not referred to directly in the specification but is a key factor in the important process of attribution retraining (see page 214).

REASONS FOR SUCCESS AND FAILURE

In general, the coach should attribute failure to external causes in order to sustain confidence and to give reassurance that achievement is a realistic
expectation in the future. External factors take away the responsibility of the loss from the players. This would help to maintain self-esteem, sustain motivation, and restore pride and confidence. An example of external attributions would be to suggest the opposition were lucky. Luck is a changeable environmental factor.

Internal attributions should be used to reinforce success, for example achievement is the result of ability. Internal attributions for success would elevate confidence and endorse future expectation of high achievement.

High achievers, or people who adopt approach behaviour, tend to attribute their success to internal factors, for example high ability level. This will result in greater effort. Failure, on the other hand, is put down to external variables such as bad luck. Failure, therefore, is seen as a temporary setback. This is known as attribution bias or self-serving bias. As a consequence, high achievers tend to remain persistent in the face of failure. This is a positive application of attribution. Consistent achievement and positive application of attribution would encourage mastery orientation. This is likely to encourage a physically active lifestyle.

Low achievers or people who adopt avoidance behaviour tend to attribute a lack of success to internal factors, such as a lack of ability. Low achievers also tend to attribute success to external factors; for example, achievement was the outcome of luck. This type of attribution would take away confidence and reduce expectation of future achievement. This is negative application of attribution. Repeated failure and negative application of attribution would cause the athlete to experience learned helplessness. This condition may cause an individual to avoid an activity and drop out of participation altogether.

**KEY TERM**

**Attribution bias**

Attribution bias, or self-serving bias, refers to the performer’s belief that the separate attributions given for success and failure never change. For example, the performer may feel that failure is always due to poor ability or success occurs because of good luck. These factors may have become for the performer a state of mind and may not be the true reasons for the outcome.

Mastery orientation involves a focus on learning and developing new skills, for example competency in the task. Learned helplessness is the belief that failure is inevitable and that the individual has no control over the factors that cause failure.

**ATRIBUTION RETRAINING**

It is unlikely that external attributions alone can change consistent failure into success, nor will they convert learned helplessness into mastery orientation.

Attribution retraining involves changing the performer’s perception of the causes of failure. The belief that poor ability is the cause of failure is changed to a belief that a lack of effort was the most important attributional factor in failure.
As an internal and stable attribution, ability is a direct reflection of personal competence and, significantly, the individual has no way of changing it. The application of effort is changeable, however, because effort is unstable. Effort attributions are also internal so that the individual can experience pride in any positive changes. Effort is a particularly valuable attribution as it can be controlled by the performer. It is a fear of having no control over failure that underpins learned helplessness.

Attribution retraining, therefore, involves focusing the reason for failure onto internal, unstable and controllable factors.

**TASK 6**

1. Identify other attributions that are internal, unstable and controllable.
2. Discuss why the attributions you have identified could help to promote mastery orientation and help a person to avoid learned helplessness.
3. Consider why mastery orientation is likely to encourage lifelong participation in physical activity.

The process of attribution retraining can be justified because it can help to raise confidence, convert avoidance behaviour into approach behaviour, and encourage mastery orientation within an individual. This will promote the likelihood of lifelong sport participation.

**APPLY IT!**

If you are a coach, incorporate positive attribution and attribution retraining into your coaching session. Consider the effect of these processes on the motivation, confidence and commitment of your group.

If you are not a coach but you are a participant, assess how your coach makes use of positive attribution and attribution retraining. Consider the effect of these processes on the motivation, confidence and commitment of your group.

**STRATEGIES FOR THE PROMOTION OF MASTERY ORIENTATION AND AVOIDANCE OF LEARNED HELPLESSNESS**

Mastery orientation is associated with having the self-belief and the desire to achieve performance competence. This inclination is based on the individual’s level of confidence. Specific strategies relating to confidence and goal setting will be addressed later (page 245). You will see that these later strategies can be applied to the promotion of mastery orientation and the avoidance of learned helplessness.

We saw earlier that an appropriately designed exercise programme can improve the personality trait of self-esteem and can modify the negative characteristics of Type A behaviour. Furthermore, attitudes toward physical activity can be changed by giving positive experiences in Physical Education and rewarding achievement with...
positive reinforcement. Negative attitudes can also be reversed by applying verbal persuasion and the psychological theory of cognitive dissonance.

Attribution retraining can also have a positive influence on sports performance and promote mastery orientation by improving the confidence of the individual. This gives the performer an element of control over the outcome, thus eliminating the onset of learned helplessness. In addition, controllable effort attributions will change ego orientation (success judged on the goal of being better than others) into task orientation (success judged on improving personal performance).

EVALUATE CRITICALLY THE EFFECTS OF ATTRIBUTION ON PERFORMANCE AND ON SUSTAINING A BALANCED, ACTIVE AND HEALTHY LIFESTYLE

Although it will be of greater significance in the next section, there is a link between aggression and goal orientation. Kavussanu (1997) proposed that ego-orientated athletes in competitive situations were more likely to display aggressive behaviour with the intent to injure an opponent, than were task-orientated athletes.

In conclusion, it could be said that the processes of attribution and attribution retraining influence the development of self-esteem and task orientation. In turn, according to Roberts et al. (1997), task goals facilitate a lifestyle that is both active and physical.

Aggression and its impact upon performance and behaviour

The term aggression is used to describe forceful behaviour in sport. The smash in badminton, fast bowling in cricket or a punch thrown in anger are some examples of ballistic actions that have been

<table>
<thead>
<tr>
<th>Positive applications of attribution that will facilitate performance and help to sustain a balanced active and healthy lifestyle</th>
<th>Negative applications of attribution that will inhibit performance and reduce the drive to sustain a balanced active and healthy lifestyle</th>
</tr>
</thead>
</table>
| Success | Internal attributions given for success help to:  
• endorse mastery orientation  
• elevate confidence or self-esteem  
• develop pride  
• increase the expectation of success in the future.  
| External attributions given for success take away:  
• the pride normally associated with success  
• the incentive value derived from mastery orientation.  |
| Failure | Internal attributions given for failure take away:  
• confidence by highlighting ability incompetence  
• mastery orientation by leading to learned helplessness.  
| External attributions given for failure help to:  
• encourage the pursuit of mastery orientation  
• sustain confidence or self-esteem  
• eliminate shame  
• improve the expectation of success in the future.  |

Table 5 Positive and negative applications of attribution
classified by the media recently as aggressive acts. Not all of these examples, however, can strictly be defined as aggression.

Two definitions of aggression given by Baron and Bull are:

‘Aggression is any behaviour that is intended to harm another individual by physical or verbal means.’

(Bull, 1990)

‘Aggression is any form of behaviour directed toward the goal of harming or injuring another living being who is motivated to avoid such treatment.’

(Baron)

The smash in badminton is not intended to injure nor is it directed to the goal of inflicting harm. The term aggression therefore needs to be clearly defined.

To understand the term it is necessary to divide aggression into two categories:

- hostile aggression
- assertive behaviour (often referred to as channelled aggression).

AGGRESSION

The prime motive of hostile aggression is to harm an opponent and the chief aim of the aggressor is to inflict injury. Aggressive actions violate the rules of any game and such indiscretions are dysfunctional in the context of sport. Often an aggressive player will disrupt the team’s performance and spoil the cohesion of the group. Aggression has been described as hostile destructiveness (Parens, 1988). Aggression needs, therefore, to be eliminated from sport.

ASSERTION

Assertive behaviour does not attempt to harm and is strictly within the rules and spirit of the game. Assertion often involves forceful, robust but functional play, primarily focused upon completing the skill successfully. The major aim of assertion is the successful completion of the task. For example, to drive forcefully through a group of players to score in basketball is assertive and not aggressive. Assertion was described by Parens (1987) as non-hostile self-protective mastery behaviour. Assertion is also known as channelled aggression.

KEY TERMS

Hostile aggression

Aggression is often referred to as hostile aggression if it is defined as deliberate intention to harm or injure another person. Hostile aggression breaks the rules of the game, e.g. deliberate high tackle in rugby.

Channelled aggression

Channelled aggression is often referred to as assertion and involves robust play which is directed towards completing the skill successfully and is not primarily involved with inflicting injury e.g. a legitimate tackle in rugby.
The causes or antecedents of aggressive behaviour

There are thought to be many causes or antecedents of aggressive behaviour in sport. Some of these are given in Fig 8.16 below.

**KEY TERM**

**Antecedent**

A prior event which can lead to aggression. Note that an antecedent is a cause and not a theory of aggression.

**Fig 8.15 The primary aim of assertion, also known as channelled aggression, is to achieve non-aggressive goals**

**Fig 8.16 Causes of aggression in sport**
Theories of aggression

INSTINCT THEORY

Freud (1920) initially proposed instinct theory but Lorenz later extended his work in 1966. This is a trait view of behaviour and therefore displays the drawbacks of this perspective, most notably that behaviour is at all times predictable. Instinct theory proposes that aggression is genetically inherited and that a trait of violence lies within everyone. Freud called this innate characteristic the ‘death instinct’, the purpose of which is to seek aggressive destruction. Lorenz put forward the idea that aggressive energy is constantly building up and needs to be released.

SOCIAL LEARNING THEORY

Bandura presented social learning theory in 1966. This theory associates with the view that all behaviour is learned. Aggression is not a genetically-based innate characteristic but is nurtured through environmental forces. Aggression can, therefore, be learned by watching and copying from role models and becomes an accepted mode of behaviour if it is reinforced. Aggression is likely to occur if it is part of the social and cultural norm of a group.

TASK 7

For a short period, watch a number of sports which involve physical contact. Identify and count the number of acts of assertion and the number of acts of aggression in the allocated period. Discuss the following:

- What is the proportion of assertion to aggression in each activity?
- Does aggression follow any particular antecedent?
- Is it the home or away team that is most aggressive?

FRUSTRATION AGGRESSION HYPOTHESIS

This is an interactionist theory which was proposed by Dollard (1939).

Frustration develops when goal-directed behaviour or a need to achieve is blocked. The tendency toward frustration is increased when the pursued goal reflects ego or outcome orientation. Frustration could occur through environmental situations such as defeat, good opposition and poor officiating. This is considered to be an interactionist theory because frustration generated by the environment triggers the aggressive gene. If the aggressive act is successful, frustration is released and the aggressor feels good. This is known as a cathartic release. Should aggression fail and result in punishment, further frustration is generated.

REMEMBER

Trait perspective, social learning perspective and interactionist approach as they related to the formation of personality are described on pages 197–202.
AGGRESSION CUE HYPOTHESIS

This theory presents a second interactionist perspective and builds upon Dollard’s work. Berkowitz (1969) believes that frustration leads to an increase in arousal. However, he disagrees that frustration alone will always trigger aggression. He proposes that frustration creates a ‘readiness’ for aggression which is triggered only when a provocative environmental cue is present.

Aggressive cues such as perceived unfairness, the opposition shirt or the nature of the game will trigger aggression in sport if arousal among participants is high. However, better players have the capacity to control frustration and arousal.

Controlling and eliminating aggression is a major factor in optimising performance. Aggressive behaviour inhibits concentration and team cohesion. Gill (2000) confirms that there is no evidence that aggressive behaviour improves sport performance.

REMEMBER

- Of the trait perspective, social learning theory and interactionist approach to personality formation, the interactionist approach appears to be the one most favoured by psychologists. (See Chapter 9, page 235.)
- Aggression has been associated with ego goal orientation. Together, it would appear they could have a negative effect on the likelihood of lifelong participation in sport.
Elimination of aggression

There are a number of methods to eliminate aggression and these come under two headings:

1. **cognitive** techniques which involve psychological strategies.
2. **somatic** techniques which involve physiological strategies.

In addition, the aggressive person could be given a role of responsibility or dysfunctional behaviour could be punished. Furthermore, emphasis on non-aggressive role models will help to eliminate aggressive behaviour. Non-aggressive behaviour should be positively reinforced to ensure that a desirable S–R learning bond is strengthened between successful performance and non-aggressive play.

Cognitive strategies are to do with thought processes and are designed to lower psychological/cognitive arousal. They include imagery which focuses on achieving a calm state of mind while forming a mental image of quiet places, and mental rehearsal (imagining one’s own movements during performance). Positive self-talk and concentrating on repeated words or phrases can also lower an inclination to be aggressive. Counting up to ten will give the opportunity to regain composure. Forgetting or distancing oneself from aggressive cues is a good strategy to prevent aggression, while walking away disengages the player from the situation. Reasoning with oneself that aggression is wrong and that punishment is the likely result is a good preventative measure, while rational thinking in general would be advised.

Somatic methods to eliminate aggression mean physical strategies and these include progressive relaxation techniques and breathing exercises. The use of **biofeedback** and any information about the physiological state can help a person to control somatic arousal which may trigger aggression.

Aggression can also be controlled through the process of attribution. Success should be attributed to ability and the effort applied during performance. The reason for success should not be attributed to tactics that intimidate opponents.

A task-oriented environment allows a performer to be judged on their ability rather than, as would happen in an ego-orientated environment, against the ability of other people. Kavussanu (1997) proposed that performers striving for ego goals...
are most likely to engage in cheating behaviour, play unfairly and be inclined to set out to injure others. A teacher, therefore, could reduce the aggressive tendency of a player by creating a task-orientated environment.

Control of aggression positively promotes the adoption of active and healthy lifestyles. If unchecked, aggressive behaviour can greatly reduce this possibility. Some of the detrimental effects of aggression are described by Silva.

- Silva (1979) proposed that hostile aggression, when demonstrated by an individual, may increase arousal causing reduced concentration resulting in poor performance. Underachievement (as it has been previously seen) can lead to learned helplessness and an inclination to give up.

- Silva’s research also indicates that the dysfunctional consequences of aggression extend beyond the immediate performance results, for example aggressive performers are likely to get injured and run a greater risk of being dismissed from the game.

- Performers with aggressive tendencies tend to feel anger and experience less satisfaction after completing activities and have therefore a reduced motive to continue with the activity.
You should now have knowledge and understanding of:

- personality and its importance in producing effective performance and in following a balanced, active and healthy lifestyle
- attitudes and their influence on performance and lifestyle
- achievement motivation and its effect on performance and on following an active and healthy lifestyle
- attribution theory and the impact of attribution on performance and sustaining a balanced, active and healthy lifestyle
- aggression and its impact upon performance and behaviour.

REVISE AS YOU GO!

1. What is meant by the terms trait, interactionist and social learning perspectives of personality?
2. Identify the characteristics of extroversion, introversion, neuroticism and stability.
3. List the characteristics of Type A and Type B personalities.
4. Identify the drawbacks of personality profiling.
5. Define cognitive, affective and behavioural components of an attitude.
6. Identify the methods that could be used to change an attitude.
7. What is learned helplessness and mastery orientation?
8. Identify and describe the dimensions of Weiner's Attribution model.
9. What is meant by the terms aggression and assertion?
10. Identify the strategies that help to eliminate aggression.

Ask your teachers for the answers to these Revise As You Go! questions.
Examination question
Using psychological theories, explain aggressive behaviour.
Describe three methods a coach might use to eliminate aggressive tendencies of performers and to encourage an active and healthy lifestyle.

(6 marks)

Examiner’s tips
The question asks for theories. These include Instructional, Social Learning, Frustration Aggression Hypothesis and Aggression-cue Hypothesis. Remember the causes of aggression sometimes known as antecedents are not theories of aggression.

Student answer
Aggression in sport is the deliberate intention to harm or injure an opponent. Aggression is also dysfunctional, for example a punch thrown in a rugby match. The coach must eliminate aggression but should encourage assertion. Assertion is sometimes known as channelled aggression and involves robust play which is both within the rules and aimed at completing the task successfully.

Aggression might be caused if a player feels that the referee has made an unfair decision, such as disallowing a goal in football because of a perceived dubious offside decision. A game between local rivals may be a cause of aggression as there could be a tradition of hostility between the teams. Finally, the nature of the game may stimulate aggression, for example rugby as a contact sport is more likely to trigger conflict than a hockey game.

The methods to eliminate aggression include imagery, which focuses on calm states in quiet places, and mental rehearsal, which concerns imagining one’s own movements. Positive self-talk and concentrating on repeated words or phrases can lower an inclination to be aggressive. Counting up to ten also gives opportunity to regain composure. Control of somatic arousal through stress management techniques will also prevent aggression from occurring.

Examiner says: Good. You mention five ways to eliminate aggression. Only three marks maximum can be given.

Examiner says: While your knowledge is correct, the question does not ask for a definition of aggression and assertion. No marks.

Examiner says: Once again your knowledge is accurate but the point has been missed. You write about the causes or antecedents of aggression. The question asks for psychological theories. No marks.
Improved student answer

The Instinct theory of aggression (Freud) states that a person is born with aggressive tendencies and that aggression is constantly being generated. This innate tendency would explain why a rugby player might strike another in the game situation.

When goal-directed behaviour is blocked, frustration could arise and aggression may be the result. This is predicted by the Frustration–Aggression Hypothesis (Dollard). If the aggressive act brings success and satisfaction, the player will experience a cathartic reaction. A practical example of this theory could be the attacker in football who is continually being tackled. The attacker then elects to foul the defender deliberately.

A stimulus or environmental cue could serve to trigger aggression. This view is presented in Aggression-cue Hypothesis (Berkowitz). The stimulus could be the perception of the ice hockey stick as a weapon, the opposition shirt or seeing a colleague being the recipient of violence. The theories both of Dollard and Berkowitz are said to be interactionist theories.

A fourth theory is Social Learning Theory. Bandura proposed that all behaviour is copied from significant others. For vicarious learning to take place, the role model needs to be similar in age and ability and it is thought that behaviour is more likely to be modelled if the gender is the same. For example, if the champion male tennis player shows hostility towards the umpire, there is a chance it could be copied by a junior player. Aggression is likely to occur if previous aggressive behaviour has been reinforced and if aggression is part of the social and cultural norm of a group.

The methods to eliminate aggression can be addressed under two headings. These headings are cognitive and somatic techniques.

Cognitive strategies embrace the process of thought and are designed to lower psychological/cognitive arousal. They include imagery, which focuses on calm states in quiet places, and mental rehearsal, which...
concerns imagining one’s own movements. Positive self-talk and concentrating on repeated words or phrases can lower an inclination to be aggressive. Counting up to ten also gives opportunity to regain composure.

Forgetting or distancing oneself from aggressive cues is a good strategy to prevent aggression, while walking away disengages the player from the situation. Reasoning with oneself that aggression is wrong and that punishment is the likely result is a preventative measure, while rational thinking in general would be advised.

Somatic methods to eliminate aggression refer to physical strategies and these include progressive relaxation techniques and breathing exercises. The use of bio-feedback and any information about the physiological state can help a person to control somatic arousal which may trigger aggression.

Emphasis on non-aggressive role models will, furthermore, help to eliminate aggressive behaviour.

Finally, the teacher or coach should create task-orientated goals as opposed to ego-orientated goals. Those who perceive success only as beating others are ego orientated and this pursuit is thought to induce both cheating and aggression. Performers with task orientation are more inclined to enjoy engagement in physical activities and are therefore likely to adopt a healthy lifestyle.