VERANDERINGE TEN OPSIGTE VAN ANTROPOMETRIESE EN MOTORIESE KOMPONENTE VANAF DIE 2000- TOT 2001-SEISOEN BY O/19-, O/21- EN SENIOR ELITE-KLUBRUGBYSPELERS

Abrie HANEKOM; Hans DE RIDDER, Eugene HARE & Dawie D.J. MALAN
Skool vir Biokinetika, Rekreasie en Sportwetenskap, Noordwes-Universiteit, Potchefstroom, Republiek van Suid-Afrika

ABSTRACT

The purpose of this study was to determine which anthropometric and motor differences might occur over a period of two years in rugby players following a scientific conditioning program. A group of 180 players were selected from the Rugby Institute of the PU for CHE and consisted of U/19, U/21 and senior level players. Fat percentage was the only anthropometric component to be evaluated. The motor components that were tested included speed and agility. One-way analysis of variance (ANOVA) was computed to determine the relationship between the six measurements from the first measurement in 2000 to the last measurement in 2001. Together with the Tukey post hoc HSD test, the differences between variables and the significance were determined. The level of significance was set at $p<0.05$. The Omega squared ($\omega^2$) test was used to determine practical significance, or how much of the total variance is accounted for by the conditioning program. Data analysis was performed using Statistica 6.0 (2001) for Windows 1998. There was an improvement in body fat percentage in all of the age groups and different positional groups (total group, forwards and backs) from the beginning of the 2000 season to the end of the 2001 season, although it was non-significant. The motor components improved from 2000 to 2001 season, although only the speed improved significantly ($p<0.05$). The improvements in all of the components, whether significant or not, indicate that scientific conditioning programmes will contribute to improve rugby players' abilities. The omega values of practical significance also indicate that the conditioning programme holds practical value.

Key words: Anthropometric; Motor; Fat percentage; Speed; Agility; Rugby; Players; Conditioning; Scientific; South Africa.