Role of Moiré-Fringe Topography in the Skeletal Examination of School Athlete

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Skeletal examination of school athlete is a significant part of the general physical examination because it may uncover many underlying problems, which could affect the performance in athletics and sports. For example, in peripubertal and pubertal children an undetected curvature of the spinal column may lead to a deformity influencing cosmetic appearance. The early detection of scoliosis, kyphosis and lordosis, therefore, is a major concern of school-health services. In addition, the basic goal of an athletic program should be to develop better body image of an athlete. Studies of posture and gait of athletes are, therefore, of interest to researchers in sports medicine. Moiré-fringe topography is a stereophotogrammetric technique, which provides a 3-D map of the object (or the subject) under study. This paper described the applications of moiré techniques in the study of posture and gait of children as well as detection and documentation of curvatures of spinal column (Fig. 1*a*, *b*).

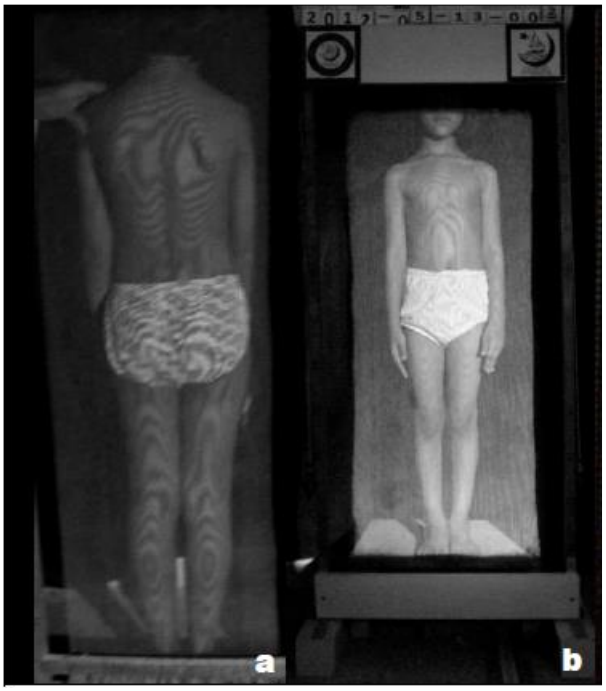

Fig. 1*a, b*. Moiré topographs of (*a*) back and (*b*) front of school-going-child athletes

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