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# Mapping the social, emotional and sensory qualities of interpersonal touch

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## Abstract

The perceived meaning of touch is likely to be informed by its sensory features together with the social context and personal characteristics. However, most affective touch research has minimised contextual information. The aim of this study is to map physical features to social, emotional and sensory descriptors of social touch interactions.

We recruited 1000 English-speakers internationally for an online survey, who viewed short video clips (7-9 secs) showing the perspective of a person being touched. The stimuli consisted of a hand touching a forearm using 24 touch expressions that reflect the range of previously measured physical parameters present in naturalistic touch. The expressions varied by contact (hand, finger), direction (horizontal, vertical), speed (3, 9, 18 cm/s), and force (light, strong). Respondents answered open-ended questions to capture three domains of description: sensory, emotional, and social context. They also rated the valence and arousal of the touches.

Respondents rated the touches mostly positively, and ratings varied depending on the physical features. Arousal was mostly neutral. Word frequency analysis revealed that imagined social scenarios involved a variety of body locations and occurred predominantly at home. Relationships to the toucher were primarily close ("friend" or "romantic partner") and varied by touch features. Touch delivered by the hand was more frequently described with the words "warm", "comfort" and "calm" than finger touches. Horizontal movement was described with "calm" and "love" and associated with "romantic partner", while vertical movement was more associated with "child", and vertical finger expressions were described with "annoy" or "attention".

**Keywords:** social touch, social context, sensory descriptors, affective touch, lexicon

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