Topography of Human Erogenous Zones

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Introduction

Here we reveal detailed topographical organization of bodily regions sensitive to triggering sexual arousal by self-produced and external touching. Touching a partner sexually may trigger and maintain their sexual arousal, thus preparing the partner physically for copulation and thus promoting sexual behaviour. It is therefore interesting to compare both sexes’ self reports and perception of the opposite sex’s erogenous zones to see, to which extent they correspond. If sexual touching only functions as a way to modulate sexual arousal, touching patterns should be concordant during masturbation and while having sex with partner. If touching patterns during masturbation and sex with partner differ, it might mean that touching during sexual interaction serves functions unrelated to triggering sexual arousal.

Methods

704 Finnish participants (528 females, mean age = 26 years, SD = 6.5 years) used an online tool (Figure 1) to report their own erogenous zones and speculate on opposite sex members’ erogenous zones while masturbating and having sex with partner. An independent sample of 88 volunteers (64 females, mean age = 26 years) participated in a control experiment mapping tactile and nociceptive sensitivity of different bodily regions.

Results

2. Maps of human erogenous zones

Masturbating

Sex with partner

Maps of human erogenous zones during masturbation and sex with a partner. The data are thresholded at p < 0.05, FDR corrected. The colour bar indicates the t-statistic range in one sample test.

3. Participant predictions of total area of erogenous zones of the opposite sex is well matched with self reports

Female with partner
Male with partner
Female masturbating
Male masturbated

Total area (%) of erogenous zone

Effects of participant sex and touch type (masturbation vs. sex with partner) on the total area of erogenous zones in the male and female body. Number is the correlation between average predicted and reported topographies (all significant at p > 0.05).

4. Mean tactile and nociceptive sensitivity maps

Mean tactile and nociceptive sensitivity maps for males and females. The data are shown on an arbitrary scale [0, 100], scaled individually for females and males, and are square root transformed to better visualize regional variation in the lower tail of the distribution. Tactile sensitivity correlates more strongly with erogenous zones (Fig. 2) than nociception (average correlations with all EZMs 0.64 and 0.32, respectively).

Conclusions

Whole human body supports triggering of sexual arousal by somatosensory stimulation. There is a clear topographical organization of core erogenous zones, which are engaged while masturbating, and extended erogenous zones, which are selectively used when having sex with a partner. Selectivity of extended erogenous zones might reflect the role of touching in establishment and maintenance of pair bonds. Tactile sensitivity is a good predictor of extended erogenous zones.

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References

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