Acceptance and Commitment Therapy (ACT)

Acceptance and Commitment Therapy (ACT) is a contextually focused form of cognitive behavioral psychotherapy that uses mindfulness and behavioral activation to increase clients' psychological flexibility—their ability to engage in values-based, positive behaviors while experiencing difficult thoughts, emotions, or sensations. ACT has been shown to increase effective action; reduce dysfunctional thoughts, feelings, and behaviors; and alleviate psychological distress for individuals with a broad range of mental health issues (including DSM-IV diagnoses, coping with chronic illness, and workplace stress). ACT establishes psychological flexibility by focusing on six core processes:

- Acceptance of private experiences (i.e., willingness to experience odd or uncomfortable thoughts, feelings, or physical sensations in the service of response flexibility)
- Cognitive defusion or emotional separation/distancing (i.e., observing one's own uncomfortable thoughts without automatically taking them literally or attaching any particular value to them)
- Being present (i.e., being able to direct attention flexibly and voluntarily to present external and internal events rather than automatically focusing on the past or future)
- A perspective-taking sense of self (i.e., being in touch with a sense of ongoing awareness)
- Identification of values that are personally important
- Commitment to action for achieving the personal values identified

The first four processes define the ACT approach to mindfulness, and the last two define the ACT approach to behavioral activation.

ACT is delivered to clients in one-on-one sessions, in small groups or larger workshops, or in books or other media, through the presentation of information, dialogue, and the use of metaphors, visualization exercises, and behavioral homework. The number and length of sessions and the overall duration of the intervention can vary depending on the needs of the client or the practice of the treatment provider.

In studies reviewed for this summary, ACT was used to (1) reduce symptoms of depression and the severity of obsessions or repetitive behaviors/mental acts associated with obsessive-compulsive disorder (OCD), (2) relieve the distress associated with delusions and hallucinations in acutely psychotic inpatients, and (3) improve general mental health in study participants by increasing their ability to cope with workplace stress. ACT also has been used in other areas, including the treatment of phobias, depression, trichotillomania, and substance abuse; smoking cessation; coping with end-stage cancer, type 2 diabetes, and epilepsy; and the management of chronic pain. In nonclinical settings, such as worksites, the intervention is also known as Acceptance and Commitment Training to avoid any stigmatizing impact of the word "therapy."

Descriptive Information

<table>
<thead>
<tr>
<th>Areas of Interest</th>
<th>Mental health promotion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mental health treatment</td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
<td><strong>Review Date: July 2010</strong></td>
</tr>
<tr>
<td>1: Obsessive-compulsive disorder symptom severity</td>
<td></td>
</tr>
<tr>
<td>2: Depression symptoms</td>
<td></td>
</tr>
<tr>
<td>3: Rehospitalization</td>
<td></td>
</tr>
<tr>
<td>4: General mental health</td>
<td></td>
</tr>
<tr>
<td><strong>Outcome Categories</strong></td>
<td>Mental health</td>
</tr>
<tr>
<td></td>
<td>Treatment/recovery</td>
</tr>
<tr>
<td><strong>Ages</strong></td>
<td>18-25 (Young adult)</td>
</tr>
<tr>
<td></td>
<td>26-55 (Adult)</td>
</tr>
<tr>
<td></td>
<td>55+ (Older adult)</td>
</tr>
<tr>
<td><strong>Genders</strong></td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td><strong>Races/Ethnicities</strong></td>
<td>American Indian or Alaska Native</td>
</tr>
</tbody>
</table>
### Quality of Research

#### Review Date: July 2010

#### Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

**Study 1**


**Study 2**


**Study 3**


#### Supplementary Materials

Outcomes

### Outcome 1: Obsessive-compulsive disorder symptom severity

**Description of Measures**
The severity of OCD symptoms was measured by the Yale-Brown Obsessive Compulsive Scale (Y-BOCS), a 10-item structured interview administered by a clinician. The Y-BOCS separately measures the severity of obsessions and compulsions on a 5-point scale that ranges from 0 (no symptoms) to 4 (extreme symptoms), generating a total score that ranges from 0 to 40. The Y-BOCS total score indicates whether symptoms are subclinical (0-7), mild (8-15), moderate (16-23), severe (24-31), or extreme (32-40). For the study, researchers defined a pre- to postintervention change of 6.39 points in the Y-BOCS total score as reliable and clinically significant. Assessments occurred 1 week before treatment (baseline) and 1 and 12 weeks after treatment (follow-ups).

**Key Findings**
In a randomized clinical trial, adults with a DSM-IV diagnosis of OCD were assigned to eight sessions of either ACT or Progressive Relaxation Training (PRT). Participants in each group had a reduction in OCD symptom severity from baseline to both posttreatment follow-up assessments (p < .001 and p < .001 for participants who received ACT and PRT, respectively). However, compared with PRT participants, ACT participants had larger and more rapid reductions in OCD symptom severity (p = .026); this group difference was associated with a large effect size (Cohen's d = 0.84). A higher percentage of ACT than PRT participants reported clinically significant reductions (≥6.39 points in the Y-BOCS total score) from baseline to 1 week after treatment (56% vs. 18%; p < .002) and from baseline to 12 weeks after treatment (66% vs. 16%; p < .001); the effect sizes for these differences were medium and large (Cohen's d = 0.77 and 1.10 for the 1- and 12-week follow-ups, respectively).

### Studies Measuring Outcome
- Study 1

### Study Designs
- Experimental

### Quality of Research Rating
- 3.7 (0.0-4.0 scale)

### Outcome 2: Depression symptoms

**Description of Measures**
Depression symptoms were measured with the Beck Depression Inventory--II (BDI-II). The BDI-II is a 21-item self-report instrument that assesses the presence and severity of depression symptoms according to DSM-IV criteria. Like the DSM-IV, the BDI-II evaluates symptoms of depression during the 2 weeks prior to assessment. Participants respond to 19 items using a 4-point scale and 2 items using a 7-point scale. The BDI-II total score ranges from 0 to 63 and indicates whether symptoms of depression are minimal (0-13), mild (14-19), moderate (20-28), or severe (29-63). Assessments occurred 1 week before treatment (baseline) and 1 and 12 weeks after treatment (follow-ups).

**Key Findings**
In a randomized clinical trial, adults with a DSM-IV diagnosis of OCD were assigned to eight sessions of either ACT or PRT. An analysis of study participants with at least a mild baseline level of depression symptoms (BDI-II score of ≥13; 70% of the participants) showed that ACT participants had greater reductions in depression symptoms than PRT participants from baseline to 1- and 12-week posttreatment follow-up assessments (p = .002 and p < .05, respectively). The group differences at the 1- and 12-week follow-ups were associated with large and medium effect sizes.
### Outcome 3: Rehospitalization

**Description of Measures**
Rehospitalization was measured through examination of participant hospitalizations over two periods. At baseline, rehospitalization was defined as the number of days (up to 120) from a participant’s pre-study hospital discharge date to the hospital admission date coinciding with study participation. At follow-up, rehospitalization was defined as the number of days between the hospital discharge date coinciding with study participation and a participant’s rehospitalization occurring during the next 4 months (120 days), as well as by the percentage of participants rehospitalized during this period. These data were obtained from hospital admission records, cross-checked with client medical charts, and verified with case managers and study staff.

**Key Findings**
In a randomized clinical trial, adults experiencing auditory hallucinations or delusions at the time of admission to a State psychiatric hospital were assigned to one of two conditions: treatment as usual (comparison group) or treatment as usual plus four individual sessions of ACT (intervention group). Treatment as usual consisted of medication, weekly or twice-weekly psychoeducational groups, and weekly individual psychotherapy sessions for participants who were hospitalized for more than a few days. Treatment as usual continued after hospital discharge with case management services, monthly medication management, and the opportunity to voluntarily participate in Assertive Community Treatment, a team-based treatment approach designed to provide comprehensive, community-based psychiatric treatment, psychosocial rehabilitation, and social support services to persons with serious and chronic mental disorders (e.g., schizophrenia). During the 4-month follow-up period, a smaller percentage of intervention group than comparison group participants were rehospitalized (20% vs. 40%; p < .05). Additionally, intervention group participants remained out of the hospital an average of 22 days longer than comparison group participants during the follow-up period; this difference was significant after controlling for pre-study baseline days to hospitalization and self-reported medication compliance across the follow-up period (p = .03).

---

### Outcome 4: General mental health

**Description of Measures**
General mental health was measured with the General Health Questionnaire-12 (GHQ-12), a brief self-report instrument containing 12 items from the original, 60-item version of the GHQ. Each item in the GHQ-12 addresses recent experiences of a symptom or behavior and begins with "have you recently" (e.g., "Have you recently lost much sleep over worry?" and "Have you recently been able to concentrate on whatever you're doing?"). Respondents answer each item with a 4-point Likert scale that ranges from 0 (not at all) to 3 (much more than usual). Low GHQ-12 scores indicate a high level of recent mental health. Assessments occurred before each of the three intervention sessions (i.e., at weeks 1, 2, and 14 of the study) and 13 weeks after the final session (i.e., at week 27 of the study).

**Key Findings**
In a randomized controlled trial in the United Kingdom, workers in a media organization were solicited for voluntary participation in a workplace-based stress management program during working hours. Study participants were assigned to one of three conditions: ACT, the Innovation Promotion Program (IPP), or a wait-list control. The IPP is a problem-focused and solution-based program that helps workers to identify and then address the causes of workplace stressors. Both ACT and the IPP were delivered in small groups as three, half-day sessions during weeks 1, 2, and 14. Findings from this study included the following:

- GHQ-12 scores were lower for ACT than for IPP participants before the third intervention session (10.42 vs. 13.18 at week 14; p < .0001) and at the postintervention follow-up (10.42 vs. 13.18; p < .0001).
These intervention group differences were associated with large effect sizes (eta-squared = .33 and .17 at weeks 14 and 27, respectively). Additionally, GHQ-12 scores were lower for ACT than for wait-list control participants at weeks 14 (10.42 vs. 12.57; p < .0001) and 27 (10.42 vs. 12.65; p < .0001). These intervention group differences were associated with large effect sizes (eta-squared = .35 and .22 at weeks 14 and 27, respectively).

Among participants in the three conditions, only ACT participants had a GHQ-12 score that was lower at the postintervention follow-up than at the preintervention assessment at week 1 (10.42 vs. 12.17; p < .0001). This pre- to postintervention mental health improvement for ACT participants was associated with a large effect size (eta-squared = .25).

### Studies Measuring Outcome

<table>
<thead>
<tr>
<th>Study</th>
<th>Age</th>
<th>Gender</th>
<th>Race/Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)</td>
<td>61% Female 39% Male</td>
<td>89% White 5% Hispanic or Latino 2.5% American Indian or Alaska Native 2.5% Asian 1% Black or African American</td>
</tr>
<tr>
<td>Study 2</td>
<td>26-55 (Adult)</td>
<td>63.8% Male 36.3% Female</td>
<td>75% White 11.3% Hispanic or Latino 6.3% Race/ethnicity unspecified 3.8% Black or African American 2.5% American Indian or Alaska Native 1.3% Asian</td>
</tr>
<tr>
<td>Study 3</td>
<td>18-25 (Young adult) 26-55 (Adult) 55+ (Older adult)</td>
<td>50% Female 50% Male</td>
<td>100% Non-U.S. population</td>
</tr>
</tbody>
</table>

### Quality of Research Ratings by Criteria (0.0-4.0 scale)

External reviewers independently evaluate the Quality of Research for an intervention's reported results using six criteria:

1. Reliability of measures
2. Validity of measures
3. Intervention fidelity
4. Missing data and attrition
5. Potential confounding variables
6. Appropriateness of analysis

For more information about these criteria and the meaning of the ratings, see [Quality of Research](#).
Study Strengths
The Y-BOCS and the BDI-II are gold standard instruments, and the GHQ-12 is a widely used instrument with strong psychometric properties. Rehospitalization data that have been extracted from hospital admission records, cross-referenced with client medical charts, and verified with case managers and study staff are an objective measure. All three studies included a manual-driven approach, and one study had formal fidelity adherence instruments. The follow-up rate exceeded 80% in two of the studies, and a power analysis in the other study suggested that the sample was adequate for detecting between-group differences and interaction effects that were associated with at least a medium effect size. In one study, missing data were handled with a sophisticated multiple imputation statistical approach. All three studies used random assignment to conditions, which controlled for many confounding variables. In two of the three studies, the analyses were sophisticated and state of the art.

Study Weaknesses
Rehospitalization is only one measure of the mental wellness of people diagnosed with a psychotic illness, and other convergent indicators, such as independent living skills and social integration, were not measured. In two of the three studies, there were no formal instruments to measure fidelity. One study measured only the reported symptoms of OCD and not the actual behaviors associated with the disorder, which may have inflated the intervention's impact on OCD. The same study also had a relatively short follow-up assessment period.

Readiness for Dissemination
Review Date: July 2010

Materials Reviewed
The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the intervention and the availability of additional, updated, or new materials.


Program Web site, http://contextualpsychology.org/act

Related Web sites:
- http://www.learningACT.com

Readiness for Dissemination Ratings by Criteria (0.0-4.0 scale)
External reviewers independently evaluate the intervention's Readiness for Dissemination using three criteria:

1. Availability of implementation materials
2. Availability of training and support resources
3. Availability of quality assurance procedures

For more information about these criteria and the meaning of the ratings, see Readiness for Dissemination.
Dissemination Strengths
Several textbooks provide theoretical and empirical foundations for ACT, vignettes and case studies, and guidance for using ACT with individuals with specific disorders. The ACT in Action DVD series provides clinicians with a conceptual understanding of the approach and very specific techniques and interventions for various clinical contexts. Web sites offer extensive ACT materials. An electronic mailing list allows users to ask questions and obtain information on various topics, including implementation, from ACT therapists and researchers. An extensive calendar of ACT training events and a Web-based training tutorial are available. Consultation can be provided to new implementation sites by the developer. The developer emphasizes quality assurance and quality improvement, with numerous process, fidelity, and outcome measures available at no cost. Worksheets that guide interpretation of the data derived from these measures are also provided.

Dissemination Weaknesses
Although tools for ensuring quality and fidelity are available, it may be a challenge for some clinicians to apply them, given the likely variability of intervention delivery. It is unclear how to secure supervision from the community of ACT therapists.

Costs
The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Cost</th>
<th>Required by Developer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership to ACBS (includes free access to electronic materials, such as treatment manuals, client handouts, books, outcome and process measures, and training materials)</td>
<td>Value-based fee (members choose the amount, with a minimum contribution of $1)</td>
<td>Yes (one resource for implementation materials is required)</td>
</tr>
<tr>
<td>Implementation materials, including:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Acceptance and Commitment Therapy: An Experiential Approach to Behavior Change</td>
<td>$30-$60 per copy</td>
<td>Yes (one resource for implementation is required)</td>
</tr>
<tr>
<td>• Acceptance &amp; Commitment Therapy for Anxiety Disorders: A Practitioner’s Treatment Guide to Using Mindfulness, Acceptance, and Values-Based Behavior Change Strategies (includes a CD-ROM with client handouts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Learning ACT: An Acceptance &amp; Commitment Therapy Skills-Training Manual for Therapists (includes a DVD with sample client lessons)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACT in Action DVD series (six DVDs)</td>
<td>$59.95 per DVD</td>
<td>No</td>
</tr>
<tr>
<td>Up to 6 days of training at the ACBS annual meeting for clinicians, clinical supervisors, and/or program administrators</td>
<td>About $400 per participant</td>
<td>No</td>
</tr>
<tr>
<td>Weekend training workshops for clinicians, clinical supervisors, and/or program administrators (held during the ACBS annual meeting)</td>
<td>About $300 per person, per workshop</td>
<td>No</td>
</tr>
<tr>
<td>Other training opportunities worldwide through ACT trainers</td>
<td>Varies depending on location and trainer</td>
<td>No</td>
</tr>
<tr>
<td>Ongoing implementation and evaluation consultation by ACT trainers</td>
<td>Varies depending on trainer and site needs</td>
<td>No</td>
</tr>
</tbody>
</table>

Replications
Selected citations are presented below. An asterisk indicates that the document was reviewed for Quality of Research.


To learn more about implementation or research, contact:
Association for Contextual Behavioral Science
acbs@contextualpsychology.org

Consider these Questions to Ask (PDF, 54KB) as you explore the possible use of this intervention.

Web Site(s):
- [http://contextualpsychology.org/act](http://contextualpsychology.org/act)

This PDF was generated from http://nrepp.samhsa.gov/ViewIntervention.aspx?id=191 on 10/17/2015