

30 babcp abstracts, february '13

(de Witt Huberts, Evers et al. 2012; England, Herbert et al. 2012; Akbaraly, Sabia et al. 2013; Alden and Trew 2013; Arch, Ayers et al. 2013; Bohn, Aderka et al. 2013; Bower, Kontopantelis et al. 2013; Cable, Bartley et al. 2013; Cella, White et al. 2013; Clarke, Thomas et al. 2013; DiMauro, Domingues et al. 2013; Ford, Jaceldo-Siegl et al. 2013; Fuchs, Lee et al. 2013; Hans and Hiller 2013; Hedman, Andersson et al. 2013; Imel, Hubbard et al. 2013; Ironson, O'Leirigh et al. 2013; Lulkahatai and Saligan 2013; Morgan, Mackinnon et al. 2013; Mulder and Chanen 2013; Niemeyer, Musch et al. 2013; Nijdam, Baas et al. 2013; Petkus and Wetherell 2013; Samuel and Ball 2013; Seekles, Cuijpers et al. 2013; Shiban, Pauli et al. 2013; Voncken and Dijk 2013; Wagner, Penelo et al. 2013; Watts, Mackenzie et al. 2013; White, Payne et al. 2013)

Akbaraly, T. N., S. Sabia, et al. (2013). **"Adherence to healthy dietary guidelines and future depressive symptoms: Evidence for sex differentials in the Whitehall II study."** *Am J Clin Nutr* 97(2): 419-427.

<http://ajcn.nutrition.org/content/97/2/419.abstract>

(Free full text available) Background: It has been suggested that dietary patterns are associated with future risk of depressive symptoms. However, there is a paucity of prospective data that have examined the temporality of this relation. Objective: We examined whether adherence to a healthy diet, as defined by using the Alternative Healthy Eating Index (AHEI), was prospectively associated with depressive symptoms assessed over a 5-y period. Design: Analyses were based on 4215 participants in the Whitehall II Study. AHEI scores were computed in 1991–1993 and 2003–2004. Recurrent depressive symptoms were defined as having a Center for Epidemiologic Studies Depression Scale score ≥ 16 or self-reported use of antidepressants in 2003–2004 and 2008–2009. Results: After adjustment for potential confounders, the AHEI score was inversely associated with recurrent depressive symptoms in a dose-response fashion in women (P-trend < 0.001 ; for 1 SD in AHEI score; OR: 0.59; 95% CI: 0.47, 0.75) but not in men. Women who maintained high AHEI scores or improved their scores during the 10-y measurement period had 65% (OR: 0.35%; 95% CI: 0.19%, 0.64%) and 68% (OR: 0.32%; 95% CI: 0.13%, 0.78%) lower odds of subsequent recurrent depressive symptoms than did women who maintained low AHEI scores. Among AHEI components, vegetable, fruit, trans fat, and the ratio of polyunsaturated fat to saturated fat components were associated with recurrent depressive symptoms in women. Conclusion: In the current study, there was a suggestion that poor diet is a risk factor for future depression in women.

Alden, L. E. and J. L. Trew (2013). **"If it makes you happy: Engaging in kind acts increases positive affect in socially anxious individuals."** *Emotion* 13(1): 64-75. <http://www.ncbi.nlm.nih.gov/pubmed/22642341>

Social anxiety is associated with low positive affect (PA), a factor that can significantly affect psychological well-being and adaptive functioning. Despite suggestions that individuals with high levels of social anxiety would benefit from PA enhancement, the feasibility of doing so remains an unanswered question. Accordingly, in the current study, individuals with high levels of social anxiety (N = 142) were randomly assigned to conditions designed to enhance PA (Kind Acts), reduce negative affect (NA; Behavioral Experiments), or a neutral control (Activity Monitoring). All participants engaged in the required activities for 4 weeks and completed pretest questionnaires measuring mood and social goals, as well as weekly email ratings of mood, anxiety, and social activities. Both the pretest and weekly mood ratings revealed that participants who engaged in kind acts displayed significant increases in PA that were sustained over the 4 weeks of the study. No significant changes in PA were observed in the other conditions. The increase in hedonic functioning was not due to differential compliance, frequency of social activities, or an indirect effect of NA reduction. In addition, participants who engaged in kind acts displayed an increase in relationship satisfaction and a decrease in social avoidance goals, whereas no significant changes in these variables were observed in the other conditions. This study is the first to demonstrate that positive affect can be increased in individuals with high levels of social anxiety and that PA enhancement strategies may result in wider social benefits. The role of PA in producing those benefits requires further study.

Arch, J. J., C. R. Ayers, et al. (2013). **"Randomized clinical trial of adapted mindfulness-based stress reduction versus group cognitive behavioral therapy for heterogeneous anxiety disorders."** *Behaviour Research and Therapy* 51(4-5): 185-196. <http://www.sciencedirect.com/science/article/pii/S0005796713000144>

Objective To compare a mindfulness-based intervention with cognitive behavioral therapy (CBT) for the group treatment of anxiety disorders. Method One hundred five veterans (83% male, mean age = 46 years, 30% minority) with one or more DSM-IV anxiety disorders began group treatment following randomization to adapted mindfulness-based stress reduction (MBSR) or CBT. Results Both groups showed large and equivalent improvements on principal disorder severity thru 3-month follow up (ps $< .001$, $d = -4.08$ for adapted MBSR; $d = -3.52$ for CBT). CBT outperformed adapted MBSR on anxious arousal outcomes at follow up (p $< .01$, $d = .49$) whereas adapted MBSR reduced worry at a greater rate than CBT (p $< .05$, $d = .64$) and resulted in greater reduction of comorbid emotional disorders (p $< .05$, $d = .49$). The adapted MBSR group evidenced greater mood disorders and worry at Pre, however. Groups showed equivalent treatment credibility, therapist adherence and competency, and reliable improvement. Conclusions CBT and adapted MBSR were both effective at reducing principal diagnosis severity and somewhat effective at reducing self-reported anxiety symptoms within a complex sample. CBT was more effective at reducing anxious arousal, whereas adapted MBSR may be more effective at reducing worry and comorbid disorders.

Bohn, C., I. M. Aderka, et al. (2013). **"Sudden gains in cognitive therapy and interpersonal therapy for social anxiety disorder."** *J Consult Clin Psychol* 81(1): 177-182. <http://www.ncbi.nlm.nih.gov/pubmed/23244366>

OBJECTIVE: The present study examined the effects of sudden gains on treatment outcome in a randomized controlled trial including individual cognitive therapy (CT) and interpersonal therapy (IPT) for social anxiety disorder (SAD). METHOD: Participants were 67 individuals with SAD who received 16 treatment sessions. Symptom severity at each session was assessed using the Social Phobia Weekly Summary Scale (Clark et al., 2003). RESULTS: Results indicate that 22.4% of participants experienced a sudden gain during treatment. Individuals with sudden gains had significantly lower social anxiety symptoms at post-treatment and follow-up compared to individuals without sudden gains. Sudden gains in CT and IPT had similar magnitudes, frequencies, and timings. However, sudden gains resulted in lower levels of post-treatment symptoms in CT compared to IPT. Cognitive changes did not precede sudden gains, but sudden gains resulted in cognitive changes. CONCLUSIONS: Sudden gains in CT and IPT for SAD are predictive of long-term outcome. In addition, the effect of sudden gains may be greater in CT compared to IPT.

Bower, P., E. Kontopantelis, et al. (2013). **"Influence of initial severity of depression on effectiveness of low intensity interventions: Meta-analysis of individual patient data."** *BMJ* 346: f540. <http://www.ncbi.nlm.nih.gov/pubmed/23444423>

OBJECTIVE: To assess how initial severity of depression affects the benefit derived from low intensity interventions for depression. **DESIGN:** Meta-analysis of individual patient data from 16 datasets comparing low intensity interventions with usual care. **SETTING:** Primary care and community settings. **PARTICIPANTS:** 2470 patients with depression. **INTERVENTIONS:** Low intensity interventions for depression (such as guided self help by means of written materials and limited professional support, and internet delivered interventions). **MAIN OUTCOME MEASURES:** Depression outcomes (measured with the Beck Depression Inventory or Center for Epidemiologic Studies Depression Scale), and the effect of initial depression severity on the effects of low intensity interventions. **RESULTS:** Although patients were referred for low intensity interventions, many had moderate to severe depression at baseline. We found a significant interaction between baseline severity and treatment effect (coefficient -0.1 (95% CI -0.19 to -0.002)), suggesting that patients who are more severely depressed at baseline demonstrate larger treatment effects than those who are less severely depressed. However, the magnitude of the interaction (equivalent to an additional drop of around one point on the Beck Depression Inventory for a one standard deviation increase in initial severity) was small and may not be clinically significant. **CONCLUSIONS:** The data suggest that patients with more severe depression at baseline show at least as much clinical benefit from low intensity interventions as less severely depressed patients and could usefully be offered these interventions as part of a stepped care model.

Cable, N., M. Bartley, et al. (2013). **"Friends are equally important to men and women, but family matters more for men's well-being."** *J Epidemiol Community Health* 67(2): 166-171. <http://jech.bmj.com/content/67/2/166.abstract>

Background People with larger social networks are known to have better well-being; however, little is known about (1) the association with socio-demographic factors that may predict the size and composition of social networks and (2) whether the association with well-being is independent of pre-existing psychological health or socio-demographic factors. **Methods** The authors used information collected from 3169 men and 3512 women who were born in Great Britain in 1958. First, age on leaving full-time education, partnership and employment status at age 42 were used to predict the size and composition of cohort members' social networks at age 45 using ordered logistic regression. Second, using multiple linear regression, the associations between social network size by composition (relatives and friends) and psychological well-being at age 50 were assessed, adjusting for socio-demographic factors and psychological health at age 42. **Results** Not having a partner and staying in full-time education after age 16 was associated with a smaller kinship network in adults. Having a smaller friendship network at age 45 was associated with poorer psychological well-being among adults at age 50, over and above socio-demographic factors and previous psychological health. Additionally, having a smaller kinship network was associated with poorer psychological well-being among men. **Conclusions** Having a well-integrated friendship network is a source of psychological well-being among middle-aged adults, while kinship networks appear to be more important for men's well-being than for women's. These relationships are independent of education, material status and prior psychological health.

Cella, M., P. D. White, et al. (2013). **"Cognitions, behaviours and co-morbid psychiatric diagnoses in patients with chronic fatigue syndrome."** *Psychological Medicine* 43(02): 375-380. <http://dx.doi.org/10.1017/S0033291712000979>

Background Specific cognitions and behaviours are hypothesized to be important in maintaining chronic fatigue syndrome (CFS). Previous research has shown that a substantial proportion of CFS patients have co-morbid anxiety and/or depression. This study aims to measure the prevalence of specific cognitions and behaviours in patients with CFS and to determine their association with co-morbid anxiety or depression disorders. **Method** A total of 640 patients meeting Oxford criteria for CFS were recruited into a treatment trial (i.e. the PACE trial). Measures analysed were: the Cognitive Behavioural Response Questionnaire, the Chalder Fatigue Scale and the Work and Social Adjustment Scale. Anxiety and depression diagnoses were from the Structured Clinical Interview for DSM-IV. Multivariate analysis of variance was used to explore the associations between cognitive-behavioural factors in patients with and without co-morbid anxiety and/or depression. **Results** Of the total sample, 54% had a diagnosis of CFS and no depression or anxiety disorder, 14% had CFS and one anxiety disorder, 14% had CFS and depressive disorder and 18% had CFS and both depression and anxiety disorders. Cognitive and behavioural factors were associated with co-morbid diagnoses; however, some of the mean differences between groups were small. Beliefs about damage and symptom focussing were more frequent in patients with anxiety disorders while embarrassment and behavioural avoidance were more common in patients with depressive disorder. **Conclusions** Cognitions and behaviours hypothesized to perpetuate CFS differed in patients with concomitant depression and anxiety. Cognitive behavioural treatments should be tailored appropriately.

Clarke, S., P. Thomas, et al. (2013). **"Cognitive analytic therapy for personality disorder: Randomised controlled trial."** *British Journal of Psychiatry* 202(2): 129-134. <http://bjp.rcpsych.org/content/202/2/129.abstract>

Background Cognitive analytic therapy (CAT) is a theoretically coherent approach developed to address common processes underlying personality disorders, but is supported by limited empirical evidence. **Aims** To investigate the effectiveness of time-limited CAT for participants with personality disorder. **Method** A service-based randomised controlled trial (trial registration: ISRCTN79596618) comparing 24 sessions of CAT (n = 38) and treatment as usual (TAU) (n = 40) over 10 months for individuals with personality disorder. Primary outcomes were measures of psychological symptoms and interpersonal difficulties. **Results** Participants receiving CAT showed reduced symptoms and experienced substantial benefits compared with TAU controls, who showed signs of deterioration during the treatment period. **Conclusions** Cognitive analytic therapy is more effective than TAU in improving outcomes associated with personality disorder. More elaborate and controlled evaluations of CAT are needed in the future.

de Witt Huberts, J. C., C. Evers, et al. (2012). **"Double trouble: Restrained eaters do not eat less and feel worse."** *Psychology & Health*: 1-15. <http://dx.doi.org/10.1080/08870446.2012.751106>

Objective: While high levels of dietary restraint do not appear to reflect actual caloric restraint, it has been found to be a risk factor for a wide array of maladaptive eating patterns. These findings raise the question what, if not caloric restriction, dietary restraint entails. We propose that the very finding that restrained eaters do not eat less than they intend to do can provide an answer. Based on this disparity between the intention to restrain oneself and actual behaviour, we therefore hypothesised that high levels of restraint are associated with eating-related guilt. **Method:** Three studies (N = 148) using unobtrusive measures of food intake; different restraint scales; and different measures of guilt tested whether restraint is related to eating-related guilt. **Results:** Results indicated that restraint was not associated with food intake, but instead was associated with increased levels of guilt after eating. Guilt was explicitly related to food intake. Moreover, the observed guilt could not be attributed to a general increase in negative affect. **Conclusion:** The results of these studies suggest that restraint is not an indicator of actual restricted food intake, but rather a reflection concerns about food and eating manifested in eating-related guilt.

DiMauro, J., J. Domingues, et al. (2013). **"Long-term effectiveness of CBT for anxiety disorders in an adult outpatient clinic sample: A follow-up study."** *Behaviour Research and Therapy* 51(2): 82-86. <http://www.sciencedirect.com/science/article/pii/S000579671200157X>

The short-term efficacy and effectiveness of Cognitive-Behavioral Therapy (CBT) for treating anxiety disorders in adults has been well established by a multitude of clinical studies and well-controlled randomized trials. However, though the long-term efficacy of CBT as a treatment modality is fairly well established, the degree of its long-term effectiveness has yet to be fully evaluated. Thus, the present study sought to assess both the immediate and long-term effectiveness of individually-administered CBT for the treatment of anxiety disorders in an outpatient psychological clinic. Individuals with a primary diagnosis of Panic Disorder, Social Phobia, Posttraumatic Stress Disorder, Generalized Anxiety Disorder, or Obsessive-Compulsive Disorder who had received 3 or more sessions of CBT were assessed for symptom severity and improvement prior to initiating treatment, at posttreatment, and at one-year follow-up. Symptom severity and improvement ratings were used to categorize patients as "responders" or "remitters" at posttreatment, and "maintained responders" or "maintained remitters" at follow-up. Findings demonstrated that posttreatment success as responder and remitter was significantly maintained at one-year follow-up. Additionally, pre- and posttreatment severity and posttreatment improvement scores were also predictive of maintenance. Furthermore, effect sizes were used to compare the effectiveness of CBT in the present clinical sample to research treatment outcomes demonstrated by previous efficacy studies.

England, E. L., J. D. Herbert, et al. (2012). **"Acceptance-based exposure therapy for public speaking anxiety."** *Journal of Contextual Behavioral Science* 1(1-2): 66-72. <http://www.sciencedirect.com/science/article/pii/S221214471200004X>

(Free full text available) Public speaking anxiety (PSA), diagnosed at clinical levels as social anxiety disorder, nongeneralized type, is associated with significant distress and impairment in a substantial portion of the population (Aderka et al., 2012). Empirically supported behavioral treatments for PSA generally include in vivo and/or simulated exposure, usually presented with some form of rationale or context (e.g., habituation). Newer acceptance-based therapies frame exposure as an opportunity to increase one's willingness to experience anxiety, while engaging in valued behaviors. The present study examined the acceptability, feasibility, and preliminary effectiveness of acceptance-based exposure treatment for PSA compared to standard habituation-based exposure in a clinical population. Treatment was delivered in a group format over 6 weekly sessions. Participants receiving acceptance-based exposure (ABE) were significantly more likely than those receiving habituation-based exposure (HAB) to achieve diagnostic remission by 6-week follow-up. Those in the ABE condition rated this intervention equally acceptable and credible compared to participants receiving the habituation-based approach, and improvement on other outcome measures was comparable across conditions. Participants in both groups demonstrated significant and equivalent improvement on measures of public-speaking-related cognitions, confidence, and social skills. Baseline levels of mindful awareness moderated change in public-speaking-related cognitions across conditions, and baseline defusion moderated change in state anxiety for the ABE condition only.

Ford, P. A., K. Jaceldo-Siegl, et al. (2013). **"Intake of Mediterranean foods associated with positive affect and low negative affect."** *Journal of Psychosomatic Research* 74(2): 142-148.

<http://www.sciencedirect.com/science/article/pii/S002239991200311X>

Objective To examine associations between consumption of foods typical of Mediterranean versus Western diets with positive and negative affect. Nutrients influence mental states yet few studies have examined whether foods protective or deleterious for cardiovascular disease affect mood. Methods Participants were 9255 Adventist church attendees in North America who completed a validated food frequency questionnaire in 2002-6. Scores for affect were obtained from the Positive and Negative Affect Schedule questionnaire in 2006-7. Multiple linear regression models controlled for age, gender, ethnicity, BMI, education, sleep, sleep squared (to account for high or low amounts), exercise, total caloric intake, alcohol and time between the questionnaires. Results Intake of vegetables ($\beta = 0.124$ [95% CI 0.101, 0.147]), fruit ($\beta = 0.066$ [95% CI 0.046, 0.085]), olive oil ($\beta = 0.070$ [95% CI 0.029, 0.111]), nuts ($\beta = 0.054$ [95% CI 0.026, 0.082]), and legumes ($\beta = 0.055$ [95% CI 0.032, 0.077]) were associated with positive affect while sweets/desserts ($\beta = -0.066$ [95% CI -0.086, -0.046]), soda ($\beta = -0.025$ [95% CI -0.037, -0.013]) and fast food frequency ($\beta = -0.046$ [95% CI -0.062, -0.030]) were inversely associated with positive affect. Intake of sweets/desserts ($\beta = 0.058$ [95% CI 0.037, 0.078]) and fast food frequency ($\beta = 0.052$ [95% CI 0.036, 0.068]) were associated with negative affect while intake of vegetables ($\beta = -0.076$ [95% CI -0.099, -0.052]), fruit ($\beta = -0.033$ [95% CI -0.053, -0.014]) and nuts ($\beta = -0.088$ [95% CI -0.116, -0.060]) were inversely associated with negative affect. Gender interacted with red meat intake ($P < .001$) and fast food frequency ($P < .001$) such that these foods were associated with negative affect in females only. Conclusions Foods typical of Mediterranean diets were associated with positive affect as well as lower negative affect while Western foods were associated with low positive affect in general and negative affect in women.

Fuchs, C., J. K. Lee, et al. (2013). **"Using mindfulness- and acceptance-based treatments with clients from nondominant cultural and/or marginalized backgrounds: Clinical considerations, meta-analysis findings, and introduction to the special series: Clinical considerations in using acceptance- and mindfulness-based treatments with diverse populations."** *Cognitive and Behavioral Practice* 20(1): 1-12.

<http://www.sciencedirect.com/science/article/pii/S1077722912000041>

(Free full text available) A growing body of research suggests that mindfulness- and acceptance-based principles can increase efforts aimed at reducing human suffering and increasing quality of life. A critical step in the development and evaluation of these new approaches to treatment is to determine the acceptability and efficacy of these treatments for clients from nondominant cultural and/or marginalized backgrounds. This special series brings together the wisdom of clinicians and researchers who are currently engaged in clinical practice and treatment research with populations who are historically underrepresented in the treatment literature. As an introduction to the series, this paper presents a theoretical background and research context for the papers in the series, highlights the elements of mindfulness- and acceptance-based treatments that may be congruent with culturally responsive treatment, and briefly outlines the general principles of cultural competence and responsive treatment. Additionally, the results of a meta-analysis of mindfulness- and acceptance-based treatments with clients from nondominant cultural and/or marginalized backgrounds are presented. Our search yielded 32 studies totaling 2,198 clients. Results suggest small (Hedges' $g = .38$, 95% CI = .11 - .64) to large (Hedges' $g = 1.32$, 95% CI = .61 - 2.02) effect sizes for mindfulness- and acceptance-based treatments, which varied by study design.

Hans, E. and W. Hiller (2013). **"Effectiveness of and dropout from outpatient cognitive behavioral therapy for adult unipolar depression: A meta-analysis of nonrandomized effectiveness studies."** *J Consult Clin Psychol* 81(1): 75-88.

<http://www.ncbi.nlm.nih.gov/pubmed/23379264>

OBJECTIVE: The primary aim of this study was to assess the overall effectiveness of and dropout from individual and group outpatient cognitive behavioral therapy (CBT) for adults with a primary diagnosis of unipolar depressive disorder in routine clinical practice. METHOD: We conducted a random effects meta-analysis of 34 nonrandomized effectiveness studies on outpatient individual and group CBT for adult unipolar depressive disorder. Standardized mean gain effect sizes are reported for end-of-treatment and 6-month follow-up effects for depression severity, dysfunctional cognitions, general anxiety, psychological distress, and functional impairment. The mean dropout rate from CBT is reported. We benchmarked our results against high-

quality randomized controlled trials (RCTs). RESULTS: Outpatient CBT was effective in reducing depressive severity in completer ($d = 1.13$) and intention-to-treat (ITT) samples ($d = 1.06$). Moderate to large posttreatment effect sizes ($d = 0.67-0.88$) were found for secondary outcomes. The weighted mean dropout rate was 24.63%. Posttreatment gains for depression were maintained at 6 months after completion of therapy. Effect sizes for depression were inferior to those of benchmark RCTs. CONCLUSIONS: Although clinical practice patients show lesser improvements in depressive symptoms than RCT patients, individual and group outpatient CBT can be effectively transported to routine clinical practice. The considerable treatment dropout rate, especially in individual CBT, must be improved. The small number of available studies and low quality of some reports stress the need for high-quality effectiveness studies.

Hedman, E., E. Andersson, et al. (2013). **"Cost-effectiveness and long-term effectiveness of internet-based cognitive behaviour therapy for severe health anxiety."** *Psychological Medicine* 43(02): 363-374. <http://dx.doi.org/10.1017/S0033291712001079>

Background Severe health anxiety is a common condition associated with functional disability, making it a costly disorder from a societal perspective. Internet-based cognitive behaviour therapy (ICBT) is a promising treatment but no previous study has assessed the cost-effectiveness or long-term outcome of ICBT for severe health anxiety. The aim of this study was to investigate the cost-effectiveness and 1-year treatment effects of ICBT for severe health anxiety. Method Cost-effectiveness and 1-year follow-up data were obtained from a randomized controlled trial (RCT) comparing ICBT ($n = 40$) to an attention control condition (CC, $n = 41$). The primary outcome measure was the Health Anxiety Inventory (HAI). A societal perspective was taken and incremental cost-effectiveness ratios (ICERs) were calculated using bootstrap sampling. Results The main ICER was $-\pounds 1244$, indicating the societal economic gain for each additional case of remission when administering ICBT. Baseline to 1-year follow-up effect sizes on the primary outcome measure were large ($d = 1.71-1.95$). Conclusions ICBT is a cost-effective treatment for severe health anxiety that can produce substantial and enduring effects.

Imel, Z. E., R. A. Hubbard, et al. (2013). **"Patient-rated alliance as a measure of therapist performance in two clinical settings."** *J Consult Clin Psychol* 81(1): 154-165. <http://www.ncbi.nlm.nih.gov/pubmed/23231576>

OBJECTIVE: The ability to form a strong therapeutic alliance is considered a foundational skill across psychotherapies. Patient-rated measures of the alliance are now being used to make judgments about a therapist's tendency to build alliances with their patients. However, whether a patient-rated alliance measure provides a useful index of a therapist's tendency to have strong alliances is not clear. METHOD: We examined therapist differences in patient ratings of the alliance obtained from an HMO that included 2 samples--an internal HMO clinic ($n = 3287$, 3781 ratings, therapist $n = 72$) and an independent practice (IP) based sample ($n = 1320$, 1690 ratings, therapist $n = 93$). First, we estimated the amount of variability in alliance scores due to therapist, including the consistency of estimated differences across 2 samples and using a cross-validation strategy. Second, we used a multivariate multilevel model to examine the convergent and discriminant validity of therapist differences in patient alliance ratings in items theoretically related (e.g., satisfaction) and unrelated (e.g., patient ratings of scheduling staff) to the therapist and alliance. RESULTS: Therapists accounted for between 1.74% and 6.93% of the variability in alliance ratings, with greater differences among IP therapists. Therapist differences were generally stable and unaffected by case mix. In addition, therapist differences in alliance were correlated with therapist differences in similar items but were relatively unrelated to theoretically distinct items. CONCLUSIONS: Therapist differences in the alliance were small but, with a sufficient number of ratings, may provide reliable information regarding a therapist's tendency to form strong alliances with their patients.

Ironson, G., C. O'Cleirigh, et al. (2013). **"Gender-specific effects of an augmented written emotional disclosure intervention on posttraumatic, depressive, and HIV-disease-related outcomes: A randomized, controlled trial."** *J Consult Clin Psychol* 81(2): 284-298. <http://www.ncbi.nlm.nih.gov/pubmed/23244367>

Objective: Trauma histories and symptoms of PTSD occur at very high rates in people with HIV and are associated with poor disease management and accelerated disease progression. The authors of this study examined the efficacy of a brief written trauma disclosure intervention on posttraumatic stress, depression, HIV-related physical symptoms, and biological markers of HIV disease progression. Method: HIV-infected men and women were randomized to four 30-min expressive writing sessions in either a treatment (trauma writing) or an attention control (daily events writing) condition. The disclosure intervention augmented the traditional emotional disclosure paradigm with probes to increase processing by focusing on trauma appraisals, self-worth, and problem solving. Outcomes were assessed at baseline, 1-, 6-, and 12-month follow-up. Results: Hierarchical linear modeling ($N = 244$, intent-to-treat analyses) revealed no significant treatment effects for the group as a whole. Gender by treatment group interactions were significant such that women in the trauma-writing group had significantly reduced posttraumatic stress disorder (PTSD) symptoms ($p = .017$), depression ($p = .009$), and HIV-related symptoms ($p = .022$) compared with their controls. In contrast, men in the trauma-treatment condition did not improve more than controls on any outcome variables. Unexpectedly, men in the daily-event-writing control group had significantly greater reductions in depression than men in the trauma-writing group. Treatment effects were magnified in women when the analysis was restricted to those with elevated PTSD symptoms at baseline. Conclusions: A brief (4-session) guided written emotional disclosure intervention resulted in significant and meaningful reductions in PTSD, depression, and physical symptoms for women with HIV, but not for men.

Lukkahatai, N. and L. N. Saligan (2013). **"Association of catastrophizing and fatigue: A systematic review."** *Journal of Psychosomatic Research* 74(2): 100-109. <http://www.sciencedirect.com/science/article/pii/S0022399912003157>

Abstract Objective Catastrophizing is an exaggerated negative evaluation and attention to specific symptoms such as pain or fatigue. A number of studies consistently support the significant role of catastrophizing in pain. However, the role of catastrophizing in fatigue is less frequently investigated. This article provides a critical review of published studies investigating this association. Methods Using the keyword "Fatigue AND Catastrophizing", we performed a search in PubMed, SCOPUS, PsycINFO, and EMBASE. Results Fourteen studies were reviewed and all except one were found to provide empirical support for an association between high catastrophizing and high fatigue. Most of these reviewed articles also show the large impact of catastrophizing on fatigue severity. Two longitudinal studies found that fatigue catastrophizing level before cancer treatment is a significant predictor of post-treatment fatigue. Studies also demonstrated that persons who had higher scores for catastrophizing recalled fatigue more accurately than those with lower scores. Conclusion In spite the differences of its definition and the measurements used, a similar significant association between catastrophizing and fatigue was reported. Because this observation was based on 14 studies with limited types of patients, further studies are recommended to examine the role of catastrophizing in fatigue from other clinical populations and to investigate its utility as a behavioral marker for central fatigue.

Morgan, A. J., A. J. Mackinnon, et al. (2013). **"Behavior change through automated e-mails: Mediation analysis of self-help strategy use for depressive symptoms."** *Behaviour Research and Therapy* 51(2): 57-62. <http://www.sciencedirect.com/science/article/pii/S0005796712001726>

Objective To evaluate whether automated e-mails promoting effective self-help strategies for depressive symptoms were effective in changing self-help behavior, and whether this improved depression outcomes. Method 568 adults with sub-threshold depression participated in a randomized controlled trial and provided complete data. A series of 12 e-mails promoting the use of evidence-based self-help strategies was compared with e-mails providing non-directive depression information. Depression symptoms were assessed with the Patient Health Questionnaire depression scale (PHQ-9) and use of self-help strategies was assessed at baseline and post-intervention. We hypothesized that those receiving the self-help e-mails would increase their use of evidence-based self-help and this would be associated with improvements in depression. Mediation analyses were conducted using a non-parametric bootstrapping procedure. Results Total use of the self-help strategies promoted in the e-mails significantly mediated the effect of the intervention on depressive symptoms ($B = -0.75$, $SE = 0.16$, 95% CI: -1.06 to -0.48). The direct effect of the intervention on depressive symptoms was much smaller and not significant when the mediation path was included. The majority of the individual strategies also had a significant indirect effect on depressive symptoms. Conclusions In adults with sub-threshold depression, automated e-mails based on behavior change principles can successfully increase use of self-help strategies, leading to a reduction in depressive symptoms.

Mulder, R. and A. M. Chanen (2013). **"Effectiveness of cognitive analytic therapy for personality disorders."** *The British Journal of Psychiatry* 202(2): 89-90. <http://bjp.rcpsych.org/content/202/2/89.abstract>

Personality disorders affect up to 50% of psychiatric out-patients. Most treatment studies have been performed in patients with borderline personality disorder. Structured psychosocial interventions for people with borderline personality disorders appear to have similar efficacy. There is some evidence that non-structured, non-specialised treatments offered by psychiatric general services might be ineffective and possibly harmful in patients with personality disorders. Cognitive analytic therapy is a time-limited, integrative psychotherapy, which appears to be effective for a range of personality disorders and superior to treatment as usual. Its practical nature and relatively short time limit may make it suitable for front-line clinical services.

Niemeyer, H., J. Musch, et al. (2013). **"Publication bias in meta-analyses of the efficacy of psychotherapeutic interventions for depression."** *J Consult Clin Psychol* 81(1): 58-74. <http://www.ncbi.nlm.nih.gov/pubmed/23244368>

OBJECTIVE: The aim of this study was to assess whether systematic reviews investigating psychotherapeutic interventions for depression are affected by publication bias. Only homogeneous data sets were included, as heterogeneous data sets can distort statistical tests of publication bias. METHOD: We applied Begg and Mazumdar's adjusted rank correlation test, Egger's regression analysis, and the trim and fill procedure to assess the presence and magnitude of publication bias in all homogeneous data sets of systematic reviews published up to September 2010. RESULTS: Thirty-one data sets reported in 19 meta-analyses fulfilled our inclusion criteria. Significant bias was detected in 5 (16.13%; rank correlation test) and 6 (19.35%; Egger's regression analysis) of these data sets. Applying the trim and fill procedure to amend presumably missing studies rarely changed the assessment of the efficacy of therapeutic interventions, with 2 exceptions. In 1 data set psychotherapy was no longer found to be significantly more efficacious than pharmacotherapy in reducing dropout at posttreatment when publication bias was taken into account. In the 2nd data set, after correcting for publication bias, there was no longer evidence that depressed patients without comorbid personality disorder profited more from psychotherapy and pharmacotherapy than patients with comorbid personality disorder. CONCLUSIONS: The results suggest that taken together, psychotherapy research for depression is only marginally affected by the selective reporting of positive outcomes. With 2 notable exceptions, correcting for publication bias did not change the evaluation of the efficacy of psychotherapeutic interventions.

Nijdam, M. J., M. A. M. Baas, et al. (2013). **"Hotspots in trauma memories and their relationship to successful trauma-focused psychotherapy: A pilot study."** *Journal of Traumatic Stress* 26(1): 38-44. <http://dx.doi.org/10.1002/jts.21771>

(Free full text available) Imaginal exposure is an essential element of trauma-focused psychotherapies for posttraumatic stress disorder (PTSD). Exposure should in particular focus on the "hotspots," the parts of trauma memories that cause high levels of emotional distress which are often reexperienced. Our aim was to investigate whether differences in the focus on hotspots differentiate between successful and unsuccessful trauma-focused psychotherapies. As part of a randomized trial, 45 PTSD patients completed brief eclectic psychotherapy for PTSD. We retrospectively assessed audio recordings of therapy sessions of 20 patients. Frequency of hotspots and the associated emotions, cognitions, and characteristics were compared for the most successful ($n = 10$) versus the least successful ($n = 10$) treatments. The mean number of unique hotspots per patient was 3.20, and this number did not differ between successful and unsuccessful treatments. In successful treatments, however, hotspots were more frequently addressed ($r = .48$), and they were accompanied by more characteristics of hotspots ($r = .39$), such as an audible change in affect, indicating medium- to large-sized effects. Repeatedly focusing on hotspots and looking for associated characteristics of hotspots may help clinicians to enhance the efficacy of imaginal exposure for patients who would otherwise show insufficient response to treatment.

Petkus, A. J. and J. L. Wetherell (2013). **"Acceptance and commitment therapy with older adults: Rationale and considerations."** *Cognitive and Behavioral Practice* 20(1): 47-56.

<http://www.sciencedirect.com/science/article/pii/S1077722911001441>

(Free full text available) Older adults are the fastest growing segment of the population. With these changing demographics, mental health professionals will be seeing more older clients. Additionally, older adults are an underserved population in that most older adults in need of mental health services do not receive treatment. Thus, it is essential that treatments for mental and behavioral health problems are empirically supported with older adults and that mental health professionals are aware of the special needs of older adult populations. Acceptance and Commitment Therapy (ACT) is an emerging approach to the treatment of distress. The purpose of this article is to provide a rationale for using ACT with older adults based on gerontological theory and research. We also review research on ACT-related processes in later life. We present a case example of an older man with depression and anxiety whom we treated with ACT. Finally, we describe treatment recommendations and important adaptations that need to be considered when using ACT with older adults and discuss important areas for future research.

Samuel, D. B. and S. A. Ball (2013). **"The factor structure and concurrent validity of the early maladaptive schema questionnaire: Research version."** *Cognitive Therapy and Research* 37(1): 150-159. <http://dx.doi.org/10.1007/s10608-012-9439-6>

Early maladaptive schemas are stable, negative beliefs about oneself, others, or the environment that are formed early in life and subsequently organize an individual's experiences and behaviors. We evaluated the factor structure and validity of the self-report Early Maladaptive Schema Questionnaire—Research version (EMSQ-R) that assesses 15 maladaptive schema identified by Young (1991) within a sample of 908 individuals in treatment for substance use and personality pathology. We first employed confirmatory factor analytic techniques and found the data fit this expected model poorly. We then utilized exploratory factor analysis to examine the hierarchical structure of the EMSQ-R and then tested its concurrent validity using available chart

data and another self-report questionnaire. In contrast with previous research, we concluded that the schemas do not have a replicable lower-order structure. However, we did retain a four-factor solution for the scales that demonstrated significant correlations with expected variables and provided partial support for the higher-order structure of EMSQ-R.

Seekles, W., P. Cuijpers, et al. (2013). **"Psychological treatment of anxiety in primary care: A meta-analysis."** *Psychological Medicine* 43(02): 351-361. <http://dx.doi.org/10.1017/S0033291712000670>

Abstract Background Guidelines and mental healthcare models suggest the use of psychological treatment for anxiety disorders in primary care but systematic estimates of the effect sizes in primary care settings are lacking. The aim of this study was to examine the effectiveness of psychological therapies in primary care for anxiety disorders. Method The Cochrane Central Register of Controlled Trials (CENTRAL), EMBASE, Medline, PsycINFO and Pubmed databases were searched in July 2010. Manuscripts describing psychological treatment for anxiety disorders/increased level of anxiety symptoms in primary care were included if the research design was a randomized controlled trial (RCT) and if the psychological treatment was compared with a control group. Results In total, 1343 abstracts were identified. Of these, 12 manuscripts described an RCT comparing psychological treatment for anxiety with a control group in primary care. The pooled standardized effect size (12 comparisons) for reduced symptoms of anxiety at post-intervention was $d = 0.57$ [95% confidence interval (CI) 0.29-0.84, $p = 0.00$, the number needed to treat (NNT) = 3.18]. Heterogeneity was significant among the studies ($I^2 = 58.55$, $Q = 26.54$, $p < 0.01$). The quality of studies was not optimal and missing aspects are summarized. Conclusions We found a moderate effect size for the psychological treatment of anxiety disorders in primary care. Several aspects of the treatment are related to effect size. More studies are needed to evaluate the long-term effects given the chronicity and recurrent nature of anxiety.

Shiban, Y., P. Pauli, et al. (2013). **"Effect of multiple context exposure on renewal in spider phobia."** *Behaviour Research and Therapy* 51(2): 68-74. <http://www.sciencedirect.com/science/article/pii/S0005796712001611>

Background Renewal of fear is one form of relapse that occurs after successful exposure therapy as a result of an encounter with a feared object in a context different from the exposure context. The current study is the first to examine whether virtual reality (VR) exposure conducted in multiple contexts reduces the likelihood of renewal. Method Thirty spider-phobic patients were randomly allocated to one of two groups that were exposed to a virtual spider four times either in a single context or in multiple contexts. All participants completed a renewal test in a novel virtual context, and an in-vivo behavior avoidance test with a real spider before and after exposure. Results As reflected in the ratings, skin conductance level, and behavioral measures, the fear of spiders decreased significantly in both groups within and between the exposure trials and from pre to post exposure. Importantly, extinction in multiple contexts was able to significantly reduce renewal compared to extinction in a single context. Conclusions Based on highly controlled context manipulations using VR, this study was able to successfully transfer animal work to phobic patients. These findings strongly suggest that exposure in multiple contexts improves the generalizability of exposure to a new context. Consequently, we recommend the application of multiple context exposures in a clinical setting to reduce the likelihood of renewal. In addition, virtual reality was demonstrated to be a helpful tool for inducing contextual shifts during the exposures.

Voncken, M. J. and K. F. L. Dijk (2013). **"Socially anxious individuals get a second chance after being disliked at first sight: The role of self-disclosure in the development of likeability in sequential social contact."** *Cognitive Therapy and Research* 37(1): 7-17. <http://dx.doi.org/10.1007/s10608-012-9449-4>

Socially anxious individuals (SAs) not only fear social rejection, accumulating studies show that SAs are indeed judged as less likeable after social interaction with others. This study investigates if SAs already make a more negative impression on others in the very first seconds of contact. The study further investigates the development of likeability and the role of self-disclosure herein in two sequential social interactions: first after an unstructured waiting room situation and next after a 'getting acquainted' conversation. Results showed that high SAs ($n = 24$) elicited a more negative first impression than low SAs ($n = 22$). Also, although high SAs improved from the first to the second task, they were rated as less likeable after both interactions. The level of self-disclosure behaviour was the strongest predictor for the development of likeability during the sequential social tasks. The absence of an interaction between group and self-disclosure in predicting the development of likeability suggests that this is true for both groups. Thus, high SAs can improve their negative first impression if they are able to increase their self-disclosure behaviour. However, SAs showed a decreased level of self-disclosure behaviour during both social interactions. Targeting self-disclosure behaviour may improve the negative impression SAs elicit in others.

Wagner, G., E. Penelo, et al. (2013). **"Internet-delivered cognitive-behavioural therapy v. Conventional guided self-help for bulimia nervosa: Long-term evaluation of a randomised controlled trial."** *British Journal of Psychiatry* 202(2): 135-141. <http://bjp.rcpsych.org/content/202/2/135.abstract>

Background Cognitive-behavioural therapy (CBT)-based guided self-help is recommended as a first step in the treatment of bulimia nervosa. Aims To evaluate in a randomised controlled trial (Clinicaltrials.gov registration number: NCT00461071) the long-term effectiveness of internet-based guided self-help (INT-GSH) compared with conventional guided bibliotherapy (BIB-GSH) in females with bulimia nervosa. Method A total of 155 participants were randomly assigned to INT-GSH or BIB-GSH for 7 months. Outcomes were assessed at baseline, month 4, month 7 and month 18. Results The greatest improvement was reported after 4 months with a continued reduction in eating disorder symptomatology reported at month 7 and 18. After 18 months, 14.6% ($n = 7/48$) of the participants in the INT-GSH group and 25% ($n = 7/28$) in the BIB-GSH group were abstinent from binge eating and compensatory measures, 43.8% ($n = 21/48$) and 39.2% ($n = 11/28$) respectively were in remission. No differences regarding outcome between the two groups were found. Conclusions Internet-based guided self-help for bulimia nervosa was not superior compared with bibliotherapy, the gold standard of self-help. Improvements remain stable in the long term.

Watts, S., A. Mackenzie, et al. (2013). **"CBT for depression: A pilot RCT comparing mobile phone vs. computer."** *BMC Psychiatry* 13(1): 49. <http://www.biomedcentral.com/1471-244X/13/49>

(Free full text available) **BACKGROUND:** This paper reports the results of a pilot randomized controlled trial comparing the delivery modality (mobile phone/tablet or fixed computer) of a cognitive behavioural therapy intervention for the treatment of depression. The aim was to establish whether a previously validated computerized program (The Sadness Program) remained efficacious when delivered via a mobile application. **METHOD:** 35 participants were recruited with Major Depression (80% female) and randomly allocated to access the program using a mobile app (on either a mobile phone or iPad) or a computer. Participants completed 6 lessons, weekly homework assignments, and received weekly email contact from a clinical psychologist or psychiatrist until completion of lesson 2. After lesson 2 email contact was only provided in response to participant request, or in response to a deterioration in psychological distress scores. The primary outcome measure was the Patient Health Questionnaire 9 (PHQ-9). Of the 35 participants recruited, 68.6% completed 6 lessons and 65.7% completed the 3-months follow up. Attrition was handled using mixed-model repeated-measures ANOVA. **RESULTS:** Both the Mobile and Computer Groups were associated with statistically significant benefits in the PHQ-9 at post-test. At 3 months follow up, the reduction seen for both groups

remained significant. CONCLUSIONS: These results provide evidence to indicate that delivering a CBT program using a mobile application, can result in clinically significant improvements in outcomes for patients with depression.

White, K. S., L. A. Payne, et al. (2013). **"Does maintenance CBT contribute to long-term treatment response of panic disorder with or without agoraphobia? A randomized controlled clinical trial."** *J Consult Clin Psychol* 81(1): 47-57.
<http://www.ncbi.nlm.nih.gov/pubmed/23127290>

OBJECTIVE: We examined the possibility that maintenance cognitive behavior therapy (M-CBT) may improve the likelihood of sustained improvement and reduced relapse in a multi-site randomized controlled clinical trial of patients who met criteria for panic disorder with or without agoraphobia. METHOD: Participants were all patients (N = 379) who first began an open trial of acute-phase CBT. Patients completing and responding to acute-phase treatment were randomized to receive either 9 monthly sessions of M-CBT (n = 79) or assessment only (n = 78) and were then followed for an additional 12 months without treatment. RESULTS: M-CBT produced significantly lower relapse rates (5.2%) and reduced work and social impairment compared to the assessment only condition (18.4%) at a 21-month follow-up. Multivariate Cox proportional hazards models showed that residual symptoms of agoraphobia at the end of acute-phase treatment were independently predictive of time to relapse during 21-month follow-up (hazards ratio = 1.15, p < .01). CONCLUSIONS: M-CBT aimed at reinforcing acute treatment gains to prevent relapse and offset disorder recurrence may improve long-term outcome for panic disorder with and without agoraphobia.