

# Mental Disorders and Chronic Somatic Diseases

## Kurzbeschreibung

Mental distress and disorders in people with chronic physical diseases are frequent and associated with negative aspects such as increased mortality and morbidity, low quality of life and treatment adherence as well as increased direct and indirect health care costs. From an etiological perspective, different causal assumptions can be differentiated to explain the temporal association of physical and mental disorders. In this context, it is important to counteract the simplification of mental disorders as simple adjustment problems, a view sometimes present in somatic health care settings. The etiology is complex, the association potentially bi-directional and partly linked to shared genetic and biological preconditions.

In view of the high prevalence rates and the clinical significant consequences, there is a need for adequate psychodiagnostics as well as prevention and treatment approaches for mental disorders in people with chronic physical diseases. First of all, the presence of comorbidity should be adequately diagnosed. However, it is estimated that only half of

all co-morbid mental health problems are diagnosed, and again only a proportion of these diagnoses are valid. Psychodiagnostic challenges are numerous regarding psychometric parameters, but also with regard to the implementation of psychodiagnostic routine in somatic medicine settings.

With regard to the prevention and treatment of combined mental disorders, the focus is on the effectiveness and cost-effectiveness of established approaches such as psychotherapeutic and psychopharmacological interventions in this specific subpopulation as well as the development and testing of innovative approaches. The latter includes not least digital health applications, but also the development and evaluation of collaborative treatment methods such as integrated care or disease management programmes.

The Department of Clinical Psychology and Psychotherapy pursues epidemiological, etiological, psychodiagnostic and interventional research questions in the context of somato-mental comorbidities as one of its main research topics.

## Project Team

Prof. Dr. Harald Baumeister, Natalie Bauereiß, Eileen Bendig, Frederike Lunkenheimer, Daniela Bodschatwinna, Eva-Maria Messner, Lina Braun, Matthias Domhardt, Henry Scharm, Agnes Geirhos, Lena Steubl, Selina Kallinger, u.v.m.

## Collaborating Partners

Compare selected publications below for an overview of national and international collaborating partners.

## Grants

Several own funded and third party funded projects

## Duration and Funding

Laufzeit: 2001 – fortlaufend

## Publications

Publications of the department:

<https://www.uni-ulm.de/en/in/psy-klips/publications/>

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## Publications (selection)

### Epidemiology and Etiology / Overview

- Grech, M., Turnbull, D.A., Wittert, G.A., Tully, P.J., CHAMPS Investigators. (2019). Identifying the internalizing disorder clusters among recently hospitalized cardiovascular disease patients: a receiver operating characteristics study. *Frontiers in Psychology*, 10, 2829.
- Kampling, H., Mittag, O., Herpertz, S., Baumeister, H., Kulzer, B., Petrik, F. (2018). Can trajectories of glycemic control be predicted by depression, anxiety, or diabetes-related distress in a prospective cohort of adults with newly diagnosed type 1 diabetes? Results of a five-year follow-up from the German Multicenter Diabetes Cohort Study (GMDC-Study). *Diabetes Research and Clinical Practice*, 141, 106-117.
- Tully, P. J., Baumeister, H., Martin, S., Atlantis, E., Jenkins, A., Januszewski, A. & Wittert, G. A. (2016). Members of the Florey Adelaide Male Ageing Study. Elucidating the biological mechanisms linking depressive symptoms with Type 2 diabetes in men: the longitudinal effects of inflammation, microvascular dysfunction and testosterone. *Psychosomatic medicine*, 78, 221-232.
- Baumeister, H., Haschke, A., Munzinger, M., Hutter, N. & Tully, P. J. (2015). Inpatient and outpatient costs in patients with coronary artery disease and mental disorders: a systematic review. *BioPsychoSocial medicine*, 9, 11.
- Tully, P. J., Turnbull, D. A., Beltrame, J., Horowitz, J., Cosh, S., Baumeister, H., & Wittert, G. A. (2015). Panic disorder and incident coronary heart disease: a systematic review and meta-regression in 1 131 612 persons and 58 111 cardiac events. *Psychological medicine*, 45, 2909–2920.
- Tully, P. J., Baumeister, H., Bengel, J., Jenkins, A., Januszewski, A., Martin, S. & Wittert, G. A. (2015). The longitudinal association between inflammation and incident depressive symptoms in men: the effects of hs-CRP are independent of abdominal obesity and metabolic disturbances. *Physiology & behavior*, 139, 328–335.
- Tully, P. J., Cosh, S. M. & Baumeister, H. (2014). The anxious heart in whose mind? A systematic review and meta-regression of factors associated with anxiety disorder diagnosis, treatment and morbidity risk in coronary heart disease. *Journal of psychosomatic research*, 77, 439–448.
- Hutter, N., Vogel, B., Alexander, T., Baumeister, H., Helmes, A. & Bengel, J. (2013). Are depression and anxiety determinants or indicators of quality of life in breast cancer patients? *Psychology, health & medicine*, 18, 412–419.
- Baumeister, H., Knecht, A. & Hutter, N. (2012). Direct and indirect costs in persons with chronic back pain and comorbid mental disorders--a systematic review. *Journal of psychosomatic research*, 73, 79–85.
- Haschke, A., Hutter, N. & Baumeister, H. (2012). Indirect costs in patients with coronary artery disease and mental disorders: a systematic review and meta-analysis. *International journal of occupational medicine and environmental health*, 25, 319–329.
- Baumeister, H., Hutter, N., Bengel, J. & Härter, M. (2011). Quality of life in somatically ill persons with comorbid mental disorders: a systematic review and meta-analysis. *Psychotherapy & Psychosomatics*, 80, 275–286.
- Baumeister, H., Kury, S. & Bengel, J. (2011). Somato-psychische Komorbidität: Definition und Verständnis. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, 54, 9–14.
- Hutter, N., Knecht, A. & Baumeister, H. (2011). Health care costs in persons with asthma and comorbid mental disorders: a systematic review. *General hospital psychiatry*, 33, 443–453.
- Baumeister, H., Kriston, L., Bengel, J. & Härter, M. (2010). High agreement of self-report and physician-diagnosed somatic conditions yields limited bias in examining mental-physical comorbidity. *Journal of clinical epidemiology*, 63, 558–565.
- Hutter, N., Schnurr, A. & Baumeister, H. (2010). Healthcare costs in patients with diabetes mellitus and comorbid mental disorders - a systematic review. *Diabetologia*, 53, 2470–2479.
- Hutter, N., Scheidt-Nave, C. & Baumeister, H. (2009). Health care utilisation and quality of life in individuals with diabetes and comorbid mental disorders. *General hospital psychiatry*, 31, 33–35.
- Härter, M. & Baumeister, H. (2007). Ätiologie psychischer Störungen bei chronischen körperlichen Erkrankungen. Härter, M., Baumeister, H. & Bengel, J. (Ed.): *Psychische Störungen bei körperlichen Erkrankungen* (pp. 1–14). Berlin: Springer.
- Baumeister, H. & Härter, M. (2007). Mental disorders in patients with obesity in comparison with healthy probands. *International Journal of Obesity*, 31, 1155–1164.
- Härter, M., Baumeister, H., Reuter, K., Jacobi, F., Höfler, M., Bengel, J. & Wittchen, H. U. (2007). Increased 12-month prevalence rates of mental disorders in patients with chronic somatic diseases. *Psychotherapy and psychosomatics*, 76, 354–360.
- Baumeister, H., Balke, K. & Härter, M. (2005). Psychiatric and somatic comorbidities are negatively associated with quality of life in physically ill patients. *Journal of clinical epidemiology*, 58, 1090–1100.
- Baumeister, H. & Härter, M. (2003). Somatoform disorders in patients with musculoskeletal and cardiovascular diseases in comparison to the general population. *Acta Neuropsychiatrica*, 15, 192-198.

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## Publications (selection)

### Psychodiagnostics

- Kallinger, S.M., Scharn, H., Boecker, M., Forkmann, T., Baumeister, H. (2019). Calibration of an item bank in 474 orthopedic patients using Rasch analysis for computer-adaptive assessment of anxiety. *Clinical Rehabilitation*, 33, 1468-1478.
- Scharn, H., Kallinger, S.M., Eder, S., Boecker, M., Forkmann, T., Baumeister, H. (2019). Development of Rasch-based short screenings for the assessment of treatment motivation in patients with cardiovascular diseases. *Disability and Rehabilitation*.
- Abberger, B., Haschke, A., Tully, P. J., Berger, J., Wirtz, M., Bengel, J. & Baumeister, H. (2016). Development of parallel short forms for the assessment of anxiety in cardiovascular rehabilitation patients: a structural equation modeling analysis of the PaSA-cardio. *Clinical Rehabilitation*, 31, 104–114.
- Tully, P. J., Baumeister, H., Bennetts, J. S., Rice, G. D. & Baker, R. A. (2016). Depression screening after cardiac surgery: A six month longitudinal follow up for cardiac events, hospital readmissions, quality of life and mental health. *International journal of cardiology*, 206, 44–50.
- Abberger, B., Haschke, A., Wirtz, M., Kroehne, U., Bengel, J. & Baumeister, H. (2013). Development and evaluation of a computer adaptive test to assess anxiety in cardiovascular rehabilitation patients. *Archives of physical medicine and rehabilitation*, 94, 2433–2439.
- Abberger, B., Haschke, A., Krense, C., Wirtz, M., Bengel, J. & Baumeister, H. (2013). The calibrated, unidimensional anxiety item bank for cardiovascular patients provided the basis for anxiety assessment in cardiovascular rehabilitation patients. *Journal of clinical epidemiology*, 66, 919–927.
- Baumeister, H., Jahed, J., Vogel, B., Härtter, M., Barth, J. & Bengel, J. (2011). *Diagnostik, Indikation und Behandlung von psychischen Störungen in der medizinischen Rehabilitation (DIBpS): Ein Leitfaden zur Implementierung eines psychodiagnostischen Stufenplans in der medizinischen Rehabilitation*. Berlin: DRV.

### Interventions

- Lunkenheimer, F., Domhardt, M., Geirhos, A., Kilian, R., Mueller-Stierlin, A.S., Holl, R.W., Meissner, T., Minden, K., Moshagen, M., Ranz, R., Sachser, C., Staab, D., Warschburger, P., Baumeister, H. (2020). Effectiveness and cost-effectiveness of guided Internet- and mobile-based CBT for adolescents and young adults with chronic somatic conditions and comorbid depression and anxiety symptoms (youthCOACHCD): study protocol for a multicentre randomized controlled trial. *Trials*, 21, 253.
- Sander, L.B., Paganini, S., Terhorst, Y., Schlicker, S., Lin, J., Spanhel, K., Buntrock, C., Ebert, D.D., Baumeister, H. (2020). Effectiveness of a Guided Web-Based Self-help Intervention to Prevent Depression in Patients With Persistent Back Pain: The PROD-BP Randomized Clinical Trial. *JAMA Psychiatry*, e201021.
- Probst, T., Baumeister, H., McCracken, L.M., Lin, J. (2019). Baseline Psychological Inflexibility Moderates the Outcome Pain Interference in a Randomized Controlled Trial on Internet-based Acceptance and Commitment Therapy for Chronic Pain. *Journal of Clinical Medicine*, 8, 24.
- Schlicker, S., Weisel, K.K., Buntrock, C., Berking, M., Nobis, S., Lehr, D., Baumeister, H., Snoek, F.J., Riper, H., Ebert, D.D. (2019). Do nonsuicidal severely depressed individuals with diabetes profit from Internet-based guided self-help? Secondary analyses of a pragmatic randomized trial. *Journal of Diabetes Research*, ID 2634094.
- Bauereiß, N., Obermaier, S., Özünal, S. E., Baumeister, H. (2018). Effects of existential interventions on spiritual, psychological and physical well-being in adult patients with cancer: systematic review and meta-analysis of randomized controlled trials. *Psycho-Oncology*, 27, 2531-2545.
- Lin, J., Faust, B., Ebert, D. D., Krämer, L., Baumeister, H., (2018). A Web-Based Acceptance-Facilitating Intervention for Identifying Patients' Acceptance, Uptake, and Adherence of Internet- and Mobile-Based Pain Interventions: Randomized Controlled Trial. *Journal of Medical Internet Research*, 20, e244.
- Lin, J., Klatt, L.I., McCracken, L.M., Baumeister, H. (2018). Psychological flexibility mediates the effect of an online-based acceptance and commitment therapy for chronic pain: an investigation of change processes. *Pain*, 159, 663-672.
- Bendig, E., Bauereiß, N., Ebert, D.D., Snoek, F., Andersson, G., Baumeister, H. (2018). Internet- based interventions in chronic somatic disease. *Deutsches Ärzteblatt International*, 115, 659–65.
- Domhardt, M., Steubl, L., Baumeister, H. (2018). Internet-and mobile-based interventions for mental and somatic conditions in children and adolescents. *Zeitschrift für Kinder- und Jugendpsychiatrie und Psychotherapie*, 1-14.

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## Publications (selection)

- Nobis, S., Ebert, D.D., Lehr, D., Smit, F., Buntrock, C., Berking, M., Baumeister, H., Snoek, F., Funk, B. & Riper, H. (2018). Web-based intervention for depressive symptoms in adults with types 1 and 2 diabetes mellitus: a health economic evaluation. *British Journal of Psychiatry*, 212, 199-206.
- Reinauer, C., Viermann, R., Förtsch, K., Linderskamp, H., Warschburger, P., Holl, R.W., Staab, D., Minden, K., Muche, R., Domhardt, M., Baumeister, H., Meissner, T. (2018). Motivational Interviewing as a tool to enhance access to mental health treatment in adolescents with chronic medical conditions and need for psychological support (COACH-MI): study protocol for a clusterrandomised controlled trial. *Trials*, 19, 629.
- Baumeister, H., Lin, J. & Ebert, D. D. (2017). Internet- und mobilebasierte Ansätze. Psychosoziale Diagnostik und Behandlung in der medizinischen Rehabilitation. *Bundesgesundheitsblatt - Gesundheitsforschung - Gesundheitsschutz*, 60, 436-444.
- Ebert, D.D., Nobis, S., Lehr, D., Baumeister, H., Riper, H., Kessler, R., Snoek, F. & Berking, M. (2017). 6-months effectiveness of Internet-based guided self-help for depression in adults with type 1 and 2 diabetes mellitus: Results of a randomized controlled trial. *Diabetic Medicine*, 34, 99-107.
- Lin, J., Paganini, S., Sander, L., Lüking, M., Ebert, D.D., Buhrman, M., Andersson, G. & Baumeister, H. (2017). An internet-based Intervention for chronic pain: A three-armed randomised controlled study of the effectiveness of guided and unguided acceptance and commitment therapy. *Deutsches Ärzteblatt international*, 114, 681-688.
- Baumeister, H., Terhorst, Y. & Lin, J. (2016). The Internet and Mobile technology: a platform for behavior change and intervention in depression and CVDs. Baune, B. T. & Tully, P. (Ed.): *Cardiovascular Diseases and Depression - Treatment and Prevention in Psychocardiology* (pp. 395-410). Berlin: Springer.
- Baumeister, H., Seifferth, H., Lin, J., Nowoczin, L., Lüking, M. & Ebert, D. (2015). Impact of an Acceptance Facilitating Intervention on Patients' Acceptance of Internet-based Pain Interventions: A Randomized Controlled Trial. *The Clinical journal of pain*, 31, 528-535.
- Nobis, S., Lehr, D., Ebert, D. D., Baumeister, H., Snoek, F., Riper, H. & Berking, M. (2015). Efficacy of a web-based intervention with mobile phone support in treating depressive symptoms in adults with type 1 and type 2 diabetes: a randomized controlled trial. *Diabetes care*, 38, 776-783.
- Petрак, F., Baumeister, H., Skinner, T. C., Brown, A. & Holt, R. I. G. (2015). Depression and diabetes: Treatment and health-care delivery. *The Lancet Diabetes & Endocrinology*, 3, 472-485.
- Tully, P. J. & Baumeister, H. (2015). Collaborative care for comorbid depression and coronary heart disease: a systematic review and meta-analysis of randomised controlled trials. *BMJ open*, 5, e009128.
- Baumeister, H., Hutter, N. & Bengel, J. (2014). Psychological and pharmacological interventions for depression in patients with diabetes mellitus: an abridged Cochrane review. *Diabetic medicine: a journal of the British Diabetic Association*, 31, 773-786.
- Baumeister, H., Nowoczin, L., Lin, J., Seifferth, H., Seufert, J., Laubner, K., & Ebert, D. D. (2014). Impact of an acceptance facilitating intervention on diabetes patients' acceptance of Internet-based interventions for depression: a randomized controlled trial. *Diabetes research and clinical practice*, 105, 30-39.
- Kampling, H., Baumeister, H., Jäckel, W. H. & Mittag, O. (2014). Prevention of depression in chronically physically ill adults (protocol). *Cochrane Database of Systematic Reviews*, 8, Art. No.: CD011246.
- Tully, P. J., Wittert, G., Selkow, T. & Baumeister, H. (2014). The real world mental health needs of heart failure patients are not reflected by the depression randomized controlled trial evidence. *PloS one*, 9, e85928.
- Baumeister, H., Hutter, N. & Bengel, J. (2012). Psychological and pharmacological interventions for depression in patients with diabetes mellitus and depression. *The Cochrane database of systematic reviews*, 12, CD008381.
- Baumeister, H. & Hutter, N. (2012). Collaborative care for depression in medically ill patients. *Current opinion in psychiatry*, 25, 405-414.
- Baumeister, H., Hutter, N. & Bengel, J. (2011). Psychological and pharmacological interventions for depression in patients with coronary artery disease. *The Cochrane database of systematic reviews*, 9, CD008012.