THE USE OF SMART GARMENTS DURING AND AFTER PHYSICAL EXERCISE: THE WEAR2HEAL PROJECT

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INTRODUCTION
Sports practice has shown positive implications for health, personal and social values, thereby increasing the population’s adherence to this activity (King et al., 2019). One of the main concerns related to sports practice is muscle recovery after exercise, which allows delaying the subsequent feeling of muscle discomfort and fatigue (Wang et al., 2021). In addition to low-intensity exercise, electrostimulation, compression, massage, and, in particular, heating are methods usually used for recovery after physical incitement (Duarte & Soares, 1990).

The Wear2Heal project aims to develop innovative solutions to optimize the recovery process during sports practice.

PURPOSE
This project aims to create textile solutions with the capacity to electro-stimulate, massage, compress and warm by using emerging technologies, including textile integration and printing electronic devices. Prototypes are expected to obtain individual solutions (the above-referred areas) or a combination thereof. The project will also target a mobile application’s development to communicate to hardware and a wireless feeding system thus maintaining the functional system autonomously.

MARKET ANALYSIS
A questionnaire was applied in order to analyze the athletes needs regarding sports recovery so that we can identify the desired characteristics in wearable textiles. The sample was composed by 154 athletes from different modalities and different levels of performance.

REFERENCES

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