

The Influence of Wearable Fitness Devices on User Behavior and Performance: A Case Study of Fitness Watches and Bands in Sri Lanka

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Abstract

The influence of wearable fitness devices on user behavior and performance in Sri Lanka reveals significant insights into adoption trends, usage patterns, and their effectiveness in enhancing fitness outcomes. Data was collected from rural and urban populations, with a significant response from undergraduates and working professionals, which is 95% by questionnaires. The study found that while the majority of users utilize these devices for basic functions such as step counting, there is strong evidence that fitness routines and goals are positively influenced by the continuous data provided by these devices. Research findings reveal substantial benefits for users in terms of improved fitness outcomes and the ability to adjust exercise routines based on real-time data. Among the participants, 70.5% report using wearable devices primarily for step counting expressing satisfaction with the results. This indicates a strong correlation between device usage and user satisfaction in achieving basic fitness goals. Athletes reported a 53.3% improvement in performance metrics due to the use of wearable devices, underscoring the potential of these tools to enhance athletic performance. The results also revealed that 73.9% of users experienced positive health outcomes, which highlights the potential health benefits associated with regular use of wearable fitness technology. Users also report positive health outcomes, frequently expressing dissatisfaction due to the devices' technological limitations, such as short battery life, high costs, and connectivity issues, which can hinder their long-term usability and effectiveness. These findings underscore the critical role of wearable fitness devices in promoting fitness and health across Sri Lanka but also highlight the pressing need for more affordable and reliable options tailored to the broader population.

Keywords: *Effectiveness, Fitness, Sri Lanka, Wearable*