

Міністерство освіти і науки України
Управління молоді та спорту Сумської обласної державної адміністрації
Національний університет фізичного виховання і спорту України
Сумський державний університет
Курський державний університет (Росія)
Тираспольський державний університет імені Т. Г. Шевченка (Молдова)



**ІННОВАЦІЙНІ ТЕХНОЛОГІЇ В СИСТЕМІ
ПІДВИЩЕННЯ КВАЛІФІКАЦІЇ ФАХІВЦІВ
ФІЗИЧНОГО ВИХОВАННЯ І СПОРТУ**

ТЕЗИ ДОПОВІДЕЙ
І МІЖНАРОДНОЇ НАУКОВО-МЕТОДИЧНОЇ КОНФЕРЕНЦІЇ
(Україна, Суми, 17–18 квітня 2014 року)

Суми
Сумський державний університет
2014

COMPARISON OF ANTHROPOMETRIC BODY FEATURES OF HIGHCLASS VOLLEYBALL PLAYERS

Shepieliev A. Y., cand. sc. (biology), Associate Professor
Sumy State University
ukraine shepelev@ukr.net

Introduction . One of the factors determining skills of athletes in certain sport is body build features[2]. Sport result depends a lot on morphologic features of the sportsman, that is one of the selective factors determining the sportsman's perspective [4]. Purpose of research is studying of peculiarities anthropometric and somatometric indices of super league, premier league and first league teams. Object and methods of research were 18 sportsmen (19-26 years old), 6 in each group, masters of sport, candidates for masters of sport in volleyball. 1st group consisted of super league team, 2nd – premier league team, 3rd – first league team that take part in the Ukrainian Championship 2012–2013. Anthropometric study was made according to V. V. Bunak schemes [1]. Statistical mathematics methods were applied [3].

Results of research and their discussion. As it follows from the results of research data, the sportsmen body length of the 1st group in relation to the 2nd group is larger at 0,99% ($p < 0,05$), in relation to the 3rd group- at 2,56% ($p > 0,05$), and indices of the 2nd group in relation to the 3rd – at 1,43% ($p < 0,05$). Body weight of the 1st group in relation to the 2nd group is larger at 1,68% ($p < 0,05$), to the 3rd – at 2,73% ($p > 0,05$), 2nd group in relation to the 3rd – at 1,80% ($p < 0,05$). Breadth of shoulder in the 1st group in relation to the 2nd and 3rd group is larger at 1,12% ($p < 0,05$) and 1,69% ($p < 0,05$), 2nd group in relation to the 3rd is larger at 0,89% ($p < 0,05$).

Length of wrist in the 2nd group in relation to the 1st group is larger at 0,82% ($p < 0,05$), in relation to the 3rd - at 0,86 ($p < 0,05$), 1st group in relation to the 3rd – at 0,21 ($p < 0,05$). Total length of foot in the 1st group in relation to the 2nd and 3rd group is larger at 1,52% ($p < 0,05$) and 1,72% ($p < 0,05$) respectively, 2nd group in relation to

the 3rd – at 0,49% ($p < 0,05$). Transverse diameter of chest and antero-posterior diameter of chest of the 1st group in relation to the 2nd group is larger at 0,89% ($p < 0,05$) and 0,33% ($p < 0,05$) respectively, in relation to the 3rd – at 3,83 % ($p > 0,05$) and 0,35% ($p < 0,05$), 2nd group in relation to the 3rd – at 2,75% ($p > 0,05$) and 0,39% ($p < 0,05$) respectively. Shoulder distal epiphysis in the 2nd group in relation to the 1st group is larger at 0,34% ($p < 0,05$), to the 3rd – at 1,08% ($p < 0,05$), 1st group in relation to the 3rd – at 0,66% ($p < 0,05$). Diameter of the hip and shin distal epiphysis in the 2nd group in relation to the 1st group is larger at 0,04% ($p < 0,05$) and 0,04% ($p < 0,05$) respectively, in relation to the 3rd – at 1,58% ($p < 0,05$), and 0,94% ($p < 0,05$), 1st group in relation to the 3rd – at 1,10% ($p < 0,05$) and 0,81% ($p < 0,05$) respectively.

Conclusions. There is no significant difference in most medium, minimum and maximum indices between the super league team and premier league team because of increased physical activity and selection in the master teams. Comparing to the first league team these indices are much higher. Therefore knowing the specific characteristic features of volleyball players we can not only determine the movement capabilities of sportsmen, but also recommend some type of physical exercises that will correspond motor activity regime in each group, as well as roles (attacker, libero).

Literature:

1. Bunak V. V. Anthropometry / V. V Bunak. – M. : 1941. – 368 p.
2. Chepulenias Alhirdas. Age and body build of high rank skiers / A. Chepulenias, B. Statkyavichune // Theory and practice of physical culture – 2011. – № 12. – p. 3–6.
3. Lapach S. M. Statistic methods in medical-biological researches using Excel / S. M. Lapach, A. V. Chubenko, P. M. Babich. – K. : Marion, 2000. – 320 p.
4. Shaldin V. V. Improving sport results of skaters considering level of morphological features / V. V. Shaldin, Y. D. Pushkarev, D. A. Dyatlov // Theory and practice of physical culture. – 2010. – № 2. – p. 14–18