

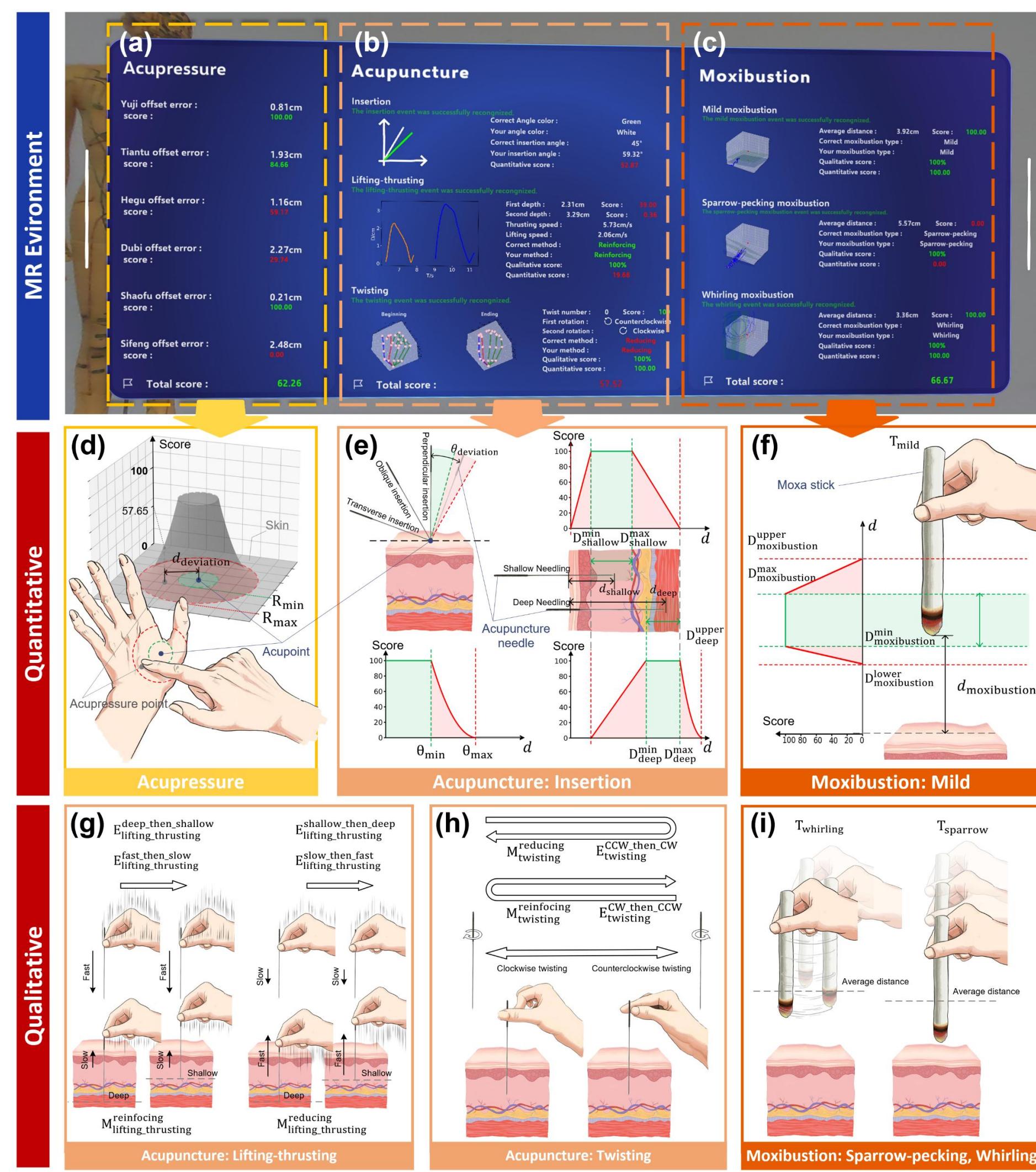
A Mixed Reality Framework for Acupoint Therapy Teaching: Localization, Practice and Evaluation

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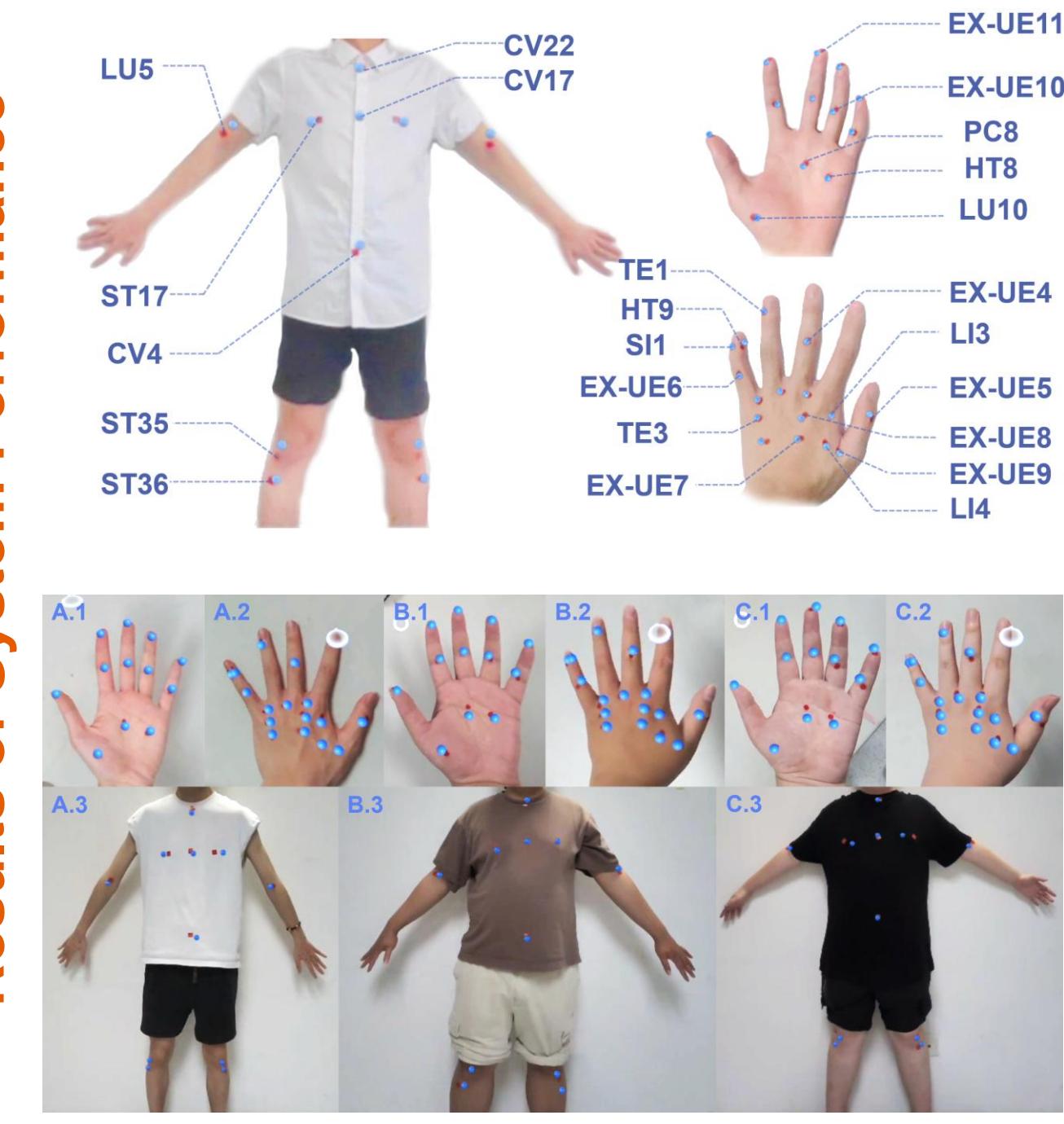
Motivation

- Traditional acupoint therapy teaching (textbooks, apprenticeships) lacks spatial accuracy and immersion.
- Existing AR/MR teaching systems are limited to virtual models, single body parts, and simulated practice of operations.
- No existing work provides evaluation standards with scoring functions to guide user improvement.



Results

- Higher Accuracy:** Our framework achieves high accuracy in acupoint detection and maintains a stable 90 FPS for a smooth user experience.
- Expert Evaluation:** Professional physicians evaluated the framework's performance and confirmed that it is sufficient for teaching requirements.
- Improved Skills:** Participants using our framework showed significant improvement in the 3D localization of acupoints and proficiency in therapy techniques compared to groups using textbooks or a 3D model.
- Positive User Feedback:** The majority of users reported high satisfaction with the system's usability, immersion, and educational value.



Results of User Study

