

Abstract

Olfaction plays an important role in human mate selection or in ratings of sexual attractiveness of potential mates. Many studies suggest that olfaction is associated with human sexuality and arousal as well, especially in women, for whom the perception of odors is an important aspect not only in mate selection, but also in sexual context. There are steroids called 16-androstenes, which have a unique importance in this issue. These steroids, produced by the apocrine glands, are compounds of human body odor. The aim of the empirical part of this thesis is to research the associations between olfactory abilities and sexual function in women, especially with particular focus on the association of olfactory sensitivity (particularly to androstadienone as well as in general), orgasmicity and arousal, which are two major domains of sexual function. Participants were 90 heterosexual and coupled female students aged 21-30. All participants were tested during the follicular phase of their menstrual cycle. The *Sniffin Sticks* olfactory test was employed to assess the general olfactory functions. Among others, olfactory sensitivity to androstadienone was measured, as well as the perceived intensity and hedonicity of androstenone, androstenol and andostadienone. Participants filled out a set of questionnaires concerning their sexuality, personality and olfactory perception. Results of this study have shown a positive correlation between general olfactory sensitivity and orgasmicity (Kendall Tau= ,25; N= 78; p= ,001) and between olfactory sensitivity to androstadienone and orgasmicity (Kendall Tau= ,18; N=78; p< ,05). Also a link between perceived intensity of androstadienone and orgasmicity has been found (Kendall Tau= ,25; N= 78; p= ,001), along with the association between *Odour Awareness Scale* score, arousal and orgasm (Kendall Tau= ,22; N= 78; p< ,01). We can suggest that better olfactory abilities can increase the sexual satisfaction of women, and secondarily also that of their partners which contributes to the stability and satisfaction in their sexual relationship. However, the causality of the association between olfaction and sexuality is uncertain.

Key words: olfactory function, olfactory sensitivity, 16-androstenes, androstadienone, sexuality, arousal, orgasm