

Comparing the accuracy of three different track app in College Student Athlete

Abstract

Fitness tracking applications have become popular worldwide as individuals start to engage in physical activity (Mamo et al., 2021). The growth of fitness tracking apps and activity monitors has been proven convenient and accessible to the general, allowing them to modify behavior changes, opportunities for assessment, and reduce sedentary behavior. Furthermore, such applications and devices enable individuals to obtain critical information such as HR, blood pressure, step count, energy/caloric expenditure, sleep quality, and more variables contributing to baseline data observation and consumer satisfaction. However, some issues are associated with fitness tracking applications that may leave people in question.

Validity and reliability amongst physical activity assessment remain a challenge when implementing activity tracking apps (Régner & Chauvel, 2018). Previous studies have used a variety of strategies, devices, and applications to account for inclusion criteria and study validation. However, there is an insufficiency in research related to fitness tracking applications, step counting accuracy, and their correlation with device placement during physical activity. This is an essential component because knowing which application is the most accurate at activity tracking will potentially encourage people to utilize the given applications.

In this study, researchers aim to determine whether or not phone placement has an effect on step-count accuracy at three distinct positions (in hand, in the pocket, in a phone sleeve on the arm). The applications that will be used for this study are Nike Run Club, Google Fit, and RunKeeper. We are in the process of collecting data from college student-athletes in those three distinct groups (i.e., Group 1, Group 2, and Group 3). Data collection was delayed due to Covid-19 safety protocols. Then Analysis of Variance (ANOVA), a parametric test, would be computed to examine differences among the groups.