Acceptance, attitude and potential needs for the smart fitness wear to assist walking exercise for middle-aged adults

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Recently, there has been a rapid increase in the aging population due to the increase in lifespan of humans resulting from the improvements in living standards and health care technology. Especially, the baby boomers, which currently comprise 15% of the Korean population, will become part of the ageing population in about 10 years and will exert strong influences in many areas of society as the new mainstream. This generation is greatly concerned about health care, especially to prepare for elderly age and their demands of efficient health management are constantly increasing. Owing to this current trend, there is a consistent increase in demand for smart sportswear for health management and improving exercise efficiency, among middle-aged people. Recently, body signal measuring sensors have been implemented in sportswear to measure the body signals of the wearer (muscle activity and heart rate) during exercise and give feedback to the wearer so that the exercise quality can be improved. These requirements and technology have led to the development of smartphone application connected sportswear, which have received considerable attention from middle-aged people. This research analyzes consumers' needs and explores solutions for the design and product planning of smart fitness wear for middle-aged people that improves the efficiency of walking exercise based on their needs. For this purpose, this study examines the existing researches in literature related to wearable technology and the current development of smart wear technology and conducts in-depth interviews of 6 and survey of 150 middle-aged consumers who exercise by walking. Based on these positive data analyses, we have sign-posted design and product planning for smart sportswear in order to improve the efficiency of walking exercise performed by middle-aged people.

Biography

Hyunsung Ban is currently an MS candidate in the Department of Clothing and Textiles at Yonsei University. Her research interests include application of emerging technologies to design and product development, functional apparel design for active ageing population and functional, expressive and aesthetic attributes of wearable technology.

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