

How Neuroticism and Disgust Influence Health Anxiety through Anxiety Sensitivity: A Conditional Process Model

Kevin Styba-Nelson, Layton J. Byam, & Dr. Alexander M. Penney

Abstract

Health anxiety (HA) is the persistent worry about one's health or persistent concerns that one might become seriously ill. Previously, HA has been associated with neuroticism, anxiety sensitivity, and disgust. The present study sought to examine if disgust moderates the relationships between neuroticism, anxiety sensitivity, and HA. An undergraduate sample (N = 552) completed online self-report questionnaires of neuroticism and HA. Participants also completed measures of disgust, which contained propensity and sensitivity subscales, as well as anxiety sensitivity, which contained physical, cognitive, and social subscales. Hayes' (2023) PROCESS macro was used to conduct a conditional process analysis. We found that neuroticism had an indirect effect on HA through both anxiety sensitivity physical and anxiety sensitivity cognitive. Further, for participants with greater disgust sensitivity, there was a larger indirect effect of neuroticism on HA through anxiety sensitivity physical. Overall, these findings support that neuroticism, anxiety sensitivity, and disgust sensitivity are significant factors that contribute to HA. The findings also suggest that therapeutic techniques like interoceptive exposure to internal sensations may be effective strategies to treat HA, as they would be able to target the anxiety and disgust sensitivities that underlie HA.

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A Conditional Process Model

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Introduction

We examined if disgust influences the relationship from neuroticism to health anxiety, including through anxiety sensitivity

- Health anxiety is the persistent excessive worry about one's health or concerns that one might become ill (Salkovskis et al., 2002)
- Health anxiety has been associated with neuroticism (Anagnostopoulos & Botse, 2016; Noyes et al., 2003) and anxiety sensitivity (Bailer et al., 2016)
- Previous research has shown that disgust may contribute to anxiety and OCD symptoms independently of neuroticism (Olatunji et al., 2007)
- Anxiety sensitivity has been found to mediate the relationship between disgust sensitivity and health anxiety (Brady et al., 2014)

We hypothesized that disgust moderates the effects of neuroticism on health anxiety, as well as the pathway of neuroticism to anxiety sensitivity to health anxiety

Method

552 undergraduates completed online surveys

(*Age* = 20.9 years, 73.0% Female, 22.3% Male, 3.1% Non-binary)

Short Health Anxiety Inventory (SHAI; Salkovskis et al., 2002)

Positive and Negative Affect Schedule (PANAS; Watson et al., 1988)

- Negative Affect (PANAS-N)

Anxiety Sensitivity Index-3 (ASI-3; Taylor et al., 2007)

- Physical Concerns (ASI-P)
- Cognitive Concerns (ASI-C)
- Social Concerns (ASI-S)

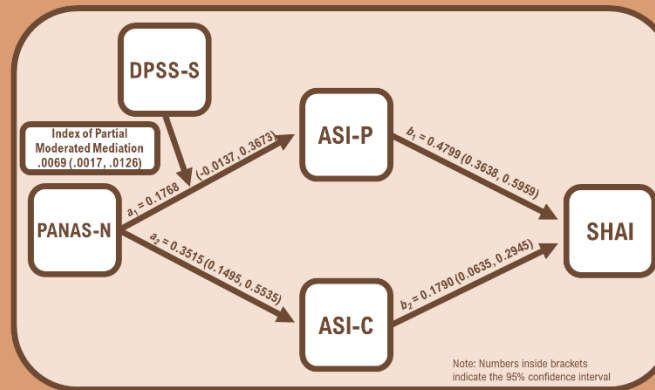
Disgust Propensity and Sensitivity Scale-Revised

(DPSS-R; Olatunji et al., 2007)

- Disgust Propensity (DPSS-P)
- Disgust Sensitivity (DPSS-S)

Hayes' (2023) PROCESS macro (Model 10) was used to conduct a conditional process analysis

Disgust influences the effect of neuroticism on health anxiety through anxiety sensitivity



Indirect effect of ASI-P (a_1b_1)

DPSS-P Percentile	DPSS-S Percentile	Effect	95% CI Lower	95% CI Upper
16 th	16 th	0.0963	0.0552	0.1459
16 th	50 th	0.1379	0.0858	0.1993
16 th	84 th	0.1934	0.1102	0.2890
50 th	16 th	0.0732	0.0300	0.1283
50 th	50 th	0.1148	0.0749	0.1633
50 th	84 th	0.1702	0.1072	0.2448
84 th	16 th	0.0454	-0.0208	0.1260
84 th	50 th	0.0870	0.0396	0.1498
84 th	84 th	0.1425	0.0915	0.2050

Indirect effect of ASI-C (a_2b_2)

DPSS-P Percentile	DPSS-S Percentile	Effect	95% CI Lower	95% CI Upper
16 th	16 th	0.0643	0.0205	0.1120
16 th	50 th	0.0721	0.0228	0.1256
16 th	84 th	0.0826	0.0249	0.1515
50 th	16 th	0.0597	0.0184	0.1082
50 th	50 th	0.0675	0.0218	0.1172
50 th	84 th	0.0780	0.0244	0.1389
84 th	16 th	0.0541	0.0145	0.1101
84 th	50 th	0.0620	0.0190	0.1148
84 th	84 th	0.0725	0.0229	0.1290

Discussion

Neuroticism had an indirect effect on health anxiety through both anxiety sensitivity physical and anxiety sensitivity cognitive

For participants with greater disgust sensitivity, there was a larger indirect effect of neuroticism on HA through anxiety sensitivity physical

Therapeutic techniques like interoceptive exposure to internal sensations may be effective strategies to treat health anxiety, as they may decrease the anxiety and disgust sensitivities that contribute to health anxiety

Addendum

Scan here to see the abstract, a copy of the poster, and full references

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