

THE CONVERSATION

Why gendered deodorants work – particularly for some men

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Old Spice may be the solution for those looking to be more manly. [youtube.com](https://www.youtube.com/watch?v=1G4F8YUgW08)

Adverts for male deodorants – such as Old Spice or Axe/Lynx – typically promise a boost in manliness and romantic success for those discerning enough to try the products. But can artificial fragrances, mixed with our natural body odours, really make us appear more masculine or feminine? Our **latest research** reveals this may indeed be the case. We found that men who are perceived as not being particularly masculine benefit the most from using deodorant.

As you would expect, this is all about sex and our search for the ideal partner. Both masculinity and femininity are important qualities in potential romantic partners. For example, studies have linked masculine physical traits in men to various indicators of “quality”, such as physical strength, good health, and reproductive capacity. Similarly, feminine traits in women also indicate reproductive quality – studies have linked feminine facial features with higher oestrogen levels.

“I’m on a horse”.

Given the relevance of masculinity and femininity in assessing romantic partners it's not surprising that fragrances are often tailored to be either masculine or feminine, **with only a minority marketed as unisex**. But we wanted to know how successful such products actually are in manipulating our perceptions of masculinity and femininity when mixed with a person's natural body odour.

The experiment

Masculinity and femininity can be assessed in many ways, such as facial structure, voice and body odour. We used this in our study to collect masculinity and femininity ratings of both faces and odours and then see how the relationship between these was altered by artificial fragrances (participants' own deodorants).

In total, 20 men and 20 women provided us with facial photographs, "unaltered" odour samples and "odour plus deodorant" samples. These were then judged and rated by heterosexual participants (130 face raters and 239 odour raters) on the basis of their masculinity or femininity.

Given that previous findings have found that femininity is usually seen in **faces and voices simultaneously** while masculinity is often linked across **faces, voices and body odour**, we predicted that participants would give similar ratings to both faces and odours.

However, only female participants did. Ratings given by men showed no agreement between the faces and odours of different donors. It could be that men are not as accurate at assessing the stimuli, or perhaps they were less motivated in the study.

Though the lack of agreement in men's ratings of faces and odours is not an objective measure of olfactory accuracy, they are not surprising as sex differences in olfactory perception have been reported before, with **women often outperforming men**. It is perhaps just as well, as **women place a greater importance on smell** when assessing potential partners.

One explanation for this sex difference is that women have **greater biological costs of reproduction** than men do. It is therefore more important for them to be able to accurately assess an individual's quality before they begin a relationship with them. Men on the other hand can afford to be less picky as sperm is (relatively) cheap.

We also found that when women applied deodorant this significantly increased their ratings of "odour femininity". In other words, if a woman had a low rating of femininity for her face and natural odour, applying deodorant would increase this, but she would still have lower femininity than "more feminine" women who were wearing deodorant.



Love: in the nose of the beholder? Artem
Tymoshenko/shutterstock

This pattern was completely different in men. Men who were rated as less masculine before applying deodorant benefited from a significant boost to their ratings after using deodorant. On the other hand, men who had a higher masculinity rating from the start were not rated differently after using deodorant. This finding suggests that some men may actually be able to use deodorant to enhance their masculinity in a way that may “level the playing field” (at least as far as odour is concerned), between themselves and their more masculine compatriots.

Evolutionary origin?

We hypothesise that the findings may reflect the difference between our preferences for masculinity and femininity. Both traits seem important in partner choice, but studies show that there is an **optimum preferred level of masculinity**. This is because masculinity also has **negative connotations** such as aggression, poor cooperation, and poor parenting – not ideal traits in a romantic partner.

Interestingly, there are no studies suggesting that there is an optimum level of femininity. These findings suggest that our evolved biological preferences (for differential levels of masculinity and femininity) have potentially shaped the design of the fragrances which we use – female fragrances can be as feminine as they like without penalty, but no one wants an extremely masculine deodorant.

Of course, it is not entirely clear why we perceive certain artificial odours as masculine or feminine. It could be that this is something that is entirely driven by marketing or culture, as it is likely that interpretations of masculinity and femininity vary cross-culturally. But it could also be that these fragrances are in some way similar to natural odours. I don't mean that we create fragrances which smell like body odour, but body odours are complex and have hundreds of compounds within them and perhaps some of these are similar (perceptually) to some of the compounds used in a fragrance. Take, for example, the use of animal musk in fragrances.

While these findings are intriguing, they only represent one study and must be interpreted cautiously until we have further evidence. However, it does reveal the tip of an iceberg. There are countless studies showing that we can find out a lot about a potential partner from their body odour, including **health status**, **personality**, **fertility** and even **genetic relatedness**. Our avid use of fragranced products therefore necessitates further investigations which may one day reveal a lot about our everyday social interactions.



Masculinity

Femininity

perfume



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