

The Classification of Skills

What is skill?

Skill is a technique, which has to be mastered in order to succeed the main objective. For example jumping 11m in triple jump. In 1963 Barbara Knapp defined skill as:

“Skill is the learned ability to bring out the pre-determined results with maximum certainty, often with the minimum outlay of time, energy or both”

Guthrie in 1952 defined skill as:

“The ability to bring about some end result with maximum certainty and minimum outlay of energy or of time and energy. A novice could convincingly execute a flawless motor skill, yet not able to perform it consistently, or with as little effort relative to an expert performer.”

(www.exrx.net)

These definitions can be simplified as:

- Practise is needed in order to master the skill.
- The ability to use little effort and produce great skill.
- The ability to perform a skill in as little time as possible, yet produce a successful skill.
- Elite athletes will perform skills much more consistently and better.

Every skill falls into either of the following three skills:

Cognitive skills: - related to decision making and thinking, usually open skills in a game situation such as kicking a football.

Motor skills: - Skills that involve thinking about the next action which is to be made. For example throwing a ball in netball.

Perceptual skills: - These skills involve critical thinking and judge of movement. For example judging the speed a tennis ball has been hit at them.

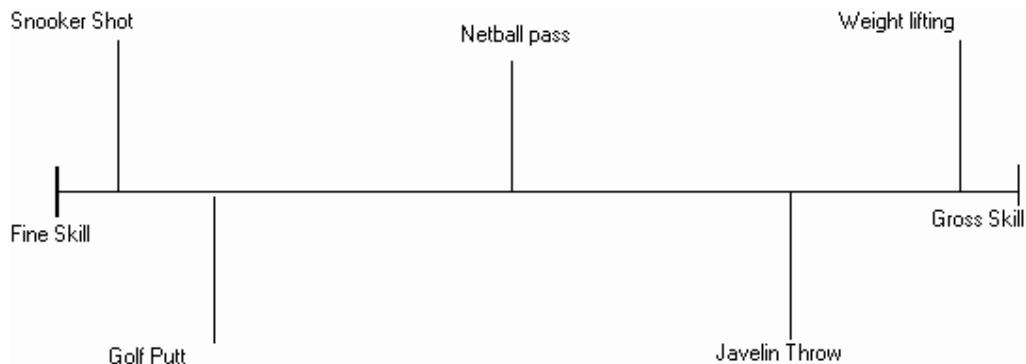
Poulton's continuums

Every sport consists of a variety of skills. Skill isn't necessarily just performed discreetly, as they can be continuous or in series. To define skills we can place them along continuums. Continuums are used to grade skills in more detail. They are also extremely useful from a coaching point of view as it allows the athlete to be familiar with different skills and use them in the correct environment or situation. For example a sprinter may have to run along a wet surface and if they are only used to dry surfaces they may not perform as well as they could.

Gross and fine skills

Gross skills, such as jumping for a header in football, involve large muscular movement whereas fine skills, like putting a golf ball consist of intricate muscular movement.

	Team	Individual	Racket
Gross	Kicking a football	Jumping in Long Jun	Tennis serve
Fine	Ten Pin Bowling	Putting golf ball	Badminton forehand flic



Fine skills are usually associated with:

- speed
- accuracy
- efficiency

Gross skills are associated with:

- strength
- endurance
- power

Open and closed skills

Open skills tend to be carried out in sports that need a lot of thinking and decision-making. It is a skill, which usually occurs within an unpredictable environment. However closed skills are not affected by the environment and have predictable outcomes as they are said to be predominantly habitual.

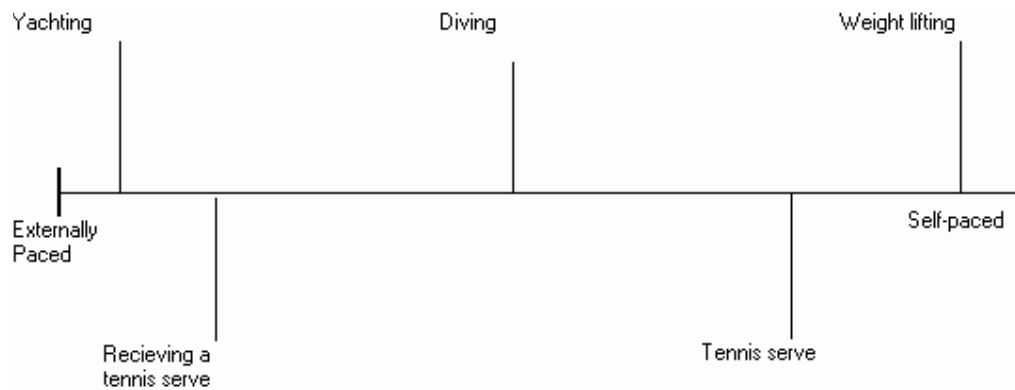
	Team	Individual	Racket
Open	Hockey shot	Dart throw	Squash drive
Closed	Hockey penalty	Discus	Badminton serve



Externally And Self-Paced

When a skill is self paced it is the ability to control the rate of action an athlete may wish to perform at. However when a skill is externally paced the athlete is reacting to either their surroundings or environment, the performer isn't in control of the pace. Externally paced skills can be affected by several factors such as the weather or wind conditions. The opposition is also a factor in that they may be in control of the play and therefore they are self-paced.

	Team	Individual	Racket
Externally paced	Yachting	Surfing	Receiving a tennis serve
Self Paced	Football passing	Triple jump	Badminton smash

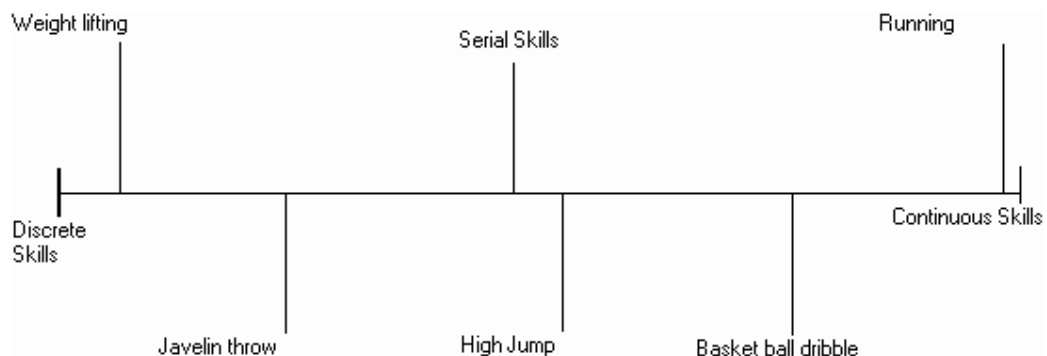


As you can see yachting is more externally paced than weight lifting because it has stronger variables such as the weather and wind, whereas the athlete controls weightlifting and doesn't involve any environmental factors.

Discrete, Serial and Continuous Skills

Some skills have a clear beginning and end. We call these discrete skills, as they are a single skill. If a set pattern of discrete skills are placed together one after another a serial skill is created. Further more are continuous skills which cannot be split into subroutines or easily distinguished into stages.

	Team	Individual	Racket
Discrete	Netball shot	Rifle shooting	Tennis net shot
Serial	Basketball dribble and pass	Triple Jump	Badminton mid court rally
Continuous	Dribbling in hockey	Cross Country running	Running to receive tennis sh

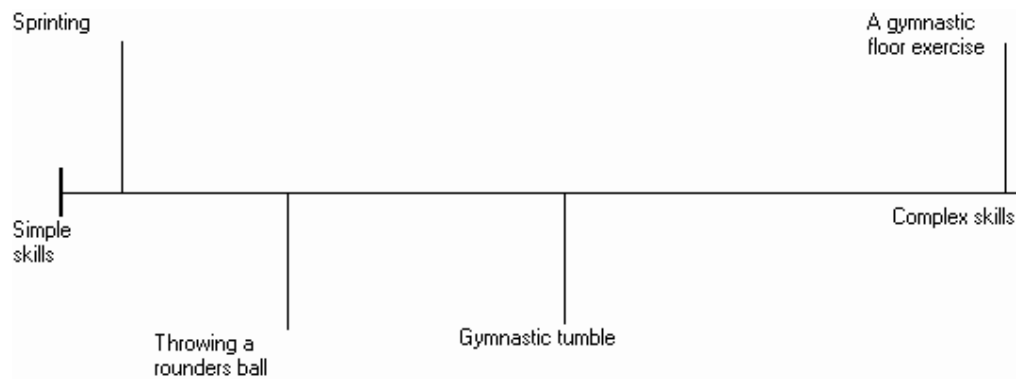


As illustrated above on the continuum high jump is more serial than discrete or continuous. The reason being it consists of many skills such as running, jumping, stretching etc.

Simple and Complex skills

If a skill can be easily performed with very few subroutines and minimum concentration it is known as a 'simple' skill. Logically, if a skill is harder to perform, needs a lot of time and attention to perfect with many interlinked subroutines it is called a 'complex' skill.

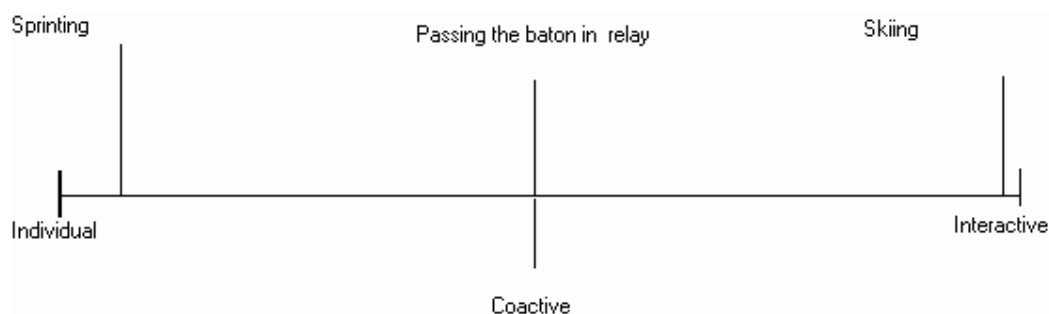
	Team	Individual	Racket
Simple	Throwing in Netball	Gymnastic jump	Hitting tennis ba
Complex	Hockey-dribbling around a play	Gymnastic floor exercis	Tennis backspin



Individual, Coactive and Interactive skills

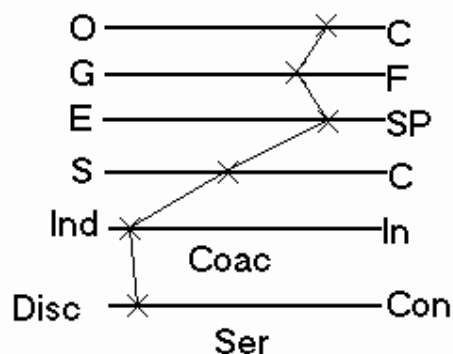
Interactive skills are those that are performed when the environment or other athletes are involved. Whereas coactive skills are carried out at the same time as other performers either individually or as a team. Individual skills take place when a single athlete is performing alone.

	Team	Individual	Racket
Interactive	Sailing	Fell running	Tennis-type of surface/indoor/outdoor
Individual	Taking a throw in at football	Javelin throw	Serve in table tennis
Coactive	Rowing	Passing relay baton	Table tennis doubles

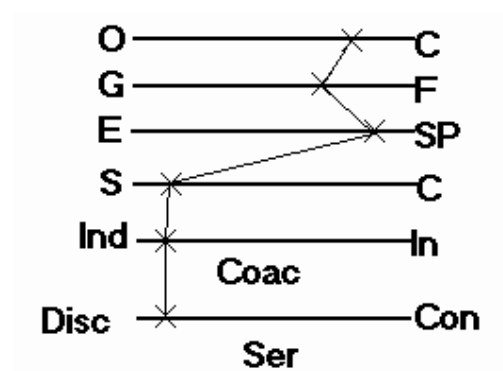


As previously mentioned the advantage of using Poulton's continuums is to define skills in great detail which in turn allows teaching different types of skills within their correct environment or situation they will occur in. This allows the athlete to become as prepared as they can be for their event although they do have their disadvantages. For example they can vary due to the type of environment, such as the type of surface, weather or even how experienced the athlete is. It can be argued that as a performer becomes better at a skill they will begin to, unknowingly begin to inter-link one skill into another. As most skills are interlinked they can be illustrated as a profile, shown below;

A Skill profile of a Netball standing shot:



Each line represents the previous continuums mentioned earlier. However, a major criticism regarding profiles is that it will vary from athlete to athlete depending on their ability. For example a professional netball player will find many of the skills far easier with experience and practise. A typical skill profile for an elite netball player could be shown as below:



As you can see the more experienced athlete would find the skill far easier to do due to the sheer practise they have had. Another criticism is that the more advanced athletes will be able to control their pace within a game situation, much better than an amateur will.

Bibliography

Page Number	Title	Publisher	Date Published	Author
Pg.-	Applying psychology	Hodder and Stoughton	1998	Barbara Woods
Pg. 102	Physical Advance in sports		2000	F.Galligan

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