

Health anxiety and attentional bias toward virus-related stimuli during the COVID-19 pandemic

Loreta Cannito (✉ loreta.cannito@unich.it)

University G. D'Annunzio

Adolfo Di Crosta

University G. D'Annunzio

Rocco Palumbo

University G. D'Annunzio

Irene Ceccato

University G. D'Annunzio

Stefano Anzani

University G. D'Annunzio

Pasquale La Malva

University G. D'Annunzio

Riccardo Palumbo

University G. D'Annunzio

Alberto Di Domenico

University G. D'Annunzio

Method Article

Keywords: attentional bias, COVID-19, health anxiety

Posted Date: November 30th, 2020

DOI: <https://doi.org/10.21203/rs.3.pex-1070/v1>

License:  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Version of Record: A version of this preprint was published at Scientific Reports on October 5th, 2020. See the published version at <https://doi.org/10.1038/s41598-020-73599-8>.

Abstract

After the COVID-19 worldwide spread, evidence suggested a vast diffusion of negative consequences on people's mental health. Together with depression and sleep difficulties, anxiety symptoms seem to be the most diffused clinical outcome. The current contribution aimed to examine attentional bias for virus-related stimuli in people varying in their degree of health anxiety (HA). Consistent with previous literature, it was hypothesized that higher HA would predict attentional bias, tested using a visual dot-probe task, to virus-related stimuli. Participants were 132 Italian individuals that participated in the study during the lockdown phase in Italy. Results indicated that the HA level predicts attentional bias toward virus-related objects. This relationship is double mediated by the belief of contagion and by the consequences of contagion as assessed through a recent questionnaire developed to measure the fear for COVID-19. These findings, indicative of attentional bias for virus-related cues, are discussed in the context of cognitive-behavioral conceptualizations of anxiety suggesting a risk for a loop effect. Future research directions are outlined.

Procedure

- 1) select pictures of virus-related objects and neutral objects
- 2) create 40 pairs of virus-related and neutral objects (Test trials)
- 3) create 40 pairs of neutral and neutral objects (Filler trials)
- 4) create the visual dot probe task
- 5) collect data from the dot probe task
- 6) clean collected data by removing a) trials with incorrect response b) trials with reaction times < 250 ms and > 1000 ms
- 7) compute attentional bias by subtracting reaction times to congruent trials (target and probe in the same position) from reaction times to incongruent trials (target and probe in different position)
- 8) calculate health anxiety score
- 9) calculate fear for COVID-19 score (and its subfactors "belief of contagion" and "consequences of contagion")
- 10) perform double mediation model