

CHAPTER 13: Personality, attitudes, arousal and anxiety

Practice questions - text book pages 182 - 183

- 1) Which one of the following is not included in the definition of personality psychology?
- it deals with adaptations to the environment.
 - it deals with how traits influence the environment.
 - it deals with how the environment influences traits.
 - all of the above are included.

Answer: a

Explanation:

- *Personality describes the unique characteristics (traits) of an individual.*

- 2) An athlete has been given some new information from the coach which radically changes the athlete's training programme and which is contrary to the athlete's current attitudes and ideas. Which attitude theory explains the athlete's reaction?
- cognitive dissonance.
 - attitude formation.
 - persuasive communication.
 - drive theory.

Answer: a

Explanation:

- *The attitude to an object and the behaviour is inconsistent.*

- 3) Cognitive dissonance occurs when:
- the attitude to an object and the behaviour towards it are consistent.
 - the attitude to an object and the behaviour is inconsistent.
 - when a person has no attitude towards an object.
 - when a person is unsure of his/her attitude towards an object.

Answer: a

Explanation:

- *Cognitive dissonance occurs when two completely different and contradictory facts affect the behaviour of an athlete.*

- 4) Which of these is not a theory of arousal in sport?
- inverted U.
 - excitement-arousal.
 - drive.
 - catastrophe.

Answer: b.

- 5) Which one of the following is a good example of a performer controlling his or her emotions during physical activity?
- shouting at a team mate for playing poorly.
 - playing more aggressively because your team is losing.
 - accepting a decision by the official which you think is wrong.
 - only fouling when the referee is not looking.

Answer: c.

- 6) A thrower prepares for a qualifying competition, but suffers from stress and tries too hard and so performs badly. Which theory explains this behaviour?
- catastrophe theory.
 - multi-dimensional anxiety theory.
 - inverted U theory.
 - drive theory.

Answer: c.

Explanation:

- *Inverted U theory explains that if you try too hard your arousal is too big, then you are past the peak of the U, and performance falls.*

7) a) What do we mean by the term personality?

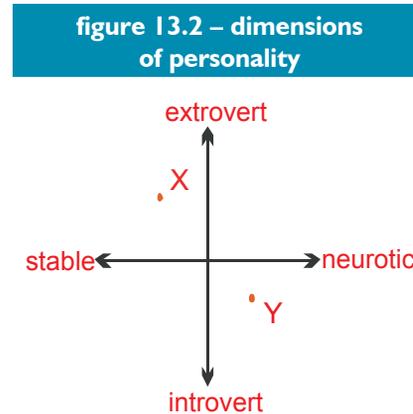
2 marks

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 13.2. 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.

c) 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.

d) 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 situation.

8) Discuss how the nature-nurture debate determines the origins of many personality characteristics.

8 marks

Answer:

- **Nature** - reflects the longlasting (**enduring**) features of a person's personality.
- The features of personality which you are **born** with.
- The **traits** which **cannot be changed** by circumstances.
- Or the **environment**.
- **Nurture** - reflects the idea that personality will **change**.
- When **circumstances** change.
- Or the **environment** changes.
- And features of personality can be changed by **learning** them from other people.
- Or copying them from other people who are **significant** to the learner.

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

8 marks

figure Q13.1 – Hollander's structure of personality



Answer:

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

- 10) 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.

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

8 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.

12) 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**.

13) 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:

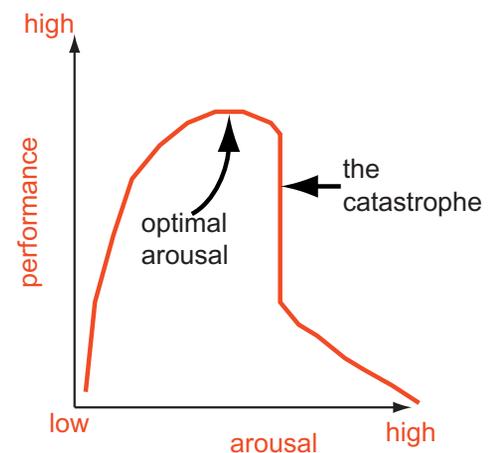
- **Pre-judgement** of individual or group.
- Based on **narrow experience** or usually unfair.
- Crowd behaviour against individual or team.
- **Racism** - with example in sport.
- Team members valuing their own group over others.
- Age or **gender** with examples.
- **Disability** - lack of access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

14) 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

figure Q13.2 – the catastrophe effect



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.

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

15 marks

figure Q13.3 – Hull's drive theory

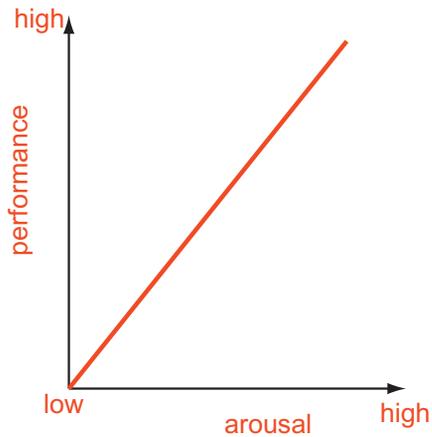
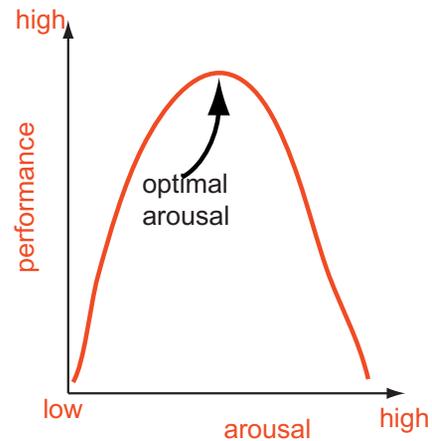


figure Q13.4 – the inverted U



Answer:

- **Hull's Drive theory**, as illustrated in the graph in figure Q13.3, 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 sports person 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 Q13.4, 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 have to be attained by the performer to produce optimum performance.

16) Under-arousal can lead to poor performance. Discuss the approaches an athlete could use to increase his or her level of arousal to optimal levels.

8 marks

Answer:

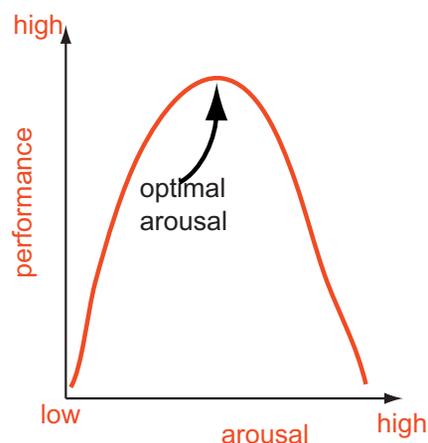
- The **Inverted U theory** (figure Q13.5) says that there will be an optimum arousal level at which performance will peak. Even slight under or over arousal can cause the individual to reduce performance, hence control of arousal will be very important to the top sportsman.
- The term '**psyching-up**' 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.

17) 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

figure Q13.5– the inverted U



Answer:

- See figure Q13.5.
- 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.

18) 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**.

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

6 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.

figure Q13.6 – the inverted U

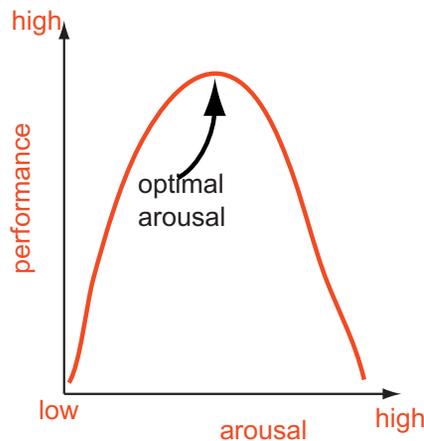
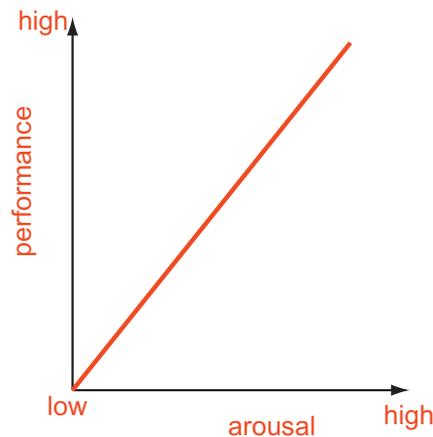


figure Q13.7 – drive theory



Marks given for sketch graph (figure Q13.6) 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 Q13.7), 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

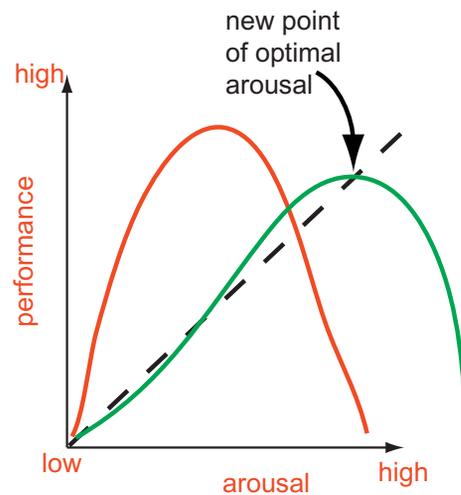
Answer:

- See figure Q13.6 above for the *inverted U* graph.
- Inverted U shape.
- Optimum performance at moderate arousal levels.

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

2 marks

figure Q13.8 – performance depending on arousal for a simple skill



Answer:

- Graph in figure Q13.8 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*).

20) 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.

21) **A Level.** Identify are the main methods that are used to measure and recognise anxiety.
Discuss the advantages and disadvantages for each method identified.

15 marks

Answer:

3 marks for 3 of:

- **Observation.**
- **Questionnaires.**
- **Physiological measurements.**

Advantages and disadvantages of methods

Observation:

- *Advantages 2 marks for 2 of:*
 - **Directly related** to a performance
 - Opportunity to **think** differently, unconventionally.
- *Disadvantages 2 marks for 2 of:*
 - Difficult to quantify **accurately**.
 - Dealing with **qualitative** data.

Questionnaires:

- *Advantages 2 marks for 2 of:*
 - Results provide **quantitative** data for analysis.
 - **Systematically** set out and can be used to assess **specific traits**.
 - **Accurate comparisons** can be made with previous or future assessments.
- *Disadvantages 2 marks for 2 of:*
 - Formal nature of paperwork may **influence** answers given.
 - **Transient feelings** or attitudes may be expressed, so normal views not expressed.
 - Results quantitative but **subjective**.

Physiological measurements:

- *Advantages 2 marks for 2 of:*
 - **Accurate** and **quantitative** and **directly related** to performance.
 - Can be used **before, during** and **after** an event.
 - Systematically and scientifically recorded using **numerical data**.
- *Disadvantages 2 marks for 2 of:*
 - Often conducted in a specialist sports science **laboratories** using specialist **expensive** equipment and **trained** staff.
 - Performer needs to be **wired up** and so testing environment is **restricted**.
 - Results can be affected by **exercise intensity** as opposed to an anxiety environment.