Effective Validation Model and Use of Mobile-Health Apps for Elderly People

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Abstract : The controversy brought about by the increasing use of mHealth apps and their effectiveness for disease prevention and diagnosis calls for immediate control. Although a critical topic in research areas such as medicine, engineering, economics, among others, this issue lacks reliable implementation models. However, projects such as Open Web Application Security Project (OWASP) and various studies have helped to create useful and reliable apps. This research is conducted under a quality model to optimize two mHealth apps for older adults. Results analysis on the use of two physical activity monitoring apps - AcTiv (physical activity) and SMCa (energy expenditure) - is positive and ideal. Through a theoretical and practical analysis, precision calculations and personal information control of older adults for disease prevention and diagnosis were performed. Finally, apps are validated by a physician and, as a result, they may be used as health monitoring tools in physical performance centers or any other physical activity. The results obtained provide an effective validation model for this type of mobile apps, which, in turn, may be applied by other software developers that along with medical staff would offer digital healthcare tools for elderly people.

Keywords : model, validation, effective, healthcare, elderly people, mobile app
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