Treating the Treatment-Resistant: A Randomized Controlled Trial of ACT for Treatment-Resistant Panic Disorder and Agoraphobia – Preliminary Results

Andrew T. Gloster, Rainer Sonntag, Simone Heinze, Jürgen Hoyer, Andrea Meyer, Jens Klotsche, Andreas Ströhle, Georg Eifert, Hans-Ulrich Wittchen

University of Basel
Technische Universität Dresden
Charité Universitätsmedizin Berlin
Chapman University







...Where Angels Fear to Tread

THE HIDDEN THIRD

Schlaepfer et al., 2012







What Constitutes Treatment Resistant?

Anxiety Disorder Association of America

- •"...when there are residual symptoms or when symptoms do not improve at all after some form of therapeutic intervention."
 - Pollack et al., 2008

Research

 When a priori response/ remission criteria are not met.

Clinical/ Anecdotal

- When the patient doesn't do what is necessary
- When I've run out of therapeutic options







Level of Evidence: Overall

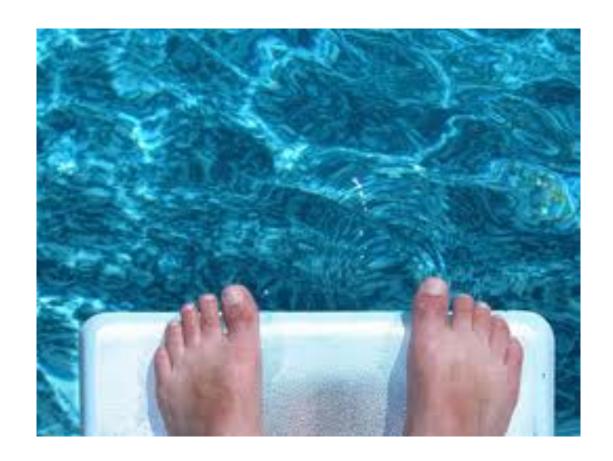
Failed Tx	Controlled Trials	Tested Alternative
Pharmacological		Pharmacological/ Biological
Pharmacological		Psychological (CBT)
Psychological (CBT)		Pharmacological/ Biological
Psychological (CBT)	_	Psychological







The Importance of Willingness During Exposure



"How Willing Are You to Engage in Exposure"

Those Who Drop Out of Treatment differ Significantly from Those that Complete the Exposure:

F (1,226) = 3.89, p <.05



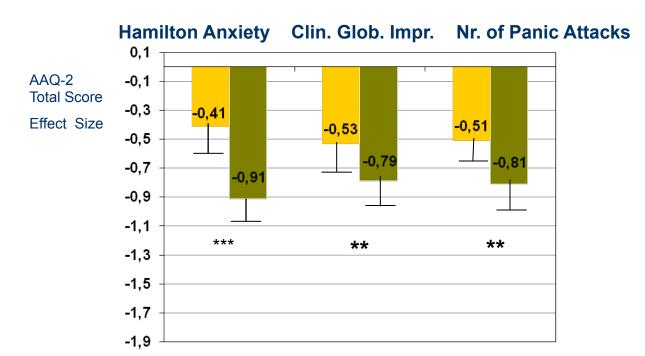




Reaction to Anxiety Suggests Possible Process Relevant for Non-Responding Patients

Lower levels of psychological flexibility associated with a poorer response

Psychological Flexibility/ Experiential Avoidance



As Measured at Post



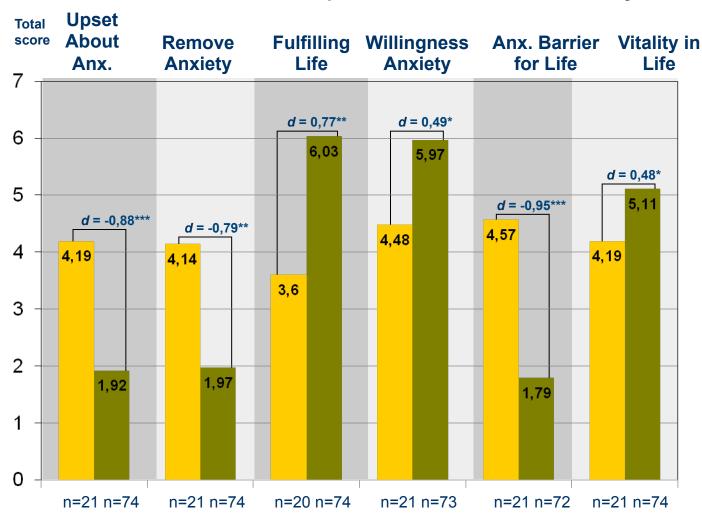






Responders and Non-Responders: The Effect of Psychological Flexibility

Effect Size Comparisons Across Facets of Psych Flex (F-ACT)



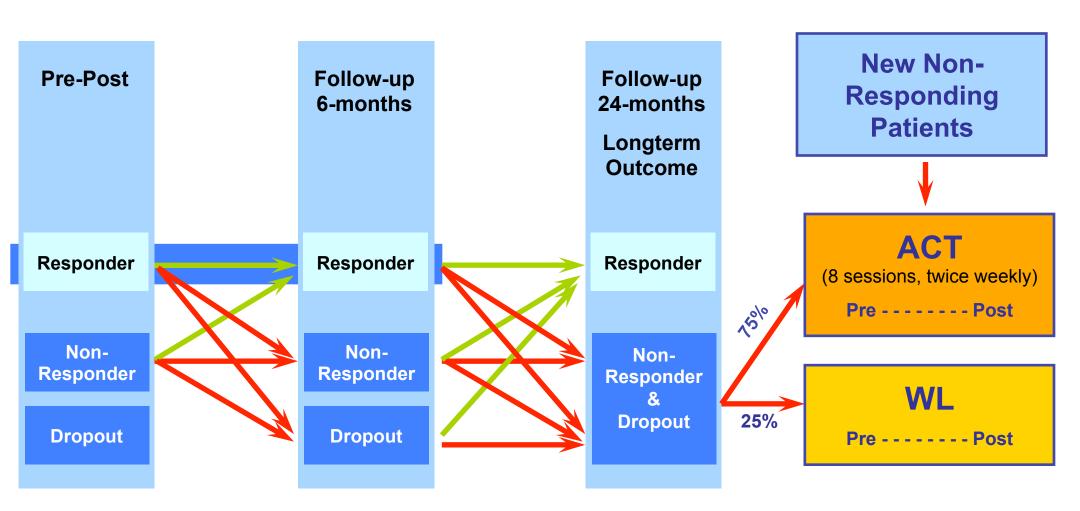
Items tappling into
facets of
Psychological
Flexibility consistently
differentiate
"responders" and "nonresponders"

As measured at 2 Yr Follow Up





Non-responders and Relapse: Can an Acceptance-based Strategy Help?









Design and Methods The study center & Therapists

Outpatient treatment center of the Technische Universität Dresden:

-Existing Trial Infrastructure

7 Graduate Student Therapists

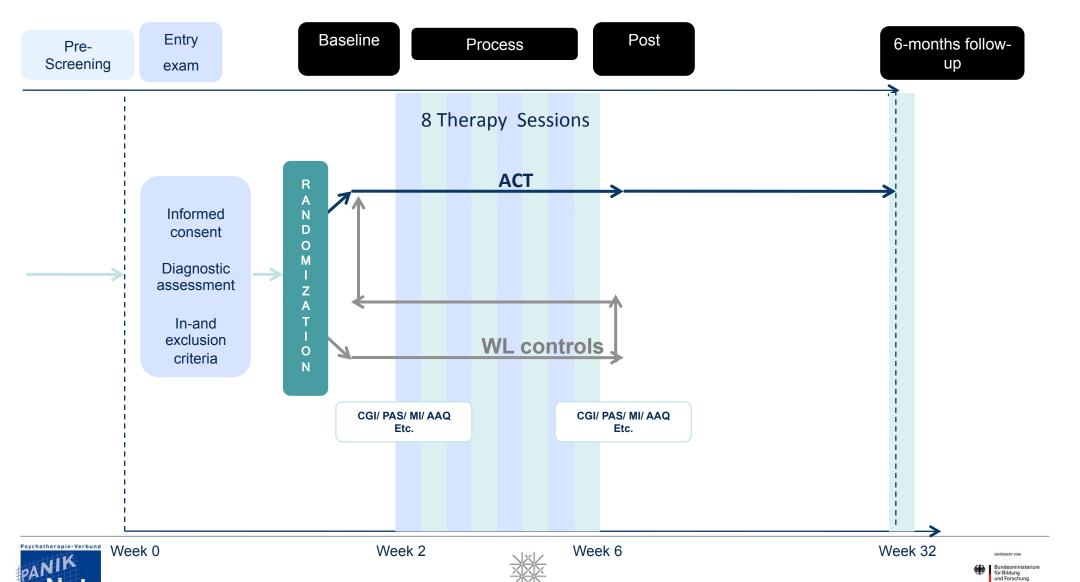
- No Previous Experience with ACT
- -Trained and licensed as part of study's certification procedures
- Average 6 Pt/ Therapist
- -Weekly supervision











UNI BASEL

Design and Methods

In- and exclusion criteria: Patients meeting DSM-IV-TR criteria for panic disorder with agoraphobia

Inclusion criteria

- Age 18-65
- DSM-IV Panic Disorder &/or Agoraphobia
- Mobility Inventory ≥ 1.5
- CGI-Score ≥ 4
- Ability to Attend Regularly
- Informed Consent
- Adequate Previous Treatment

Exclusion criteria

- Significant medical (somatic/mental) conditions
- acute suicidality
- DSM-IV Bipolar Disorder
- DSM-IV Psychotic Disorder
- DSM-IV Borderline Personality Disorder
- current psychological treatment for an axis I-Disorder
- current alcohol-, BZD-, drug dependence







Design and Methods

Adequate Previous Treatment

- ≥ 20 Sessions of Psychotherapy
- Consisting of Elements of Empirically Supported Treatments

And/ or

- ≥ 4 Months of Prescription of Substances Approved by the Official Pharmacology Guidelines of the German Physician Society
- At sufficient Dosage







Sample

- N = 43 Individuals; 51 Cases (10 WL delayed patients)
- Sex: 69.8% Female
- Mean Age: 37.2 y.o. (SD = 9.3)
- Adequate Previous Treatment:
 - Psychotherapy: 88.4% (38/43)
 - Pharmacotherapy: 32.0% (14/43)
 - Both: 20.9% (9/43)
- At Least Sub-Adequate Previous Treatment:
 - Psychotherapy: 95.3% (41/43)
 - Pharmacotherapy: 48.8% (21/43)
 - Both: 51.1% (22/43)

Mean 42.2 Sessions!







Design and Methods

The Treatment

Session 1

Control is the Problem, Values

Week 1

Session 2

Acceptance, Control is the Problem, Mindfulness

Session 3

Mindfulness, Acceptance/ Willingness, Values

Week 2

Session 4:

Defusion, Mindfulness, Values, Self-as-Context

Session 5

Defusion, Self-as-Context, Willingness, Values, Commitment

Week 3

Sessions 6-7:

Defusion, Willingness, Values, Commitment

Sessions 8:

Defusion, Willingness, Values, Commitment, Relapse Prevention

Week 4







...With a Different Type of Conversation

Beschriften Sie Ihren eigenen Grabstein "Wofür soll mein Leben stehen?" Eine Lebensverbesserungsübung Hier ruht



Bundesministerium für Bildung und Forschung

Preliminary Results

Outcome (Pre – Post vs. WL)

Primary Outcome Measures

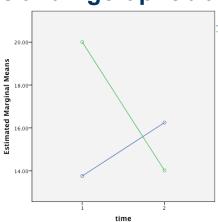






Primary Outcomes

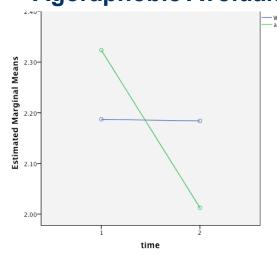
Panic and Agoraphobia Scale (PAS)



Group x Time
Interaction:
F (1, 40) = 6.7,
p < .001

Cohen's *d* = 0.7

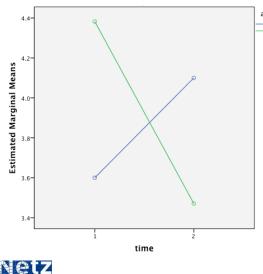
Agoraphobic Avoidance (MI)



Group x Time Interaction: F (1, 36) = 2.0, p < .07

Cohen's *d* = 0.5

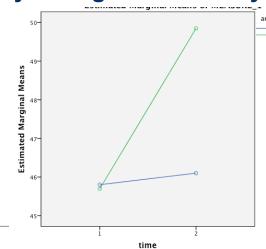
Clinical Global Impression (CGI)



F (1, 42) = 13.7, p < .001

Cohen's *d* = 0.9

Psychological Flexibility (AAQ-II)



Group x
Time
Interaction:
F (1, 44) =
1.3, p < .13

Cohen's *d* = 0.4





Preliminary Results

Outcome (Pre – Post vs. WL)

Secondary Outcome Measures

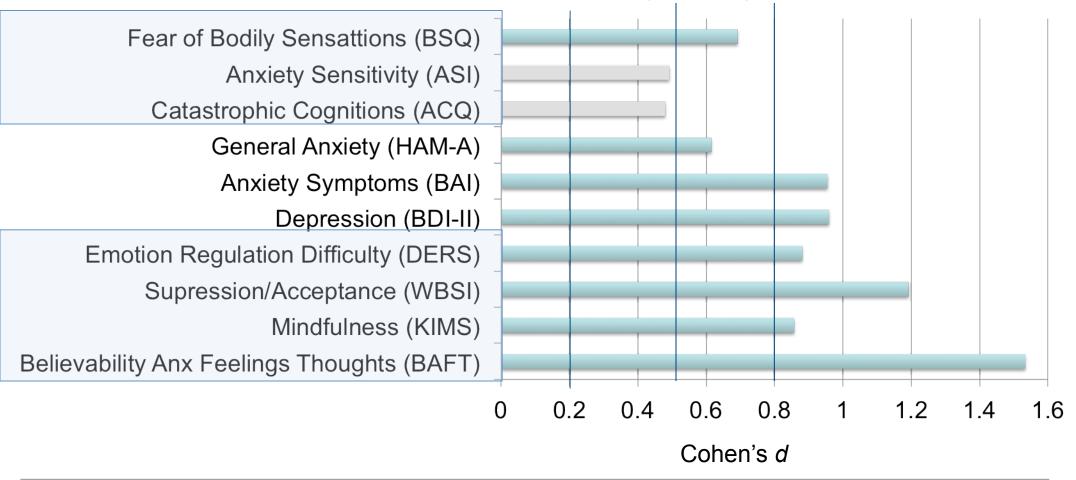
- -Symptomatology
- -Non Targeted Constructs
- -Targeted Processes







Controlled Effect Size (vs. WL)









Preliminary Results

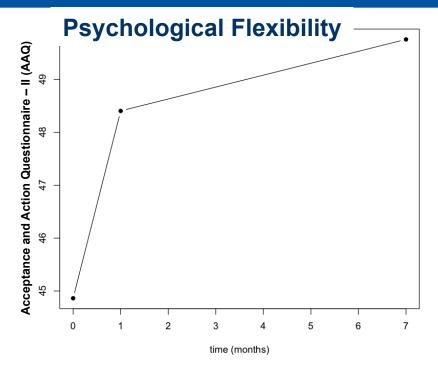
Follow-Up (6 Months)

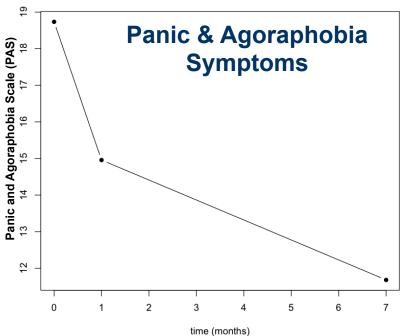
Primary Outcome Measures

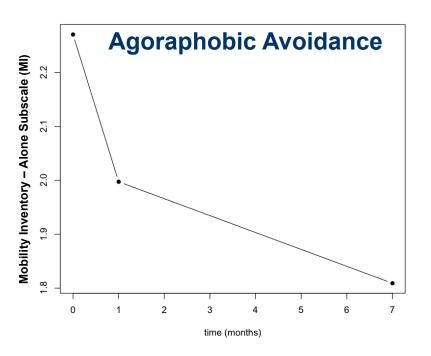


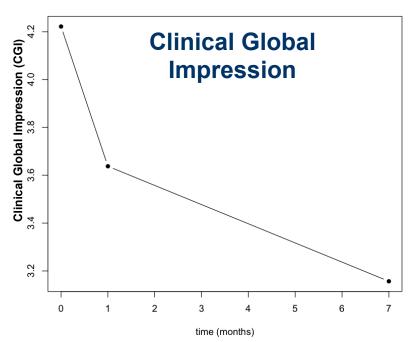












...and One More Thing

Drop Out Rate:

- Overall: 5 Patients (9.4%)!
- "Real Rate": 3 Patients (5.6%)

Timing of Drop Out	Frequency	
Prior to Session 1	1	
After Session 1	1	
After Session 3	1	
After Session 5	1	
After Session 8 (No Post)	1	







...and the Response Now?

Response Rate:

Panic & Agoraphobia Symptoms		Clinical GI	Clinical Global Functioning		
Post	6-Month Follow Up	Post	6-Month Follow Up		
70%	80%	57%	52%		







Conclusions

Where We Stand

- ACT (Psychological Approach) Appears Feasible for Treating Refractory Patients
 - ...with longitudinal stability
 - ...in a tough crowd
 - ...using therapists with no prior ACT experience
 - ...in 4 weeks
 - ...with a manual
- Mindfulness-based approaches may be especially useful for patients with moderate to severe depression (Arch & Ayers, 2013)
- There is Hope for the "Hidden Third"

More Work Lies Ahead

- Session-by-Session Process
- Detailed Response Analysis
- Other Disorders
- Longer Follow-up
- Different Control Groups







Acknowledgments

The Basel Network

Roselind Lieb, Jutta Mata, Andrea Meyer, Cornelia Witthauer, Eva Unternaehrer, Gunter Meinlschmidt, Jens Gaab, Britta Lohmann, , Isabelle Schumann, Klaus Bader, Georg Eifert, Jan Martz, Rainer Sonntag

The MAC Study Network

<u>Funding/Support</u>: This work is part of the German multicenter trial "Mechanisms of Action in CBT (MAC)". The MAC study is funded by the German Federal Ministry of Education and Research (BMBF; project no. 01GV0615) as part of the BMBF Psychotherapy Research Funding Initiative.

<u>Data Access and Responsibility:</u> All principle investigators take responsibility for the integrity of the respective study data and their components. All authors and co-authors had full access to all study data. Data analysis and manuscript preparation were completed by the authors and co-authors of this article, who take responsibility for its accuracy and content.

Centers: Principal investigators (PI) with respective areas of responsibility in the MAC study are V. Arolt (Münster: Overall MAC Program Coordination), H.U. Wittchen (Dresden: Principal Investigator (PI) for the Randomized Clinical Trial and Manual Development), A. Hamm (Greifswald: PI for Psychophysiology), A.L. Gerlach (Münster: PI for Psychophysiology and Panic subtypes), A. Ströhle (Berlin: PI for Experimental Pharmacology), T. Kircher (Marburg: PI for functional neuroimaging), and J. Deckert (Würzburg: PI for Genetics). Additional site directors in the RTC component of the program are G.W. Alpers (Würzburg), T. Fydrich and L.Fehm (Berlin-Adlershof), and T. Lang (Bremen).

Acknowledgements and staff members by site: Greifswald (coordinating site for psychophysiology): Christiane Melzig, Jan Richter, Susan Richter, Matthias von Rad; Berlin-Charite (coordinating center for experimental pharmacology): Harald Bruhn, Anja Siegmund, Meline Stoy, Andre Wittmann; Berlin-Adlershof: Irene Schulz; Münster (Overall MAC Program Coordination, Genetics and Functional Neuroimaging): Andreas Behnken, Katharina Domschke, Adrianna Ewert, Carsten Konrad, Bettina Pfleiderer, Peter Zwanzger Münster (coordinating site for psychophysiology and subtyping):, Judith Eidecker, Swantje Koller, Fred Rist, Anna Vossbeck-Elsebusch; Marburg/ Aachen (coordinating center for functional neuroimaging):, Barbara Drüke, Sonja Eskens, Thomas Forkmann, Siegfried Gauggel, Susan Gruber, Andreas Jansen, Thilo Kellermann, Isabelle Reinhardt, Nina Vercamer- Fabri; Dresden (coordinating site for data collection, analysis, and the RCT): Franziska Einsle, Christine Fröhlich, Andrew T. Gloster, Christina Hauke, Simone Heinze, Michael Höfler, Ulrike Lueken, Peter Neudeck, Stephanie Preiß, Dorte Westphal; Würzburg Psychology Department: Julia Dürner, Hedwig Eisenbarth, Antje B. M. Gerdes, Harald Krebs, Paul Pauli, Silvia Schad, Nina Steinhäuser; Bremen: Veronika Bamann, Sylvia Helbig-Lang, Anne Kordt, Pia Ley, Franz Petermann, Eva-Maria Schröder. Additional support was provided by the coordinating center for clinical studies in Dresden (KKS Dresden): Xina Grählert and Marko Käppler.

The RTC project was approved by the Ethics Committee of the Medical Faculty of the Technical University of Dresden (EK 164082006). The neuroimaging components were approved by the Ethics Committee of the Medical Faculty of the Rheinisch-Westfälische Hochschule University Aachen (EK 073/07). The experimental pharmacology study was approved by the Ethics Committee of the state of Berlin (EudraCT: 2006-00-4860-29). The study was registered with the ISRCTN: ISRCTN80046034.





