

When sweaty means relaxing


A new study suggests that other people's sweat could help relieve social anxiety.




SOCIETY



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A recent pilot study has highlighted an interesting possibility for better treatment of certain mental health problems. According to the study, exposure to human odours extracted from people's sweat might be part of the solution for reducing social anxiety. This research was carried out as part of the EU-funded [POTION](#)  project that is investigating the way in which chemosignals – a type of pheromone uniquely produced by humans – influence social interaction.

Social anxiety is a common mental health condition where people feel intense anxiety or fear of being watched and judged by others. This affects their interactions at work and school, and even in everyday situations such as shopping or eating in public. Through this study, a team of European scientists discovered that patients who underwent mindfulness therapy (focus on increasing awareness of thoughts, feelings and actions that hinder progress) while also exposed to human chemosignals experienced decreased social anxiety.

“Our state of mind causes us to produce molecules (or chemo-signals) in sweat which communicate our emotional state and produce corresponding responses in the receivers. The results of our preliminary study show that combining these chemo-signals with mindfulness therapy seem[s] to produce better results in treating social anxiety ... [than] can be achieved by mindfulness therapy alone,” explains lead researcher Elisa Vigna of POTION project partner Karolinska Institutet, Sweden, in a [press release](#)  posted on the website of the ‘European Psychiatric Association’.

The team collected sweat samples from volunteers who were watching short clips from films specially chosen to elicit the emotions of fear and happiness. This was to determine whether the different emotions experienced by the volunteers while sweating would affect the treatment of patients exposed to these volunteers’

chemosignals differently.

The researchers tested the effect of these sweat samples on 48 women between 15 and 35 years of age who suffered from social anxiety. They divided the women into three groups of 16 and over a period of 2 days exposed each group to a different odour as they underwent mindfulness therapy. One group was exposed to chemosignals of fear, another to chemosignals of happiness, and the third – control group – to clean air.

Fear and happiness, it is all the same

“We found that the women in the group exposed to sweat from people who had been watching funny or fearful movies, responded better to mindfulness therapy than those who hadn’t been exposed,” reports Vigna. After one treatment session of mindfulness therapy combined with exposure to human body odours, the patients showed a 39 % reduction in anxiety, compared with the less impressive 17 % reduction in anxiety experienced by the group receiving mindfulness therapy only.

“We were a little surprised to find that the emotional state of the person producing the sweat didn’t differ in treatment outcomes – sweat produced while someone was happy had the same effect as someone who had been scared by a movie clip,” the researcher goes on to say. “So there may be something about human chemo-signals in sweat generally which affects the response to treatment. It may be that simply being exposed to the presence of someone else has this effect, but we need to confirm this.”

The POTION (Promoting social interaction through emotional body odours) team is now testing this possibility in a follow-up study that includes sweat from people watching neutral documentaries.

For more information, please see:

[POTION project website](#) 

Keywords

POTION, sweat, social anxiety, mindfulness, chemosignal, odour

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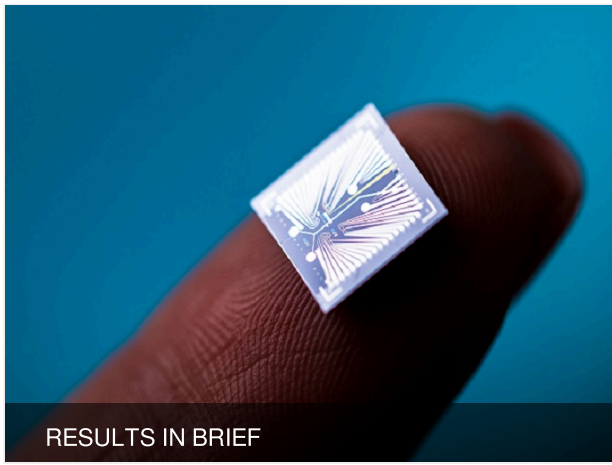


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