Electronic Supplementary Material 1

A predicted interaction between odour pleasantness and intensity provides evidence for MHC social signalling in women

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Supplementary Table S1. Studies that tested experimentally for MHC-linked body or urinary odours and/or odour preferences in humans, based on a search in Web of Science *(*www.webofknowledge.com*),* starting with the keywords "HLA" and "odour", and examining studies that cited, or were cited by, the papers that matched the search criteria. The table summarizes the conclusions drawn by the authors of the respective paper, with "yes" = the authors concluded that they had found evidence for MHC-linked effects on odours or odour perception; "(yes)" = both sexes were included and analyses were not sex-specific; "." = link to MHC was not tested; "?" = the role of the MHC remained unclear because there was no statistically significant link. The column "Critique & authors' reply" refers to commentary papers that specifically addressed aspects of the respective paper.

Study	MHC-linked odours		MHC-linked odour perception		Comments	Critique & authors' reply
	men	women	men	women		
Gilbert et al. (1986) [1]	.	.	(yes)	(yes)	Humans evaluating odours of MHC-congenic mice.	
Ferstl et al. (1992) [2]	(yes)	(yes)	.	yes	Human urinary odours evaluated by rats; women reporting peculiar odour perception phenomena.	
Wedekind et al. (1995) [3]	yes	.	.	yes	Users of contraceptive Pill had different preferences than non-Pill users.	[4], [5]
Wedekind & Füri (1997) [6]	yes	?	yes	yes	No significant sex differences in MHC-linked preferences; strongest MHC-linked preference for one male odour ($r^2 = 0.23$).	
Eggert et al. (1999) [7]	yes	yes	.	.	Human odours evaluated by rats and in gas chromatography.	
Milinski & Wedekind (2001) [8]	.	.	yes	yes	MHC-linked preferences for some traditional perfume ingredients.	
Jacob et al. (2002) [9]	yes	.	.	yes	Preferences tested in a group of low genetic diversity.	[10], [11]
Thornhill et al. (2003) [12]	yes	yes	yes	yes	Preferences of male odours linked to MHC heterozygosity, preferences of female odours linked to MHC similarity.	
Santos et al. (2005) [13]	yes	?	?	yes	Potential effects of the contraceptive pill not included in analyses.	
Pause et al. (2006) [14]	yes	yes	yes	yes	Analysing electroencephalograms with axillary hairs as odour samples.	
Wedekind et al. 2007 [15]	yes	.	?	yes	Descriptions of body odours by a female perfumer.	
Roberts et al. (2008) [16]	yes	.	.	yes	Odour preferences shifted towards MHC similarity with use of the contraceptive Pill (as predicted in [3])	
Janes et al. (2010) [17]	?	?	(yes)	(yes)	MHC-linked preferences to artificial scents, no significant link to body odours (the authors discuss ethnic diversity as potentially confounding).	
Natsch et al. (2010) [18]	?	?	.	.	Testing for MHC effects on N-acylglutamine conjugates of volatile carboxylic acids secreted in the axilla.	
Hämmerli et al. (2012) [19]	.	.	(yes)	(yes)	MHC-linked preferences for some traditional perfume ingredients	
Milinski et al. (2013) [20]	.	.	.	yes	Supplementation of own body odour by synthesized MHC peptides.	[21], [22]
Verhulst et al. (2013) [23]	?	.	.	.	Testing MHC effects on attractiveness of odours to mosquitoes.	
Probst et al. (2017) [24]	.	?	?	.		present paper
Present reanalysis of Probst et al.	.	yes	yes	.		

The table only lists studies that tested for potential MHC effects on odours or odour preferences in humans. It does not list studies that tested for links between MHC and facial or skin characteristics [e.g. 25, 26, 27] or that tested for potential MHC effects on mate choice, sexual responsivity, or fertility in humans for which some studies did not find significant MHC effects [e.g. 28, 29] while others found statistically significant links to the MHC [e.g. 30, 31, 32-34].

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