Abstract

Wearable devices and applications (apps) that offer a variety of features intended to support exercisers have flooded the marketplace. Organismic integration theory (OIT) proposes that motivations to exercise can vary along a spectrum of self-determination. To best serve exercisers and assist organizations that are developing and promoting fitness technologies, we need a better understanding of how individuals’ exercise motivations influence their fitness technology feature set use. We also need to determine the impact of fitness technology features on enhancing or undermining wellness outcomes—such as subjective vitality. Our results suggest that almost every subtype of exerciser, where the subtype is defined by OIT motivations toward exercise, has a unique use profile. Our findings also suggest that the social interaction and data management features of current fitness technologies show promise in assisting well-being outcomes, but only for the more self-determined and amotivated subtypes of exercisers. This leads us to suggest that providing every type of exerciser the motivational support that best fits their motivational profile may not be a trivial task, but it ultimately may be necessary for fitness technologies to be universally useful in supporting wellness outcomes.

Keywords: Fitness technology, wearables, health information technology, self-determination theory, organismic integration theory, intrinsic motivation, extrinsic motivation