

浙江工业大学工业设计研究院实验伦理审查表
 Institute of Industrial Design of Zhejiang University of Technology
 Experiment Ethics Review

项目编号: 0903/2021

项目名称 (Project Name)	音乐节奏对不同强度跑步疲劳感知的影响研究 (The Effect of Music Tempo on Fatigue Perception at Different Exercise Intensities)
项目负责人 (Project leader)	吴剑锋 Jianfeng (签字) 
所在部门 (Department)	浙江工业大学工业设计研究院 (Industrial Design & Research Institute, Zhejiang University of Technology)
项目起止时间 (Time of start and stop)	2021.9.15-2021.10.15
伦理审查内容 (Content of ethical review)	<p>研究内容:</p> <p>本研究设计了以音乐节奏(快节奏、慢节奏、无音乐)和运动强度(高运动强度、低运动强度)为自变量的被试内双因素实验,以疲劳感知产生时间、心率信号变化、目标肌肉表面肌电(sEMG)信号的时频域指标变化为观测指标,邀请 13 名参与者完成了共 78 组跑步实验。</p> <p>目标测试肌肉:结合前人的研究,发现股直肌(RF)、股内侧肌(VM)的肌电信号变化明显,并且能在动作变化时保持较强的稳定性。因此选定这两块肌肉作为本次实验的检测对象。</p> <p>Research contents:</p> <p>In this study, we designed a within-subject two-factor experiment with music tempo (fast rhythm, slow rhythm, no music) and exercise intensity (high exercise intensity, low exercise intensity) as independent variables, and invited 13 participants to complete a total of 78 sets of running experiments with fatigue perception generation time, heart rate signal changes, and changes in time-frequency domain indicators of surface electromyography (sEMG) signals of the target muscles as observations.</p> <p>Target test muscles: Combined with previous studies, it was found that the electromyographic signals of rectus femoris (RF) and medial femoris (VM) muscles changed significantly and could maintain a strong stability during the movement changes. Therefore, these two muscles were selected as the test subjects for this experiment.</p> <p>参与者:</p> <p>13 名成年健康的,无肌肉、骨骼、呼吸系统或心血管等方面的疾病男性,身高 170-180cm,体重 60-75kg。</p> <p>Subjects:</p> <p>13 healthy adult males without musculoskeletal, respiratory or cardiovascular disease, height 170-180cm, weight 60-75kg.</p> <p>相关影响:</p> <p>本研究不会向被试者收取任何费用,也不能给被试者带来直接利益,但这个项目的研究将可能带来一些学术上的益处。本研究的结果可能会在学术期刊/书籍上发表,或者</p>

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<p>审查意见</p>	<p>同意 Approved</p> <p>审查专家代表签名:</p> <div style="text-align: center;">  <p>刘肖健 Liu Xiangjian</p> <p>黄薇 Wei Huang</p> <p>朱上上 Shangshang Zhu</p> </div> <p style="text-align: right;">2021年9月15日</p>	