

INTEGRATED EXERCISE AND MEASUREMENT DEVELOPMENT DIGITAL-BASED TECHNOLOGY APPARATUS

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ABSTRACT

Technology makes it easy for humanity to integrate various jobs. One area that can take advantage of technological facilities is sports, especially training. With technology, machines for physical exercise can be combined at once with physical measurement instruments as a result of exercise. This development research aims to combine physical exercise equipment with digital-based physical condition test instruments so that it is called *integrated exercise and measurement technology apparatus* based on digital.

This research and development use the Borg & Gall model (1983: 775) with the following steps 1) *Research and Information Collecting*, 2) *Planning*, 3) *Developing preliminary form of product*, 4) *Final*. Data collection uses valid and reliable techniques and instruments. Data is analyzed using quantitative and qualitative analysis techniques tailored to the needs of digital-based tool development. The results of this study are in the form of a prototype multi-functional *Integrated Exercise And Measurement Technology Apparatus Based digitally*.

The results of the study are expected to produce digital-based integrated physical conditioning training equipment and measurement of physical conditions. The results of the study are expected to have an impact on the development of the sports industry. External targets to be achieved from this research are indexed journal articles Scopus educational horizons, ISBN guidebooks.

Kata Kunci: *Development, integrated exercise and measurement technology apparatus, Physical Condition*