

Gadgets in Psychophysiology

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Abstract

Psychophysiology can be defined as a science that studies the physiology of humans when they are in a particular psychological state. It is interested in human's heart- rate variability or changes in breathing rhythm when he is afraid, happy, surprised or under cognitive load. Nowadays, industry and society widely use the principles and methods of psychophysiology to improve their products and services. The modern company is interested not only in the physical, chemical or biological properties of its product, but also (and sometimes mainly) in how the product looks, feels or even smells. Apart from psychological measurement tools, these properties are usually measured using brain scanners, autonomic nervous system monitoring devices, or human behaviour measurement systems.

In the presentation, I will introduce some of the typical uses of simple psychophysiological devices, such as their inclusion in the psychophysiological feedback loop, difficulty assessment, VR sickness, affective gaming, rehabilitation, science in education, and various projects in the field of psychology. I will address the issue of accuracy of these devices and draw some general conclusions based on our long experience.

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