

Abstract

Despite the importance of touch in our everyday social interactions from birth through to adulthood, little empirical published research has been conducted on the topic of affective touch over the years. Here, focusing on the physical properties of pleasant touch, the primary aim of the present study was to explore a possible link between pleasantness and perceived humanness of touch, and the secondary aim was to explore the role of sex and material familiarity for the perceived pleasantness of touch, with wider range of materials and a larger group of participants compared to the preexisting findings. With highly controlled stimuli materials, including cotton, denim, felt, foam, fur, leather, paper, plastic, silk, suede and velvet, and velocities, 4 cm per second to target C-tactile (CT) afferent and 0.5 cm per second as control, by a touch device, our study showed a positive correlation between pleasantness and perceived humanness of touch. Yet, the novel, but complex, roles pertaining to sex and familiarity for the perceived pleasantness of touch remain plausible. In particular, the present study is the first to obtain the subjective perception of humanness in relation to touch pleasantness. This highlights the notion that different somatosensory dimensions of humanness (i.e. texture and velocity) all converge to enhance pleasure, demonstrating the richness of the physical properties of pleasant touch.

Keywords: Touch; tactile perception; C-tactile afferents; pleasantness; humanness