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SOMATOTYPE AND BMI PROFILES OF BOTSWANA SPECIAL OLYMPICS ATHLETES

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10.1136/bjism.2010.078725.257

Introduction Studies on the somatotype and body mass index (BMI) of athletes with disabilities are very scarce. Those on Special Olympics athletes, particularly of African origin, are even almost non-existent. The aim of this study was to profile and compare the somato-types and BMIs of male and female Botswana Special Olympics athletes.

Methods The sampling design was purposive. Study participants comprised 11 male (15.5 ± 1.9) and 15 female (14.7 ± 3.1) randomly selected athletes with mild mental retardation. Measurement of the somatotype components – skinfolds, circumferences, breadths, lengths and heights were taken in line with the standards set by the International Society for the Advancement of Kinanthropometry. Somatotypes were estimated with the Heath–Carter method. For the BMI, the procedure as described by Adams (2002) was adopted.

Results Male participants had a mean somatotype rating of 1.7-2.0-3.3 (SD 2.0-1.1-2.3) while females had a mean of 3.4-3.6-2.6 (SD 1.9-4.6-1.6). Also, apart from the significant main effect of gender, $F_{(1, 24)} = 4.67$, $p = 0.041$, on the endomorphy component of the somatotype of the participants, gender

had no significant relationships: $F_{(1,24)} = 1.31$, $p = 0.264$ and, $F_{(1,24)} = 0.66$, $p = 0.423$, respectively, at $p < 0.05$.

Conclusion The above results indicate that the participants' gender had very slight influence on the somatotype components of the Botswana Special Olympic athletes. The results have implications for the future selection of Botswana Special Olympics athletes and the scientific design of training programmes that would prepare the athletes morphologically for such an elite competition as the Special Olympics.