

Is health anxiety related to disease avoidance?

J. Axelsson, M Lekander, B. Karshikoff & E Hedman

Dept. Clinical Neuroscience, Karolinska Institutet & Stress Research Institute, Stockholm University



Conclusion

- Our data supports that cognitive biases and disgust of other peoples' health status are significant features of severe health anxiety

- A sensitivity to whether other people are contagious (pathogenic threats) have probably been evolutionary beneficial, allowing for "disease avoidance". We here propose that a heightened sensitivity may have debilitating effects in a society with many people and a high demand for social interactions.

Hypotheses

We hypothesized that a higher degree of health anxiety would relate to an altered interpretation of other people's health status and that this would be driven by disgust and a worry for becoming sick.

Method

We recruited 225 participants with a varying degree of health anxiety (of which 132 were patients suffered from severe health anxiety, i.e. meeting criteria for a diagnosis of either somatic symptom disorder or illness anxiety disorder according to DSM-5). Mean age was 38.2 years (SD=8.2) and 69% were women.

Procedure

The participants rated 12 facial photographs (of people with a varying degree of appeared health) with respect to health, attractiveness, sociability, risk of becoming sick if meeting this person, worried over the own health, anxious if seeing this person and disgust. We analysed how health anxiety (as assessed with the Health Anxiety Inventory, HAI) was associated with these outcomes.

How large is the risk of becoming infected if meeting this person?



1 2 3 4 5 6 7

No risk at all Very large

Illustration. Each participant rated one facial photograph for one outcome at a time. The picture (merged from 13 faces) is from another study.

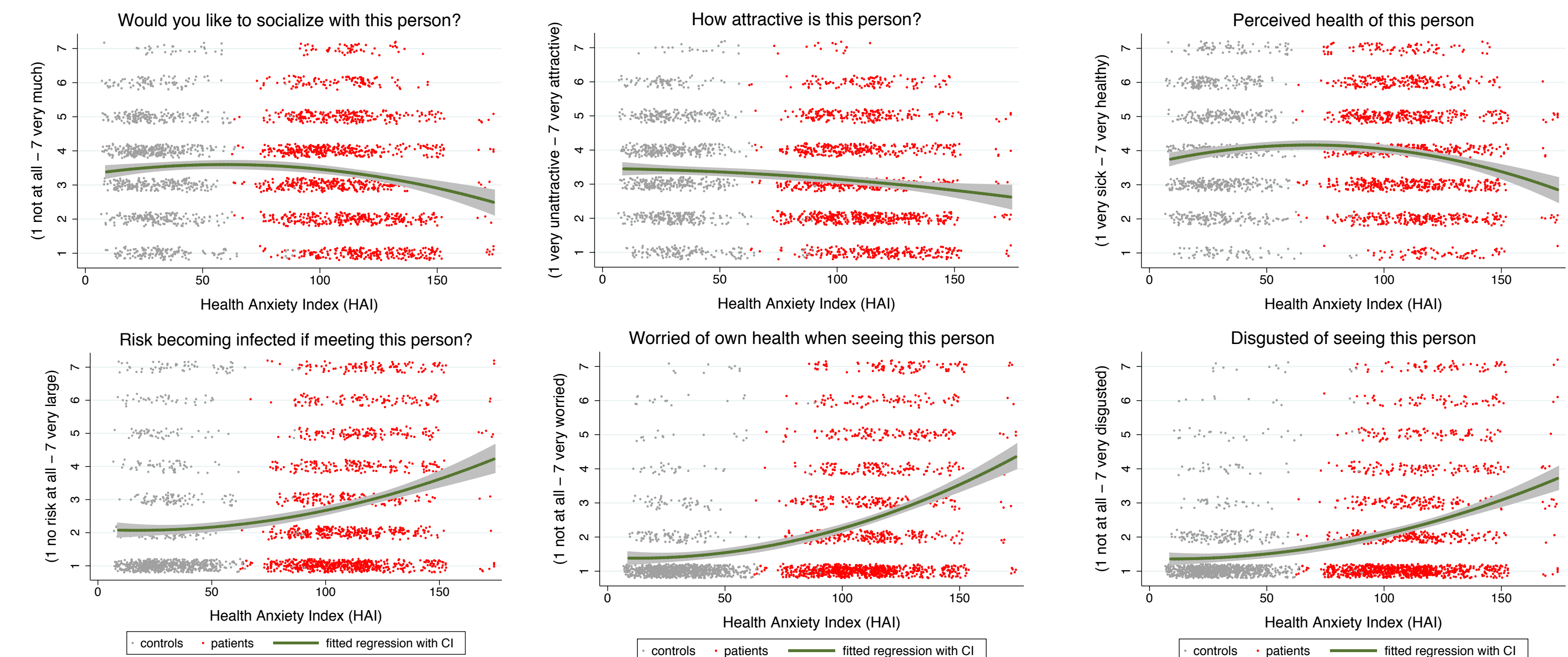


Figure. The relationships between Health anxiety (Health anxiety index, HAI) and ratings of facial photos. Each photo was rated with respect to: willingness to socialize with the person, attractiveness, perceived health, risk of becoming infected if meeting this person, worried over the own health seeing this person (not shown), and how disgusted they were when seeing this person. All effects were significant for both linear and quadratic relationships (only quadratic relationships are shown).

Results

- Higher levels of health anxiety (HAI) was linearly related to perceiving other people as less healthy ($b = -.2 \pm .0$ SE steps of the scale for 100 HAI points), less attractive ($b = -.4 \pm .1$) and wanted to socialize less with them ($b = -.3 \pm .1$, all p 's $< .001$, all small effect sizes).
- HAI was also related to believing one had a higher risk of becoming infected if meeting the people on the photos ($b = +1.0 \pm .1$), more worry about the own health ($b = +1.4 \pm .1$), becoming more anxious ($b = +1.1 \pm .1$), and more disgusted ($b = +1.2 \pm .1$; all p 's $< .001$).
- All analyses were significant for quadratic relationships (as illustrated in the figures) and when adjusting for patient group.
- The relationships between HAI and social/health/attractiveness were non-significant when adjusting for worry or disgust, suggesting them as possible mechanisms.

We are presently working on testing the disease avoidance model. This includes experimental studies on involved mechanisms and behaviour as well as interventions studies in clinical groups.



John Axelsson, PhD
Karolinska Institutet
Dept. of Clinical Neuroscience
Email: john.axelsson@ki.se
& Stockholm University
Stress Research Institute

