# IASAT Touch in & as medicine



Tailoring touch in a clinical context through novel digital touch tools



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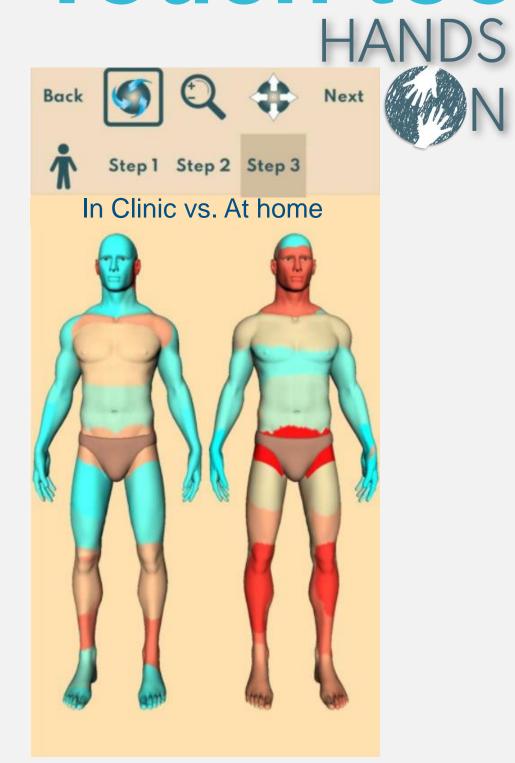
Touch can heal and foster trust but how can we tailor it in a clinical context

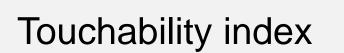
Digital touch tools to probe individual differences in response salutary touch and social touch

## Background

- Touch facilitates therapeutic synchrony and strengthens the therapeutic alliance<sup>1</sup>
- Social touch can but does not always facilitate perceived trustworthiness
- Individual differences may include preferred modality for comfort<sup>2</sup>
- Mechanisms for "salutary touch" (touch as medicine) and social touch (touch in medicine) remain to be fully elucidated<sup>3</sup>

## Touch tools





Development of digital touch tools to probe and tailor touch in and as medicine

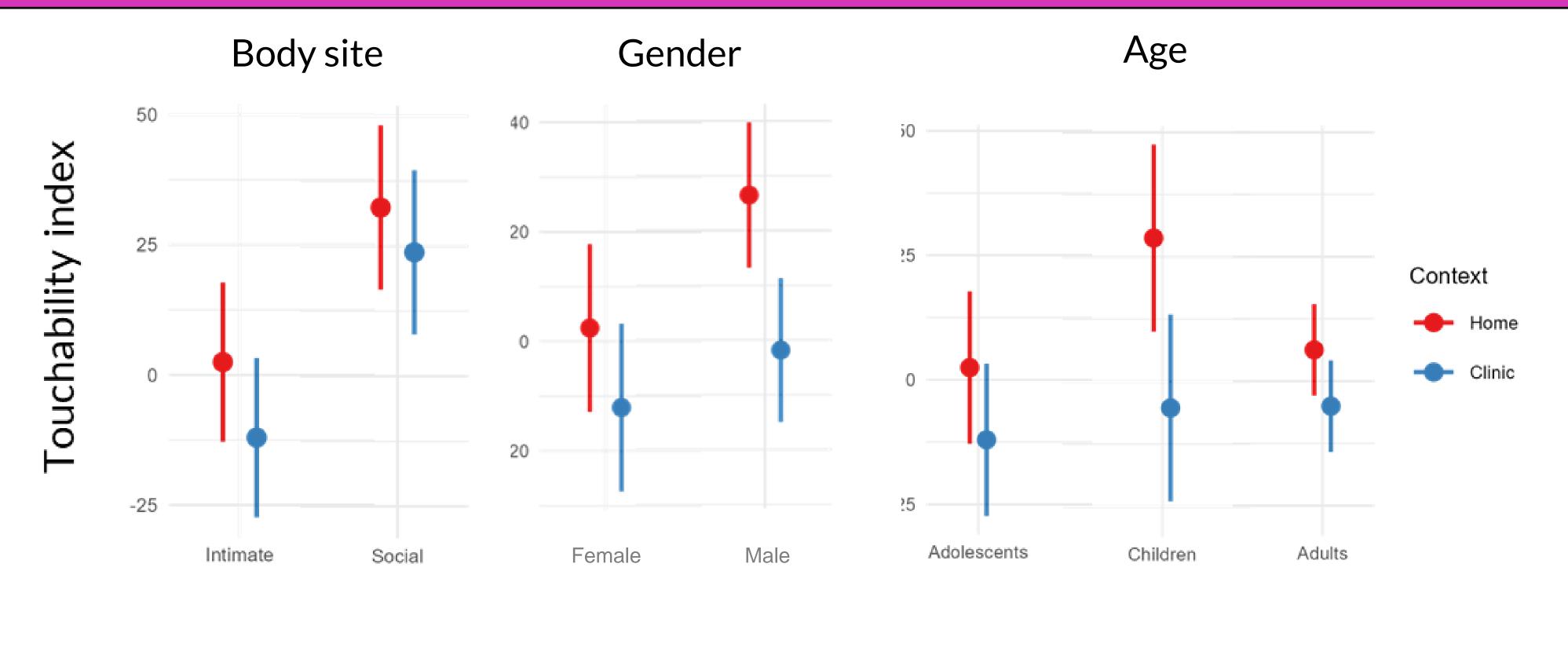


Immersive VR with multisensory feedback

## Research Questions and Results

What individual factors influence how we want to be touched in a clinical context?

How can we compare corrective and motivational touch in a virtual clinical context?



Human
Social
Touch

Meditated
Social
Touch

via smart shirt

Social Affective Touch

User Arousal State
via smart watch

Lüneberg et al., in preparation

Valori et al., under review

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#### References

1) McParlin, Z., Cerritelli, F., Friston, K. J., & Esteves, J. E. (2022). Therapeutic alliance as active inference: the role of therapeutic touch and synchrony. *Frontiers in psychology*, 13, 783694

mediated and unmediated interactions. Computers in Human Behavior, 153, 108121.

- and synchrony. Frontiers in psychology, 13, 783694.

  2) Valori, I., Jung, M. M., & Fairhurst, M. T. (2024). Social touch to build trust: A systematic review of technology-
- 3) McGlone, F., Uvnäs Moberg, K., Norholt, H., Eggart, M., & Müller-Oerlinghausen, B. (2024). Touch medicine: bridging the gap between recent insights from touch research and clinical medicine and its special significance for the treatment of affective disorders. *Frontiers in psychiatry*, *15*, 1390673.

### Conclusions and next steps

- Need to better distinguish between salutary touch and social touch
- How touch is perceived in a clinical context is subjective and as such how touch is used should be tailored.
- Potential to combine digital touch tools (e.g. immersive VR and different forms of haptic feedback) to probe specific responses to either salutary or social touch.











