Investigating centrality in PTSD symptoms across diagnostic systems using network analysis

https://doi.org/10.1080/20008198.2020.1866412

Published in:
European Journal of Psychotraumatology

Document Version:
Publisher's PDF, also known as Version of record

Queen's University Belfast - Research Portal:
Link to publication record in Queen's University Belfast Research Portal

Publisher rights
Copyright 2021 the authors. This is an open access Creative Commons Attribution-NonCommercial License (https://creativecommons.org/licenses/by-nc/4.0/), which permits use, distribution and reproduction for non-commercial purposes, provided the author and source are cited.

General rights
Copyright for the publications made accessible via the Queen's University Belfast Research Portal is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The Research Portal is Queen's institutional repository that provides access to Queen's research output. Every effort has been made to ensure that content in the Research Portal does not infringe any person's rights, or applicable UK laws. If you discover content in the Research Portal that you believe breaches copyright or violates any law, please contact openaccess@qub.ac.uk.

Download date:07. Jun. 2022
Investigating centrality in PTSD symptoms across diagnostic systems using network analysis*

Maj Hansen, Cherie Armour, Emily McGlinchey, Jana Ross, Sophie Lykkegaard Ravn, Tonny E. Andersen, Nanna Lindeklde, Mette Elmose, Sidsel Karsberg & Eiko Fried

To cite this article: Maj Hansen, Cherie Armour, Emily McGlinchey, Jana Ross, Sophie Lykkegaard Ravn, Tonny E. Andersen, Nanna Lindeklde, Mette Elmose, Sidsel Karsberg & Eiko Fried (2021) Investigating centrality in PTSD symptoms across diagnostic systems using network analysis*, European Journal of Psychotraumatology, 12:sup1, 1866412, DOI: 10.1080/20008198.2020.1866412

To link to this article: https://doi.org/10.1080/20008198.2020.1866412

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

Published online: 01 Feb 2021.

Submit your article to this journal

View related articles

View Crossmark data

Citing articles: 1 View citing articles
Investigating centrality in PTSD symptoms across diagnostic systems using network analysis*

Maj Hansen a,b, Cherie Armour a, Emily McGlinchey a, Jana Ross a, Sophie Lykkegaard Ravn a,d, Tonny E. Andersen a, Nanna Lindekiilde a, Mette Elmose a, Sidsel Karsberg a and Eiko Fried a

aTHRIVE, Department of Psychology, University of Southern Denmark, Odense M, Denmark; bSchool of Psychology, Queens University Belfast, University Road, Belfast, Northern Ireland; cSchool of Applied Social and Policy Sciences, Ulster University, Londonderry, Northern Ireland; dSpecialized Hospital for Polio and Accident Victims, Roedovre, Denmark; eCentre for Alcohol and Drug Research, Aarhus BSS, Aarhus University, Aarhus C, Denmark; fDepartment of Clinical Psychology, Leiden University, Leiden, The Netherlands

ABSTRACT

Background: The posttraumatic stress disorder (PTSD) diagnosis has been widely debated since it was introduced into the diagnostic nomenclature four decades ago. Recently, the debate has focused on consequences of having two different descriptions of PTSD: 20 symptoms belonging to four symptom clusters in the Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5), and three symptoms clusters in the 11th edition of the International Classification of Diseases (ICD-11) most often operationalized by six symptoms in the International Trauma Questionnaire (ITQ) (2017) and Hansen, Hyland, Armour, Shevlin, & Elkli (2015). Research has provided support for both models of PTSD, but at the same time indicates differences in estimated prevalence rates of PTSD (Hansen et al., 2015, 2017). A growing body of research has modelled PTSD both theoretically and statistically as a network of interacting symptoms (Birkeland, Greene, & Spiller, 2020), yet it remains more unclear how the two diagnostic systems perform regarding which symptoms are more central/interconnected.

Objectives and methods: We estimated two 23-item Gaussian Graphical Models to investigate whether ICD-11 or DSM-5 PTSD symptoms are more central in two trauma-exposed samples: a community sample ($N = 2,367$) and a military veteran sample ($N = 657$). PTSD DSM-5 was measured with the PTSD checklist-5 (PCL-5) and the PTSD ICD-11 was measure by the ITQ PTSD subscale.

Results: Five of the six most central symptoms estimated via the expected influence centrality metric across the two samples were identical and represented symptoms from both diagnostic systems operationalized by the PCL-5 and the ITQ.

Conclusions: The results of the present study underline that symptoms from both diagnostic systems hold central positions. The implications of the results are discussed from the perspectives of an indexical (i.e. the diagnostic systems reflect both shared and different aspects of PTSD) and a constitutive view (i.e. the diagnostic systems represent different disorders and the results cannot be reconciled per se) of mental health diagnoses (Kendler, 2017).

ORCID

Maj Hansen http://orcid.org/0000-0002-8328-0807
Cherie Armour http://orcid.org/0000-0001-7649-3874
Emily McGlinchey http://orcid.org/0000-0002-7423-8762
Jana Ross http://orcid.org/0000-0003-2794-1268
Sophie Lykkegaard Ravn http://orcid.org/0000-0002-2908-5832
Tonny E. Andersen http://orcid.org/0000-0002-9045-7500
Nanna Lindekiilde http://orcid.org/0000-0002-4212-6838
Mette Elmose http://orcid.org/0000-0003-4112-9890
Sidsel Karsberg http://orcid.org/0000-0001-6664-603X
Eiko Fried http://orcid.org/0000-0001-7469-594X

References


CONTACT Maj Hansen mhansen@health.sdu.dk THRIVE, Department of Psychology, University of Southern Denmark, Campusvej 55, 5230, Odense, M, Denmark


© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (http://creativecommons.org/licenses/by-nc/4.0/), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.