

PUBLICATIONS

Kevin Hilbert

ORIGINAL ARTICLES:

Accepted / in press / 2022

Langhammer, T., Peters, C., Ertle, A., **Hilbert, K.**, Lueken, U. (accepted). Impact of COVID-19 pandemic related stressors on patients with anxiety disorders: A cross-sectional study. *PLOS One*.

Hilbert, K., Boeken, O., Asbrand, J., Seemann, S., Langhammer, T., Praxl, B., Horváth, L., Ertle, A., Lueken, U. (2022). Who is seeking help for psychological distress associated with the COVID-19 pandemic? Characterization of risk factors in 1269 participants accessing low-threshold psychological help. *PLoS ONE*. 17(7), e0271468.

Teismann, T., **Hilbert, K.**, Forkmann, T. (2022). Prädiktion suizidalen Verhaltens: Von der klinischen Urteilsbildung zur künstlichen Intelligenz. *Nervenheilkunde*, 41, 253-257.

Roesmann, K., Leehr, E. J., Böhnlein, J., Steinberg, C., Seeger, F., Schwarzmeier, H., ... , **Hilbert, K.**, Straube, T., Junghöfer, M. (2022). Behavioral and Magnetoencephalographic Correlates of Fear Generalization Are Associated with Responses to Later Virtual Reality Exposure Therapy in Spider Phobia. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 7(2), 221-230.

2021

Hornstein, S., Forman-Hoffman, V., Nazander, A., Ranta, K., **Hilbert, K.** (2021). Predicting Therapy Outcome in a Digital Mental Health Intervention for Depression and Anxiety: A Machine Learning Approach. *Digital Health*, 7, 1-11.

Langhammer, T.*, **Hilbert, K.***, Praxl, B., Kirschbaum, C., Ertle, A., Asbrand, J.*, Lueken, U.* (2021). Mental health trajectories of individuals and families during the COVID-19 pandemic: Study protocol of a longitudinal investigation and indicated prevention program. *Mental Health & Prevention*, 24, 200221. *both authors contributed equally

Hilbert, K., Ertle, A. (2021). Zu Risiken und Nebenwirkungen...? Anregung zur Diskussion über potentielle Nebenwirkungen klinisch-psychologischer Diagnostik in der Psychotherapie. *Verhaltenstherapie*, 31, 340-345. doi:10.1159/000519187

Harrewijn, A., Cardinale, E. M., Groenewold, N. A., Bas-Hoogendam, J. M., Aghajani, M., **Hilbert, K.**, ..., Winkler, A. M., Pine, D. S. (2021). Cortical and Subcortical Brain Structure in Generalized Anxiety Disorder – Findings from 28 research sites in the ENIGMA-Anxiety Working Group. *Translational Psychiatry*, 11, 502.

Leehr, E. J., Roesmann, K., Böhnlein, J., Dannlowski, U., Gathmann, B., Herrmann, M. J., ..., **Hilbert, K.** (2021). Clinical predictors of treatment response towards exposure therapy in virtual spider phobia: a machine learning and external cross-validation approach. *Journal of Anxiety Disorders*, 83, 102448.

Blasco, M. S., Radua, J., Soriano-Mas, C., Gómez-Benlloch, A., Porta-Casteràs, D., Carulla, M., ..., **Hilbert, K.**, ..., Cardoner, N. (2021). Structural Brain Correlates in Major Depression, Anxiety Disorders and Post-traumatic Stress Disorder: A Voxel-Based Morphometry Meta-analysis. *Neuroscience and Biobehavioral Reviews*, 129, 269-281.

Hilbert, K., Jacobi, T., Kunas, S. L., Elsner, B., Reuter, B., Lueken, U., Kathmann, N. (2021). Identifying CBT non-response among OCD outpatients: a machine-learning approach. *Psychotherapy Research*, 31(1), 52-62. doi: 10.1080/10503307.2020.1839140

Kunas, S. L., Lautenbacher, L., Lueken, U., **Hilbert, K.** (2021). Psychological Predictors of Cognitive-Behavioral Therapy Outcomes for Anxiety and Depressive Disorders in Children and Adolescents: A Systematic Review and Meta-Analysis. *Journal of Affective Disorders*, 278, 614-626.

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Kunas, S. L., **Hilbert, K.**, Yang, Y., Richter, J., Hamm, A., Wittmann, A., Ströhle, A., ... Gerlach, A. L., Lueken, U. (2020). The modulating impact of cigarette smoking on brain structure in panic disorder: a voxel-based morphometry study. *Social Cognitive and Affective Neuroscience*, nsaa103, 1-11. doi: 10.1093/scan/nsaa103

Bas-Hoogendam, J. M., Groenewold, N. A., Aghajani, M., Freitag, G. F., Harrewijn, A., **Hilbert, K.**, Jahanshad, N., ... van der Wee, N. J. A., Stein, D. J. (2020). ENIGMA-anxiety working group: Rationale for and organization of large-scale neuroimaging studies of anxiety disorders. *Human Brain Mapping*, online first publication, 1–23. <https://doi.org/10.1002/hbm.25100>

Zugman, A., Harrewijn, A., Cardinale, E. M., Zwiebel, H., Freitag, G. F., Werwath, K. E., ... **Hilbert, K.**, ... Pine, D. S., Winkler, A. M. (2020). Mega-analysis methods in ENIGMA: The experience of the generalized anxiety disorder working group. *Human Brain Mapping*, online first publication, 1–23. <https://doi.org/10.1002/hbm.25096>

Walter, H., Kausch, A., Dorfschmidt, L., Waller, L., Chinichian, N., Veer, I., **Hilbert, K.** ... Kruschwitz, J. D. (2020). Self-control and interoception: linking the neural substrates of craving regulation and the prediction of aversive interoceptive states induced by inspiratory breathing restriction. *NeuroImage*, 215, 116841. 10.1016/j.neuroimage.2020.116841

Thompson, P. M., Jahanshad, N., Ching, C. R. K., Salminen, L. E., Thomopoulos, S. I., Bright, J., ... **Hilbert, K.**, ..., Zelman, V. for the ENIGMA Consortium (2020). ENIGMA and global neuroscience: A decade of large-scale studies of the brain in health and disease across more than 40 countries. *Translational Psychiatry*, 10(1), 100.

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Asselmann, E., **Hilbert, K.**, Hoyer, J., Wittchen, H.-U., Lieb, R., Bühringer, G., Beesdo-Baum, K. (2018). Self-reported volitional control in adolescents and young adults from a community cohort: Associations with current, past and future mental disorders. *Psychiatry Research*, 260, 292-299.

Stefanescu, M. R., Endres, R. J., **Hilbert, K.**, Wittchen, H.-U., Lueken, U. (2018). Networks of phobic fear: Functional connectivity shifts in two subtypes of specific phobia. *Neuroscience Letters*, 662, 167-172.
doi: 10.1016/j.neulet.2017.10.031

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Carlisi, C., **Hilbert, K.**, Guyer, A. E., Ernst, M. (2017). Sleep-amount differentially affects fear-processing neural circuitry in pediatric anxiety: A preliminary fMRI investigation. *Cognitive, Affective, & Behavioral Neuroscience*, 17, 1098-1113. doi: 10.3758/s13415-017-0535-7

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Kirschner, H., **Hilbert, K.**, Hoyer, J., Lueken, U., Beesdo-Baum, K. (2016). Psychophysiological reactivity during uncertainty and ambiguity processing in high and low worriers. *Journal of Behavior Therapy and Experimental Psychiatry*, 50, 97-105.

2015

Hilbert, K., Pine, D. S., Muehlhan, M., Lueken, U., Stedte-Schmiedgen, S., Beesdo-Baum, K. (2015). Gray and white matter volume abnormalities in generalized anxiety disorder by categorical and dimensional

characterization. *Psychiatry Research: Neuroimaging*, 234(3), 314-320.
<http://dx.doi.org/10.1016/j.psychresns.2015.10.009i>

Hilbert, K., Evens, R., Maslowski, N. I., Wittchen, H.-U., Lueken, U. (2015). Neurostructural correlates of two subtypes of specific phobia: a voxel-based morphometry study. *Psychiatry Research: Neuroimaging*, 231(2), 168-175.

Lueken, U., **Hilbert, K.**, Wittchen, H.-U., Reif, A., Hahn, T. (2015). Diagnostic classification of specific phobia subtypes using structural MRI data: a machine learning approach. *Journal of Neural Transmission*, 122(1), 123-134.

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Lueken, U., **Hilbert, K.**, Stolyar, V., Maslowski, N. I., Beesdo-Baum, K., Wittchen, H.-U. (2014). Neural substrates of defensive reactivity in two subtypes of specific phobia. *Social Cognitive & Affective Neuroscience*, 9(11), 1668-1675.

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Hilbert, K., Lueken, U., Beesdo-Baum, K. (2014). Neural structures, functioning and connectivity in Generalized Anxiety Disorder and interaction with neuroendocrine systems: A systematic review. *Journal of Affective Disorders*, 158, 114-126.

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Lau, J. Y. F., **Hilbert, K.**, Goodman, R., Gregory, A. M., Pine, D. S., Viding, E. M., Eley, T. C. (2012). Investigating the genetic and environmental bases of biases in threat recognition and avoidance in children with anxiety problems. *Biology of Mood and Anxiety Disorders*, 2(1).
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OTHER ARTICLES:

Hornstein, H., Seiler, M., Forman-Hoffman, V., Aschbacher, K., Nelson, B. W., **Hilbert, K.***, Ritter, K.* (preprint). Association of Depressive Symptoms with Resting Heart Rate Variability recorded from a Wearable Device under Naturalistic Conditions: A Machine Learning Study. *PsyArXiv*. doi: 10.31234/osf.io/9z3pr
**both authors contributed equally*

Hilbert, K., (2015). Sind neurowissenschaftlich fundierte Biomarker im Rahmen der Behandlung psychischer Störungen denkbar? *Psychotherapeutenjournal*, 1/2015, 42-46.

BOOKS AND BOOK CHAPTERS:

Hilbert, K. (2022). AIM in Depression and Anxiety. In N. Lidströmer & H. Ashrafian (Eds.), *Artificial Intelligence in Medicine*. Springer, Cham. doi: 10.1007/978-3-030-58080-3_212-2

Hilbert, K. (2017). *Neurostructural correlates and cortisol responses in generalized anxiety disorder versus other anxiety conditions and depression: evidence for specificity* (Doctoral dissertation). Dresden, DE: Technische Universität Dresden.

Beesdo-Baum, K., **Hilbert, K.** (2015). Generalized Anxiety Disorder. In D. J. Stein & B. Vythilingum (Eds.), *Anxiety Disorders and Gender*. Heidelberg, DE: Springer.

Lau, J. Y. F., **Hilbert, K.**, Gregory, A. M. (2013). Anxiety and depression in young people: Developmental considerations. In P. Graham & S. Reynolds (Eds.), *Cognitive behaviour therapy for children and families – current trends* (3rd ed.). Cambridge, UK: Cambridge University Press.

ABSTRACTS IN PEER REVIEWED JOURNALS

Hilbert, K., Lueken, U., Beesdo-Baum, K. (2019). Characterization of three major functional networks using graph-analysis across internalizing disorders. *European Neuropsychopharmacology*, 29(Suppl. 1), s495-s496.

Groenewold, N., Bas-Hoogendam, J. M., ... , **Kevin Hilbert**, ... et al. (2018). F27. Subcortical Volumes in Social Anxiety Disorder: Preliminary Results From Enigma-Anxiety. *Biological Psychiatry*, 83(Suppl. 9), S247-S248.

Hilbert, K., Pine, D.S., Lueken, U., Beesdo-Baum, K. (2015). Clustering of emotional processing data in subjects with generalised anxiety disorder and major depression. *European Neuropsychopharmacology*, 25(Suppl. 2), 188.

Hoyer, J., **Hilbert, K.**, Villringer, A., Pleger, B. (2015). Application of a novel clustering approach in the investigation of cognitive functioning and overweightness. *European Neuropsychopharmacology*, 25(Suppl. 2), 346.

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CONFERENCE ACTIVITIES:

- Hilbert, K.**, et al. (2022, 07.06.-11.06.). fMRI Konnektivität und Maschinelles Lernen zur Prädiktion individueller Psychotherapieergebnisse. In E.-L. Brakemeier, J. Rubel, J. A. Glombiewski, W. Lutz (Chairs), Evidenzgestützte Personalisierung psychologischer Interventionen: Vom maschinellen Lernen in die Anwendung. 1. Deutscher Psychotherapiekongress, Berlin, DE.
- Hilbert, K.** (2021, 05.11.-06.11.). Psychische Belastung infolge der COVID-19 Pandemie. 22. Jahrestagung der Gesellschaft für Angstforschung e.V., Göttingen, DE.
- Hilbert, K.** (2021, 09.07.-12.07.). Machine learning for assessments in clinical psychology: supporting diagnosis and predicting cognitive behavioral therapy outcomes for individual patients under naturalistic conditions. In M. Ziegler (Chair), Artificial intelligence and psychological assessment: Between revolution and reality. International Test Commission 2021 Colloquium, Online.
- Hilbert, K.**, Leehr, E. J., Roesmann, K., Kunas, S. L., Jacobi, T., Elsner, B., ..., Kathmann, N. & Lueken, U. (2021, 12.05.-15.05.). Prädiktionsmodelle zur Vorhersage von Psychotherapieerfolg in ambulanter kognitiver Verhaltenstherapie: Externale Validität und Generalisierbarkeit. In **K. Hilbert** & U. Lueken (Chairs), Individualisierte Vorhersage von Psychotherapie(miss-)erfolg. 38. Symposium der Fachgruppe Klinische Psychologie und Psychotherapie, Mannheim, DE.
- Hilbert, K.**, Kunas, S. L., Kathmann, N., Fydrich, T., Fehm, L. & Lueken, U. (2021, 12.05.-15.05.). Maschinelles Lernen als aussichtsreiches Werkzeug zur Unterstützung klinischer Entscheidungsprozesse: Einführung und Beispielstudien zur (Differential-)Diagnostik und zur Prädiktion von Psychotherapieergebnissen. In H. Niemeyer & M. Heinrich (Chairs), Aktuelle Methodentrends und ihre Anwendung in der klinischen Psychologie. 38. Symposium der Fachgruppe Klinische Psychologie und Psychotherapie, Mannheim, DE.
- Hilbert, K.** (2020, 26.11.-28.11.). Predicting treatment outcome in anxiety and related disorders with machine learning. In K. Roesmann & D. Domschke (Chairs), *Mechanisms of fear and avoidance learning in anxiety disorders and their associations with exposure outcomes*. Vortrag, DGPPN Kongress 2020, Berlin, DE.
- Seidl, E., Schaefer, J., **Hilbert, K.**, Scherbaum, S., Hoyer, J., Muehlhan, M. & Beesdo-Baum, K. (2019, 18.03.-19.03.). *Cognitive control in spider phobics. Is it relevant for behavioral psychotherapy?* Poster presented at the 2019 Summer School of the Collaborative Research Centre 'Volition and Cognitive Control: Mechanisms, Modulators, Dysfunctions' (SFB 940), Dresden, Germany.
- Hilbert, K.**, Schuhmann, T., Kunas, S. L., Lueken, U., Kathmann, N., Fydrich, T. & Fehm, L. (2019, 17.07.-19.07.). *Cognitive behavioral therapy outcome prediction for individual patients using routine data from two Berlin outpatient centers using machine learning*. Poster presented at the 9th World Congress of Behavioural and Cognitive Therapies, Berlin, Germany.

- Hilbert, K.**, Lueken, U. & Beesdo-Baum, K. (2018, 06.10.-09.10.). *Characterization of three major functional networks using graph-analysis across internalizing disorders*. Poster presented at the 31st ECNP Congress, Barcelona, SP.
- Seidl, E., **Hilbert, K.**, Zwosta, K., Scherbaum, S., Wolfensteller, U., Ruge, H., Hoyer, J., Muehlhan, M. & Beesdo-Baum, K. (2017, 22.06. – 23.06.). *C5: Cognitive control tasks for the avoidance behavior and specific phobia project: piloting results*. Poster presented at the 2017 Summer School of the Collaborative Research Centre 'Volition and Cognitive Control: Mechanisms, Modulators, Dysfunctions' (SFB 940), Dresden, Germany.
- Hilbert, K.**, & Beesdo-Baum, K. (2017, 05..05.). BeMIND - Behavior and Mind Health Study. In Populations- und zielgruppenspezifische Kohortenstudien [Population – and target-group specific cohort studies]. 8. Workshop der DGEpi AG 14 – Neurologische und Psychische Erkrankungen Grenzen und Möglichkeiten der zerebralen MRT-Bildgebung in Populationsstudien, Münster, DE.
- Hilbert, K.**, Pine, D. S., Lueken, U. & Beesdo-Baum, K. (2015, 29.08.-01.09.). *Unsupervised clustering of neurofunctional data in Generalised Anxiety Disorder and Major Depression*. Poster presented at the 28th ECNP Congress, Amsterdam, NL.
- Hilbert, K.**, Steudte-Schmiedgen, S. & Beesdo-Baum, K. (2015, 13.-16.05.). Emotionsverarbeitung und Stress bei Generalisierter Angststörung und Major Depression [Emotion regulation and stress in Generalized Anxiety Disorder and Major Depression]. In P. Kanske & I. Dziobek (Chair), Psychopathologie des sozialen Gehirns: Mechanismen und neue Perspektiven für die Therapie [Psychopathology of the social brain: Mechanisms and new perspectives for therapy]. Symposium conducted at the 9. Workshopkongress für Klinische Psychologie und Psychotherapie & 33. Symposium der Fachgruppe Klinische Psychologie und Psychotherapie der DGPs, Dresden, DE.
- Hilbert, K.**, Rößler, T. & Beesdo-Baum, K. (2015, 26.-27.03.). *Level of habitual worrying is not related to impaired cognitive control in High and Low Worriers*. Poster presented at the 2015 Spring School of the collaborative Research Centre 'Volition and Cognitive Control: Mechanisms, Modulators, Dysfunctions' (SFB 940), Dresden, Germany.
- Hilbert, K.**, Nebe, S., Lueken, U. & Beesdo-Baum, K. (2014, 08.-12.06.). *Differential neural correlates of uncertainty and ambiguity processing in worriers: a preliminary analysis*. Poster presented at the 20th meeting of the Organization for Human Brain Mapping, Hamburg, Germany.
- Evens, R., **Hilbert, K.**, Maslowski, N. I., Wittchen, H.-U. & Lueken, U. (2014, 08.-12.06.). *The neural substrates of symptom provocation in dental phobia: a crossmodal comparison study*. Poster presented at the 20th meeting of the Organization for Human Brain Mapping, Hamburg, Germany.
- Hilbert, K.** & Beesdo-Baum, K. (2013, 20.-22.03.). *Cognitive control deficits and relationship to worry frequency and controllability: Concept of a fMRI study*. Poster presented at the 2013 Spring School of the

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Hilbert, K., Lueken, U. & Beesdo-Baum, K. (2013, 07.-10.03.). *Differential prefrontal cortex activation characterizes generalized anxiety disorder without depression*. Poster presented at the 2013 ECNP Workshop on Neuropsychopharmacology for Young Scientists in Europe, Nice, France.

Lueken, U., Kruschwitz, J. D., **Hilbert, K.**, Muehlhan, M., Hoyer, J. & Wittchen, H.-U. (2010, 05.-10.06.). *Better look twice: Stimulus processing in dental phobia using a video-based fMRI paradigm*. Poster presented at the 16th meeting of the Organization for Human Brain Mapping, Barcelona, Spain.