U can't touch this: spatial topography of social touching

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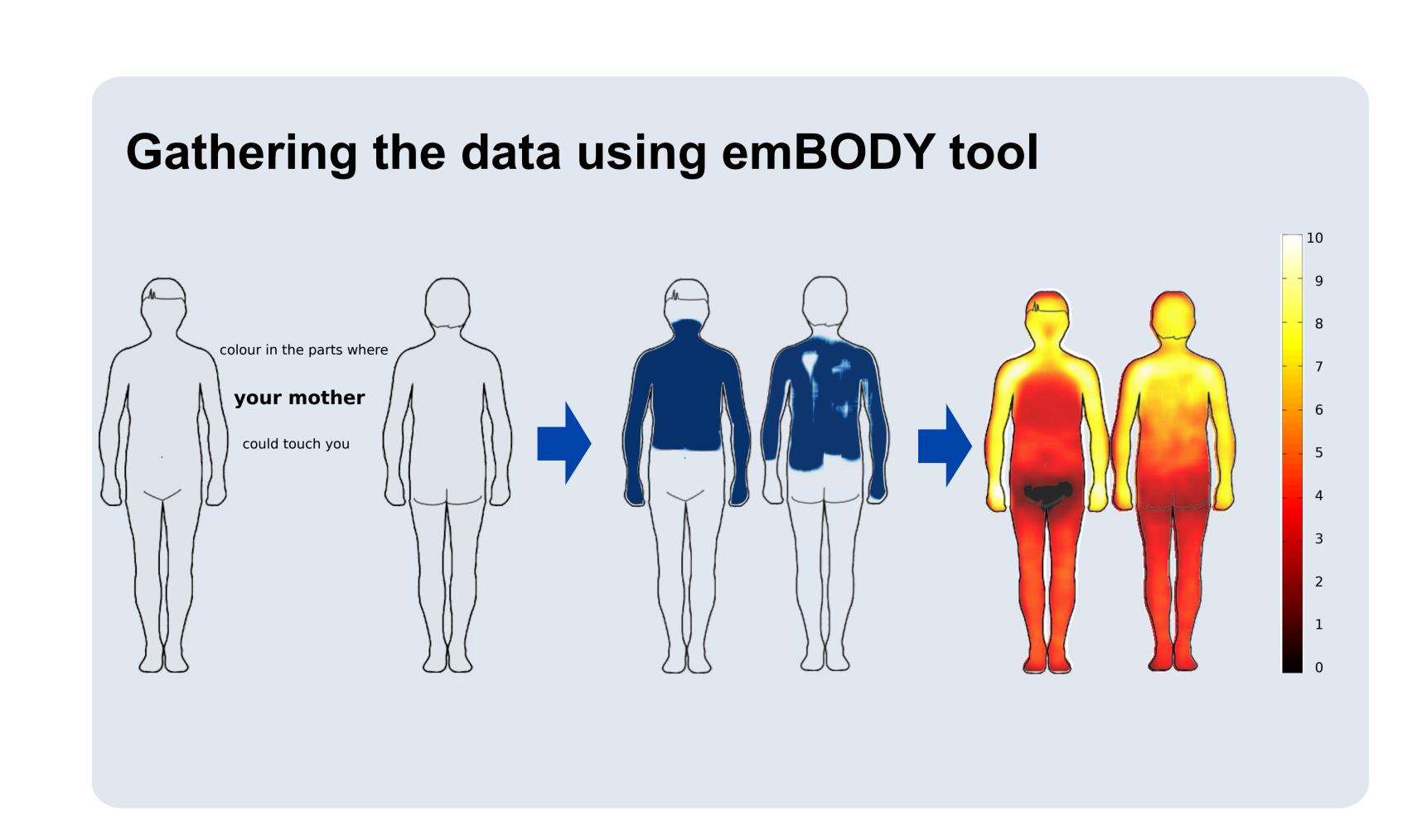
Introduction

- 33 Social touching is the most intimate way of human communication.
- **>>** Touch can be used for communicating positive and negative affect, and promoting social bonding.
- >> Temporal and spatial patterns of touching behavior might be expected to vary depending on the type of social relationship, yet this hypothesis remains unexplored in humans.
- >>> We explore the mental representations of topographies of acceptable social touch in Finnish, French, Italian, and Russian cultures.

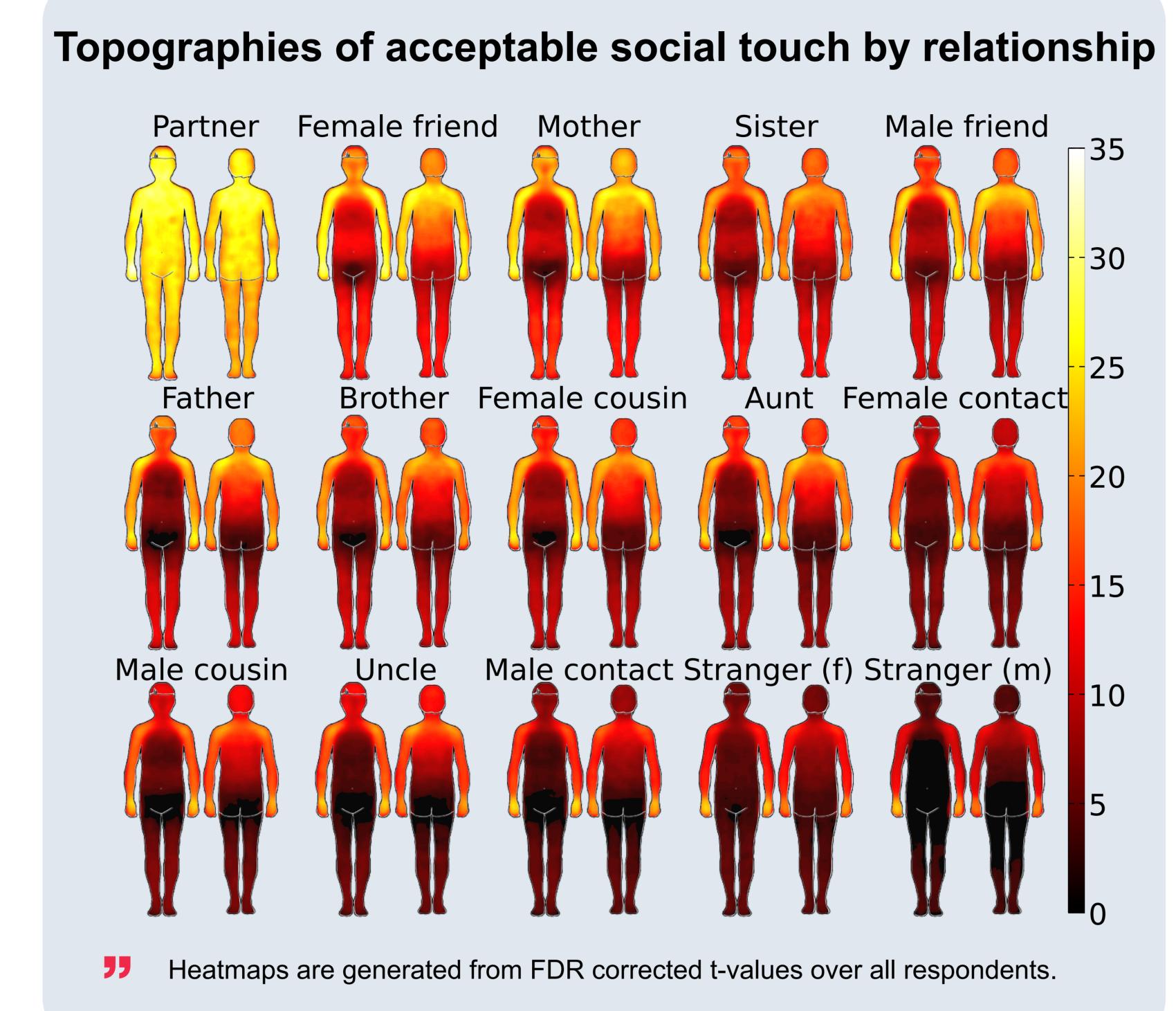
Methods

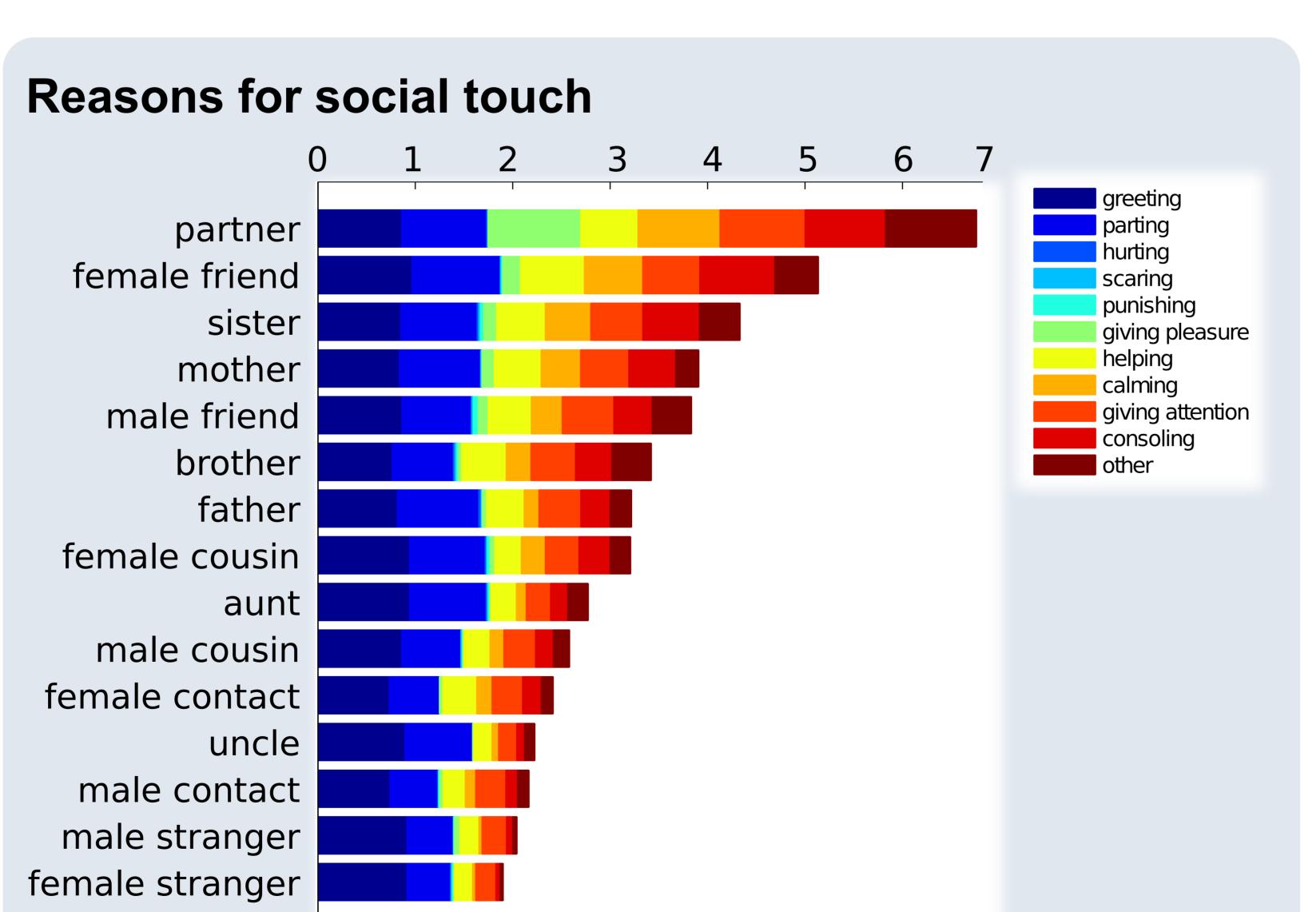
Experiment 1: 91 Finnish subjects completed an online questionnaire regarding touching behavior in their social network: who they touch, where (at home, in their workplace, and in public), and why.

Experiment 2: Subjects (n=972) from Finland, Italy, Russia and France were shown front and back silhouettes of human bodies with an online tool (Nummenmaa et al, 2014). They were asked to color the bodily regions where different members of their social network could touch them, or where they think they could touch the corresponding individuals.

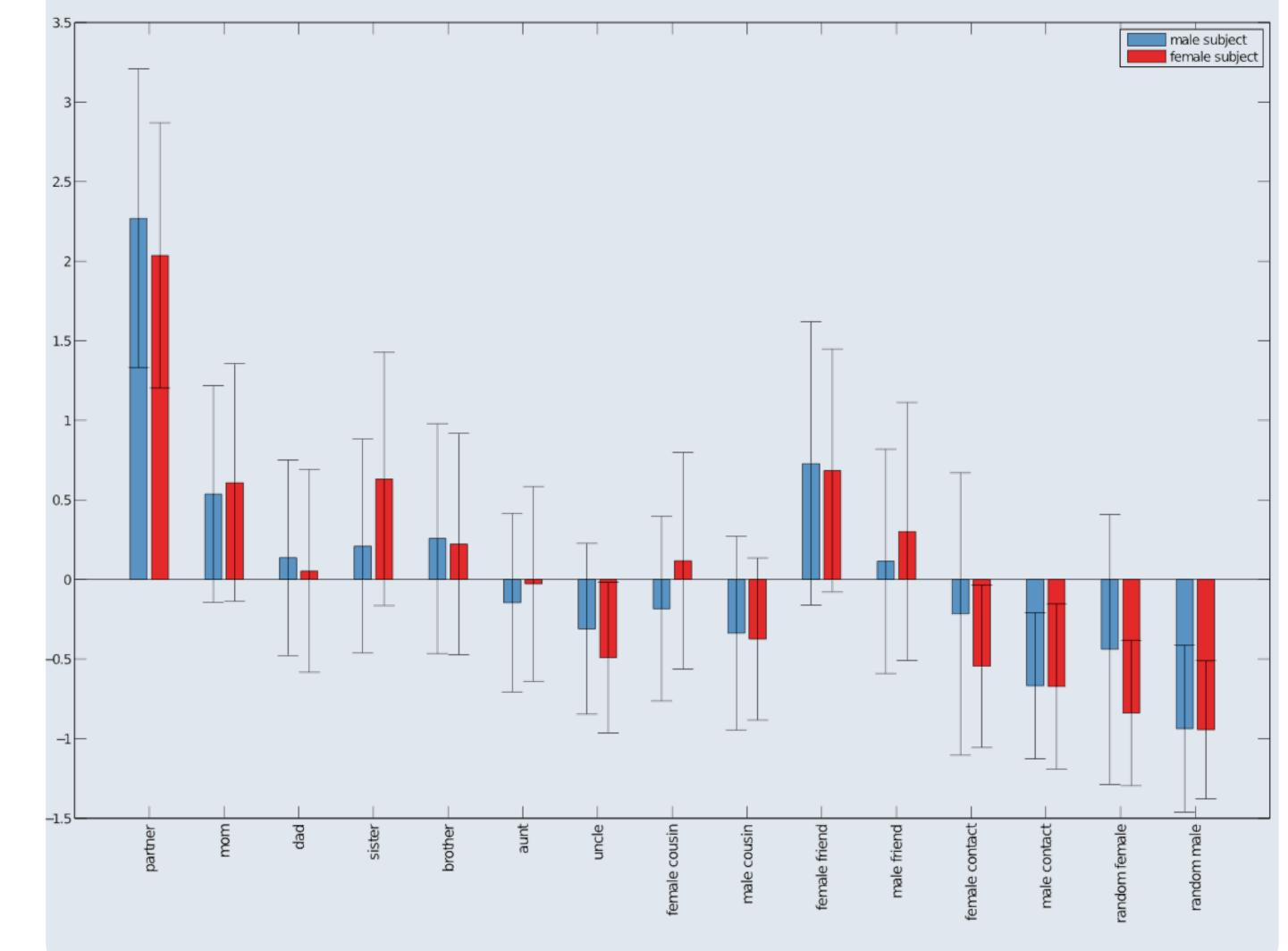


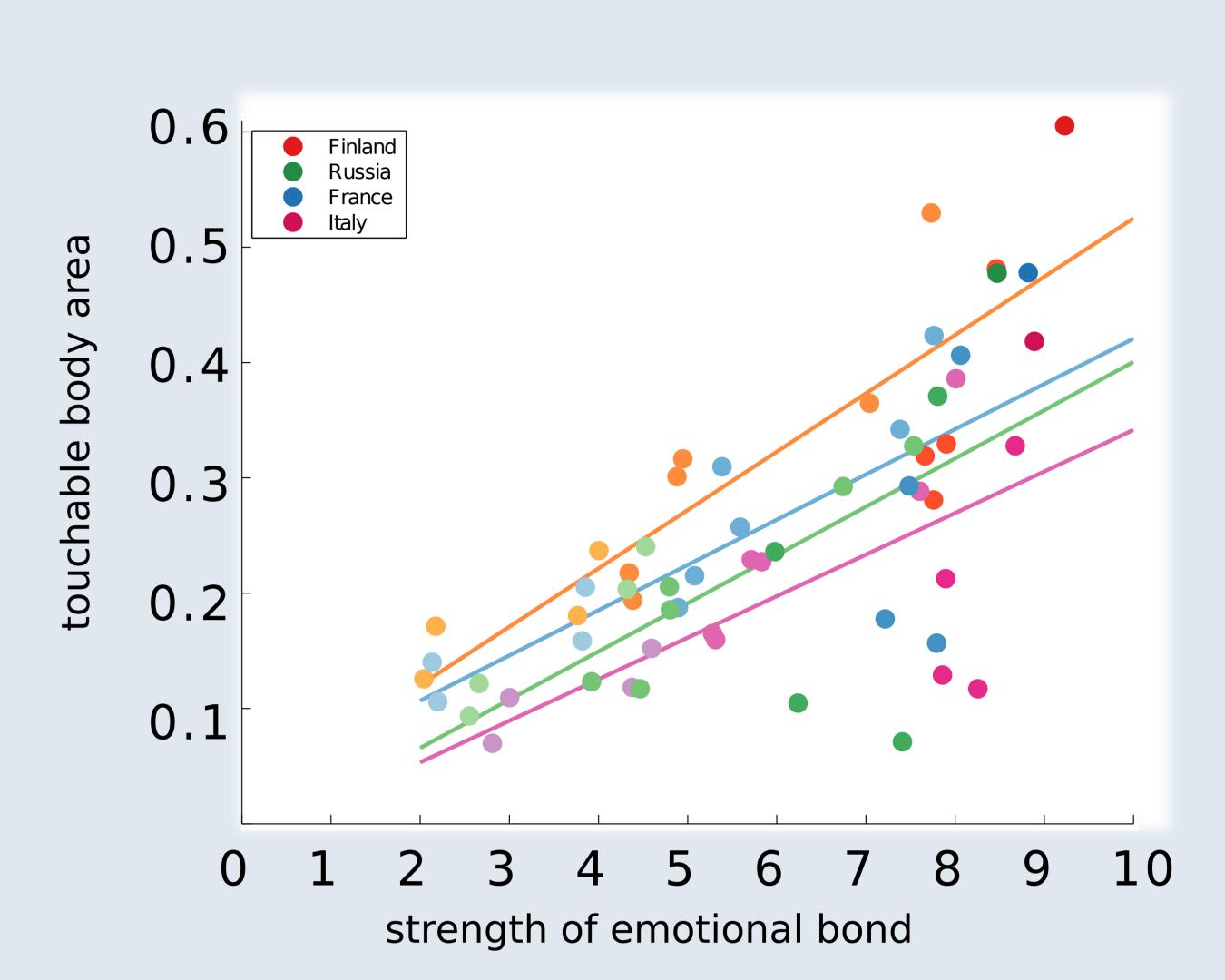
Results





Touchable body area depends on the gender of both toucher and the person being touched



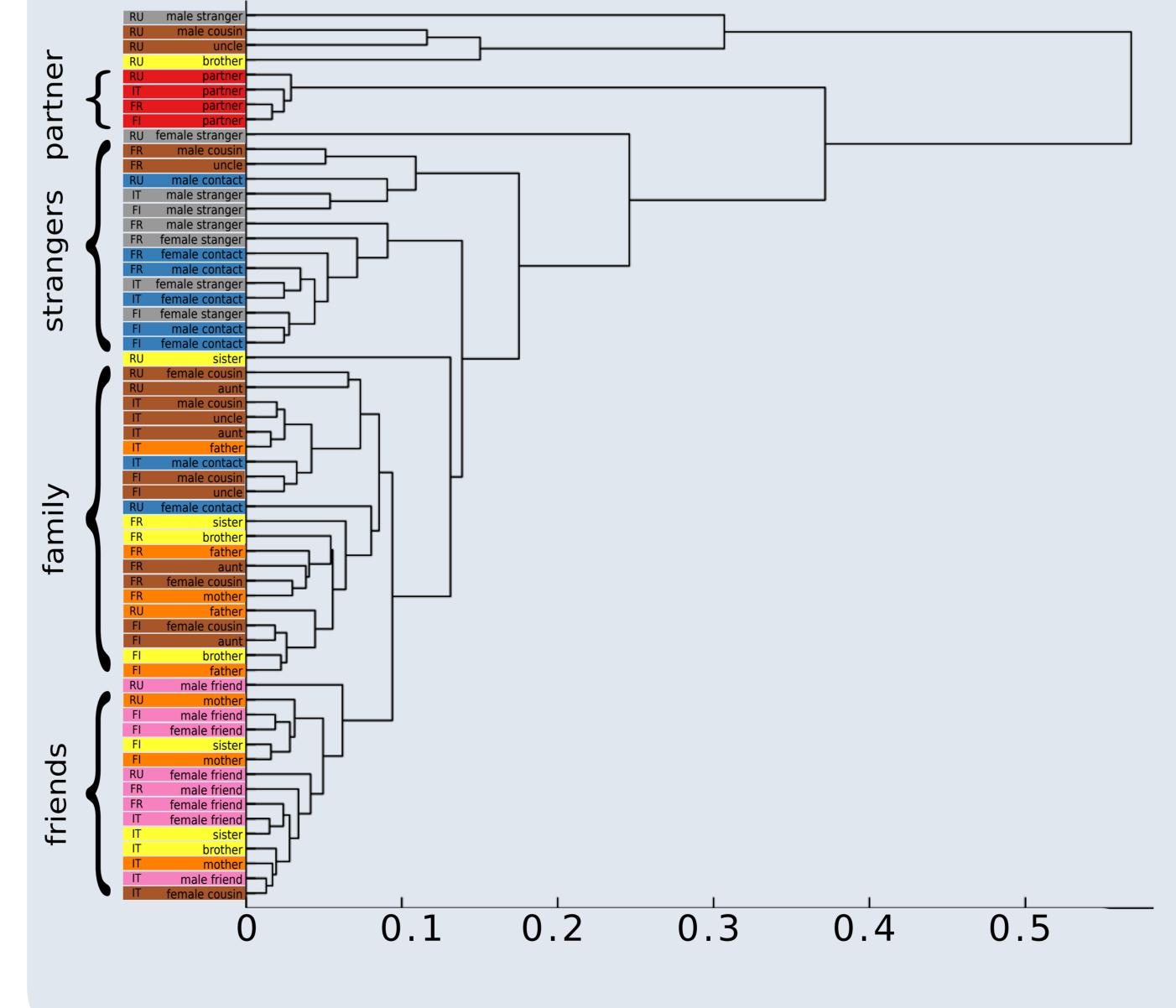


Strength of emotional bond correlates

strongly with touchable body areas

Intensity of marker color reflects the layer of social network where the toucher is located

Layers of social network stay separated when clustering averaged body maps



Conclusions

- JJ Topographies of social touching are spescific by cultural norms as well as relationship between the toucher and the person being touched
- Women are allowed to touch in more places than men even when formal relationship is the same (for example, uncle and aunt)
- JJ Strength of emotional bond dictates how much body area a given person can touch

References

Nummenmaa, L., Glerean, E., Hari, R., & Hietanen, J. K. (2014). Bodily maps of emotions. Proceedings of the National Academy of Sciences, 111(2), 646-651.



