

## Motor Programmes

Motor programmes are a set of movements stored in the memory. When they are required they are called upon from the memory and transmitted to the relevant muscles in order for them to contract and carry out the movement. After use the motor programme is restored. Elite performers are able to call on these very quickly reducing reaction time. Although the motor programmes of beginners are likely to be incorrect and very slow. Every motor programme has a sub routine for example in cricket where you need to have the right stance, grip, feet placement, backswing etc.

Open loop control is where one message is sent to the brain to and the muscles respond to this message. This is normally in a fast movement and feedback is at the end. However a closed loop control is where information is sent to the brain throughout the procedure and muscles receive information to change. This is used in slow movements for example a gymnast on a balance and there is feedback throughout the procedure.

### Anticipation

There are two types of anticipation:

- Spacial which is guessing a movement that will be needed
- Temporal which is guessing what is about to happen.

The psychological refractory period is the delay in time of the first stimulus and the final stimulus. The delay is caused by the increased processing time required for a second stimulus. Once a message has been sent to the brain it has to be carried out.

Skill is something that you have learned over a period of time. For example a tennis forehand. It is recommended that you need 10,000 hours of training in order to become professional. A skill is normally aesthetically pleasing, energy efficient and a learned movement.

However ability is an inherited trait that supports cognitive or motor activities such as balance and speed. Its involves more general aspects.

