30 babcp abstracts, december '12

(Alexander, Tatum et al. 2012; Anson, Veale et al. 2012; Biederman, Petty et al. 2012; Briñol, Gascó et al. 2012; Carlson 2012; Del Re, Fluckiger et al. 2012; Dennis, Khan et al. 2012; Farabaugh, Alpert et al. 2012; Forman, Shaw et al. 2012; Gallagher and Resick 2012; Genet and Siemer 2012; Gillies, Taylor et al. 2012; Goldin, Ziv et al. 2012; Gonzalo, Kleim et al. 2012; Joshi, Wozniak et al. 2012; Kim, Wollburg et al. 2012; Legault, Al-Khindi et al. 2012; Lemay, Overall et al. 2012; Okusaga and Postolache 2012; Piet, Wurtzen et al. 2012; Rethorst, Sunderajan et al. 2012; Sparenberg, Topolinski et al. 2012; Stein, Dickstein et al. 2012; van Dam, van der Ven et al. 2012; Verduyn, Van Mechelen et al. 2012; Viana, Ebesutani et al. 2012; Vos, Huibers et al. 2012; Wiley 2012; Fix and Fix 2013; Neff and Germer 2013)

Alexander, V., B. C. Tatum, et al. (2012). ***"A study of mindfulness practices and cognitive therapy: Effects on depression and self-efficacy."*** International Journal of Psychology and Counselling 4(9): 115-122. http://www.academicjournals.org/ijpc/abstracts/abstracts/abstracts2012/October/Alexander%20et%20al.htm

(Free full text available) Despite research findings that Cognitive Therapy (CT) reduces relapse of depression, patients often do have setbacks. Recently, CT researchers have integrated the Eastern meditative practice of mindfulness into cognitive approach. This study was a variation on research on Mindfulness Based Cognitive Therapy (the incorporation of mindfulness and CT) and relapse prevention from depression. Three tracks of participants, mindfulness training (MT), CT and treatment as usual (TAU) were studied to examine relapse rates from depression and the participants' sense of self-efficacy. The MT and CT tracks were added on to a regular outpatient treatment program. Three measures were used: the Beck Depression Inventory, the Mindfulness-Based Self Efficacy Scale and the Generalized Self-Efficacy Scale. Participants were assessed during an initial (pretest, baseline) period and again at a 3-month follow-up. Results reveal a significant decrease in depression and an increase in mindful and generalized self-efficacy in the MT track (N = 33). The results also showed a significant decrease in depression and mindfulness self-efficacy for the CT track (N = 27), but no significant change in generalized self-efficacy. The TAU track (N = 30) revealed no significant changes in any of the three measures. These trends show promise for relapse prevention of depression and improved sense of self-management through both therapeutic methodologies of mindfulness and cognitive therapy.

Anson, M., D. Veale, et al. (2012). ***"Social-evaluative versus self-evaluative appearance concerns in body dysmorphic disorder."*** Behaviour Research and Therapy 50(12): 753-760. http://www.sciencedirect.com/science/article/pii/S0005796712001398

Body Dysmorphic Disorder (BDD) is characterised by significant preoccupation and distress relating to an imagined or slight defect in appearance. Individuals with BDD frequently report marked concerns relating to perceived negative evaluation of their appearance by others, but research specifically investigating such concerns remains limited. This study investigated the extent and nature of appearance-related social-evaluative and self-evaluative concerns in individuals with BDD and healthy controls. BDD participants, in comparison to controls, reported high levels of importance and anxiety associated with perceptions of others' views of their appearance, in addition to their own view. No differences were observed in the level of importance and anxiety associated with their self-view in comparison to others' views. These findings support existing evidence indicating that appearance-related social-evaluative concerns are a central feature of BDD. Cognitive-behavioural treatment implications are discussed.

Biederman, J., C. R. Petty, et al. (2012). ***"Adult outcome of attention-deficit/hyperactivity disorder: A controlled 16-year follow-up study."*** J Clin Psychiatry 73(7): 941-950. http://www.ncbi.nlm.nih.gov/pubmed/22901345

OBJECTIVE: To estimate the risks for psychopathology and functional impairments in adulthood among a longitudinal sample of youth with and without attention-deficit/hyperactivity disorder (ADHD) diagnosed in childhood. METHOD: This was a case-controlled, 16-year (15-19 years) prospective follow-up study of ADHD. 140 boys with and 120 without DSM-III-R ADHD were recruited from pediatric and psychiatric settings. The main outcome measures were structured diagnostic interviews and measures of psychosocial, educational, and neuropsychological functioning. Data were collected from 1988 to 2006. RESULTS: At the 16-year follow-up, subjects with ADHD continued to significantly differ from controls in lifetime rates of antisocial, mood, anxiety, and addictive disorders, but with the exception of a higher interval prevalence of anxiety disorders (20% vs 8%; z = 2.32, P = .02) and smoking dependence (27% vs 11%; z = 2.30, P = .02), the incidence of individual disorders in the 6-year interval between the current and prior follow-up did not differ significantly from controls. At follow-up, the ADHD subjects compared with controls were significantly (P < .05) more impaired in psychosocial, educational, and neuropsychological functioning, differences that could not be accounted for by other active psychopathology. CONCLUSIONS: These long-term prospective findings provide further evidence for the high morbidity associated with ADHD across the life cycle, stressing the importance of early recognition of this disorder for prevention and early intervention strategies. These findings also indicate that, in adulthood, ADHD confers significant risks for impairment that cannot be accounted for by other psychopathology.

Briñol, P., M. Gascó, et al. (2012). ***"Treating thoughts as material objects can increase or decrease their impact on evaluation."*** Psychological Science. http://pss.sagepub.com/content/early/2012/11/21/0956797612449176.abstract

In Western dualistic culture, it is assumed that thoughts cannot be treated as material objects; however, language is replete with metaphorical analogies suggesting otherwise. In the research reported here, we examined whether objectifying thoughts can influence whether the thoughts are used in subsequent evaluations. In Experiment 1, participants wrote about what they either liked or disliked about their bodies. Then, the paper on which they wrote their thoughts was either ripped up and tossed in the trash or kept and checked for errors. When participants physically discarded a representation of their thoughts, they mentally discarded them as well, using them less in forming judgments than did participants who retained a representation of their thoughts. Experiment 2 replicated this finding and also showed that people relied on their thoughts more when they physically kept them in a safe place—putting their thoughts in their pockets—than when they discarded them. A final study revealed that these effects were stronger when the action was performed physically rather than merely imagined.

Carlson, L. E. (2012). ***"Mindfulness-based interventions for physical conditions: A narrative review evaluating levels of evidence."*** ISRN Psychiatry 2012: 21. http://dx.doi.org/10.5402/2012/651583

(Free full text available) Research on mindfulness-based interventions (MBIs) for treating symptoms of a wide range of medical conditions has proliferated in recent decades. Mindfulness is the cultivation of nonjudgmental awareness in the present moment. It is both a practice and a way of being in the world. Mindfulness is purposefully cultivated in a range of structured interventions, the most popular of which is mindfulness-based stress reduction (MBSR), followed by mindfulness-based cognitive therapy (MBCT). This paper begins with a discussion of the phenomenological experience of coping with a chronic and potentially life-threatening illness, followed by a theoretical discussion of the application of mindfulness in these situations. The literature

evaluating MBIs within medical conditions is then comprehensively reviewed, applying a levels of evidence rating framework within each major condition. The bulk of the research looked at diagnoses of cancer, pain conditions (chronic pain, low back pain, fibromyalgia, and rheumatoid arthritis), cardiovascular disease, diabetes, human immunodeficiency virus (HIV)/acquired immune deficiency syndrome (AIDS), and irritable bowel syndrome. Most outcomes assessed are psychological in nature and show substantial benefit, although some physical and disease-related parameters have also been evaluated. The field would benefit from more adequately powered randomized controlled trials utilizing active comparison groups and assessing the moderating role of patient characteristics and program "dose" in determining outcomes.

Del Re, A. C., C. Fluckiger, et al. (2012). ***"Therapist effects in the therapeutic alliance-outcome relationship: A restricted-maximum likelihood meta-analysis."*** Clin Psychol Rev 32(7): 642-649. http://www.ncbi.nlm.nih.gov/pubmed/22922705

OBJECTIVE: Although the relationship between the therapeutic alliance and outcome has been supported consistently across several studies and meta-analyses, there is less known about how the patient and therapist contribute to this relationship. The purpose of this present meta-analysis was to (1) test for therapist effects in the alliance-outcome correlation and (2) extend the findings of previous research by examining several potential confounds/covariates of this relationship. METHOD: A random effects analysis examined several moderators of the alliance-outcome correlation. These included (a) patient-therapist ratio (patient N divided by therapist N), (b) alliance and outcome rater (patient, therapist, and observer), (c) alliance measure, (d) research design and (e) DSM IV Axis II diagnosis. RESULTS: The patient-therapist ratio (PTR) was a significant moderator of the alliance-outcome correlation. Controlling for several potential confounds in a multi-predictor meta-regression, including rater of alliance, research design, percentage of patient Axis II diagnoses, rater of outcome and alliance measure, PTR remained a significant moderator of the alliance-outcome correlation. CONCLUSION: Corroborating previous research, therapist variability in the alliance appears to be more important than patient variability for improved patient outcomes. This relationship remains significant even when simultaneously controlling for several potential covariates of this relationship.

Dennis, J. A., O. Khan, et al. (2012). ***"Psychological interventions for adults who have sexually offended or are at risk of offending."*** Cochrane Database Syst Rev 12: CD007507. http://www.ncbi.nlm.nih.gov/pubmed/23235646

BACKGROUND: Sexual offending is a legal construct that overlaps, but is not entirely congruent with, clinical constructs of disorders of sexual preference. Sexual offending is both a social and a public health issue. Victim surveys illustrate high incidence and prevalence levels, and it is commonly accepted that there is considerable hidden sexual victimisation. There are significant levels of psychiatric morbidity in survivors of sexual offences.Psychological interventions are generally based on behavioural or psychodynamic theories.Behavioural interventions fall into two main groups: those based on traditional classical conditioning and/or operant learning theory and those based on cognitive behavioural approaches. Approaches may overlap. Interventions associated with traditional classical and operant learning theory are referred to as behaviour modification or behaviour therapy, and focus explicitly on changing behaviour by administering a stimulus and measuring its effect on overt behaviour. Within sex offender treatment, examples include aversion therapy, covert sensitisation or olfactory conditioning. Cognitive behavioural therapies are intended to change internal processes - thoughts, beliefs, emotions, physiological arousal - alongside changing overt behaviour, such as social skills or coping behaviours. They may involve establishing links between offenders' thoughts, feelings and actions about offending behaviour; correction of offenders' misperceptions, irrational beliefs and reasoning biases associated with their offending; teaching offenders to monitor their own thoughts, feelings and behaviours associated with offending; and promoting alternative ways of coping with deviant sexual thoughts and desires.Psychodynamic interventions share a common root in psychoanalytic theory. This posits that sexual offending arises through an imbalance of the three components of mind: the id, the ego and the superego, with sexual offenders having temperamental imbalance of a powerful id (increased sexual impulses and libido) and a weak superego (a low level of moral probation), which are also impacted by early environment.This updates a previous Cochrane review but is based on a new protocol. OBJECTIVES: To assess the effects of psychological interventions on those who have sexually offended or are at risk of offending. SEARCH METHODS: In September 2010 we searched: CENTRAL, MEDLINE, Allied and Complementary Medicine (AMED), Applied Social Sciences Index and Abstracts (ASSIA), Biosis Previews, CINAHL, COPAC, Dissertation Abstracts, EMBASE, International Bibliography of the Social Sciences (IBSS), ISI Proceedings, Science Citation Index Expanded (SCI), Social Sciences Citation Index (SSCI), National Criminal Justice Reference Service Abstracts Database, PsycINFO, OpenSIGLE, Social Care Online, Sociological Abstracts, UK Clinical Research Network Portfolio Database and ZETOC. We contacted numerous experts in the field. SELECTION CRITERIA: Randomised trials comparing psychological intervention with standard care or another psychological therapy given to adults treated in institutional or community settings for sexual behaviours that have resulted in conviction or caution for sexual offences, or who are seeking treatment voluntarily for behaviours classified as illegal. DATA COLLECTION AND ANALYSIS: At least two authors, working independently, selected studies, extracted data and assessed the studies' risk of bias. We contacted study authors for additional information including details of methods and outcome data. MAIN RESULTS: We included ten studies involving data from 944 adults, all male.Five trials involved primarily cognitive behavioural interventions (CBT) (n = 664). Of these, four compared CBT with no treatment or wait list control, and one compared CBT with standard care. Only one study collected data on the primary outcome. The largest study (n = 484) involved the most complex intervention versus no treatment. Long-term outcome data are reported for groups in which the mean years 'at risk' in the community are similar (8.3 years for treatment (n = 259) compared to 8.4 in the control group (n = 225)). There was no difference between these groups in terms of the risk of reoffending as measured by reconviction for sexual offences (risk ratio (RR) 1.10; 95% CI 0.78 to 1.56).Four trials (n = 70) compared one behavioural programme with an alternative behavioural programme or with wait list control. No meta-analysis was possible for this comparison. For two studies (both cross-over, n = 29) no disaggregated data were available. The remaining two behavioural studies compared imaginal desensitisation with either covert sensitisation or as part of adjunctive drug therapy (n = 20 and 21, respectively). In these two studies, results for the primary outcome (being 'charged with anomalous behaviour') were encouraging, with only one new charge for the treated groups over one year in the former study, and in the latter study, only one new charge (in the drug-only group) over two years.One study compared psychodynamic intervention with probation. Results for this study (n = 231) indicate a slight trend in favour of the control group (probation) over the intervention (group therapy) in terms of sexual offending as measured by rearrest (RR 1.87; 95% CI 0.78 to 4.47) at 10-year follow-up.Data for adverse events, 'sexually anomalous urges' and for secondary outcomes thought to be 'dynamic' risk factors for reoffending, including anger and cognitive distortions, were limited. AUTHORS' CONCLUSIONS: The inescapable conclusion of this review is the need for further randomised controlled trials. While we recognise that randomisation is considered by some to be unethical or politically unacceptable (both of which are based on the faulty premise that the experimental treatment is superior to the control - this being the point of the trial to begin with), without such evidence, the area will fail to progress. Not only could this result in the continued use of ineffective (and potentially harmful) interventions, but it also means that society is lured into a false sense of security in the belief that once the individual has been treated, their risk of reoffending is reduced. Current available evidence does not support this belief. Future trials should concentrate on minimising risk of bias, maximising quality of reporting and including follow-up for a minimum of five years 'at risk' in the community.

Farabaugh, A., J. Alpert, et al. (2012). ***"Cognitive therapy for anxious depression in star(*) d: What have we learned?"*** J Affect Disord 142(1-3): 213-218. http://www.ncbi.nlm.nih.gov/pubmed/22877961

BACKGROUND: Anxious depression, defined as MDD with high levels of anxiety symptoms, has been associated with lower rates of antidepressant response and remission as well as greater chronicity, suicidality and antidepressant side-effect burden. The primary aim of this study was to assess the effectiveness of cognitive therapy (CT) alone or in combination with medications for anxious versus non-anxious depression. METHODS: We assessed the STAR()D study participants who were partial or non-responders to citalopram. Subjects were then either switched (n=696) to a new antidepressant or to CT alone, or they were kept on citalopram and augmented (n=577) with another antidepressant or CT. We compared response and remission rates, across treatment conditions, between those who met criteria for anxious depression and those who did not. RESULTS: Those with anxious depression had significantly lower remission rates based on the QIDS, whether assigned to switch or augmentation, compared to those with non-anxious depression. Those with anxious depression, compared to those without, had significantly lower response rates based on the QIDS only in the switch group. There was no significant interaction between anxious depression and treatment assignment. LIMITATIONS: Limitations include the use of citalopram as the only Level 1 pharmacotherapy and medication augmentation option, the relatively small size of the CT arms, use of depression-focused CT rather than anxiety-focused CT, and focus on acute treatment outcomes. CONCLUSIONS: Individuals with anxious depression appear to experience higher risk of poorer outcome following pharmacotherapy and/or CT after an initial course of citalopram and continued efforts to target this challenging form of depression are needed.

Fix, R. L. and S. T. Fix (2013). ***"The effects of mindfulness-based treatments for aggression: A critical review."*** Aggression and Violent Behavior(0). http://www.sciencedirect.com/science/article/pii/S1359178912001231

Recently, there has been significant growth in the empirical literature on mindfulness and mindfulness-based treatments (MBTs). The purpose of the current review was to critically examine and critique eleven studies evaluating MBTs for reducing aggressive behaviors. Articles were divided based on design (i.e., group design vs. single subject). This review highlighted evidence supporting the efficacy of the use of mindfulness-based treatments in individuals with aggressive behavior problems. Many of the group studies had weak designs, limiting the validity of the stated results. Results from the single-subject studies were more promising, providing strong support for the use of MBTs in reducing aggression. However, despite recent advances in the use of MBTs with individuals with aggression problems, questions remain unanswered. Finally, suggestions for future research are made to improve and identify means of evaluating the effectiveness of mindfulness-based treatments in an aggressive population.

Forman, E. M., J. A. Shaw, et al. (2012). ***"Long-term follow-up of a randomized controlled trial comparing acceptance and commitment therapy and standard cognitive behavior therapy for anxiety and depression."*** Behavior Therapy 43(4): 801-811. http://www.sciencedirect.com/science/article/pii/S0005789412000597

The present study represents one of the first comparisons of the long-term effectiveness of traditional cognitive behavior therapy (i.e., Beckian cognitive therapy; CT) and acceptance and commitment therapy (ACT). One hundred thirty-two anxious or depressed outpatients were randomly assigned to receive either CT or ACT, and were assessed at posttreatment (n = 90) and at 1.5-year (n = 91) follow-up. As previously reported, the two treatments were equivalently effective at posttreatment according to measures of depression, anxiety, overall (social/occupational/symptom-related) functioning, and quality of life. However, current results suggest that treatment gains were better maintained at follow-up in the CT condition. Clinical significance analyses revealed that, at follow-up, one-third more CT patients were in the clinically normative range in terms of depressive symptoms and more than twice as many CT patients were in the normative range in terms of functioning levels. The possible long-term advantage of CT relative to ACT in this population is discussed.

Gallagher, M. and P. Resick (2012). ***"Mechanisms of change in cognitive processing therapy and prolonged exposure therapy for ptsd: Preliminary evidence for the differential effects of hopelessness and habituation."*** Cognitive Therapy and Research 36(6): 750-755. http://dx.doi.org/10.1007/s10608-011-9423-6

The present study examined two potential mechanisms of change, hopelessness cognitions and habituation, in a randomized controlled trial of cognitive processing therapy (CPT) and prolonged exposure therapy (PE) for posttraumatic stress disorder (PTSD). Participants were 171 adult women with a current primary diagnosis of sexual assault related PTSD. The potential mechanisms were examined by evaluating the intraindividual change in hopelessness within the course of both treatments and subjective units distress (SUDS) ratings (a proxy for habituation) within the course of PE. The effects of intraindividual change in the proposed mechanisms were then examined on within-treatment changes in PTSD symptoms. Findings indicated that the participants assigned to the CPT treatment had significantly greater pre-post reductions in hopelessness than those assigned to PE and that the changes in hopelessness predicted changes in PTSD symptoms (R2 = .24). Intraindividual changes in SUDS ratings for participants in the PE treatment condition also predicted changes in PTSD symptoms and did so independently of the effect of changes in hopelessness. Future research should examine these mechanisms using more intensive methods of data collection that would permit the demonstration of temporality of change.

Genet, J. J. and M. Siemer (2012). ***"Rumination moderates the effects of daily events on negative mood: Results from a diary study."*** Emotion 12(6): 1329-1339. http://www.ncbi.nlm.nih.gov/pubmed/22775130

Rumination describes a detrimental response to distress that involves repetitive thoughts about one's emotional state and its causes and potential consequences. Many experimental studies have shown that induced state rumination exacerbates the effect of laboratory stressors on negative affect. The current study examines whether use of rumination in response to specific real-life events moderates the association between unpleasant daily events and negative mood. One hundred fifty-seven undergraduate participants completed daily diaries for six consecutive days. The daily diaries assessed current mood, a survey of unpleasant daily events, and use of rumination in response to the most unpleasant daily event. Data were analyzed with a multilevel random coefficient modeling (MRCM) approach. It was predicted and found that use of rumination in daily life moderates the relation between unpleasant daily events and negative mood. On days when participants reported intense rumination use, higher levels of unpleasant daily events predicted higher levels of negative mood. By contrast, on days when participants reported lower use of rumination, higher levels of unpleasant events were not associated with higher levels of negative mood. This study is the first to demonstrate that real-life use of rumination moderates the relation between unpleasant events and mood in daily life.

Gillies, D., F. Taylor, et al. (2012). ***"Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents."*** Cochrane Database Syst Rev 12: CD006726. http://www.ncbi.nlm.nih.gov/pubmed/23235632

BACKGROUND: Post-traumatic stress disorder (PTSD) is highly prevalent in children and adolescents who have experienced trauma and has high personal and health costs. Although a wide range of psychological therapies have been used in the treatment of PTSD there are no systematic reviews of these therapies in children and adolescents. OBJECTIVES: To examine

the effectiveness of psychological therapies in treating children and adolescents who have been diagnosed with PTSD. SEARCH METHODS: We searched the Cochrane Depression, Anxiety and Neurosis Review Group's Specialised Register (CCDANCTR) to December 2011. The CCDANCTR includes relevant randomised controlled trials from the following bibliographic databases: CENTRAL (the Cochrane Central Register of Controlled Trials) (all years), EMBASE (1974 -), MEDLINE (1950 -) and PsycINFO (1967 -). We also checked reference lists of relevant studies and reviews. We applied no date or language restrictions. SELECTION CRITERIA: All randomised controlled trials of psychological therapies compared to a control, pharmacological therapy or other treatments in children or adolescents exposed to a traumatic event or diagnosed with PTSD. DATA COLLECTION AND ANALYSIS: Two members of the review group independently extracted data. If differences were identified, they were resolved by consensus, or referral to the review team.We calculated the odds ratio (OR) for binary outcomes, the standardised mean difference (SMD) for continuous outcomes, and 95% confidence intervals (CI) for both, using a fixed-effect model. If heterogeneity was found we used a random-effects model. MAIN RESULTS: Fourteen studies including 758 participants were included in this review. The types of trauma participants had been exposed to included sexual abuse, civil violence, natural disaster, domestic violence and motor vehicle accidents. Most participants were clients of a trauma-related support service.The psychological therapies used in these studies were cognitive behavioural therapy (CBT), exposure-based, psychodynamic, narrative, supportive counselling, and eye movement desensitisation and reprocessing (EMDR). Most compared a psychological therapy to a control group. No study compared psychological therapies to pharmacological therapies alone or as an adjunct to a psychological therapy.Across all psychological therapies, improvement was significantly better (three studies, n = 80, OR 4.21, 95% CI 1.12 to 15.85) and symptoms of PTSD (seven studies, n = 271, SMD -0.90, 95% CI -1.24 to -0.42), anxiety (three studies, n = 91, SMD -0.57, 95% CI -1.00 to -0.13) and depression (five studies, n = 156, SMD -0.74, 95% CI -1.11 to -0.36) were significantly lower within a month of completing psychological therapy compared to a control group.The psychological therapy for which there was the best evidence of effectiveness was CBT. Improvement was significantly better for up to a year following treatment (up to one month: two studies, n = 49, OR 8.64, 95% CI 2.01 to 37.14; up to one year: one study, n = 25, OR 8.00, 95% CI 1.21 to 52.69). PTSD symptom scores were also significantly lower for up to one year (up to one month: three studies, n = 98, SMD -1.34, 95% CI -1.79 to -0.89; up to one year: one study, n = 36, SMD -0.73, 95% CI -1.44 to -0.01), and depression scores were lower for up to a month (three studies, n = 98, SMD -0.80, 95% CI -1.47 to -0.13) in the CBT group compared to a control. No adverse effects were identified. No study was rated as a high risk for selection or detection bias but a minority were rated as a high risk for attrition, reporting and other bias. Most included studies were rated as an unclear risk for selection, detection and attrition bias. AUTHORS' CONCLUSIONS: There is evidence for the effectiveness of psychological therapies, particularly CBT, for treating PTSD in children and adolescents for up to a month following treatment. At this stage, there is no clear evidence for the effectiveness of one psychological therapy compared to others. There is also not enough evidence to conclude that children and adolescents with particular types of trauma are more or less likely to respond to psychological therapies than others.The findings of this review are limited by the potential for methodological biases, and the small number and generally small size of identified studies. In addition, there was evidence of substantial heterogeneity in some analyses which could not be explained by subgroup or sensitivity analyses. More evidence is required for the effectiveness of all psychological therapies more than one month after treatment. Much more evidence is needed to demonstrate the relative effectiveness of different psychological therapies or the effectiveness of psychological therapies compared to other treatments. More details are required in future trials in regards to the types of trauma that preceded the diagnosis of PTSD and whether the traumas are single event or ongoing. Future studies should also aim to identify the most valid and reliable measures of PTSD symptoms and ensure that all scores, total and sub-scores, are consistently reported.

Goldin, P. R., M. Ziv, et al. (2012). ***"Cognitive reappraisal self-efficacy mediates the effects of individual cognitive-behavioral therapy for social anxiety disorder."*** J Consult Clin Psychol 80(6): 1034-1040. http://www.ncbi.nlm.nih.gov/pubmed/22582765

OBJECTIVE: To examine whether changes in cognitive reappraisal self-efficacy (CR-SE) mediate the effects of individually administered cognitive-behavioral therapy (I-CBT) for social anxiety disorder (SAD) on severity of social anxiety symptoms. METHOD: A randomized controlled trial in which 75 adult patients (21-55 years of age; 53% male; 57% Caucasian) with a principal diagnosis of generalized SAD were randomly assigned to 16 sessions of I-CBT (n = 38) or a wait-list control (WL) group (n = 37). All patients completed self-report inventories measuring CR-SE and social anxiety symptoms at baseline and post-I-CBT/post-WL, and I-CBT completers were also assessed at 1-year posttreatment. RESULTS: Compared with WL, I-CBT resulted in greater increases in CR-SE and greater decreases in social anxiety. Increases in CR-SE during I-CBT mediated the effect of I-CBT on social anxiety. Gains achieved by patients receiving I-CBT were maintained 1-year posttreatment, and I-CBT-related increases in CR-SE were also associated with reduction in social anxiety at the 1-year follow-up. CONCLUSIONS: Increasing CR-SE may be an important mechanism by which I-CBT for SAD produces both immediate and long-term reductions in social anxiety.

Gonzalo, D., B. Kleim, et al. (2012). ***"How disorder-specific are depressive attributions? A comparison ofiindividuals with depression, post-traumatic stress disorder and healthy controls."*** Cognitive Therapy and Research 36(6): 731-739. http://dx.doi.org/10.1007/s10608-011-9429-0

(Free full text available) Depressed individuals tend to assign internal, stable, and global causes to negative events. The present study investigated the specificity of this effect to depression and compared depressive attributional styles of individuals with major depression (MD), post-traumatic stress disorder (PTSD), and healthy controls. We indexed attributional style using the depressive attributions questionnaire in 164 participants. Additionally, we assessed appraisals characteristic of PTSD using the post-traumatic cognitions inventory (PTCI), depressive rumination, trauma history, and depression and PTSD symptom severity. Individuals with MD endorsed a depressive attributional style to a greater extent than both individuals with PTSD, who were not depressed, and healthy controls. Depressive attributional style was associated with the severity of depressive and PTSD symptoms, number and distress of traumatic experiences, frequency of rumination, and post-traumatic cognitions. Depressive attributions and PTCI appraisals independently predicted MD and PTSD symptom severity. They may thus be useful in predicting MD and PTSD, and should be targeted in psychological treatments of these conditions.

Joshi, G., J. Wozniak, et al. (2012). ***"Psychiatric comorbidity and functioning in a clinically referred population of adults with autism spectrum disorders: A comparative study."*** J Autism Dev Disord. http://www.ncbi.nlm.nih.gov/pubmed/23076506

To systematically examine the patterns of psychiatric comorbidity and functioning in clinically referred adults with autism spectrum disorders (ASD). Psychiatrically referred adults with and without ASD were compared on measures assessing for psychiatric comorbidity and psychosocial functioning. Sixty-three adults with ASD participated in the study (mean age: 29 +/- 11 years). Adults with ASD in their lifetime suffered from a higher burden of psychiatric disorders (6 +/- 3.4 vs. 3.5 +/- 2.7; $p < 0.001$) including major depressive disorder and multiple anxiety disorders, and were functionally more impaired with a significant proportion having received both counseling and pharmacotherapy. Adults with ASD have high levels of psychiatric comorbidity and dysfunction comparable to a clinically referred population of adults without ASD.

Kim, S., E. Wollburg, et al. (2012). ***"Opposing breathing therapies for panic disorder: A randomized controlled trial of lowering vs raising end-tidal p(co(2))."*** J Clin Psychiatry 73(7): 931-939. http://www.ncbi.nlm.nih.gov/pubmed/22901344

BACKGROUND: Teaching anxious clients to stop hyperventilating is a popular therapeutic intervention for panic. However, evidence for the theory behind this approach is tenuous, and this theory is contradicted by an opposing theory of panic, the false-suffocation alarm theory, which can be interpreted to imply that the opposite would be helpful. OBJECTIVE: To test these opposing approaches by investigating whether either, both, or neither of the 2 breathing therapies is effective in treating patients with panic disorder. METHOD: We randomly assigned 74 consecutive patients with DSM-IV-diagnosed panic disorder (mean age at onset = 33.0 years) to 1 of 3 groups in the setting of an academic research clinic. One group was trained to raise its end-tidal P(CO(2)) (partial pressure of carbon dioxide, mm Hg) to counteract hyperventilation by using feedback from a hand-held capnometer, a second group was trained to lower its end-tidal P(CO(2)) in the same way, and a third group received 1 of these treatments after a delay (wait-list). We assessed patients physiologically and psychologically before treatment began and at 1 and 6 months after treatment. The study was conducted from September 2005 through November 2009. RESULTS: Using the Panic Disorder Severity Scale as a primary outcome measure, we found that both breathing training methods effectively reduced the severity of panic disorder 1 month after treatment and that treatment effects were maintained at 6-month follow-up (effect sizes at 1-month follow-up were 1.34 for the raise-CO(2) group and 1.53 for the lower-CO(2) group; $P < .01$). Physiologic measurements of respiration at follow-up showed that patients had learned to alter their P(CO(2)) levels and respiration rates as they had been taught in therapy. CONCLUSIONS: Clinical improvement must have depended on elements common to both breathing therapies rather than on the effect of the therapies themselves on CO(2) levels. These elements may have been changed beliefs and expectancies, exposure to ominous bodily sensations, and attention to regular and slow breathing. TRIAL REGISTRATION: ClinicalTrials.gov identifier: NCT00183521.

Legault, L., T. Al-Khindi, et al. (2012). ***"Preserving integrity in the face of performance threat: Self-affirmation enhances neurophysiological responsiveness to errors."*** Psychological Science 23(12): 1455-1460. http://pss.sagepub.com/content/23/12/1455.abstract

Self-affirmation produces large effects: Even a simple reminder of one's core values reduces defensiveness against threatening information. But how, exactly, does self-affirmation work? We explored this question by examining the impact of self-affirmation on neurophysiological responses to threatening events. We hypothesized that because self-affirmation increases openness to threat and enhances approachability of unfavorable feedback, it should augment attention and emotional receptivity to performance errors. We further hypothesized that this augmentation could be assessed directly, at the level of the brain. We measured self-affirmed and nonaffirmed participants' electrophysiological responses to making errors on a task. As we anticipated, self-affirmation elicited greater error responsiveness than did nonaffirmation, as indexed by the error-related negativity, a neural signal of error monitoring. Self-affirmed participants also performed better on the task than did nonaffirmed participants. We offer novel brain evidence that self-affirmation increases openness to threat and discuss the role of error detection in the link between self-affirmation and performance.

Lemay, E. P., N. C. Overall, et al. (2012). ***"Experiences and interpersonal consequences of hurt feelings and anger."*** J Pers Soc Psychol 103(6): 982-1006. http://www.ncbi.nlm.nih.gov/pubmed/22984830

This research compared the experiences and consequences of hurt feelings and anger in 3 retrospective studies (Studies 1a, 1b, and 2), a dyadic daily diary study (Study 3), and a dyadic behavioral observation study (Study 4). Although victims felt both hurt and angry in response to perpetrators' behaviors that signaled relational devaluation (Studies 1-4), hurt and anger differed in terms of victims' subjective experiences and behaviors, perpetrators' responses, and relationship consequences. Hurt was characterized by the experience of commitment, dependence, and vulnerability; goals to restore the perpetrator's acceptance; and constructive behavior. Moreover, victims' hurt was associated with perpetrators evaluating victims and victims' commitment more positively, with perpetrators' feelings of guilt and empathy and with perpetrators' constructive responses. Hurt also had positive consequences for relationships. In contrast, victims' anger was generally independent of commitment and characterized by the experience of control, invulnerability, and low dependence; goals to change perpetrators' behavior; and victims' destructive behavior. Furthermore, victims' anger was associated with perpetrators perceiving victims to be less committed and elicited reciprocated anger and destructive behaviors from perpetrators. These findings suggest that despite relational devaluation being a cause of both hurt and anger, these feelings have distinct social functions. Hurt reflects a desire to maintain interpersonal connection and repair relationships, which will often successfully elicit repair attempts by perpetrators, whereas anger reflects a desire to control others via antagonistic destructive behaviors, which exacerbate interpersonal difficulties.

Neff, K. D. and C. K. Germer (2013). ***"A pilot study and randomized controlled trial of the mindful self-compassion program."*** J Clin Psychol 69(1): 28-44. http://onlinelibrary.wiley.com/doi/10.1002/jclp.21923/abstract

OBJECTIVES: The aim of these two studies was to evaluate the effectiveness of the Mindful Self-Compassion (MSC) program, an 8-week workshop designed to train people to be more self-compassionate. METHODS: Study 1 was a pilot study that examined change scores in self-compassion, mindfulness, and various wellbeing outcomes among community adults (N = 21; mean [M] age = 51.26, 95% female). Study 2 was a randomized controlled trial that compared a treatment group (N = 25; M age = 51.21; 78% female) with a waitlist control group (N = 27; M age = 49.11; 82% female). RESULTS: Study 1 found significant pre/post gains in self-compassion, mindfulness, and various wellbeing outcomes. Study 2 found that compared with the control group, intervention participants reported significantly larger increases in self-compassion, mindfulness, and wellbeing. Gains were maintained at 6-month and 1-year follow-ups. CONCLUSIONS: The MSC program appears to be effective at enhancing self-compassion, mindfulness, and wellbeing. *(Full text freely downloadable from https://webspace.utexas.edu/neffk/pubs/listofpublications.htm).*

Okusaga, O. and T. T. Postolache (2012). ***Toxoplasma gondii, the immune system, and suicidal behavior***. The neurobiological basis of suicide. Y. Dwivedi. Boca Raton (FL).

Each year suicide leads to the tragic and premature deaths of over 1 million individuals around the world with an estimated annual mortality of 14.5 per 100,000 people. This translates to one death occurring every 40 s. Suicide is the 10th leading cause of death, making up 11.5% of all deaths (Hawton and van Heeringen 2009), though this burden is probably underestimated considering many third world countries appear to underreport suicide 9-10 times the actual amount (Hawton and van Heeringen 2009). While suicide rates have remained constant for the last decade, the three greatest causes of death (heart disease, cancer, and cerebrovascular disease) have all seen a decrease in death rates in this time period. Two of the most important risk factors for suicide are history of past suicide attempt (Harris and Barraclough 1997; Mann 2003) and a history of mood disorder. Every suicide is preceded by an estimated 8-25 suicide attempts, and 4% of depressed individuals die from suicide (Hawton and van Heeringen 2009). Additionally, more than half of individuals who attempt suicide had a major depressive episode at the time of the attempt. For the past 7 years, our team at the University of Maryland School of Medicine

Mood and Anxiety Program has been focused on studying triggers and vulnerabilities for suicide originating in the natural environment, that is, physical, chemical, and biological. In particular, we have been interested in the highly consistent peaks of suicide (Postolache et al. 2010) during certain seasons and their possible triggers. Specifically, we have identified (1) a relationship between atmospheric peaks of aeroallergens and suicide attempts in women (Postolache et al. 2005), confirmed in Denmark (Qin et al. 2011), (2) a relationship between suicide and allergy (Qin et al. 2011), and (3) an increased expression of allergy-related cytokines in the prefrontal cortex of suicide victims (Tonelli et al. 2008b). We have also reported that intranasal administration of allergens induces animal behaviors that are analogous to certain suicide risk factors such as aggression (Tonelli et al. 2008a) and anxiety (Tonelli et al. 2009). Our intermediate conclusion is that molecular and cellular mechanisms involved in the allergic immune response might attenuate functional capabilities of areas of the prefrontal cortex to act as behavioral breaks via multisynaptic inhibition of infralimbic centers. Following this line of thought, if allergy (a misdirected immune response against innocuous substances that were "misperceived" by the immune system as invasive pathogens) is associated with suicidal behavior, one would expect real neurotropic parasites to also be associated with suicide behavior. This led us to investigate Toxoplasma gondii and the anti-T. gondii immune response. A possible connection between T. gondii and suicidal behavior was suggested by the relatively high seroprevalence, its neurotropism (Flegr 2007), the immune activation involved in the defense against the parasite leading to elevation of cytokines previously found related to suicidal behavior (see Section 19.3.2), the occurrence of induced self-destructive behavior in rodent models (Lamberton et al. 2008; Vyas et al. 2007; Webster 2007), behavioral changes in humans (Flegr et al. 2002), and the parasite's association with mental illness (Niebuhr et al. 2008; Torrey et al. 2007). We will first briefly review the immune system and the evidence connecting immune activation with suicidal behavior, and then we will describe the immune response to T. gondii, followed by a description of the parasite and the evidence associating T. gondii infection with suicidal behavior.

Piet, J., H. Wurtzen, et al. (2012). ***"The effect of mindfulness-based therapy on symptoms of anxiety and depression in adult cancer patients and survivors: A systematic review and meta-analysis."*** J Consult Clin Psychol 80(6): 1007-1020. http://www.ncbi.nlm.nih.gov/pubmed/22563637

OBJECTIVE: The use of mindfulness-based therapy (MBT) in oncology settings has become increasingly popular, and research in the field has rapidly expanded. The objective was by means of a systematic review and meta-analysis to evaluate the current evidence for the effect of MBT on symptoms of anxiety and depression in adult cancer patients and survivors. METHOD: Electronic databases were searched, and researchers were contacted for further relevant studies. Twenty-two independent studies with a total of 1,403 participants were included. Studies were coded for quality (range: 0-4), and overall effect size analyses were performed separately for nonrandomized studies (K = 13, n = 448) and randomized controlled trials (RCTs; K = 9, n = 955). Effect sizes were combined using the random-effects model. RESULTS: In the aggregated sample of nonrandomized studies (average quality score: 0.5), MBT was associated with significantly reduced symptoms of anxiety and depression from pre- to posttreatment corresponding to moderate effect sizes (Hedges\'s g) of 0.60 and 0.42, respectively. The pooled controlled effect sizes (Hedges\'s g) of RCTs (average quality score: 2.9) were 0.37 for anxiety symptoms ($p < .001$) and 0.44 for symptoms of depression ($p < .001$). These effect sizes appeared robust. Furthermore, in RCTs, MBT significantly improved mindfulness skills (Hedges\'s g = 0.39). CONCLUSION: While the overall quality of existing clinical trials varies considerably, there appears to be some positive evidence from relatively high-quality RCTs to support the use of MBT for cancer patients and survivors with symptoms of anxiety and depression.

Rethorst, C. D., P. Sunderajan, et al. (2012). ***"Does exercise improve self-reported sleep quality in non-remitted major depressive disorder?"*** Psychol Med: 1-11. http://www.ncbi.nlm.nih.gov/pubmed/23171815

BACKGROUND: Sleep disturbances are persistent residual symptoms following remission of major depressive disorder (MDD) and are associated with an increased risk of MDD recurrence. The purpose of the current study was to examine the effect of exercise augmentation on self-reported sleep quality in participants with non-remitted MDD. Method Participants were randomized to receive selective serotonin reuptake inhibitor (SSRI) augmentation with one of two doses of exercise: 16 kilocalories per kilogram of body weight per week (KKW) or 4 KKW for 12 weeks. Depressive symptoms were assessed using the clinician-rated Inventory of Depressive Symptomatology (IDS-C). The four sleep-related items on the IDS-C (Sleep Onset Insomnia, Mid-Nocturnal Insomnia, Early Morning Insomnia, and Hypersomnia) were used to assess self-reported sleep quality. RESULTS: Significant decreases in total insomnia ($p<0.0001$) were observed, along with decreases in sleep onset, mid-nocturnal and early-morning insomnia (p's <0.002). Hypersomnia did not change significantly ($p=0.38$). Changes in total, mid-nocturnal and early-morning insomnia were independent of changes in depressive symptoms. Higher baseline hypersomnia predicted a greater decrease in depression severity following exercise treatment ($p=0.0057$). No significant moderating effect of any baseline sleep on change in depression severity was observed. There were no significant differences between exercise treatment groups on total insomnia or any individual sleep item. CONCLUSIONS: Exercise augmentation resulted in improvements in self-reported sleep quality in patients with non-remitted MDD. Given the prevalence of insomnia as a residual symptom following MDD treatment and the associated risk of MDD recurrence, exercise augmentation may have an important role in the treatment of MDD.

Sparenberg, P., S. Topolinski, et al. (2012). ***"Minimal mimicry: Mere effector matching induces preference."*** Brain and Cognition 80(3): 291-300. http://www.sciencedirect.com/science/article/pii/S0278262612001133

Both mimicking and being mimicked induces preference for a target. The present experiments investigate the minimal sufficient conditions for this mimicry-preference link to occur. We argue that mere effector matching between one's own and the other person's movement is sufficient to induce preference, independent of which movement is actually performed. In Experiments 1 and 2, participants moved either their arms or legs, and watched avatars that moved either their arms or legs, respectively, without any instructions to mimic. The executed movements themselves and their pace were completely different between participants (fast circular movements) and targets (slow linear movements). Participants preferred avatars that moved the same body part as they did over avatars that moved a different body part. In Experiment 3, using human targets and differently paced movements, movement similarity was manipulated in addition to effector overlap (moving forward–backward or sideways with arms or legs, respectively). Only effector matching, but not movement matching, influenced preference ratings. These findings suggest that mere effector overlap is sufficient to trigger preference by mimicry. *(And see Christian Jarrett's BPS Research Digest comments on the article at http://www.bps-research-digest.blogspot.co.uk/2012/12/for-mimicry-to-flatter-its-all-about.html)*.

Stein, N. R., B. D. Dickstein, et al. (2012). ***"Trajectories of response to treatment for posttraumatic stress disorder."*** Behavior Therapy 43(4): 790-800. http://www.sciencedirect.com/science/article/pii/S0005789412000585

Research on the predictors of response to cognitive-behavioral treatments for PTSD has often produced inconsistent or ambiguous results. We argue this is in part due to the use of statistical techniques that explore relationships among the entire sample of participants rather than homogeneous subgroups. Using 2 large randomized controlled trials of Cognitive Processing Therapy (CPT), CPT components, and Prolonged Exposure, we employed growth mixture modeling to identify distinct trajectories

of treatment response and to determine the predictors of those trajectories. We determined that the participants' trajectories could be best represented by 2 latent classes, which we subsequently labeled responders (87% of the sample) and nonresponders (13% of the sample). Notably, there was not a separate class for partial responders. Assignment to the nonresponder class was associated with receiving the written accounts (WA) component of CPT, a pretreatment diagnosis of major depression (MDD), and more pretreatment hyperarousal symptoms. Thus, it appears that some individuals do not benefit from merely writing about their trauma and processing it with the therapist; they may also need to engage in cognitive restructuring to successfully ameliorate their symptoms. Additionally, those who meet criteria for MDD or have high levels of hyperarousal at the onset of treatment might require additional treatment or support.

van Dam, D. S., E. van der Ven, et al. (2012). ***"Childhood bullying and the association with psychosis in non-clinical and clinical samples: A review and meta-analysis."*** Psychological Medicine 42(12): 2463-2474. http://dx.doi.org/10.1017/S0033291712000360

Background Approximately 11% of schoolchildren are bullied on a regular basis. It has been argued that continuous exposure to stress is related to the development of psychotic symptoms. The current study sought to investigate whether being bullied in childhood is related to the development of psychotic symptoms. Method A search of PubMed, PsycINFO and EMBASE was conducted. The reference lists of included papers were searched to identify other eligible papers. A meta-analysis was performed on a subgroup of studies. Results We found four clinical and 10 general population studies that met inclusion criteria. The results of the clinical studies were mixed. However, the results of the non-clinical studies provided more consistent evidence that school bullying is related to the development of non-clinical psychotic symptoms. Stronger associations were found with increased frequency and severity and longer duration of being bullied. We performed a meta-analysis on seven population-based studies, yielding unadjusted and adjusted odds ratios (ORs) of 2.7 [95% confidence interval (CI) 2.1–3.6] and 2.3 (95% CI 1.5–3.4) respectively. Conclusions Although there is some evidence of an association between bullying and psychosis in clinical samples, the research is too sparse to draw any firm conclusions. However, population-based non-clinical studies support the role of bullying in the development of psychotic symptoms later in life. These findings are consistent with findings of an increased risk of psychotic symptoms among those exposed to other types of abuse.

Verduyn, P., I. Van Mechelen, et al. (2012). ***"The relationship between self-distancing and the duration of negative and positive emotional experiences in daily life."*** Emotion 12(6): 1248-1263. http://www.ncbi.nlm.nih.gov/pubmed/22642344

Extant research suggests that self-distancing facilitates adaptive self-reflection of negative emotional experiences. However, this work operationalizes adaptive self-reflection in terms of a reduction in the intensity of negative emotion, ignoring other important aspects of emotional experience such as emotion duration. Moreover, prior research has predominantly focused on how self-distancing influences emotional reactivity in response to reflecting on negative experiences, leaving open questions concerning how this process operates in the context of positive experiences. We addressed these issues by examining the relationship between self-distancing and the duration of daily negative and positive emotions using a daily diary methodology. Discrete-time survival analyses revealed that reflecting on both daily negative (Studies 1 and 2) and positive events (Study 2) from a self-distanced perspective was associated with shorter emotions compared with reflecting on such events from a self-immersed perspective. The basic science and clinical implications of these findings are discussed.

Viana, A., C. Ebesutani, et al. (2012). ***"Childhood exposure to parental threatening behaviors and anxiety symptoms in a community sample of young adults: The mediating role of cognitive biases."*** Cognitive Therapy and Research 36(6): 670-680. http://dx.doi.org/10.1007/s10608-011-9414-7

Childhood exposure to parental threatening behaviors has been associated with a number of negative outcomes, including anxiety symptoms. However, research is lacking regarding the mechanisms that may explain these associations. One such mechanism may be cognitive biases, or more specifically, the degree to which individuals interpret neutral or ambiguous events as threatening (i.e., interpretive biases) and make negative judgments about their ability to cope with internal and external events (i.e., judgment biases). The purpose of this study was to examine the direct links between childhood exposure to parental threatening behaviors and anxiety symptoms in young adulthood, as well as the mediating role of cognitive biases in this association. Multiple mediator analyses in both normal (n = 643; mean age = 18.77 years, SD = 1.06; age range = 18–24; 69% women) and anxious groups (n = 152; mean age = 18.64 years, SD = 0.97; age range = 18–23; 80% women) revealed that childhood exposure to parental threatening behaviors significantly predicted current anxiety disorder symptoms. In both groups, this association was fully mediated by participants' judgment biases. The mediated effect was significant after controlling for negative affectivity. Overall, the findings of this study suggest that childhood exposure to parental threatening behaviors may set the stage for the development of judgment biases, which, in turn, may increase the risk for anxiety symptoms. These findings highlight the potential utility of targeting judgment biases in interventions for anxiety-related problems.

Vos, S. P. F., M. J. H. Huibers, et al. (2012). ***"A randomized clinical trial of cognitive behavioral therapy and interpersonal psychotherapy for panic disorder with agoraphobia."*** Psychological Medicine 42(12): 2661-2672. http://dx.doi.org/10.1017/S0033291712000876

Background Interpersonal psychotherapy (IPT) seems to be as effective as cognitive behavioral therapy (CBT) in the treatment of major depression. Because the onset of panic attacks is often related to increased interpersonal life stress, IPT has the potential to also treat panic disorder. To date, a preliminary open trial yielded promising results but there have been no randomized controlled trials directly comparing CBT and IPT for panic disorder. Method This study aimed to directly compare the effects of CBT versus IPT for the treatment of panic disorder with agoraphobia. Ninety-one adult patients with a primary diagnosis of DSM-III or DSM-IV panic disorder with agoraphobia were randomized. Primary outcomes were panic attack frequency and an idiosyncratic behavioral test. Secondary outcomes were panic and agoraphobia severity, panic-related cognitions, interpersonal functioning and general psychopathology. Measures were taken at 0, 3 and 4 months (baseline, end of treatment and follow-up). Results Intention-to-treat (ITT) analyses on the primary outcomes indicated superior effects for CBT in treating panic disorder with agoraphobia. Per-protocol analyses emphasized the differences between treatments and yielded larger effect sizes. Reductions in the secondary outcomes were equal for both treatments, except for agoraphobic complaints and behavior and the credibility ratings of negative interpretations of bodily sensations, all of which decreased more in CBT. Conclusions CBT is the preferred treatment for panic disorder with agoraphobia compared to IPT. Mechanisms of change should be investigated further, along with long-term outcomes.

Wiley (2012). ***"Virtual issue: Bullying."*** General Psychology. http://onlinelibrary.wiley.com/subject/code/000104/homepage/virtual_issue__bullying.htm#Long_Term_Effects

A collection of articles & book chapters on bullying brought together as a resource by Wiley publishers - includes "Bullying in the digital age", "Bullying in the workplace", "Bystanders & witnesses", "Risk factors", "Long-term effects" and "Prevention and intervention".