

been placed over the adhesive markers previously allocated on the skin.

Results: We considered 24 postural components divided between sagittal, frontal, and posterior planes. Of those, only 7 provided a statistical difference according to gender; the rest did not differ between males and females. On the sagittal plane, the forward shift of the tibia differs between males (4.26 ± 2.29) and females (7.12 ± 3.57) with a large effect size ($d = -0.95$); The angle between lateral malleolus and the fifth toe differs between males (33.76 ± 5.17) and females (26.2 ± 4.24) with a large effect size ($d = 1.6$). On the frontal plane, the height of the right knee and the left knee differ between males (4.84 ± 2.98) and females (7.57 ± 3.16) with a large effect size ($d = -0.89$). No gender differences are present in the posterior plane.

Conclusions: These results provide a set of normative data concerning the digital examination of the posture of healthy individuals. This approach represents a reproducible, easy and low-cost method of posture assessment.

PP65A—The value of experience in relation to the sum of the degree of difficulty in the 3 m and 10 m diving

C. Bratta¹, S. Demarie², C. Cortis¹

¹Department of Human Sciences, Society and Health Università degli studi di Cassino e del Lazio Meridionale, ²Department of Movement, Human and Health Sciences Università degli studi di Roma Foro Italico

Purpose: Athletic performance increases from birth to youth reaching a peak level in early adulthood and declines thereafter, furthermore, the competitive performance may change between athletes in different sports and events. As a general trend for both sexes, the disciplines concerning very specific technical skills involve the youngest athletes, such as for the gymnastics and aquatic disciplines. Thus, the aim of the study was to investigate the value of experiences in terms of ages and the influence of this on both sexes competitive performance in 3 m and 10 m diving.

Methods: Diving competition results from Sydney 2000 to Tokyo 2020 were collected from the FINA official web site. For the female (F) and male (M) medalists (Olympic (OL): F = 18, M = 18; World Championship (WCH): F = 30, M = 30; World Cup (WC): F = 33, M = 33) of each event the sum of the Degrees of Difficulty (DDs) and first the year of competition (3 m: F = 14.9 ± 2.2 yrs, M = 15.3 ± 1.8 ; 10 m: F = 14.2 ± 2.1 , M = 15.4 ± 1.8) were analyzed using the slope of the regression line of the results over time (y).

Results: Observing the trend over time of the first year of competition, it seems that in the 3 m men are older than women especially in bronze medalist (M: $y = -0.1959$; F: $y = 0.0573$). Instead, silver medalist women seem to be older than men (F: $y = 0.157$; M: $y = 0.0254$). In 10 m all medalists' women are younger than men (F: $1^{\circ}y = 0.0266$; $2^{\circ}y = 0.0469$; $3^{\circ}y = 0.0147$; M: $1^{\circ}y = -0.1144$; $2^{\circ}y = -0.0084$; $3^{\circ}y = -0.0829$). From the analysis of DDs: in 3 m women DDs continuously increased in all medalists ($1^{\circ}y = 0.0107$; $2^{\circ}y = 0.0478$; $3^{\circ}y = 0.0368$), the same trend is observed in men's DDs especially for gold medalists ($y = 0.0316$), while in silver and bronze there aren't a significant increase (Silver $y = 0.0017$; Bronze $y = 0.0046$). In 10 m women's DDs values decrease with the increasing of the years for all medalists ($1^{\circ}y = -0.1879$; $2^{\circ}y = -0.1727$; $3^{\circ}y = -0.0497$); in men especially for gold and silver medalist DDs values increase ($1^{\circ}y = 0.4599$; $2^{\circ}y = 0.6401$) while in bronze DDs decrease over the time ($y = -0.225$).

Conclusions: The results suggest that age is a fundamental parameter that may influence performance results in both competitions.

Furthermore, the experience, due to years of competitions, seems to have a great influence on DD and consequently affects the preparation phase for the competitions. A good knowledge of athletes' career and abilities could provide coaches a guidance on choosing athletes' routine and progression towards their performance goals.

PP65B—Validity of the nfl combine battery of physical performance tests

F. Nigro¹, S. Bartolomei², R. Di Michele², S. Marcora²

¹Department for Life Quality Studies Università degli studi di Bologna Alma Studiorum, ²Department of Biomedical and Neuromotor Sciences Università degli studi di Bologna Alma Studiorum

Purpose: The purpose of this study was to assess the validity of the NFL combine battery of physical performance tests by assessing their ability to differentiate between different levels of performances in American football (AF) (known-groups technique).

Methods: Comparisons were made between three groups (36 subjects each) varying in AF performance: 1) Drafted and 2) Non-Drafted US college AF players, and 3) players from an Italian 1st division AF team. Players in these three groups were matched according to position (skill players, big skill players and linemen) (Sierer et al., 2008), stature and body mass (Robbins, 2008). Italian players were tested by one the researchers using standard NFL combine procedures. The data of the US players were extracted from a publicly available database (pro-football-reference.com). Differences were tested statistically using Group x Position ANOVAs ($p < 0.05$) on each of the following variables: 40-yard dash, 20-yard shuttle, 3-cone drill, broad jump, vertical jump, bench press.

Results: In all the six physical tests the Italian players performed significantly worse than both drafted and non-drafted US players. Drafted US players performed better than Non-Drafted US players in 40-yard dash, 20-yard shuttle, broad jump, and vertical jump. On the contrary, Non-Drafted US players performed better than Drafted ones in the bench press tests, and no significant differences between these two groups were found in 3-cone drill test in any position.

Conclusions: In agreement with previous research (Vitale et al., 2016), all the six physical performance tests included in the NFL combine battery are able to discriminate between very large differences in AF performances. However, only 40-yard dash, 20-yard shuttle, broad jump, and vertical jump seems to be valid with respect to their main purpose: help with the selection of professional NFL players. Further research is required to develop and validate better tests of upper body strength and agility to be included in the NFL combine battery of physical performance tests.

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