

Fitness testing essay



There are many ways to test your V02 max. According to Serganian, P. (1993: 72). " The best method for testing your V02 max is the twenty metre shuttle run. This is because you are using your aerobic energy system continually." This has also been supported by Lager LA, Lambert J. Who said " It is concluded that the 20-m shuttle run test is valid and reliable test for the prediction of the VO2 max of male and female adults, individually or in groups, on most gymnasium surfaces."

The component of fitness that is being used in this test is cardiovascular endurance. According to Beashel, P et al, " Cardiovascular endurance is the ability of our heart and lung systems to cope with activity over a relatively long period of time." This will be happening in the twenty metre shuttle run. This is because you are running over a long period of time, so you need to rely and your heart and lungs to deliver oxygen to your working muscles. This will help you to last longer, as ATP will be produced.

According to McArdle, W, D et al (2006: 472) " When training for specific aerobic activities such as cycling, swimming, rowing, or running, the overload must engage the appropriate muscles required by the activity and provide exercise at a level sufficient to stress the cardiovascular system." This makes it specific to the test because you are pumping oxygen around the body from your heart and seeing how your muscles can use it per minute. It is also specific because the equipment is available to use at Burnley Football Club.

According to the Singapore Sports Medicine Centre your " V02 max will occur when you reach your maximum heart rate. This is because you can't take on

anymore workload.” The Singapore Sports Medicine Centre believe this test is valid because it is only maximum when you have been pushed point where you cannot take on any more workload. This occurred when they tested a middle aged woman from Singapore. This test is also reliable because the middle aged woman hit the average for a person her age in Singapore. (See appendix 2).

This person would then be put on a cycling programme to help improve his V02 max. According to Morton, D (2000: 62). You should choose an exercise that is rhythmic and uses large muscles. You should work to 60% of your maximum heart rate, unless you already very fit, then work to 75% of your maximum heart rate. The exercise should then last between fifteen-twenty minutes at least three times a week. He would be given cycling as it is something rhythmic as you have to cycle with a rhythm, and you are using large muscles in your legs. You can also make it last for fifteen-twenty minutes per day. He would work to 75% of his maximum heart rate because this person has already stated that he is very fit, so he should be able to cope with this much training.

This is valid towards v02 max because you are using your aerobic energy system which uses oxygen, and you are trying to find out how much oxygen you can take in and use per minute. According to Hermansen et al (1970). “ In as much as normally there are greater circulatory and ventilatory responses to bicycle exercise in terms of heart rate and pulmonary ventilation at submaximal exercise and in terms of blood pressure at maximal exertion.” (See appendix 3).

This test is reliable as you are measuring securely and stably what is intended to be measured. Which is how much oxygen can the athlete take in and use per minute according to body size. According to Sjogaard, G (1985: 46). "Track cyclists have remarkably high V02 max values." This proves that it is reliable because cyclists are producing high values of V02 max, which proves that the test works.

Cycling is a very practical sport. This is because you are outside and it is classed as a field test rather than a laboratory based test where you are attached to equipment to get results. You can also continue to make it practical as you can set a distance of how far to get in a certain amount of time.

You are using your cardiovascular component of fitness in cycling this is because, according to Griffin, J (2006: 68). "Cardiovascular endurance is the ability to perform physical work involving large muscle groups continuously for an extended period." And in cycling you are using large muscle groups in your legs, continually for a long period of time.

This test is specific because you are trying to find out the V02 max of a person, and in cycling you are using your aerobic energy system, if you cycle over a long time. This means that you will be producing oxygen. The equipment is also available to use at Burnley Football Club.

Conclusion

This assignment has looked at different physiological fitness tests. It has looked at the validity of the fitness tests, the reliability of the fitness tests,

the practicality of the fitness tests, the component of fitness being used in the fitness tests. This was then applied to a client who is a sports person. To help to understand what the client wanted to improve, he filled out a questionnaire. This questionnaire had questions on it that helped to understand how much exercise he participated in, in a week.