UNIVERSITI TEKNOLOGI MARA

DETERMINANTS OF PHYSICAL ATTRIBUTES AS INDICATOR FOR TALENT IDENTIFICATION IN LONG JUMP EVENT AMONG STUDENTS WITH VISUAL DISABILITIES

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ABSTRACT

Traditionally, the talent identification process was used to select a child for a sporting program, but scientifically, the talent identification process is designed to select a child's sport. Identifying talent in sport requires one to have a scientific approach as talent can be challenging, biased, and difficult to predict. Studies in talent identification in the long jump for able-bodied sport are available, but less for people who have disabilities, especially among those with visual disabilities. Are the instruments used to identify the potential students with visual disabilities similar as they are used in able-bodied athletes? The purpose of this study is to identify the reliability and construct validity of test instruments on strength, agility, power, and speed in long jump performance among students with visual disabilities. It is also to determine the relation of the fitness attributes towards their performance in long jump. Using a purposive sampling technique, 90 (n=90) male students between 14-17 years old, who are classified as Class B2 based on Paralympic classification for blind sports participated in the study. They are from the Special School for the Blind, Setapak, Kuala Lumpur, and Malaysia Association for the Blind, Brickfields, Kuala Lumpur. The study applies the test-retest method where they have been tested with the physical attributes; strength (basketball throw test), agility (10-m agility test), power (standing long jump test), and speed (40-m sprint test). 2 weeks of training have been conducted in between the test. The participants then underwent another test with the same fitness attributes. The findings revealed that the Pearson Correlation was use to identify the reliability scores shows a significant different between test and retest on basketball throw test ($r = .841$, $r = .84$, $n = 90$, $p < 0.001$), 10 m agility test ($r = .908$, $r = .90$, $n= 90$, $p < 0.001$), standing long jump test ($r = .924$, $r = .92$, $n=90$, $p < 0.001$) and 40-m sprint test ($r = .988$, $r=.98$, $n=90$, $p < 0.001$). The results of the construct validity using Dependent T-test show improvement between test and retest for all the tests with basketball throw test (t value $(89) = 3.312$, $p = 0.01$), 10 m agility test (t value $(89) = 8.461$, $p = 0.00$), standing long jump test (t value $(89) = -5.650$, $p = 0.00$) and 40 m sprint test (t value $(89) = 4.856$, $p = 0.00$). Multiple regression (entry method) has been applied to find the relation between the four attributes and the performance in the long jump, and only power shows the relation towards performance in the long jump event ($p <.024$ ($r=-.16$)). It shows that, in recruiting talent in long jump among students who have visual disabilities, standing long jump test can be apply as the main indicator in seeking new talent. In conclusion, the physical attributes for talent identification among students with visual disabilities need to focus on exercises that develop their ability in power. So that they can perform better in the long jump. It is recommended to engaging them in physical activity programs and training them frequently on power and develop the TI tests according to the class-specific ability.

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

International success in sports can be considered as many as wasting time, effort, financial and also resources. But, this is a worth when an athlete standing on the winning prodium, makes himself and his country proud of him/her. It takes about eight to 10 years for an athlete to prepare himself to compete at the Paralympic games or world championships. The chapter will provide an introduction of the topic that has been chosen based on the interest of the researcher, and a background was written. The background will be followed by problem statement, research objectives and research questions that has been designed. An overview of the entire chapter will also present.

1.2 Research Background

Identifying talent in sport requires one to have a scientific approach as talent is something that can be challenging, bias, and it is difficult to predict. This is because talent identification (TI) is the procedure of identifying participants who have the potential to be success in a particular sport, and talent development provide the most significant learning environment to make this potential a reality, play a crucial role in the pursuit of excellence (Russell 1989; Williams & Reilly 2000). Talent identification is a dynamic process where it is measured by the rate of improvement in the training situation (Khanna, 2010). Traditionally, the TI process was used to select a child for a sport, but scientifically, the TI process is designed to select a sport for a child. This means, when once TI was used to identify those who can potentially become athletes, these individuals will then provide with the opportunity to join a training environment. Thus, TI predicts the future capacity of performance of an individual (Abbott & Collins, 2002) and training are used to bring success to the governing body.