

Assessing Cardiovascular Health and Stress Management Techniques Using Novel and Accessible Mobile Apps in a Laboratory Setting

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The library of mobile apps to collect data and assess individual fitness levels and cognitive abilities is growing at an exponential rate. Students are already independently using these apps on a regular basis so why not take advantage of what they already know how to use! This workshop will describe the use of simple mobile apps such as Polar Beat to evaluate cardiovascular fitness and stress related physiological markers. More specifically, we will discuss and highlight the ability to generate simple heart rate and/or heart rate variability datasets using mobile apps that students can use to assess the effectiveness of different lifestyle interventions. The datasets allow the measurement of maximum oxygen uptake during exercise (i.e. the Astrand Physical Test), the ability to recover after strenuous exercise, the ability to control the acute stress response, and the correlation between the level of stress and cognitive performance. Workshop attendees will participate in demonstrations and the workup of real-time data to simulate the student laboratory experience. Finally, we will provide insight into how these simple but powerful experiments can be implemented into existing health, fitness or physiology based curricula.

Mission, Review Process & Disclaimer

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