DEVELOPMENT OF SCIENTIFIC-BASED PARA SPORTS ATHLETICS WHEELCHAIR RACING NUMBER TALENT SCOUTING INSTRUMENTS

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ABSTRACT

The disability scouting system is currently still in the process of general development, and for the wheelchair racing class, no instruments have yet been developed. The current athlete recruitment process is still going through a selection process both at the regional and national levels. This research aims to develop a talent-scouting instrument for disabled sports in the wheelchair racing class for athletics sprint events based on scientific selection.
The research method used in this research is expert validation involving 7 validators from scientific disciplines that support this research. The instruments assessed include validating calculations of the suitability of physical condition elements in wheelchair racing and the suitability of the selection of measuring instruments in physical condition analysis in wheelchair racing. Elements of the physical condition include biometric elements and biomotor elements. The data analysis technique in this research uses Aiken index analysis, namely to determine the validity of the content of the instruments that have been determined based on the needs for analyzing the physical conditions of wheelchair racing.
The results show that the suitability of physical condition factors with measuring instruments includes biometric elements: (1) body weight using a body scale has a validity of 0.90 (valid), (2) sitting height using an anthropometric chair is 0.90 (valid), (3) Length of arm span when using measuring tape 0.90 (valid), (4) arm circumference using a measuring tape 0.95 (valid), (5) shoulder width using a measuring tape 0.90 (valid). Then the motor elements: (1) cardiovascular endurance using a static wheelchair 0.86 (valid), (2) arm muscle strength sitting row 0.86 (valid), (3) back muscle strength back up with a load 0.86 (valid), (4) Abdominal muscle strength with sit-ups using weights 0.76 (valid), (5) grip strength using a hand grip dynamometer 0.86 (valid), (6) speed using a static wheelchair 0.86 (valid), (7) flexibility of the hand with the hand hook behind the back 0.86 (valid) and (8) arm power with basketball throwing 0.86 (valid). Based on the results of expert validation, it can be concluded that the suitability of biometric and biomotor elements for the needs of wheelchair racing can be said to be valid.

Kata Kunci: *Wheelchair racing, talent scouting, instrument validity*