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The Future Of 3D Body Scanning Within ISAK? A Natural Home Or A Conflicting Toolset

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ABSTRACT

Introduction: Three-dimensional (3D) surface imaging, also known as body scanning or optical scanning, captures the external 3D geometry of the human body. It provides several advantages over manual measurement; quick and direct contactless measurement, retrospective or immediate analysis and the extraction of a wide variety of anthropometrics, including complex anthropometrics and morphometrics - all of which are unattainable or impractical through manual measurement. Many types of 3D imaging systems are now commercially available and being used in a wide variety of contexts around the world to provide an opportunity for innovation and progress. However, with each system using different hardware, software and computer vision techniques, and whilst some standardisation exists, there is a global call for greater standardisation and guidance to ensure correct and suitable use of, and appropriate interpretation of the data extracted from this technology in both research and practice (Seminati et al., 2017; Heymsfield et al., 2018; Ashdown, 2020). Methods: The critical evaluation of a three month industry networking travel grant, focused on 3D body scanning and the acquisition of anthropometrics within health, sport, fashion and animal applications, that took place from September to December 2019. Results: Whilst international standards and international working groups are moving towards unified practice and standardisation, there appears to be the call for the lead of an accrediation based organisation to ensure correct use in practice and research of this technology. Conclusion: With the popularity of 3D surface imaging forecast to grow and thereby the call for standardisation set to continue, should and how can ISAK engage within this process?

CONFLICT OF INTEREST

The authors of this document can confirm there is no conflict of interests.



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