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Improving sport science students’ practical skills and employment prospects: Is the answer in your smartphone?

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Introduction

In 2015, I was interviewed by Gretchen Reynolds from the New York Times about whether smart phone apps may allow us to improve our golf swing and other motor skills. This got me thinking about how my postgraduate students may benefit from using their smart phone and the multitude of apps (such as MyJump) that are now currently available.

The Problem

- Difficulty to analyse high-speed movements (e.g. running, jumping and kicking).
- Expense for students to purchase high speed video cameras, force plates and biomechanical analysis software.

The Proposition

- The increase of smart phone (including the iPhone 6’s with high speed 240 frames per second video camera) and human movement apps may now allow sports science students to overcome these barriers (Balsalobre-Fernandez et al., in press, 2015, 2014).
- The aim of this project was therefore to examine relevant stakeholders’ perceptions of how smart phones apps may be used to improve sports science practical skills and employment opportunities.

Methodology

Key stakeholders including postgraduate students, sport scientists and strength and conditioning coaches were interviewed to obtain their perceptions on smartphones and apps (n=7).

Findings

1. As many smart phones have high speed video camera capacity, apps are becoming increasingly used to assess human movement.

2. Students still need to critically examine the apps’ validity and reliability; although the validity and reliability of a few apps has been demonstrated in the peer-reviewed literature.

3. Masters of Sports Science students appreciated using smart phones and apps in class and believed such devices are important tools for sports science provision.

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References:

