Discuss the differences between skill, ability and technique and explain how you would structure practices to enhance these components of a performance

For this crousework I have to idenifty the differces between skill, ability and technique to address this problem I will define term, give examples form sporting fields and will use continuums to display areas of skill.

To help me answer this question 3 sports were chosen basketball, badminton and high jump.

Skill: - is an athlete's ability to choose and perform the right techniques at the right time, successfully, regularly and with a minimum of effort. Athletes use their skill to achieve athletic objectives e.g. jumping a 1.50meter in high jump. Skill is acquired and therefore has to be learned. (Google.com internet search al et 2003)

The types of skill listed below with examples of break down skill into 4 components, this along with the use of continuums further are unstinting of skill in various situations.

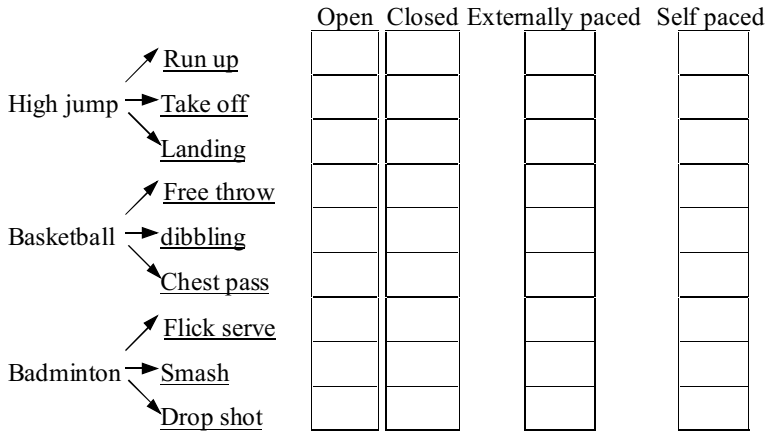
	Individual	Racket	Team
Cognitive~ *skill which involves mental powers* *	A darts player counting score	Tennis strength of a shot	Footballer stopping play if a players hurt
Perceptual~ *interpreting and making sense of stimulus* *	110 meter hurdler judging how high to lift the leg	Squash player predicting a shot	Judging the distance of a pass
Motor~ *smoothly executing physical movements**	Jogging in a warm-up	Tennis player serving to opponents weak side	Kicking a football
Perceptual Motor~ *Interpreting stimulus and executing physical movements to suit**	Not running fast at the start of a long race	Table tennis trying to keep the other player guessing to what's coming next.	Wasting time if you are winning

* Sport and PE Wesson al et 2000

A continuum is a line between 2 extremes, examples are placed on the line

Open ——————————————————— Closed

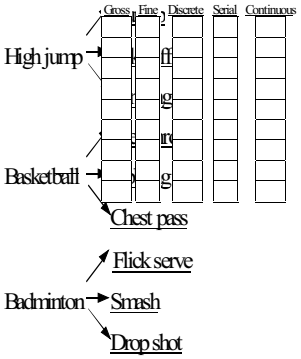
Since many of the continuums work with each other I with look at open and closed skill along with self paced and externally paced, I will look at this continuum 1st.
An open skill is always changing because of the environment in which is performed is changing, hence we use are knowledge, experience and perceptual skill to predict the outcome E.g. passing a ball.
A closed skill takes part in a stable and predictable environment where the performer follows a set sequence of movements E.g. free throw in basketball.

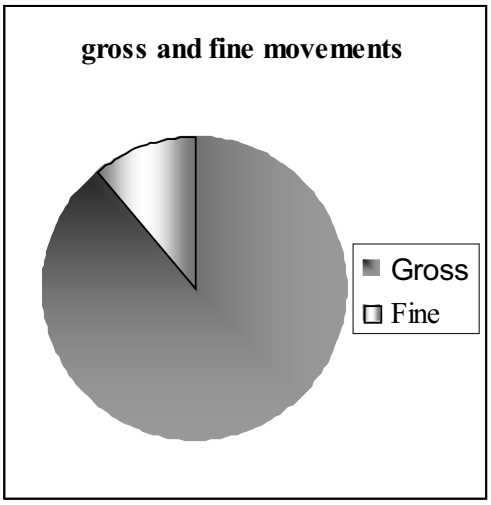


The results from the table above show clearly open skills are directly proportion to externally paced skills. These skills involve reaction, and are usually open skills. I.e. in ball games the performer must time his actions with the actions of other players and the ball e.g. pass the ball in basketball.
Closed skills and self-paced skills go together this is because in self-paced skills the performer controls the rate at which the skill is executed e.g. flick serve in badminton.

Analyse of this 4 continuums has lead me to the conclusion that team and racket sports are mainly use open and externally pace skills and at only the certain time will they become self paced and closed.

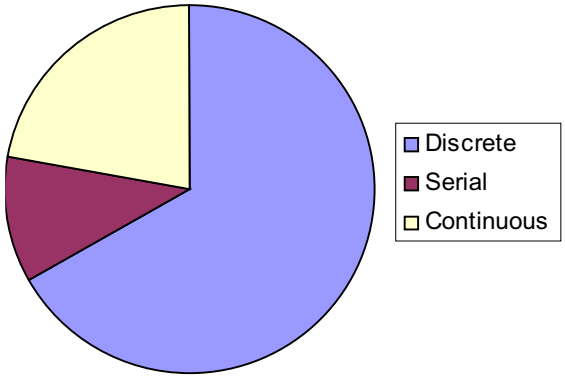
The next continuums I will look at are will look at are gross and fine and the discrete, serial and continuous continuums





From the table I can see than the vast majority of skill chosen requires gross muscle movements, this movements are basic patterns such as walking, running and jumping e.g. high jump. The flick serve is the only fine skill these involves small complicated movements and usually involves a high level of hand to eye coordination e.g. is the flick serve in badminton . This leads me to conclude that most sports will include a lot more gross movements than fine skilled movement.

discrete, serial and continous skills



Discrete skills are brief and have a clear beginning and end. They are single, specific skills, which make up the actions involved in a variety of sports such as hitting and throwing. E.g. a flick in badminton. Serial Skills are a group of discrete skills strung together to make a new and complex movement. E.g. the take off in a high jump.

Continuous skills have no obvious beginning or end. These skills could be stopped at any moment during the performance of the skill. E.g. dibbling in basketball.

Ability is the building blocks of sport; it is seen as being innate. That is, you're born with it. (Advanced PE for Edexcel - F Galligan et al 2000) To be successful sprinter you inhered certain features i.e. somatotype and some abilities e.g. explosive strength, reaction time and rate of control. Some people have difficulty picking up sporting skills but can play an instrument to a very high standard and some people are the opposite but a few can do both very well. The musician in this example is displaying very strong traits of Perceptual ability and only a little gross motor ability. If this person practiced sport very often they would pick up the skills and Technique but still lack ability. Abilities are long lasting e.g. in hurling lifting a ball with your strong side, it natural to do it and it's more foolproof. Where as a skill, e.g. striking a ball on the weak side, will not get better on less constantly practised.

Perceptual motor abilities is the ability to sense and interpret sensory inputs

- **Reaction time**~ ability to perform to stimulus when it a appears
- **Manual dexterity**~ ability to make skilful, well directed arm hand movements
- **Agility**~ a combination of speed and flexibly
- **Aiming**~ ability to aim precisely at a small object in space
- **Limb coordination**~ ability to coordinate the movements of a number of limbs simultaneously.

Gross motor abilities to move in a coordinated muscle movement

- **Extend flexibility**~ ability to flex the trunk muscles
- **Dynamic flexibility**~ ability to make repeated and rapid truck flexing movements
- **Static strength**~ maximum force exerted against an external object
- **Dynamic strength**~ muscular endurance in exerting force
- **Explosive strength**~ ability to mobilise energy effectively into bursts

	Individual	Racket	Team
Perceptual motor	Being fast out of the blocks	Putting lots of spin on a tennis ball	In hurling striking a ball while moving
Gross motor	A burst of energy to the legs in high jump	Playing to a high tempo in a long match/rally	Being the anchor in a tug-of-war contest

Technique is the correct way of doing some thing e.g. walking with the correct posture. There are 3 phases preparation, execution and result, if all 3 are done correctly and you have ability the desired result with take place examples below.

	Preparation	Execution	Result
High Jump	1. Counting steps for run-up 2. Imagine the run-up 3. Correct run-up "J" shape	4. Drive knee up 5. Arch back (correct posture) 6. Lift arms	7. Rotate body to land on shoulder 8. Hand and feet away from the mats 9. Pointing toward the way you came
Basketball Free throw	1. Feet shoulder wide apart 2. Knees bent 3. Strong hand under ball and weak hand the side	4. Knees bent, push up 5. Bend arm and push forward 6. Hand should be facing target	7. Wrists cocked 8. Finish on tip toes
Badminton Smash	1. Sideways facing net 2. Racquet back 3. Weight on back leg	4. Use other arm for guidance 5. Transfer weight 6. Hit shuttle just in front of face	7. Being racquet across body 8. Weight on the other foot

There are varies types of practices, which can improve skill, these are:

Variable and massed practices well work together. Variable is ideal for working on set pieces in a controlled environment E.g. the block in basketball, thus improving technique and skill . Distributed is learning with reasonably long intervals between separate occasions of learning E.g. weight training.

Fixed and distributed practices also work well together. Fixed a specific is practiced repeatedly in a closed environment E.g. practicing on a driving range. Massed is learning no intervals or short intervals between successive bouts of learning e.g. circuit training.