

**CHAPTER 13 – Personality, attitudes, arousal and anxiety**

**Questions - text book page 154**

1) What is meant by the term stress?

**Answer:**

- **Stress** means our perceptions of the demands of a task or situation.
- And the perceived ability to cope with those demands.

2) Explain two psychological symptoms of stress.

**Answer:**

- **Worry** or feeling overwhelmed or feeling out of control.
- **Inability** to make **decisions**.
- Inability to **concentrate** or direct attention, confusion.
- Narrowing of **attention**.
- **Irritability**.

3) Identify three main stressors in the context of sport.

**Answer:**

- **Stressors** are factors or situations which can cause stress, for example, competition against self.
- Competition against others.
- The expectancy of others.
- The event being perceived as **important**.
- The **hostility** of others or the crowd.
- Feeling of **frustration** caused by injury, poor play or officials' decisions.

**Exam style questions - text book pages 156 - 157**

1) a) What do we mean by the term personality? Why is it important for sports psychologists to know about personality? 3 marks

**Answer:**

- **Personality** involves the **unique characteristics** of an individual.
- Personality involves consistent **behaviour** patterns.
- It is important for sports psychologists to know about personality because individuals behave in different ways, so it is important to understand them.
- Better understanding can lead to better **motivational** or training strategies.
- Performers will relate better to those that understand them.

b) Eysenck identified two dimensions of personality as in figure 13.19. Describe the trait approach to personality. What do the traits extroversion and stability mean? 4 marks

**Answer:**

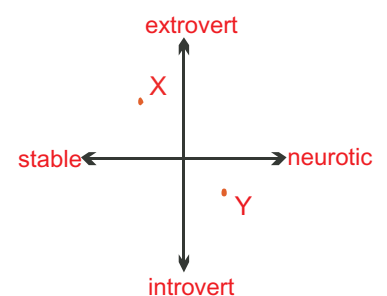
- The **trait** approach sees the personality of the performer as **genetic** or **innate**.
- Traits are the **enduring** characteristics of an individual.
- **Extrovert** - the sportsperson seeks social situations or is sociable.
- **Stable** - the performer has a level personality, and is predictable or steady.

2) a) From figure 13.19 describe the characteristics of players **X** and **Y**. 4 marks

**Answer:**

- **Player X** - stable extrovert:
- Extrovert - sociable or outgoing or talkative or easy-going.
- Stable - fairly even tempered or reliable or controlled.
- **Player Y** - neurotic introvert:
- Introvert - passive or quiet or peaceful or thoughtful or shy.
- Neurotic - moody or anxious or pessimistic or unstable.

**figure 13.19 – dimensions of personality**



2) b) By using an example from sport, outline the social learning approach to personality.

3 marks

**Answer:**

*Practical examples expressing:*

- **Observation** of others who are around.
- **Imitation** of others.
- Social learning is more likely if those being observed are '**significant**' or of high status.
- Personality is **learned** from others.

c) What do we mean by the interactionist approach?

2 marks

**Answer:**

- A **mix** of trait and social learning.
- An individual adapts his or her personality **according to the environment**.
- Behaviour is determined by the interaction of a person with his or her environment.
- **B = f(PE)**.
- This approach explains why people seemingly have **different** personalities in different situations.

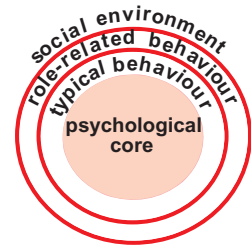
3) Hollander (1971) viewed personality as a structure with layers of influence. Using examples from sport, explain Hollander's structure of personality.

8 marks

**Answer:**

- See figure Q13.1.
- Essentially a **trait** approach.

**figure Q13.1 – Hollander's structure of personality**



- **Psychological core** (inner layer) not affected by the environment. It is the basis of beliefs.
- Example: a hockey player who believes in fair play or the value of physical exercise.
- **Typical response** layer (middle layer) which represents typical responses.
- Example: a hockey player usually turns up for training.
- **Role-related behaviour** layer (outer layer) which represents our responses that are affected by circumstances.
- Example: hockey player may not take part fully in training because of lack of motivation on that day.
- **Social environment** (surrounding layer) representing social influences or expectations.
- Example: hockey player may not take part in training because there are pressures from friends to do other activities.

4) List six ways in which a coach might use personality theory to help an athlete during training or competition.

6 marks

**Answer:**

- To identify the degree to which traits such as competitiveness, self-confidence, self-control, conscientiousness are shown.
- To enable the sportsperson to change his or her behaviour, or modify his or her traits in the sporting situation.
- To enable the athlete to improve self-esteem and self-confidence.
- To enable self-awareness of difficulties in respect of anxiety or self-confidence in a sporting situation, and hence the need for strategies to avoid or improve these factors.
- Observation of behaviours in both training and competition can identify differences between the two situations, and hence point up the need for different competitive strategies.
- To enable control of traits, which might cause difficulties, such as aggressiveness.

5) Discuss theories that are used to explain personality, and apply them to sporting situations.

12 marks

**Answer:**

- Personality is the term which describes the unique characteristics of an individual which makes him or her act as they do.
- There are three main theories of personality:
- **Trait theories** use the idea that a person has always had a feature of his or her personality, and always will have.
- Personality is made up of several traits that cluster together to produce behaviours.
- **Cattell** identified a large number of personality traits which he measured in a questionnaire called **Cattell's 16PF**.
- This psychometric test is used by sports psychologists to assess trait behaviours.
- **Eysenck** is a trait theorist who recognized four characteristics of personality.
- **Extroversion** includes characteristics such as liveliness, sociability and impulsiveness. A person with this trait prefers team sports which have simple motor skills and low concentration levels, for example, rugby and boxing.
- **Introversion** includes characteristics such as isolation, independence, shyness. A person with this trait will prefer individual sports which require concentration, precision, self-motivation, intricate skills, low arousal levels. For example, archery, golf and snooker.
- **Neuroticism** includes the fact that behaviour may change and so is unpredictable and irrational. For example, a sportsperson may lose his or her temper for no apparent reason.
- **Stability** means that behaviour is unchanging, and a person will always react with calmness in the face of losing important points in a tennis match, for example.
- Eysenck identified a **two dimensional view** of personality as four primary types that can be applied to sporting situations.
- A **stable extrovert** is talkative, outgoing, has leadership qualities needed in team sports. This person attracts loyalty and is able to make definite and match changing decisions on patterns of play in a rugby match.
- A **neurotic extrovert** is restless, aggressive, excitable and changeable. Such a person may only succeed in sports such as martial arts or weight lifting for example. This person may not get through the first round of an important table tennis tournament.
- A **neurotic introvert** is anxious, rigid and pessimistic. This sportsperson may not be able to implement new strategies when faced with a losing situation in an important game of rugby or hockey for example.
- A **stable introvert** is controlled, reliable and even-tempered. These characteristics are often observed in snooker players and other individual sportspeople.
- **Social learning theory** explains behaviour in terms of the reaction to specific situations.
- The main point of social learning theory is that a person will learn to deal with situations by observing those around him or her and by imitating their behaviour (after **Bandura**).
- This theory explains how athletes learn behaviour by watching others such as learning skills and then copying them.
- **Interactionist theories** are those which assert that a combination of trait and a person's situation or environment builds up a person's personality.
- Traits determine behavior, but can be modified by situations.
- **Lewin** was an **interactionist theorist** who stated that behaviour is a combination of both inherent (built-in) personality traits and environmental factors. The following equation describes the theory:
- $B = f(P,E)$ .
- Behaviour is the function of **Personality** and **Environment**.
- The theory also states that **personality traits** can be used to predict behaviour in some situations, but this is not exclusive.
- The innate (trait) factors of the athlete's personality cannot be changed by a coach.
- A coach could manage a sportsperson's **negative trait factors**, such as anxiety by:
  - For example, the anxiety could be channelled into positive images of her technical model.
  - Rejecting poor efforts as due to external factors (for example, the weather or the wind).
  - And building on positive images of successful technical elements achieved.
  - The athlete can then build success by focusing on factors other than her own anxiety.
- This strategy will enable the player to remove the stress from the situation and hence reduce anxiety - even if she were to lose!

6) a) What do we mean by the term attitude? 1 mark

**Answer:**

- A **predisposition** (an opinion held because of previous experiences) towards an attitude object.
- An attitude is made up of **beliefs, feelings and behaviour**.

b) We often refer to someone as having a positive attitude in sport. Using Wood's triadic model describe the characteristics of a positive attitude. 3 marks

**Answer:**

- **Cognitive aspects** - the sportsperson has a belief in the activity as worthwhile.
- **Affective aspects** - the sportsperson has positive emotions or enjoyment or enthusiasm.
- **Behavioural aspects** - the sportsperson participates or spectates regularly.

c) What factors influence our attitudes? 4 marks

**Answer:**

4 marks for 4 of:

- Past **experiences**.
- **Education**.
- **Media**.
- Other group members or **peers**.
- **Cultural norms**.
- **Parental influences**.
- Perceived need for **health** or **exercise**.

7) a) If you wished to change a young person's negative attitude to sport into a positive one, what strategies would you employ? Use psychological theory to back up your answer. 4 marks

**Answer:**

4 marks for 4 of:

- Use **cognitive dissonance**.
- **Persuasion**.
- Change one aspect of the triadic model to create dissonance.
- **Attribute** early failure to **controllable factors** (like the need to try harder or change an aspect of technique).
- Give success or **positive reinforcement** when the performer achieves partial success.
- Use of appropriate **role models**.
- Show the benefits to **health**.
- Emphasise positive body image.
- Promote awareness of self or emphasise **personal satisfaction**.

b) What do we mean by the term prejudice and how does it manifest itself in sport? 4 marks

**Answer:**

4 marks for 4 of:

- **Pre-judgement** of individual or group.
- Based on **narrow experience** or usually unfair.
- Crowd behaviour against individual or team.
- **Racism** - with example in sport.
- Team members valuing their own group over others.
- Age or **gender** with examples.
- **Disability** - lack of access to sports venues etc.

8) The catastrophe theory is used to explain a golfer's disastrous failure to win a match having been 3 strokes in the lead coming up to the last green. Explain this situation and why this theory might be useful in preventing a repetition. 4 marks

**Answer:**

- See figure Q13.2.
- This is an extension to the *inverted U* theory.
- In which during the performance of a skill, as *arousal* increases *performance* improves.
- Until an *optimum arousal* point at which performance is at its best.
- If arousal increases beyond this, *performance levels start to fall*.
- Until a point at which a drastic loss of form happens - this is the *catastrophe*.
- So, the golfer is getting excited at the thought of winning - this causes him to miss-hit important shots, and hence lose the match.
- The lesson to be learned is that he must use *calming tactics* to keep his arousal level below the catastrophe.
- Then he would be somewhere near his optimum point for best performance.

9) A number of PE students are attending trials at their chosen sport. Describe the Inverted U theory and explain how it might affect a student's performance at the trials. 5 marks

**Answer:**

- See figure Q13.3.
- As *arousal* (or anxiety) increases, *performance* increases.
- There is an *optimum* arousal point at which the performance is best for this particular performer.
- This *optimum* level depends on the classification of the skill being performed (whether fine or gross, open or closed etc).
- And the *habitual* nature of the *skill* - how well learnt the skill.
- Once the optimum arousal level is exceeded, *performance* falls.
- The message is that if the student *tries too hard* (arousal too high), then he or she may not do as well as if he or she were to *relax and focus* at the optimum arousal level.

10) a) What is the difference between state and trait anxiety? 2 marks

**Answer:**

- *State*: feeling of apprehension or stress in a *specific* situation.
- *Trait*: *general* stress levels or innate anxiety, anxiety you take to all situations.

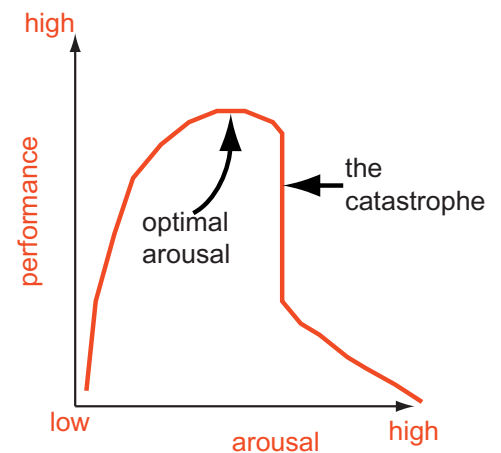
b) What coping strategies should the anxious performer draw upon? 5 marks

**Answer:**

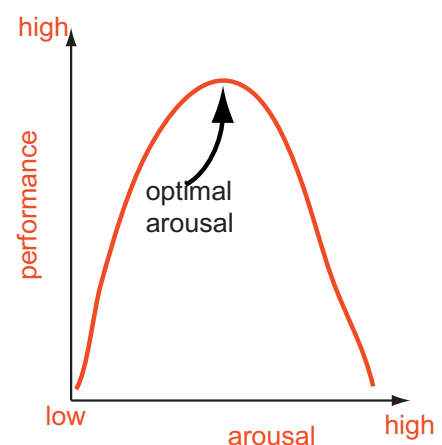
5 marks for 5 of:

- *Cognitive strategies*, for example, imagery, mental rehearsal or selective attention.
- Positive thinking or negative thought stopping.
- Hypnotism.
- *Somatic strategies*, for example, relaxation.
- Or yoga.
- Attainable *goal setting*.
- Decreasing the *perceived importance* of the event.
- Raising *self-efficacy* or increasing confidence.
- Positive reinforcement.
- Give success.
- Attributional factors.
- *Redefine success*.

**figure Q13.2 – the catastrophe effect**



**figure Q13.3– the inverted U**



11) a) Discuss the possible relationships between anxiety and performance in sporting activities.

7 marks

**Answer:**

- **Anxiety** is an aspect of **arousal** (arousal is required or evident in most sport performance).
- **Inverted U theory** links arousal and performance in sport.

Marks given for sketch graph (figure Q13.4) showing inverted U theory.

- Showing low **performance** at low **arousal**.
  - Showing high performance at medium arousal.
  - Showing low performance at high arousal.
  - **Small amount of anxiety** suggests that the performer is casual or **inattentive**, therefore unlikely to perform at his or her best (i.e. produce a low performance).
  - **High anxiety** or arousal can cause over-excitement or **disruption of concentration** or attention or control.
  - **Moderate** levels of anxiety or arousal is **optimal** and makes a performer ready for action.
  - Differences depend on the **type of activity**, for example, high arousal may be required for contact games, and low arousal or calmness for gymnastics.
  - Differences may also be due to the **personality of the performer** (for example, to perform well extroverts need high anxiety, and introverts need low arousal or anxiety).
- 
- **Drive theory** (see figure Q13.5), mark given for linear relationship between arousal and performance.
  - Drive theory (also called Hull's theory) can explain what happens for simple skills.
  - The more **arousal**, the better the **performance**.
  - Performance can be explained by  $P = H \times D$  (**performance = habit x drive**).
  - This means that the **dominant response** is accentuated by high arousal levels (the higher the arousal the better the performance).

b) High levels of arousal have often been linked with stress. Sketch a graph showing the relationship between the performance of a complex skill and level of arousal. 2 marks

**Answer:**

- See figure Q13.4 above for the **inverted U** graph.
- Inverted U shape.
- Optimum performance at moderate arousal levels.

c) Add a second curve to your graph showing how the performance of simple skill might be affected by arousal. 2 marks

**Answer:**

- Graph in figure Q13.6 showing optimum performance at high arousal level (**unbroken green line on graph**).
- Or Drive theory, linear relationship between performance and arousal, or the higher the arousal the better the performance (**dashed black line on graph**).

figure Q13.4 – the inverted U

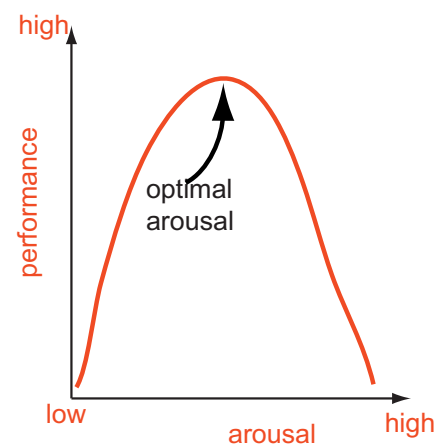


figure Q13.5 – drive theory

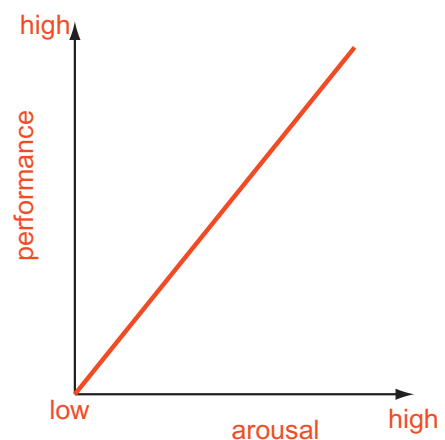
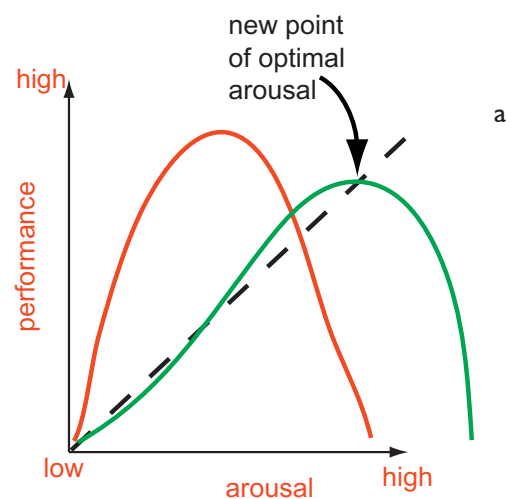


figure Q13.6 – performance depending on arousal for a simple skill





12) With reference to sporting performance, explain how cognitive and somatic anxiety differ.

5 marks

**Answer:**

*You must use a sporting example in your answer.*

- **Cognitive anxiety** is a psychological response consisting of:
  - Worry.
  - Inability to concentrate.
  - Loss of attention.
  - Fear of failure.
  - For example, worry that a tennis opponent is a much better player than you.
- **Somatic anxiety** is a **physiological** response.
  - For example, before the tennis match begins:
    - Increased heart rate.
    - Adrenaline.
    - 'Butterflies'.
    - Sweaty palms.
- **Cognitive anxiety** may remain high during a performance.
  - The more you worry, the bigger the drop in performance.
- **Somatic anxiety** should reduce once a performance begins.
  - The effects of somatic anxiety are similar to the inverted U.
  - As anxiety increases, performance improves - up to an optimum point.
  - After this point, further increase in anxiety will lead to reduced performance.

13) **A Level.** Discuss the role of techniques in the control of stress and anxiety for sports performers.

15 marks

**Answer:**

- **Stress** is defined as a person's physiological response to an external stimulus that triggers the 'fight-or-flight' reaction.
  - This is usually caused by the release of the hormones adrenaline or noradrenaline.
- **Anxiety** is a feeling of worry, nervousness, or unease about something with an uncertain outcome and includes state and trait personality characteristics.
  - Many things can trigger the stress and anxiety reactions, including danger, threat, news, illness, as well as significant changes in one's life such as the death of a loved one.
  - In the sporting situation, this could be due to a continuous losing streak at soccer, failure to qualify for an important competition, or failure to improve training marks after an extensive and intense exercise regime.
  - A sportsperson must learn how to **manage and control** stress if he or she is going to break through to realize his or her potential.
  - Situations which could be stressful will always arise in the ordinary course of events (failure to win an important match in spite of being ranked ahead of the opponent, for example).
- **Management of stress and anxiety:**
  - An athlete with high anxiety trait (A-trait) is likely to be more anxious in stressful situations.
  - To help the athlete control competitive anxiety **somatic relaxation techniques** can be used to control the physiological symptoms of stress and anxiety.
  - These techniques include **progressive muscle relaxation**, **centring** by focusing on control of the diaphragm and deep breathing and the use of **biofeedback** such as the monitoring skin temperature and sweating.

13) (continued)

- *Cognitive relaxation techniques or self talk, imagery and mental rehearsal will help sports performers to understand the process of a competitive situation, thereby building up self-confidence.*
- *For example, talking to oneself about how to play a better tennis shot, instead of throwing one's racket at the umpire is a better approach that uses self-talk of a positive way.*
- *Enabling a person to embrace self-understanding.*
- *For example, self-identification as a Type A or as Type B personality.*
- *Suggesting a person could self-manage his or her life.*
- *For example, indicating it might be best if she could be better organised – not forgetting her training shoes or written training schedule when turning up to training.*
- *Indication that conflicts between people should be resolved and not allowed to persist and affect future relationships within a team or between a team member and a team manager.*
- *Sometimes increasing or reducing the exercise loading will reduce stress and anxiety.*
- *Sometimes, a change of diet can affect stress levels, particularly reducing the quantity of junk food eaten. It is well known that most sportspeople are voracious eaters who will sometimes eat anything to satisfy hunger and the need for incredibly high energy input for the sport.*
- *Adjustment of diet in this way could improve marginal nutrient intake and help feelings of well-being.*
- *Taking more regular and effective rest.*
- *Some techniques of time management may help a person to control stressful situations.*
- *For example, becoming more organized and reducing the generation of clutter. Having bags packed in advanced of training – including training shoes and written schedule. This leaves the stress of getting to a training venue as the only thing left to worry about!*
- *Setting priorities can help.*
- *Using a 'to do' list of tasks that a person needs to complete can give a person a sense of control and accomplishment. Ticking off: training – shopping – lunch with girlfriend or boyfriend – afternoon training – go to lecture at university – can give a sense of satisfaction and reduce stress.*
- *Effective stress management involves learning to set limits and to say 'No' to some demands that others make, particularly parents and coach who may want a person to do a task without prior knowledge.*



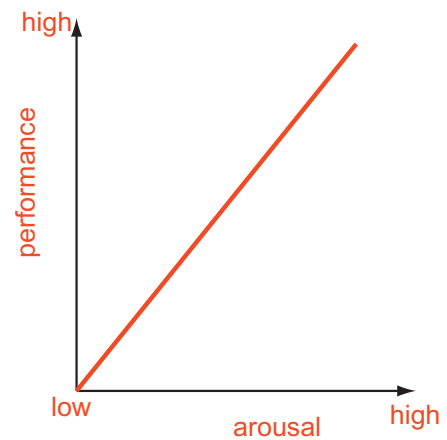
14) **A Level.** Discuss Hull's drive theory and the inverted U hypothesis as explanation of the anxiety-performance relationship.

15 marks

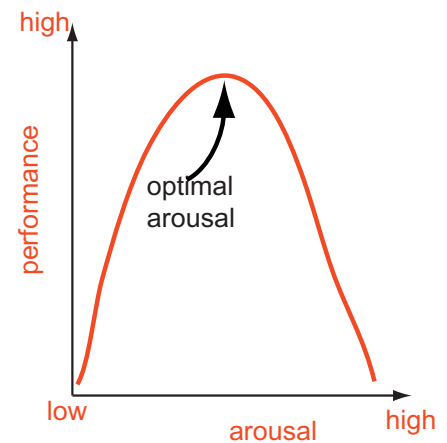
**Answer:**

- **Hull's Drive theory**, as illustrated in the graph in figure Q13.7, describes the simple situation where the higher the arousal level, the higher the achievement or performance level.
- This theory applies to gross skills like weight lifting and sprinting.
- The theory also states that the more arousal, the more likely that a well-learned skill (a dominant response) will be reproduced.
- This means that older more deep-seated skills will tend to be produced when a person is very aroused rather than newer less well-learned skills practised more recently.
- The implication of this is that a highly aroused performer will need to focus very hard and direct his or her attention very strongly towards a desired response, particularly if this response includes recently learned elements.
- Otherwise the state of arousal will cause the person to regress to an older, less desirable but dominant response.
- This theory explains why in some sporting activities, a sportsperson who tries too hard (and who therefore is in a state of high arousal) fails to reproduce his or her best performance.
  
- In **inverted U theory**, as illustrated in the graph in figure Q13.8, there is an optimum arousal level. As arousal increases, performance increases up to a certain point, if aroused more than this, the performance will go down.
- Optimum arousal depends on:
  - Type of activity, for example, gross skills (like weight lifting) require high arousal, whereas fine skills (like snooker) require low arousal.
  - The skill level of the performer, the more skilful the performer the higher the optimum arousal level could be.
  - The personality of the performer, in which the more extrovert the performer, the higher the arousal likely to be attained by the performer to produce optimum performance.

**figure Q13.7 – Hull's drive theory**



**figure Q13.8 – the inverted U**



15) Under-arousal can lead to poor performance. Discuss methods an athlete could use to increase his or her level of arousal to optimal levels. 12 marks

Answer:

- The **Inverted U theory** (figure Q13.8) says that there will be an optimum arousal level at which performance will peak. Even slight under or over arousal can cause the individual to reduce performance, hence control of arousal will be very important to the top sportsman.
- The term '**psyching-up**' describes the process of increasing arousal to higher levels.
- It is very important not to 'over-psych' since this will cause the athlete to reduce performance.
- Some sports and events will require very high arousal levels to achieve optimal performance. Weight-lifting and throwing events are in this category.
- But even these will require some control since 'trying too hard' can cause the fall off of performance indicated by the inverted U.
- Psyching-up can be achieved by self-talk – talking oneself into a state of high arousal – usually accompanied by marching or jumping about as the state of arousal is increased.
  
- If the sport is snooker, or darts, or a highly technical sport such as tennis, the degree of arousal will need to be reduced and calmness induced.
- This can be done using a process called '**centring**' in which control of the diaphragm and deep breathing is used to reduce arousal and focus in on appropriate technique.
- **Progressive muscle relaxation** (PMR) can be used to calm and reduce arousal in the performer. Here muscles are focussed on in rotation and forced to relax accompanied by deep breathing.
- **Mental rehearsal** or **visualisation** can be used to rehearse the precise maximum of arousal by thinking about the process rather than actually doing it.
- This has the effect of rehearsal of the process, including the sequences of muscle activation in which innervations of muscle will happen (the electrical signals will be sent through the nervous pathways from the brain and into the various bits of the body) but not quite at the threshold needed to actually do the activity. Arousal comes into this category and can be rehearsed.