

Tilburg University

Response: Commentary: Cognitive behavioral therapy versus eye movement desensitization and reprocessing for treating panic disorder

Horst, F.; den Oudsten, B.L.; Zijlstra, W.; de Jongh, A.; Lobbestael, J.; de Vries, J.

Published in:
Frontiers in Psychology

DOI:
[10.3389/fpsyg.2018.02045](https://doi.org/10.3389/fpsyg.2018.02045)

Publication date:
2018

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

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):
Horst, F., den Oudsten, B. L., Zijlstra, W., de Jongh, A., Lobbestael, J., & de Vries, J. (2018). Response: Commentary: Cognitive behavioral therapy versus eye movement desensitization and reprocessing for treating panic disorder: A randomized controlled trial. *Frontiers in Psychology, 9*, [2045]. <https://doi.org/10.3389/fpsyg.2018.02045>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.



Response: Commentary: Cognitive Behavioral Therapy vs. Eye Movement Desensitization and Reprocessing for Treating Panic Disorder: A Randomized Controlled Trial

Ferdinand Horst^{1*}, Brenda Den Oudsten², Wobbe Zijlstra^{2,3}, Ad de Jongh^{4,5,6}, Jill Lobbstaël⁷ and Jolanda De Vries^{2,8}

¹ Department of Psychiatry, St. Elisabeth Hospital, Tilburg, Netherlands, ² Department of Medical and Clinical Psychology, Centre of Research on Psychology in Somatic Diseases, Tilburg, Netherlands, ³ Department of Education and Research, St. Elisabeth Hospital, Tilburg, Netherlands, ⁴ Department of Behavioral Science, Academic Centre for Dentistry, University of Amsterdam and VU University, Amsterdam, Netherlands, ⁵ School of Health Sciences, Salford University, Manchester, United Kingdom, ⁶ Institute of Health and Society, University of Worcester, Worcester, United Kingdom, ⁷ Department of Clinical Psychological Science, Maastricht University, Maastricht, Netherlands, ⁸ Department of Medical Psychology, St. Elisabeth Hospital, Tilburg, Netherlands

OPEN ACCESS

Edited by:

Gian Mauro Manzoni,
Università degli Studi eCampus, Italy

Reviewed by:

Benedikt L. Amann,
Autonomous University of Barcelona,
Spain

*Correspondence:

Ferdinand Horst
f.horst@etz.nl

Specialty section:

This article was submitted to
Clinical and Health Psychology,
a section of the journal
Frontiers in Psychology

Received: 14 September 2018

Accepted: 04 October 2018

Published: 24 October 2018

Citation:

Horst F, Oudsten BD, Zijlstra W, de Jongh A, Lobbstaël J and De Vries J (2018) Response: Commentary: Cognitive Behavioral Therapy vs. Eye Movement Desensitization and Reprocessing for Treating Panic Disorder: A Randomized Controlled Trial. *Front. Psychol.* 9:2045. doi: 10.3389/fpsyg.2018.02045

Keywords: EMDR (eye movement desensitization and reprocessing), CBT (cognitive-behavioral therapy), RCT (randomized controlled trial), panic disorder (PD), psychotherapy

A Commentary on

Cognitive Behavioral Therapy vs. Eye Movement Desensitization and Reprocessing for Treating Panic Disorder: A Randomized Controlled Trial

by Perna, G., Sangiorgio, E., Grassi, M., and Caldirola, D. (2018) *Front. Psychol.* 9:1061. doi: 10.3389/fpsyg.2018.01061

Perna et al. (2018) wrote a commentary in which they respond to two aspects of our study (Horst et al., 2017). First, they try to downplay the results of our study by suggesting that we did not use a measure of severity. This is surely an example of reading our article the wrong way. In fact, we used a set of valid measures closely related to the severity of panic disorder (PD). Two of these, the Agoraphobic Cognitions Questionnaire (ACQ) and the Body Sensations Questionnaire (BSQ) are among the most popular and well-researched instruments for assessing panic disorder and agoraphobia worldwide. For example, interpreting bodily sensations (as indexed by the BSQ) is commonly considered to play a key role in the dynamics underlying panic disorder in that individuals suffering from panic disorder display a tendency to interpret bodily sensations as an imminent catastrophe, thereby initiating a vicious circle that reinforces panic (e.g., Clark, 1986; McNally, 1994). This is further supported by numerous studies showing that BSQ total scores and scores on measures directly assessing the severity of panic attacks, such as the Panic Attack Questionnaire-Revised (PAQ-R), are significantly associated. For instance, McGinn et al. (2015) reported a correlation of -0.44 between ACQ and PAQ-R and a correlation of 0.40 between the BSQ and the PAQ-R. In addition, a panic-related interpretation bias, as indexed with the ACQ, is not merely predictive of panic attacks, but even of new onsets of panic disorder (Woud et al., 2014). Moreover, the cognitions related to the panic attacks as assessed with the ACQ directly reflect

TABLE 1 | Effect sizes for both treatment groups EMDR and CBT together for baseline (T1).

Outcome	ES = delta/SD	ES
SYMPTOMS		
ACQ	5/10.95	0.46
BSQ1	5/12.45	0.40
BSQ2	5/11.05	0.45
MI-ac	8/18.85	0.42
MI-al	8/24.50	0.33
QOL		
OQOL	1/3.60	0.28
Physical health	1/2.80	0.36
Psychological health	1/2.51	0.40
Social relationships	1/2.90	0.34
Environment	1/2.40	0.42

ACQ, Agoraphobic Cognitive Questionnaire; BSQ1, Body Symptoms Questionnaire (amount of fear); BSQ2, Body Symptoms Questionnaire (how often sensations are experienced); CBT, Cognitive Behavioral Therapy; EMDR, Eye Movement Desensitization and Reprocessing; ES, Effect size; MI-ac, Mobility Inventory (when accompanied); MI-al, Mobility Inventory (when alone); QOL, Quality Of Life; OQOL/GH, Overall Quality Of Life and General Health.

two main DSM-IV criteria of PD, i.e., persistent concerns about having additional attacks and worry about the implications of the attack or its consequences (American Psychiatric Association, 2013). Concerning the BSQ, this questionnaire literally asks patients to indicate how often they experienced the physical symptoms mentioned in the DSM-IV-TR (Frances, 2004).

Furthermore, Perna et al. (2018) argue that our abstract conclusion that EMDR therapy is as effective as CBT for PD patients is overstated. This argument is largely taken out of context. Specifically, this sentence in our abstract was immediately preceded by an overview of the specific outcome measures of this study. These outcome concepts were again

REFERENCES

- American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders, 5th Edn*. Arlington, VA: American Psychiatric Association.
- Clark, D. M. (1986). A cognitive approach to panic. *Behav. Res. Ther.* 24, 461–470. doi: 10.1016/0005-7967(86)90011-2
- Frances, A. (2004). *Diagnostic and Statistical Manual of Mental Disorders, DSM-IV-TR*. Washington, DC: American Psychiatric Association.
- Horst, F., Den Oudsten, B., Zijlstra, W., de Jongh, A., Lobbestael, J., and De Vries, J. (2017). Cognitive behavioral therapy vs. eye movement desensitization and reprocessing for treating panic disorder: a randomized controlled trial. *Front. Psychol.* 8:1409 doi: 10.3389/fpsyg.2017.01409
- McGinn, L. K., Nooner, K. B., Cohen, J., and Leaberry, K. D. (2015). The role of early experience and cognitive vulnerability: presenting a unified model of the etiology of panic. *Cogn. Ther. Res.* 39, 508–519. doi: 10.1007/s10608-015-9673-9
- McNally, R. J. (1994). *Panic Disorder: A Critical Analysis*. New York, NY: Guilford Press.
- Norman, G. R., Sloan, J. A., and Wyrwich, K. W. (2003). Interpretation of changes in health-related quality of life: the remarkable universality of half a standard deviation. *Med. Care* 582–592. doi: 10.1097/01.MLR.0000062554.74615.4C

specified in the main conclusion of our discussion (i.e., regarding to severity of a wide range of PD symptoms, including anxiety related cognitions, fear of bodily sensations, as well as quality of life).

The second issue raised by Perna et al. (2018), concerns a lack of description of the method used to determine the non-inferiority (NI) margins of outcome measures. As referenced by Perna et al. (2018), NI margins should be based on statistical reasoning as well as clinical judgment. Starting with the clinical judgement, there were no existing comparable studies that could provide information. Therefore, the principle investigator consulted eight licensed clinical psychologists, familiar with the questionnaires and the population of patients with PD, asked how large should the score of a particular questionnaire increase or decrease to indicate that the patient very likely improved or worsened. In addition, concerning statistical reasoning, effect sizes were calculated based on T1 for the entire group. These effect sizes are shown in **Table 1**.

Assuming an effect size of 0.05 SD on a QOL score is considered relevant (Norman et al., 2003), all used NI margins are lower. The smaller the NI margin, the more difficult is it to demonstrate non-inferiority. So, according to the $0.5*SD$ -rule, the chosen NI margins are all on the conservative side with regard to non-inferiority testing.

In conclusion, Perna et al. (2018) tried to undermine our results and drew conclusions from our study that were unwarranted. We have conducted our study with the utmost scrutiny.

AUTHOR CONTRIBUTIONS

FH and JD drafted the manuscript. BO, AdJ, JL, and WZ revised the manuscript for important intellectual content. FH, BO, WZ, AdJ, JL, and JD approved the final version of the manuscript.

- Perna, G. R., Sangiorgio, E., Grassi, M., and Caldirola, D. (2018). Commentary: cognitive behavioral therapy vs. eye movement desensitization and reprocessing for treating panic disorder: a randomized controlled trial. *Front. Psychol.* 9:1061. doi: 10.3389/fpsyg.2018.01061
- Woud, M. L., Zhang, X. C., Becker, E. S., McNally, R. J., and Margraf, J. (2014). Don't panic: interpretation bias is predictive of new onsets of panic disorder. *J. Anxiety Disord.* 28, 83–87. doi: 10.1016/j.janxdis.2013.11.008

Conflict of Interest Statement: AdJ reported receiving income for published books or book chapters on EMDR and for training professionals in this method.

The remaining authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2018 Horst, Oudsten, Zijlstra, de Jongh, Lobbestael and De Vries. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.