Available online at www.sciencedirect.com
ScienceDirect
Journal of Forensic and Legal Medicine 15 (2008) 89–95
JOURNAL OF FORENSIC AND LEGAL MEDICINE
www.elsevier.com/jflm

Original Communication

Correlation of foot length with height and weight in school age children

Theodoros B Grivas MD, PhD (Orthopaedic Surgeon),
Constantinos Mihas MD, MSc (General Practioner, Biostatistician) *,
Angeliki Arapaki BSc (Math), MSc (Biostatistician),
Elias Vasiliadis MD (Orthopaedic Surgeon)

"Thriassio" General Hospital, 19600 Athens, Greece

Received 6 August 2006; received in revised form 10 May 2007; accepted 23 May 2007
Available online 10 September 2007

Although the correlation between foot length and human height and weight has been studied, there is a lack of [illegible] children. The aim of this study is to evaluate this relationship in a large sample of juveniles in [illegible]. The sample of the study consisted of 5093 children (average age: 11.47 ± 2.71 years), who were examined [illegible] 2005. The Harris–Beath Mat for footprinting was the device used for measuring foot length. Statistical [illegible] and multivariate linear regression models. All statistical models were found to be significant and indicated [illegible] foot length were independent predictors of either height or weight. From all models fitted, the model having the [illegible] was described by the formula: height (cm) = 34.113 + 3.716 × (right foot length (cm)) + 1.558 (if girl) + [illegible]. It was also found that the models which contained right rather than left foot length as an explanatory [illegible] both height and weight. The results of this study suggest that foot length can estimate the stature and [illegible] especially after adjusting for age and sex.
[illegible] All rights reserved.

[illegible] Height; Weight; Children; Forensic