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Title: Social Touch During Development: Long-Term Effects on Brain and Behavior

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### Highlights

- Development is shaped by social touch, as shown by animal models and human studies
- We predict different long-term effects depending on valence, intensity, and timing
- We review the literature on social touch in light of these variables
- We identify gaps in the literature needed to design second-generation models

### **Abstract (max 170 words)**

In this paper, our goal is to explore what is known about the role of social touch during development.

We first address the neural substrates of social touch and the role of tactile experience in neural development. We discuss natural variation in early exposure to social touch, followed by a discussion on experimental manipulations of social touch during development and “natural experiments”, such as early institutionalization. We then consider the role of other developmental and experiential variables that predict social touch in adults. Throughout, we propose and consider new theoretical models of the role of social touch during development on later behavior and neurobiology.

### **KeyWords (3-12)**

Social touch, CT fibers, bio-behavioral development

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