



Section 4: Sports Psychology – Knowledge Booklet

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This booklet belongs to _____

My target grade is _____

Key terms for this unit

You must use your text book to find the definitions

Fundamental Motor Skills

Perception

Specific

Anxiety

Measurable

Cognitive Skills

Achievable

Kinaesthetic Sense

Motor Skill: An action or task that has a target or goal and that requires voluntary body movement to achieve this goal.

Recorded

Skilful Movement

Timed

4.1. Characteristics of Skilful Movement and Classification of Skills

When we use the term skill, we often mean a combination of perceptual (how we see our surroundings), cognitive (thinking skills) and **motor skills**. Skilled performers are not born with most motor skills already programmed in their minds – they have to learn them in a number of different ways.

Motor Skill – An action that has a target or goal, which requires voluntary body movement to achieve the goal. It is a learned movement response.

Characteristics of a Skilful Movement

A skilled movement is one in which a predetermined objective is accomplished with maximum efficiency with a minimum outlay of energy.

You may be asked in an exam to identify characteristics of a skilful movement. There are several you need to know about

Remember P-FACE

Pre-determined – the skill has a clear objective or goal e.g. a dancer knows the routine before the competition

Fluent – the skill is performed in one flowing movement e.g. a gymnast performs a routine with no hesitation

Aesthetic – the skill looks pleasing to the eye e.g. a basketball player shoots the ball with the correct technique

Co-ordinated – the skill is performed under control using limbs, senses and movements at the same time e.g. a tennis player hitting a serve

Efficient – the skill is performed without wasting time or energy e.g. a swimmer using perfect freestyle technique.

****An unskilful performance will be the opposite of a skilful performance. For example – not fluent****

Perception – interpretation of stimuli. This can vary depending on experience.

Cognitive Skills – involve the intellectual ability of the performer. They affect the perceptual process and help us to make decisions that are required in a given situation.



Classification of Skills

Skills can be classified on a continua/scale, which makes it clearer on how to learn and perform a particular skill. There are 2 continua that you need to know:-

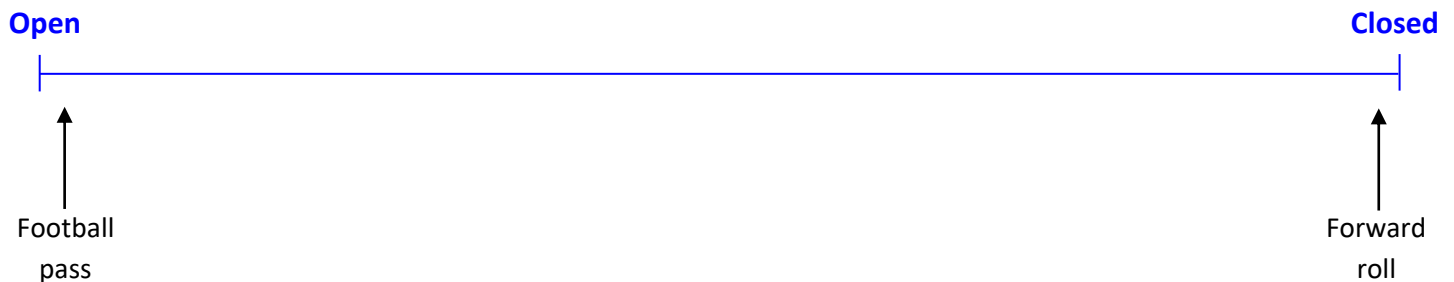
- Environmental continuum
- Difficulty continuum

Environmental Continuum

This continuum ranges from open to closed. If the skill is affected by the surrounding environment and requires the performer to make perceptual decisions, it is an open skill. If the skill is not affected by the environment it is known as a closed skill.

Open Skill – a pass in a football game

Closed Skill – a forward roll in gymnastics

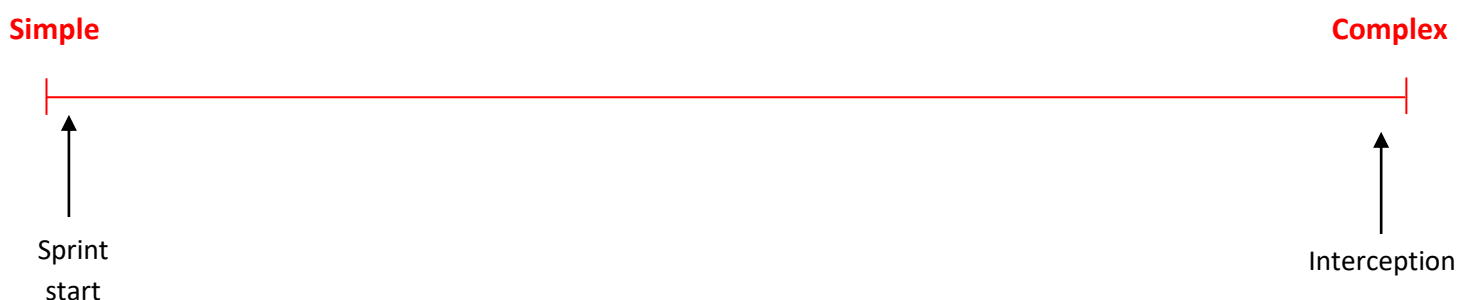


Difficulty Continuum

This continuum ranges from simple to complex. If the skill has very few decisions to make, it is known as a simple skill and can be learned as a whole. If the skill has many decisions to make, it is known as a complex skill and will have to be learned in stages.

Simple Skill – a sprint start

Complex Skill – a netball interception



4.2. Goal Setting

There are many reasons why goal setting can be important, including to encourage individuals to stick to a routine and to motivate performers. One common way of doing this is through the SMART principle. This principle is useful to ensure that goals are appropriate and effective:-

Specific – the goal should be relevant to your sport. If goals are clear and focussed they are more likely to be achieved. For example, a marathon runner would focus on improving the aerobic system, whereas a sprinter would focus on improvements in the anaerobic system. An example of a specific goal would be an athlete wanting to improve their leg strength by 5kg in 8 weeks.

Measurable – you need to be able to assess/measure the goal to know how well a performer has done, this can be done through testing. This is important for monitoring and makes you accountable. An example of this is if a performer was to improve their strength, they would use the one-rep max test to measure their strength before and after to see if they have improved.

Achievable – goals need to be realistic and within the performer's capabilities. Motivation will improve if goals are challenging enough, but at the same time, not too difficult. For example, a football team that finished 12th in the league last season may set a goal to finish in the top 10 for the next season. It would likely be unachievable to set a goal of winning the league.

Recorded – progress needs to be recorded frequently in order to track progress and adapt training programmes. This can be good for short-term goals to be achieved, thus improving motivation. For example, a weight lifter recording their sets, reps and weight lifted each training session to ensure there is progress.

Timed – there should be a time limit set to achieve the goal. Short-term goals are more achievable and lead onto long term goals. For example, setting a long term goal to score 30 goals at the end of the season but having a short term goal of scoring in the next game.



You should understand and be able to apply examples of the use of goal setting for the following reasons:

- for exercise and training adherence
- to motivate performers
- to improve and optimise performance.

For exercise and training adherence

Goal setting has been shown as an effective method in ensuring that those people who wish to exercise or train to improve fitness, health and performance are more likely to stick to their exercise/training programmes. Too many goals can be irrelevant to the performer or can result in them giving up too quickly. Goals that are simply out of reach, too difficult or too demanding can result in a high dropout rate.

To motivate performers

Goal setting can **inspire** and **drive** performers to achieve their best and can be useful in motivating them to follow exercise and training programmes. Provides **positive reinforcement** and can **build confidence** if they are meeting their short term goals regularly. But in order to motivate goals must follow the SMART principle and also be exciting and realistic. All performers, whether they are elite athletes striving for world records or are simply exercising to keep fit, are often motivated by short-term goals, leading to long-term goals. If goals or targets are reached each step of the way then performers are more likely to continue and to try their best to reach the next step towards further goals.

To improve and optimise performance

Goals that follow the SMART principle often lead to **higher levels of performance**, but goals should be incrementally more difficult over a period of time. Improvements can be seen only if each short-term goal is **realistic** but **challenging**. Goals set might lead to a **decline in performance if they are set beyond the reach of the performer** and this can also lead to **demotivation** and may result in the performer giving up altogether. For goals to result in exercise adherence, motivated performers and improved performance, they need to be appropriate to performer's needs. By setting appropriate goals you can:

- take up an activity or activities
- achieve more when you participate in physical activities
- improve your performance
- improve the quality and quantity of your training
- increase your motivation to succeed
- increase your pride and satisfaction after goal completion.

If goals are SMART then you can also **avoid injury**. For example if a goal is **realistic**, you are less likely to be injured as the goal you are trying to achieve is **within your capabilities**, for example a weight lifter will not set a goal at improving their personal best by 100kg as this is unrealistic and can cause injury. Additionally, a goal must be set in an **achievable time scale**, this will ensure that performers will not over train which can lead to injury. Finally, if the performer is **specific**, then the movement patterns they will complete are relevant to their sport. Thus, they are less likely to pick up an injury through incorrect movement patterns.

Effective Goal Setting

For goal setting to be effective there must be short-term goals leading to longer-term goals. For example, to win the league cup, the netball team may have to concentrate on winning more games away from home. For this there may be short-term goals of improving the team's defending strategies.

For those who simply wish to exercise more, the first step is to walk to school rather than any long-distance running. Motivation can be increased by splitting long-term goals into medium-term and short-term goals, which are more specific and manageable over a short period of time.

There are 2 types of goals that are recognised and set in sport: performance and outcome goals.

Performance goals – these are directed to the performance or technique of the activity. For example, to throw the ball higher to give more time to accurately serve in tennis

Outcome goals – these goals are directed to the end result. For example the tennis serve lands in or out.

4.3. Mental Preparation

Mental preparation techniques are widely used by those who participate in physical activities as well as sportsmen and women to cope with high levels of cognitive and somatic anxiety (cognitive and somatic anxiety management techniques).

- Practical example: Controlling the heart rate by relaxation methods before a hockey match can make the player feel more positive about performing (somatic). Positive thinking can, in turn, control our heart rate (cognitive).

Anxiety - The feeling of fear that we experience that something might go wrong either in the present or in the future.

Cognitive anxiety management techniques - Those ways of coping that affect the mind and therefore can control anxiety.

Somatic anxiety management techniques - Those ways of coping that affect the body directly such as relaxation. Cognitive can affect somatic and vice versa.

The following stress management techniques can be used as coping strategies:-

-Imagery

-Mental Rehearsal

-Selective Attention

-Positive Thinking

Imagery

Imagery can improve concentration. The creation of pictures in a performer's mind is imagery. Many people try to get the feeling of movement, relax or get a feeling of pleasure/happiness. For example, a rugby player imagines the ball being kicked over the rugby posts.



Mental Rehearsal

Going through the activity in your mind to form a mental image of the skill about to be performed. This can help to learn a new skill, improve existing skills and control anxiety. This can involve internal and external imagery:-

- Internal imagery – imagining yourself doing the activity and stimulate feelings of the activity. For example, a gymnast imagining themselves performing a routine and feeling the movements.
- External imagery – picturing yourself doing the activity from outside the body. For example, a racing driver imagining driving the course from outside the car.



Benefits of Imagery and Mental Rehearsal:-

- Speeds up your reactions
- Enables you to focus
- Keeps you calm
- Increases confidence
- Can prepare you to react in different ways depending on the circumstances
- Encourages you to be motivated and positive in your outlook

Selective Attention

When learning skills it is difficult for the learner to discriminate between information that is relevant and information that irrelevant. It is therefore important that when learning a skill that needs more concentration, the performer concentrates on what is relevant and ignores irrelevant distractions.



For example: A goalkeeper in football may receive information that is not required to save the shot. There may be crowd noise and movement; movement of other players and the shouting of opponents to try to distract. The more experienced the goalkeeper, the more likely it is that they will be able to select out and filter this information.

Positive thinking

This technique involves the participant being positive about performances by talking to themselves positively or thinking about successful past performances. This technique has been shown to help with self-confidence. For example, a football player about to take a penalty thinks to herself, 'you can do it, you are going to score, remember that time you put it in the top right corner to win the last game?'



Unfortunately, it is very common for sports performers to 'talk themselves out of winning', for instance a penalty taker saying to herself, 'I will probably miss this.' This is known as negative self-talk or negative thinking and should be minimised if people are to participate in physical activities or for sports performance to be good.

There are five categories of negative thoughts:-

1. Worry about performance, e.g. 'I think she is better than me.'
2. Inability to make decisions, e.g. 'Shall I pass, shall I hold, shall I shoot?'
3. Preoccupation with physical feelings, e.g. 'I feel too tired, I'm going to give up and rest.'
4. Thinking about what will happen if they lose, e.g. 'What will my coach say when I lose this point?'
5. Thoughts of not having the ability to do well, e.g. 'I am not good enough; he is better than me.'

4.4. Types of Guidance and Feedback

Guidance

When a teacher or coach teaches a new skill to a student or seeks to develop the skills of an experienced performer, they need to decide the best way to transmit the knowledge necessary for effective performance. There are four main types of guidance:

- **Visual**
- **Verbal**
- **Manual**
- **Mechanical**

| Guidance | What is it? | Advantages | Disadvantages |
|-------------------|---|---|--|
| Visual | Uses a demonstration, video, chart or illustration to build a picture of what is required to correctly perform the skill. For example, a demonstration of a penalty flick in hockey | -Good for beginners as it is easy to visualise -Easy to remember -Technical model to copy -Quick and effective | -If demonstration is incorrect, wrong movement patterns are learned -Difficult to get a feel or kinaesthetic sense of the skill -May be too complicated or have too much information |
| Verbal | Describes or explains how to perform a skill. It is best used with visual guidance to reinforce mental picture. For example, a teacher telling a pupil to watch the ball when receiving a pass in rugby | -Immediate and quick -Good for fine tuning skills -Develop a better understanding when used with visual guidance | -Wrong or too much information can be given -Can lead to misunderstanding -Difficult to create mental picture of skill |
| Manual | Physical support given by the coach or instructor to guide a performer. For example, a coach supporting a pupil during a somersault | -Reduces fear in dangerous situation -Increases safety -Raises confidence -Gives some kinaesthetic feel to the performer | -Can give an unrealistic feel of the skill -Performer can become over-reliant on support -Can be dangerous if support is incorrect or equipment malfunctions |
| Mechanical | Uses equipment to guide and support a performer. For example, a novice swimmer using a float or a trampolinist using a twisting belt | | |

Feedback

Feedback can be given during the performance of a motor skill or after its completion. Feedback is most effective if it is given close to the performance so the performance is fresh in the participant's mind. Feedback motivates, changes performance or actually reinforces learning. The more precise the feedback, the more beneficial it is.

There are several forms of feedback listed in the table below.

| Feedback | What is it? | Example | How does it improve performance? |
|---------------------------------|--|--|--|
| Internal/Intrinsic | A type of continuous (during performance) feedback that comes from within the performer, for example the 'feel' of the skill | A gymnast performing a handstand feels that their legs are straight | If the outcome is successful the performer will know how the action should feel next time they complete it |
| External/Extrinsic | Feedback that comes from external sources, such as sound or vision | A hockey player sees the ball go into the net | It can build a performer's confidence and increase motivation |
| Knowledge of Results | A type of terminal (after the action) feedback, such as the end result of an action | The goalkeeper in football saves the penalty | Important for learning skills as performers need to know the outcome of their action to reinforce/change performance |
| Knowledge of Performance | Feedback about how well the movement/technique is executed | A coach informs a sprinter that their arms are in the correct position at 90 degrees | If the performer completes an action well, they will know they need to repeat the same process next time |
| Positive | Reinforces skill learning and gives information about successful outcome. It is using praise to motivate and give confidence to a performer. | A netball coach saying well done when a pass is performed correctly | If a performer receives positive feedback, they are more likely to repeat that action/movement |
| Negative | Information about an unsuccessful outcome, which can be used to build strategies that are more successful and remove techniques which are less successful. | A coach telling a badminton player that their grip is incorrect | If a performer receives negative feedback, they are likely to change their action/movement |