

# **30 babcp abstracts, november '12**

(Bragdon and Lombardo 2012; Brooks 2012; Carter, McCullough et al. 2012; Cheavens, Strunk et al. 2012; Cramer, Haller et al. 2012; Cunningham and Kirkland 2012; Donahue, Forest et al. 2012; Doron, Moulding et al. 2012; Doron, Sar-El et al. 2012; Ein-Dor and Tal 2012; Gitlin, Kales et al. 2012; Grant, Odlaug et al. 2012; Hilderink, Burger et al. 2012; Jarrett 2012; Kilbourne 2012; Kraft and Pressman 2012; Kuyken, Crane et al. 2012; Lee and Schwarz 2012; Luby, Lenze et al. 2012; Luby 2012; McLaughlin, Green et al. 2012; McLaughlin, Greif Green et al. 2012; Murphy and Perera-Delcourt 2012; Perkins, Leonard et al. 2012; Sherman, Lee et al. 2012; Steiner 2012; Teicher, Polcari et al. 2012; Telch, Rosenfield et al. 2012; Wiles, Thomas et al. 2012; Winsper, Zanarini et al. 2012)

Bragdon, R. A. and T. W. Lombardo (2012). **"Written disclosure treatment for posttraumatic stress disorder in substance use disorder inpatients."** *Behav Modif* 36(6): 875-896. <http://bmo.sagepub.com/content/36/6/875.abstract>

Comprehensive exposure-based approaches to treating posttraumatic stress disorder (PTSD) are effective, but they are time intensive and not widely used because of factors such as client noncompliance and fears of iatrogenic effects. Exposure by writing disclosure (WD), modeled after Pennebaker's brief stress-reduction procedure, may circumvent these obstacles. WD treatment reduces PTSD symptoms in trauma victims but has rarely been tested in diagnosed PTSD participants and never in substance use disorder (SUD) populations—despite high comorbidity rates. The authors applied a standard Pennebaker WD treatment for 45 SUD inpatients screened for full or subsyndromal PTSD in an uncontrolled study. Results suggested potential strong cost-effectiveness: Posttreatment outcome measures showed significant symptom reductions, which remained stable at 3-month follow-up. With converging evidence from future controlled studies, WD strategies may emerge as effective and easily implemented treatment options for PTSD in SUD treatment settings.

Brooks, D. (2012). **The heart grows smarter.** *New York Times*. New York. [http://www.nytimes.com/2012/11/06/opinion/brooks-the-heart-grows-smarter.html?\\_r=0](http://www.nytimes.com/2012/11/06/opinion/brooks-the-heart-grows-smarter.html?_r=0)

This intriguing newspaper article argues that many men are becoming more emotionally intelligent with potentially far-reaching effects. The author even adds "The big finding is that you can teach an old dog new tricks. The men (in the Grant Study) kept changing all the way through, even in their 80s and 90s." Encouraging!

Carter, E. C., M. E. McCullough, et al. (2012). **"The mediating role of monitoring in the association of religion with self-control."** *Social psychological and personality science* 3(6): 691-697. <http://spp.sagepub.com/content/3/6/691.abstract>

Religiosity is related to a variety of positive outcomes and the nature of this relationship has long been a topic of inquiry. Recently, it was proposed that an important piece of this puzzle may be the propensity for religious beliefs to promote self-control, a trait that is linked to a range of benefits. How religion translates into self-control, however, remains unclear. We examined the extent to which religiosity's relationship with self-control is mediated by self-monitoring, perceived monitoring by God, and perceived monitoring by other people. Results revealed that more religious people tended to monitor their standing regarding their goals (self-monitoring) to a greater degree, which in turn related to more self-control. Also, religious people tended to believe that a higher power was watching them, which related to greater self-monitoring, which in turn was related to more self-control.

Cheavens, J. S., D. R. Strunk, et al. (2012). **"The compensation and capitalization models: A test of two approaches to individualizing the treatment of depression."** *Behaviour Research and Therapy* 50(11): 699-706. <http://www.sciencedirect.com/science/article/pii/S0005796712001222>

Despite long-standing calls for the individualization of treatments for depression, modest progress has been made in this effort. The primary objective of this study was to test two competing approaches to personalizing cognitive-behavioral treatment of depression (viz., capitalization and compensation). Thirty-four adults meeting criteria for Major Depressive Disorder (59% female, 85% Caucasian) were randomized to 16-weeks of cognitive-behavioral treatment in which strategies used were selected based on either the capitalization approach (treatment matched to relative strengths) or the compensation approach (treatment matched to relative deficits). Outcome was assessed with a composite measure of both self-report (i.e., Beck Depression Inventory) and observer-rated (i.e., Hamilton Rating Scale for Depression) depressive symptoms. Hierarchical linear modeling revealed a significant treatment approach by time interaction indicating a faster rate of symptom change for the capitalization approach compared to the compensation approach ( $d = .69$ ,  $p = .03$ ). Personalizing treatment to patients' relative strengths led to better outcome than treatment personalized to patients' relative deficits. If replicated, these findings would suggest a significant change in thinking about how therapists might best adapt cognitive-behavioral interventions for depression for particular patients.

Cramer, H., H. Haller, et al. (2012). **"Mindfulness-based stress reduction for low back pain. A systematic review."** *BMC Complement Altern Med* 12: 162. <http://www.ncbi.nlm.nih.gov/pubmed/23009599>

ABSTRACT: BACKGROUND: Mindfulness-based stress reduction (MBSR) is frequently used for pain conditions. While systematic reviews on MBSR for chronic pain have been conducted, there are no reviews for specific pain conditions. Therefore a systematic review of the effectiveness of MBSR in low back pain was performed. METHODS: MEDLINE, the Cochrane Library, EMBASE, CMBASE, and PsycInfo were screened through November 2011. The search strategy combined keywords for MBSR with keywords for low back pain. Randomized controlled trials (RCTs) comparing MBSR to control conditions in patients with low back pain were included. Two authors independently assessed risk of bias using the Cochrane risk of bias tool. Clinical importance of group differences was assessed for the main outcome measures pain intensity and back-specific disability. RESULTS: Three RCTs with a total of 117 chronic low back pain patients were included. One RCT on failed back surgery syndrome reported significant and clinically important short-term improvements in pain intensity and disability for MBSR compared to no treatment. Two RCTs on older adults (age  $\geq 65$  years) with chronic specific or non-specific low back pain reported no short-term or long-term improvements in pain or disability for MBSR compared to no treatment or health education. Two RCTs reported larger short-term improvements of pain acceptance for MBSR compared to no treatment. CONCLUSION: This review found inconclusive evidence of effectiveness of MBSR in improving pain intensity or disability in chronic low back pain patients. However, there is limited evidence that MBSR can improve pain acceptance. Further RCTs with larger sample sizes, adequate control interventions, and longer follow-ups are needed before firm conclusions can be drawn.

Cunningham, W. A. and T. Kirkland (2012). **"Emotion, cognition, and the classical elements of mind."** *Emotion review* 4(4): 369-370. <http://emr.sagepub.com/content/4/4/369.abstract>

The scientific study of emotion faces a potentially serious problem: after over a hundred years of psychological study, we lack consensus regarding the very definition of emotion. We propose that part of the problem may be the tendency to define

emotion in contrast to cognition, rather than viewing both "emotion" and "cognition" as being comprised of more elemental processes. We argue that considering emotion as a type of cognition (viewed broadly as information processing) may provide an understanding of the mechanisms underlying domains that are traditionally thought to be qualitatively distinct.

Donahue, E. G., J. Forest, et al. (2012). **"Passion for work and emotional exhaustion: The mediating role of rumination and recovery."** *Applied Psychology: Health and Well-Being* 4(3): 341-368. <http://dx.doi.org/10.1111/j.1758-0854.2012.01078.x>

The purpose of the present research is to present a model pertaining to the mediating roles of rumination and recovery experiences in the relationship between a harmonious and an obsessive passion (Vallerand et al., 2003) for work and workers' emotional exhaustion. Two populations were measured in the present research: namely elite coaches and nurses. Study 1's model posits that obsessive passion positively predicts rumination about one's work when being physically away from work, while harmonious passion negatively predicts ruminative thoughts. In turn, rumination is expected to positively contribute to emotional exhaustion. The results of Study 1 were replicated in Study 2. In addition, in the model of Study 2, obsessive passion was expected to undermine recovery experiences, while harmonious passion was expected to predict recovery experiences. In turn, recovery experiences were expected to protect workers from emotional exhaustion. Results of both studies provided support for the proposed model. The present findings demonstrate that passion for work may lead to some adaptive and maladaptive psychological processes depending on the type of passion that is prevalent.

Doron, G., R. Moulding, et al. (2012). **"Adult attachment insecurities are associated with obsessive compulsive disorder."** *Psychol Psychother* 85(2): 163-178. <http://www.ncbi.nlm.nih.gov/pubmed/22903908>

**OBJECTIVES:** Obsessive compulsive disorder (OCD) is one of the most disabling and highly prevalent anxiety disorders (ADs). Current cognitive models of OCD implicate views about the self and world in the maintenance of the disorder. However, little research has focused on issues that may lead to vulnerability to such views. In particular, a person's attachment insecurities (attachment anxiety, avoidance) may be important risk factors increasing the likelihood of such non-adaptive perceptions (Doron & Kyrios, 2005). **DESIGN:** Participants meeting criteria for OCD were compared with cohorts meeting criteria for other ADs and healthy controls on a range of measures including adult attachment, OC symptoms, cognitions, and mood. **METHODS:** Diagnosis of the clinical groups was established using the Anxiety Disorders Interview Schedule for DSM-IV (Brown, Di Nardo, & Barlow, 1994). The clinical relevance of attachment insecurities was ascertained by comparing their prevalence in an OCD sample (N = 30), an ADs sample (N = 20), and a community sample (N = 32). **RESULTS:** Attachment anxiety was significantly higher in individuals with OCD, even when controlling for depression. **CONCLUSIONS:** Addressing attachment anxiety in individuals presenting with OCD may be important for enhancing therapeutic outcomes. However, findings are based on cross-sectional data that preclude conclusions relating to causal influence.

Doron, G., D. Sar-El, et al. (2012). **"Threats to moral self-perceptions trigger obsessive compulsive contamination-related behavioral tendencies."** *J Behav Ther Exp Psychiatry* 43(3): 884-890. <http://www.ncbi.nlm.nih.gov/pubmed/22306821>

**BACKGROUND AND OBJECTIVES:** Obsessive compulsive (OC) phenomena such as contamination fears may lead to significant impairment in daily functioning. In this research, we examined whether threat to moral self-perceptions can trigger contamination-related behavioral tendencies. **METHOD:** Three experiments examined the influence of subtle priming of morality-related information on contamination-related behavioral tendencies. **RESULTS:** Subtle suggestions of incompetence in the morality self-domain led to heightened OC-related behavioral tendencies. These effects were specific to self-relevant (versus other-relevant), negative (versus positive) information about the morality domain (versus a morality-irrelevant domain). Findings were not related to pre-existing variations in self-esteem, stress, anxiety, or depression, and were not explained by mood fluctuations. **LIMITATIONS:** Our studies were conducted with non-clinical samples. **CONCLUSIONS:** Self-sensitivities in the moral domain may be causally linked with contamination-related concerns. Treatments addressing such sensitivities may prove useful when treating obsessive compulsive phenomena.

Ein-Dor, T. and O. Tal (2012). **"Scared saviors: Evidence that people high in attachment anxiety are more effective in alerting others to threat."** *European Journal of Social Psychology* 42(6): 667-671. <http://dx.doi.org/10.1002/ejsp.1895>

Attachment-related anxiety has repeatedly been associated with poorer adjustment in various social, emotional, and behavioral domains. Building on social defense theory, we examined a possible advantage of having some group members who score high in attachment anxiety – a heightened tendency to deliver a warning message without delay. We led participants to believe that they accidentally activated a computer virus that erased an experimenter's computer. We then asked them to alert the department's computer technicians to the incident. On their way, they were presented with four decision points where they could choose either to delay their warning or to continue directly to the technicians' office. We found that anxious individuals were less willing to be delayed on their way to deliver a warning message. This result remained significant when attachment avoidance, extroversion, and neuroticism were statistically controlled. Results are discussed in relation to the possible adaptive functions of certain personality characteristics often viewed as undesirable. (*BPS Digest* - <http://www.bps-research-digest.blogspot.co.uk/2012/11/the-advantage-of-having-anxiously.html> - comments "Psychologists talk about different attachment styles, such as secure, anxious and avoidant. The secure style is usually the one we're supposed to aspire to. They're the calm people who find it easy to get close to others, but not in a clingy way. By contrast, those with an anxious or avoidant attachment style are often seen in a pathological light - being either too needy or too aloof, respectively. They might sound like the kind of people you want to steer clear of, but now Tsachi Ein-Dor and Orgad Tal have published new research showing the upside to having an anxiously attached person on your team. Eighty undergrads (28 women) completed attachment style and personality questionnaires. High scorers in anxious attachment agreed with statements like "My desire to be very close sometimes scares people away". Two weeks later they returned for what they thought was a study into artistic preferences. Each participant sat down at a computer and was left to rate a series of paintings that appeared on-screen. After the third piece of art, an error message popped up and the next thing, after the participant clicked OK, the computer started running a virus that wiped the whole hard-drive. The experimenter - a trained actress - came back in the room, feigned horror, and asked the participant to take the flash-drive out of the computer and head to the Dean's assistant manager for help. Over the next few minutes, four obstacles were thrown in the way of the participants, potentially diverting them from the aim of seeking help. Outside in the corridor a person asked them to complete a short survey; the Dean's assistant manager, when they got there, directed them to the lab manager, but asked them to do some photocopying first; the lab manager's door had a sign on it asking visitors to wait; and finally, after being directed to the lab technicians' room, the participants passed a student who dropped a load of papers on the floor. The higher that participants scored on anxious attachment, the more likely they were to seek help about the virus with single-minded focus. They more often than others refused to do the survey, shrugged off the photo-copying request, sought help rather than waiting outside the lab manager's office, and left the student to pick up their own papers from the floor. In contrast, the personality variables of extraversion and neuroticism were not related to this single-mindedness. Ein-Dor and Tal have nicknamed anxiously attached people "sentinels". In past research they've shown that they,

like people of a generally anxious disposition, are quicker to detect threats (e.g. smoke in the room). This new result confirms the researchers' further prediction that anxiously attached people are also particularly motivated to seek help from others, to raise the alarm - a tendency that "in many real world situations, might save others from a serious threat". Concluding, Ein-Dor and Tal said their study offered "a new perspective on the strengths of individuals who have long been viewed as deficient and poorly adapted.")

Gitlin, L. N., H. C. Kales, et al. (2012). **"Nonpharmacologic management of behavioral symptoms in dementia."** *JAMA* 308(19): 2020-2029. <http://dx.doi.org/10.1001/jama.2012.36918>

Behavioral symptoms such as repetitive speech, wandering, and sleep disturbances are a core clinical feature of Alzheimer disease and related dementias. If untreated, these behaviors can accelerate disease progression, worsen functional decline and quality of life, cause significant caregiver distress, and result in earlier nursing home placement. Systematic screening for behavioral symptoms in dementia is an important prevention strategy that facilitates early treatment of behavioral symptoms by identifying underlying causes and tailoring a treatment plan. First-line nonpharmacologic treatments are recommended because available pharmacologic treatments are only modestly effective, have notable risks, and do not effectively treat some of the behaviors that family members and caregivers find most distressing. Examples of nonpharmacologic treatments include provision of caregiver education and support, training in problem solving, and targeted therapy directed at the underlying causes for specific behaviors (eg, implementing nighttime routines to address sleep disturbances). Based on an actual case, we characterize common behavioral symptoms and describe a strategy for selecting evidence-based nonpharmacologic dementia treatments. Nonpharmacologic management of behavioral symptoms in dementia can significantly improve quality of life and patient-caregiver satisfaction.

Grant, J. E., B. L. Odlaug, et al. (2012). **"Skin picking disorder."** *Am J Psychiatry* 169(11): 1143-1149. <http://ajp.psychiatryonline.org/article.aspx?articleid=1389516>

Although skin picking has been documented in the medical literature since the 19th century, only now is it receiving serious consideration as a DSM psychiatric disorder in discussions for DSM-5. Recent community prevalence studies suggest that skin picking disorder appears to be as common as many other psychiatric disorders, with reported prevalences ranging from 1.4% to 5.4%. Clinical evaluation of patients with skin picking disorder entails a broad physical and psychiatric examination, encouraging an interdisciplinary approach to evaluation and treatment. Approaches to treatment should include cognitive-behavioral therapy (including habit reversal or acceptance-enhanced behavior therapy) and medication (serotonin reuptake inhibitors, N-acetylcysteine, or naltrexone). Based on clinical experience and research findings, the authors recommend several management approaches to skin picking disorder.

Hilderink, P. H., H. Burger, et al. (2012). **"The temporal relation between pain and depression: Results from the longitudinal aging study Amsterdam."** *Psychosomatic Medicine* 74(9): 945-951. <http://www.psychosomaticmedicine.org/content/74/9/945.abstract>

Objective Pain and depression are both common in old age, but their (long-term) temporal relationship remains unknown. This study is designed to determine whether pain predicts the onset of depression and vice versa. Methods This is a prospective, population-based cohort study with 12-year follow-up and 3-year intervals in the Netherlands (Longitudinal Aging Study Amsterdam). At baseline, participants were aged 55 to 85 years (n = 2028). Main measurements outcomes were incident depression defined as crossing the cutoff of 16 and showing a relevant change ( $\geq 5$  points) on the Center for Epidemiological Studies-Depression Scale among nondepressed participants and incident pain defined as a score of 2 or higher on the pain scale of the 5-item Nottingham Health Profile in pain-free participants. Multiple imputations were adopted to estimate missing values. Results In nondepressed participants (n= 1769), a higher level of pain was predictive of incident depression in multiple extended Cox regression analyses (hazard rate [HR] = 1.13 [95% confidence interval {CI}: 1.05-1.22], p = .001), which all remained significant after correction for sociodemographic characteristics, life-style characteristics, functional limitations, and chronic diseases (HR = 1.09 [95% CI = 1.01-1.18], p = .035). In the pain-free participants (n = 1420), depressive symptoms at baseline predicted incident pain (HR = 1.02 [95% CI: 1.01-1.04], p = .006). This depression measure did not independently predict the onset of pain in the fully adjusted models. Conclusions As pain precedes the onset of depression, strategies to prevent depression in chronic pain patients are warranted. In contrast, no effects of depression on the development of subsequent pain were found when adjusting for covariates.

Jarrett, C. (2012) **Labs worldwide report converging evidence that undermines the low-sugar theory of depleted willpower** *BPS Research Digest* <http://www.bps-research-digest.blogspot.co.uk/2012/11/labs-worldwide-report-converging.html>

One of the main findings in willpower research is that it's a limited resource. Use self-control up in one situation and you have less left over afterwards - an effect known as "ego-depletion". This discovery led to a search for the underlying physiological mechanism. In 2007, Roy Baumeister, a pioneer in the field, and his colleagues reported that the physiological correlate of ego-depletion is low glucose. Self-control leads the brain to metabolise more glucose, so the theory goes, and when glucose gets too low, we're left with less willpower. The breakthrough 2007 study showed that ego-depleted participants had low blood glucose levels, but those who subsequently consumed a glucose drink were able to sustain their self-control on a second task. In the intervening years the finding has been replicated and the glucose-willpower link has come to be stated as fact. "No glucose, no willpower," wrote Baumeister and his journalist co-author John Tierney in their best-selling popular psychology book *Willpower: Rediscovering Our Greatest Strength* (Allen Lane, 2012). The claim was also endorsed in a guide to willpower published by the American Psychological Association earlier this year. "Maintaining steady blood-glucose levels, such as by eating regular healthy meals and snacks, may help prevent the effects of willpower depletion," the report claims. But now two studies have come along at once (following another published earlier in the year) that together cast doubt on the idea that depleted willpower is caused by a lack of glucose availability in the brain ... The key point is the new results suggest depleted willpower is about motivation and the allocation of glucose resources, not about a lack of glucose. These findings don't prove that consuming glucose has no benefit for restoring willpower, but they suggest strongly that it's not the principle mechanism. It's notable that the new findings complement previous research in the sports science literature showing that gargling (without ingesting) glucose can boost cycling performance. "While our findings are consistent with the predictions of the resource-depletion account, they also contribute to an increasing literature that glucose may not be a candidate physiological analog for self-control resources," write Hagger and Chatzisarantis. "Instead ego-depletion may be due to problems of self-control resource allocation rather than availability." An important next step is to conduct brain-imaging and related studies to observe the physiological effects of gargling glucose on the brain, and on motivational beliefs. There are also tantalising applications from the new research - for example, could the gargle effect (perhaps in the form of glucose-infused chewing gum) be used as a willpower aid for dieters and people trying to give up smoking?



Kilbourne, A. M. (2012). **"E-health and the transformation of mental health care."** *Psychiatr Serv* 63(11): 1059. <http://ps.psychiatryonline.org/article.aspx?articleid=1386873>

This month's issue highlights important research milestones regarding e-health technologies and their potential to enhance access to psychosocial interventions and improve outcomes for persons with mental disorders. Hunkeler and colleagues conducted a randomized controlled trial of an Internet-delivered chronic care model for persons with chronic depression enrolled in a staff-model health maintenance organization. The program involves a Web-based self-management program supported by electronic medical record-enhanced panel management and provider decision support. Deen and coauthors report on a national assessment of telehealth use in the U.S. Department of Veterans Affairs, which found substantial increases in individual and group telepsychotherapy encounters in recent years. These e-health technologies have great potential to extend the reach of psychosocial interventions beyond the clinic walls, especially for persons in rural settings or who are reluctant to seek mental health specialty care.

Kraft, T. L. and S. D. Pressman (2012). **"Grin and bear it: The influence of manipulated facial expression on the stress response."** *Psychological Science* 23(11): 1372-1378. <http://pss.sagepub.com/content/23/11/1372.abstract>

In the study reported here, we investigated whether covertly manipulating positive facial expressions would influence cardiovascular and affective responses to stress. Participants (N = 170) naive to the purpose of the study completed two different stressful tasks while holding chopsticks in their mouths in a manner that produced a Duchenne smile, a standard smile, or a neutral expression. Awareness was manipulated by explicitly asking half of all participants in the smiling groups to smile (and giving the other half no instructions related to smiling). Findings revealed that all smiling participants, regardless of whether they were aware of smiling, had lower heart rates during stress recovery than the neutral group did, with a slight advantage for those with Duchenne smiles. Participants in the smiling groups who were not explicitly asked to smile reported less of a decrease in positive affect during a stressful task than did the neutral group. These findings show that there are both physiological and psychological benefits from maintaining positive facial expressions during stress.

Kuyken, W., R. Crane, et al. (2012). **"Does mindfulness based cognitive therapy prevent relapse of depression?"** *BMJ* 345: e7194. <http://www.ncbi.nlm.nih.gov/pubmed/23144206>

Depression typically runs a relapsing and recurrent course.<sup>1</sup> Without ongoing treatment people with recurrent depression have a very high risk of repeated depressive relapses throughout their life, even after successful acute treatment. Major inroads into the substantial health burden attributable to depression could be offset through interventions that prevent depressive relapse among people at high risk of recurrent episodes.<sup>2</sup> If the factors that make people vulnerable to depressive relapse can be attenuated, the relapsing course of depression could potentially be broken. Currently, most depression is treated in primary care, and maintenance antidepressants are the mainstay approach to preventing relapse.<sup>3</sup> The UK's National Institute for Health and Clinical Excellence (NICE) recommends that to stay well, people with a history of recurrent depression should continue taking antidepressants for at least two years. However, many patients experience side effects, and some express a preference for psychosocial interventions, which provide long term protection against relapse.<sup>4</sup> Mindfulness based cognitive therapy (MBCT)<sup>5</sup> was developed as a psychosocial intervention for teaching people with a history of depression the skills to stay well in the long term. A recent systematic review and meta-analysis of six randomised controlled trials (n=593) suggests that MBCT significantly reduces the rates of depressive relapse compared with usual care or placebo, corresponding to a relative risk reduction of 34% (risk ratio 0.66, 95% confidence interval 0.53 to 0.82).<sup>6</sup> However, despite the emerging evidence base<sup>6</sup> and widespread clinical enthusiasm for MBCT,<sup>7</sup> several uncertainties remain. Firstly, it is not clear how MBCT compares with other approaches to preventing depressive relapse—most notably, maintenance antidepressants. Evidence from two of the six randomised controlled trials included in systematic review mentioned above suggests that MBCT was at least as efficacious as maintenance antidepressants in preventing relapse (risk ratio 0.80, 95% confidence interval 0.60 to 1.08),<sup>6</sup> but the sample sizes were small and the confidence intervals were wide. Even though antidepressants are the first line approach to preventing depressive relapse, no trials have yet evaluated whether the combination of antidepressants and MBCT provides added benefit over either treatment alone. There are also no head to head trials comparing MBCT with other psychosocial approaches known to help people stay well in the long term (such as cognitive behavioural therapy and interpersonal therapy). Secondly, although the six randomised controlled trials have not yet reported adverse effects, neither have studies explicitly explored in any depth MBCT's acceptability in a broad range of populations. The earliest two trials of MBCT provided evidence through retrospective analyses suggesting that MBCT may be effective only for people who had had three or more episodes of depression.<sup>6</sup> As a result, subsequent trials have restricted their sample to patients with three or more previous episodes. Future research is needed to establish how acceptable MBCT is to a broad range of patients. Thirdly, even though it is nearly 10 years since NICE first recommended MBCT and even though the 2009 NICE update identified the therapy as a key priority for implementation, there is a substantial gap between the efficacy research and implementation in routine practice settings. A recent survey suggests that only a small number of mental health services in the UK have systematically built MBCT into their depression care pathways ... How do I know when to refer someone for cognitive behavioural therapy, interpersonal therapy, or mindfulness based cognitive therapy? All three psychosocial treatments are recommended by NICE, but cognitive behavioural and interpersonal therapies aim to help patients with current depression get well and stay well. MBCT might therefore be considered for people who are well but still at substantial risk of relapse—that is, those who have experienced three or more previous episodes of depression. This includes people who have relapsed despite antidepressant treatment; who cannot or choose not to continue antidepressant treatment; and/or who have residual symptoms. Such patients may present asking for long term support in the management of their depression or feel at risk of having future relapses after drug or psychological treatment. MBCT is best suited to people interested in a psychosocial approach to preventing future episodes of depression who are open and willing to learn new ways of thinking and behaving and to learn within a group based context, and who can invest the time both to attend the groups and to do the home practice.

Lee, S. W. and N. Schwarz (2012). **"Bidirectionality, mediation, and moderation of metaphorical effects: The embodiment of social suspicion and fishy smells."** *J Pers Soc Psychol* 103(5): 737-749. <http://www.ncbi.nlm.nih.gov/pubmed/22905770>

Metaphorical effects are commonly assumed to be unidirectional, running from concrete to abstract domains but not vice versa. Noting that metaphorical effects are often found to be bidirectional, we explore how they may be mediated and moderated according to the principles of knowledge accessibility and applicability. Using the example of "something smells fishy" (a metaphorical expression of social suspicion), 7 experiments tested for the behavioral effects of fishy smells on social suspicion among English speakers, the reversed effects of suspicion on smell labeling and detection, and the underlying mechanism. Incidental exposure to fishy smells induced suspicion and undermined cooperation in trust-based economic exchanges in a trust game (Study 1) and a public goods game (Study 2). Socially induced suspicion enhanced the correct labeling of fishy smells, but not other smells (Studies 3a-3c), an effect that could be mediated by the accessibility and moderated by the applicability of metaphorically associated concepts (Studies 4-6). Suspicion also heightened detection sensitivity to low concentrations of fishy smells (Study 7). Bidirectionality, mediation, and moderation of metaphorical effects have important theoretical implications for

integrating known wisdom from social cognition with new insights into the embodied and metaphorical nature of human thinking. These findings also highlight the need for exploring the cultural variability and origin of metaphorical knowledge.

Luby, J., S. Lenze, et al. (2012). **"A novel early intervention for preschool depression: Findings from a pilot randomized controlled trial."** *J Child Psychol Psychiatry* 53(3): 313-322. <http://www.ncbi.nlm.nih.gov/pubmed/22040016>

BACKGROUND: Validation for depression in preschool children has been established; however, to date no empirical investigations of interventions for the early onset disorder have been conducted. Based on this and the modest efficacy of available treatments for childhood depression, the need for novel early interventions has been emphasized. Large effect sizes (ES) for preschool psychotherapies for several Axis I disorders suggest that earlier intervention in depression may also be promising. Therefore, a novel form of treatment for preschool depression, Parent-Child Interaction Therapy Emotion Development (PCIT-ED) was developed and tested. METHODS: A preliminary randomized controlled trial (RCT) was conducted comparing PCIT-ED to psycho-education in depressed 3- to 7-year-olds and their caregivers. A total of 54 patients met symptom criteria for DSM-IV major depressive disorder and were randomized, 19 patients completed the active treatment (n = 8 dropouts) and 10 completed psycho-education (n = 17 dropouts). RESULTS: Both groups showed significant improvement in several domains, with PCIT-ED showing significance in a greater number of domains. An intent-to-treat analysis suggested that PCIT-ED was significantly more effective than psycho-education on executive functioning (p = .011, ES = 0.12) and emotion recognition skills (p = .002, ES = 0.83). CONCLUSIONS: The RCT proved feasible and suggests an individual control condition should be used in future trials to minimize differential dropout. These pilot data, although limited by power, suggest that PCIT-ED may be a promising early intervention for depression. Larger scale randomized controlled trials of PCIT-ED for depressed preschoolers are now warranted.

Luby, J. L. (2012). **"Dispelling the "they'll grow out of it" myth: Implications for intervention."** *Am J Psychiatry* 169(11): 1127-1129. <http://ajp.psychiatryonline.org/article.aspx?articleid=1389511>

(Free full text available): Although the field of infant/preschool mental health is not young, it has been met with high levels of skepticism and has yet to be well integrated into mainstream psychiatry. As outlined by Bufferd et al. in their landmark paper in this issue (1), efforts to empirically investigate and validate mental disorders in early childhood have faced a number of impediments. These have included concern that diagnostic labels might stigmatize young children; the lack—until recently—of developmentally sensitive, age-appropriate measures of psychopathology that make accurate distinctions from developmental norms; and, perhaps most importantly, a long-held underlying belief that early emotional and behavioral problems represent normative extremes that young children simply grow out of. Bufferd and colleagues' longitudinal study of a large community sample adds to the literature and provides some of the most rigorous broad-based data to date refuting this notion. Building on the growing body of literature validating the onset of numerous axis I psychiatric disorders as early as age 3 (2–5), Bufferd et al. provide findings from a relatively large community sample of 3-year-old children assessed using a comprehensive interviewer-based diagnostic interview (among other measures) and followed longitudinally to age 6. As the authors point out, unique features of the study design included the community-based sampling and the use of a rigorous and comprehensive diagnostic interview designed specifically to assess discrete disorders in preschoolers (as opposed to more commonly used generic checklist measures). The study findings clearly demonstrated that the manifestation of symptoms meeting DSM-IV criteria for clinical disorders at age 3 was a robust marker of risk for disorders at age 6. Both homotypic and heterotypic continuity were demonstrated. Notably, having a disorder at age 3 was associated with an almost fivefold greater risk of having a disorder at age 6. Conversely, more than 50% of children who met criteria for a disorder at age 6 already had clinically significant symptoms by age 3. One limitation of the study was that the age 6 assessment was done by telephone rather than in person as was done at the age 3 assessment. Another was that the diagnosis was based on parental report and was not supplemented by observational data, thereby introducing possible bias that cannot be offset by child report (since young children have a limited ability to self-report on symptoms directly). It should be noted, however, that the use of parent informants in research diagnostic assessments of young children stands as the state of the art today, despite some promising efforts to develop feasible valid and reliable observational tools that map onto diagnostic algorithms (6). Notwithstanding these limitations, the study findings clearly add broad evidence supporting the relative stability, rather than transience, of early forms of psychopathology and therefore the importance of early identification and intervention ... The field of psychiatry, facing the need to develop more powerful and effective treatments, has been searching for new models to conceptualize disorders and to understand mechanisms of risk (11). Along this line, there has been an increasing focus on understanding the developmental underpinnings of disorders so that they may be identified before they are full-blown and, in some cases, on the path to chronicity. In this light, the findings of Bufferd et al. should blow new wind into the sails of efforts to identify and define the earliest-onset forms of mental disorders. Such work may help us understand the developmental pathways of adult disorders and develop new methods for intervening earlier in life, during periods of greater developmental change and plasticity.

McLaughlin, K. A., J. Green, et al. (2012). **"Intermittent explosive disorder in the national comorbidity survey replication adolescent supplement."** *Archives of General Psychiatry* 69(11): 1131-1139. <http://dx.doi.org/10.1001/archgenpsychiatry.2012.592>

Context Epidemiologic studies of adults show that DSM-IV intermittent explosive disorder (IED) is a highly prevalent and seriously impairing disorder. Although retrospective reports in these studies suggest that IED typically begins in childhood, no previous epidemiologic research has directly examined the prevalence or correlates of IED among youth. Objective To present epidemiologic data on the prevalence and correlates of IED among US adolescents in the National Comorbidity Survey Replication Adolescent Supplement. Design United States survey of adolescent (age, 13-17 years) DSM-IV anxiety, mood, behavior, and substance disorders. Setting Dual-frame household-school samples. Participants A total of 6483 adolescents (interviews) and parents (questionnaires). Main Outcome Measures The DSM-IV disorders were assessed with the World Health Organization Composite International Diagnostic Interview (CIDI). Results Nearly two-thirds of adolescents (63.3%) reported lifetime anger attacks that involved destroying property, threatening violence, or engaging in violence. Of these, 7.8% met DSM-IV/ CIDI criteria for lifetime IED. Intermittent explosive disorder had an early age at onset (mean age, 12.0 years) and was highly persistent, as indicated by 80.1% of lifetime cases (6.2% of all respondents) meeting 12-month criteria for IED. Injuries related to IED requiring medical attention reportedly occurred 52.5 times per 100 lifetime cases. In addition, IED was significantly comorbid with a wide range of DSM-IV/ CIDI mood, anxiety, and substance disorders, with 63.9% of lifetime cases meeting criteria for another such disorder. Although more than one-third (37.8%) of adolescents with 12-month IED received treatment for emotional problems in the year before the interview, only 6.5% of respondents with 12-month IED were treated specifically for anger. Conclusions Intermittent explosive disorder is a highly prevalent, persistent, and seriously impairing adolescent mental disorder that is both understudied and undertreated. Research is needed to uncover risk and protective factors for the disorder, develop strategies for screening and early detection, and identify effective treatments.

McLaughlin, K. A., J. Greif Green, et al. (2012). **"Childhood adversities and first onset of psychiatric disorders in a national sample of US adolescents."** *Archives of General Psychiatry* 69(11): 1151-1160. <http://dx.doi.org/10.1001/archgenpsychiatry.2011.2277>

Context Although childhood adversities (CAs) are known to be highly co-occurring, most research examines their associations with psychiatric disorders one at a time. However, recent evidence from adult studies suggests that the associations of multiple CAs with psychiatric disorders are nonadditive, arguing for the importance of multivariate analysis of multiple CAs. To our knowledge, no attempt has been made to perform a similar kind of analysis among children or adolescents. Objective To examine the multivariate associations of 12 CAs with first onset of psychiatric disorders in a national sample of US adolescents. Design A US national survey of adolescents (age range, 13-17 years) assessing DSM-IV anxiety, mood, behavior, and substance use disorders and CAs. The CAs include parental loss (death, divorce, and other separations), maltreatment (neglect and physical, sexual, and emotional abuse), and parental maladjustment (violence, criminality, substance abuse, and psychopathology), as well as economic adversity. Setting Dual-frame household-school samples. Participants In total, 6483 adolescent-parent pairs. Main Outcome Measures Lifetime DSM-IV disorders assessed using the World Health Organization Composite International Diagnostic Interview. Results Overall, exposure to at least 1 CA was reported by 58.3% of adolescents, among whom 59.7% reported multiple CAs. The CAs reflecting maladaptive family functioning were more strongly associated than other CAs with the onset of psychiatric disorders. The best-fitting model included terms for the type and number of CAs and distinguished between maladaptive family functioning and other CAs. The CAs predicted behavior disorders most strongly and fear disorders least strongly. The joint associations of multiple CAs were subadditive. The population-attributable risk proportions across DSM-IV disorder classes ranged from 15.7% for fear disorders to 40.7% for behavior disorders. The CAs were associated with 28.2% of all onsets of psychiatric disorders. Conclusions Childhood adversities are common, highly co-occurring, and strongly associated with the onset of psychiatric disorders among US adolescents. The subadditive multivariate associations of CAs with the onset of psychiatric disorders have implications for targeting interventions to reduce exposure to CAs and to mitigate the harmful effects of CAs to improve population mental health.

Murphy, H. and R. Perera-Delcourt (2012). **"Learning to live with OCD is a little mantra I often repeat': Understanding the lived experience of obsessive-compulsive disorder (OCD) in the contemporary therapeutic context."** *Psychology and Psychotherapy: Theory, Research and Practice*: n/a-n/a. <http://dx.doi.org/10.1111/j.2044-8341.2012.02076.x>

Objectives While there has been an abundance of quantitative studies that examine the clinical features and treatment modalities of obsessive-compulsive disorder (OCD), only a few qualitative research studies examining the experience of OCD have been documented. Our objectives were to explore and understand psychosocial aspects of OCD and to provide qualitative accounts of the condition and its treatment rather than concentrating on its psychopathology. We also wanted to locate the role cognitive behavioural therapy (CBT) played in the condition for our participants. Design Data for the study came from a series of nine semi-structured interviews carried out with individuals who self-identified as having OCD. Participants were recruited through two leading UK-based OCD charities. Methods We used interpretative phenomenological analysis (IPA) to analyse the accounts and participants gave feedback as to the validity of the themes in early stages of analysis. Results We report two superordinate themes – Having OCD (with subordinate themes 'wanting to be normal and fit it', 'failing at life' and 'loving and hating OCD') and The Impact of Therapy (with subordinate themes of 'wanting therapy', 'finding the roots' and 'a better self'). Conclusions Having OCD as a condition meant that individuals experienced a sense of overwhelming personal failure matched against age appropriate life cycle goals. This crisis of the self was bolstered by public and self-stigma about the condition. While clinical diagnosis and therapeutic interventions were significant, participants reported dialectical tensions experienced with OCD, pointing to the complexity of psychological functioning in the condition. Practitioner Points \* Participants experienced a 'deficit identity' as a result of OCD, impacting on self-esteem and self-confidence. \* While participants valued a medical diagnosis of OCD, there was ambivalence in 'letting go' of OCD behaviours. \* Some participants experienced CBT as an intervention which prevented them telling their OCD story. \* Participants valued the therapeutic relationship, especially in understanding and talking through the origins of OCD. (BPS Digest - <http://www.bps-research-digest.blogspot.co.uk/2012/11/whats-it-like-to-have-ocd.html> - comments "Research with people who have obsessive-compulsive disorder (OCD) is often impersonal. Participants' thoughts, feelings and behaviours are reduced to ticked boxes on a questionnaire. There's a risk the real story of what it's like to have OCD doesn't get told. Helen Murphy and Ramesh Perera-Delcourt have taken a different approach. They interviewed 9 people (one woman) with OCD, face-to-face, for about an hour each, to hear how these people felt about their condition and about any treatment they'd received. The researchers transcribed the interviews and highlighted key themes. Regarding the experience of OCD, the main themes were "wanting to be normal and fit in", "failing at life", and "loving and hating OCD." Participants found comfort in meeting other OCD support-group members. They also spoke of caring too much about what other people are thinking of them. OCD can interfere with education, relationships and careers and frequently, participants compared their own stalled life trajectories against what they perceived as the societal norm. "I feel like I've got to make up for lost time in a way," one man said. There were in-depth descriptions of the painful situations created by OCD - one man who house-shared had to scrub the entire bathroom with powerful cleaning product for an hour every day before he could use it. But at the same time, there was a fear of losing the crutch that the condition provides. "I wish I could do that [stop checking], I wish I could stop," another man said, adding: "Well, not totally." In relation to therapy, the main themes were "wanting therapy", "finding the roots", and "a better self". Participants spoke of the relief that came from having their problems recognised and listened to. The importance of rapport between participants and their therapists was mentioned repeatedly, consistent with what's known about the importance of the therapeutic relationship. Although aspects of CBT were found useful by many ("it helped me focus on what is important to me in life," said one), others commented on the lack of interest in the roots of the condition. "There's been a 'stuff the past' sort of thing but it's like cutting a plant above the soil - the roots are still there," said another participant. CBT helped participants with self-esteem issues. "... reanalysing things ... has made me realise that I wasn't to blame for all kinds of things," one person said. Murphy and Perera-Delcourt concluded that examining people's narratives can help to "understand the lived experience and lessen public and self stigma". Given the way their participants emphasised the value of rapport in therapy, the researchers questioned claims that computerised CBT is a valid substitute. They also highlighted the apparent importance to people with OCD of understanding its origins. "Developmental issues in the maintenance of the disorder have been generally neglected and our findings suggest that understanding and talking through the origins of OCD may lessen treatment resistance," they said.)

Perkins, A. M., A. M. Leonard, et al. (2012). **"A dose of ruthlessness: Interpersonal moral judgment is hardened by the anti-anxiety drug lorazepam."** *J Exp Psychol Gen*. <http://www.ncbi.nlm.nih.gov/pubmed/23025561>

Neuroimaging data suggest that emotional brain systems are more strongly engaged by moral dilemmas in which innocent people are directly harmed than by dilemmas in which harm is remotely inflicted. In order to test the possibility that this emotional engagement involves anxiety, we investigated the effects of 1 mg and 2 mg of the anti-anxiety drug lorazepam on the response choices of 40 healthy volunteers (20 male) in moral-personal, moral-impersonal, and nonmoral dilemmas. We found that lorazepam caused a dose-dependent increase in participants' willingness to endorse responses that directly harm other humans in moral-personal dilemmas but did not significantly affect response choices in moral-impersonal dilemmas or



nonmoral dilemmas. Within the set of moral-personal dilemmas that we administered, lorazepam increased the willingness to harm others in dilemmas where harm was inflicted for selfish reasons (dubbed low-conflict dilemmas) as well as responses to dilemmas where others were harmed for utilitarian reasons (i.e., for the greater good, dubbed high-conflict dilemmas). This suggests that anxiety exerts a general inhibitory effect on harmful acts toward other humans regardless of whether the motivation for those harmful acts is selfish or utilitarian. Lorazepam is also a sedative drug, but we found that lorazepam slowed decision times equally in all 3 dilemma types. This finding implies that its specific capacity to increase ruthlessness in moral-personal dilemmas was not a confound caused by sedation.

Sherman, G. D., J. J. Lee, et al. (2012). **"Leadership is associated with lower levels of stress."** *Proceedings of the National Academy of Sciences of the United States of America (Forthcoming)* 109(44): 17903-17907.  
<http://www.pnas.org/content/109/44/17903.abstract?sid=5c02da07-9613-4817-a186-3aaf72299754>

As leaders ascend to more powerful positions in their groups, they face ever-increasing demands. As a result, there is a common perception that leaders have higher stress levels than nonleaders. However, if leaders also experience a heightened sense of control - a psychological factor known to have powerful stress-buffering effects - leadership should be associated with reduced stress levels. Using unique samples of real leaders, including military officers and government officials, we found that, compared with nonleaders, leaders had lower levels of the stress hormone cortisol and lower reports of anxiety (study 1). In study 2, leaders holding more powerful positions exhibited lower cortisol levels and less anxiety than leaders holding less powerful positions, a relationship explained significantly by their greater sense of control. Altogether, these findings reveal a clear relationship between leadership and stress, with leadership level being inversely related to stress. (Full text freely downloadable from Amy Cuddy's Harvard Business School webpage - <http://www.hbs.edu/faculty/Pages/profile.aspx?facId=491042&facInfo=pub> ).

Steiner, M. (2012). **"Prenatal exposure to antidepressants: How safe are they?"** *Am J Psychiatry* 169(11): 1130-1132.  
<http://ajp.psychiatryonline.org/article.aspx?articleid=1389512>

(Free full text available): The question of whether maternal antidepressant treatment during pregnancy is better or worse for the offspring than untreated maternal depression is still mostly unanswered. The majority of studies addressing this issue have focused on the risks of neonatal malformation and on immediate postpartum neonatal discontinuation syndrome (also known as neonatal withdrawal or adaptation syndrome). Several guidelines have been published over the past 5 years, by the American Psychiatric Association and the American College of Obstetricians and Gynecologists, Great Britain's National Institute for Health and Clinical Excellence, the Scottish Intercollegiate Guidelines Network, and the Black Dog Institute of Australia. They all end with a cautionary statement that the decision to use medication during pregnancy must take into account any possible risk associated with using antidepressants at this time. Monitoring of a specific malformation and/or postpartum neonatal discontinuation syndrome among antidepressant-exposed pregnancies is based on retrospective case-control surveillance, which has obvious limitations. Based on recent data from the Metropolitan Atlanta Congenital Defects Program, the risk of major structural or genetic birth defects in the United States is approximately 3% of all births (5). To date, there is no report suggesting that the use of antidepressants during pregnancy increases that risk above the general population risk of 2%-3%, nor is there evidence to indicate that they might cause organ-specific defects. The only exception is the reports suggesting that paroxetine use early in pregnancy is associated with an increased risk of atrium septum defects. More recently, several larger cohort databases have presented a more optimistic view when comparing the ill effects of untreated maternal depression to the outcomes for neonates born to mothers exposed to antidepressants during pregnancy. Works by Spinelli and by Diav-Citrin and Ornoy are also informative. My colleagues and I recently completed a large systematic review and meta-analysis of pregnancy and delivery outcomes after exposure to antidepressants. We focused on gestational age, birth weight, and APGAR scores among infants exposed to antidepressants in utero. Although the results showed statistically significant associations for all three outcomes, the effects found were small in magnitude (gestational age approximately 3 days shorter, birth weight 75 g lower, and difference in APGAR scores at 1 and 5 minutes less than half a point), and the values in the exposed group typically fell within the normal range. There are a handful of studies that examined the impact of antidepressant exposure during pregnancy on developmental milestones in the offspring. These include both testing for cognitive and behavioral functioning in preschoolers and long-term follow-up into adolescence and adulthood. None suggests any significant negative impact; see data from the Danish National Birth Cohort and the Norwegian Mother and Child Cohort Study . There is, however, ample evidence that anxiety, depression, and in particular, stress during pregnancy, especially early in gestation, can have adverse effects on fetal maturation, cognitive performance during infancy, and learning and memory in 6- to 8-year-old children. In this issue, Nulman and colleagues present data on the effects of prenatal exposure to venlafaxine, selective serotonin reuptake inhibitors (SSRIs), and maternal depression on long-term child neurodevelopment. The results failed to show an effect of antidepressant medication on children's intellectual or behavioral outcomes. Instead, the results showed that untreated depression is associated with a higher risk for postpartum depression and that prenatal and childhood exposure to maternal depression is associated with behavioral problems in the offspring and may increase the risk for long-term psychopathology. The same group, from the Motherisk Program at the Hospital for Sick Children in Toronto, under the directorship of Gideon Koren, was the first to publish, 10 years ago, results along the same lines. In a prospective, controlled study, Nulman and colleagues found that exposure to tricyclic antidepressants or fluoxetine throughout gestation was not associated with poor cognition, nor did it affect language development or temperament of preschool and early-school children, whereas maternal depression was associated with less cognitive and language achievement in the offspring. Regardless of this encouraging perspective, health care providers should keep in mind that in order to prescribe antidepressants during pregnancy, the indication must be compelling. Not only is it crucial to establish an axis I diagnosis, it is also important to assess the degree of distress and the burden of illness that the pregnant woman is experiencing. It is also paramount to have a frank discussion with the patient (and whenever possible, with her partner in attendance) on the pros and cons of using antidepressants during pregnancy based on the most recent available evidence and to obtain her or their consent.

Teicher, M., A. Polcari, et al. (2012). **"Hyperactivity persists in male and female adults with ADHD and remains a highly discriminative feature of the disorder: A case-control study."** *BMC Psychiatry* 12(1): 190.  
<http://www.biomedcentral.com/1471-244X/12/190>

(Free full text available) BACKGROUND: Symptoms of hyperactivity are believed to fade with age leaving ADHD adults mostly inattentive and impulsive. Our aim was to test this assertion using objective measures of hyperactivity, impulsivity and inattention. METHOD: Participants were 40 subjects with ADHD (23M/17F; 35+/-10 yrs) and 60 healthy adults (28M/32F; 29+/-9 yrs) blindly assessed using Wender-Reimherr interview ratings, Structured Clinical Interview for DSM-IV Disorders and DSM-IV criteria. Infrared motion capture systems tracked head and leg movements during performance of a No-4's cognitive control task. Subjects also completed the Conners' CPT-II. RESULTS: ADHD and controls differed significantly in activity and attention. Effect sizes for activity measures ( $d' = 0.7--1.6$ ) were, on average, two-fold larger than differences in attention or impulsivity, correlated more strongly with executive function ratings and were more discriminatory (ROC area = 0.83 for activity composite,

0.65 for No-4's distraction composite, 0.63 for Conners' CPT-II confidence index, 0.96 for the combined activity and attention diagnostic index). This finding was true for subjects with the predominantly inattentive subtype as well as subjects with combined or predominantly hyperactive/impulsive subtype. Males and females with ADHD were equally active. The superior accuracy of activity measures was confirmed using Random Forest and predictive modeling techniques. CONCLUSIONS: Objectively measured hyperactivity persists in adults with ADHD and is a more discriminative feature of the disorder than computerized measures of inattention or impulsivity. This finding supports the hypothesis that a deficient ability to sit still remains a defining feature of the disorder in adults when it is measured objectively.

Telch, M. J., D. Rosenfield, et al. (2012). **"Emotional reactivity to a single inhalation of 35% carbon dioxide and its association with later symptoms of posttraumatic stress disorder and anxiety in soldiers deployed to Iraq."** *Archives of General Psychiatry* 69(11): 1161-1168. <http://dx.doi.org/10.1001/archgenpsychiatry.2012.8>

**Context** The identification of modifiable predeployment vulnerability factors that increase the risk of combat stress reactions among soldiers once deployed to a war zone offers significant potential for the prevention of posttraumatic stress disorder (PTSD) and other combat-related stress disorders. Adults with anxiety disorders display heightened emotional reactivity to a single inhalation of 35% carbon dioxide (CO<sub>2</sub>); however, data investigating prospective linkages between emotional reactivity to CO<sub>2</sub> and susceptibility to war-zone stress reactions are lacking. **Objective** To investigate the association of soldiers' predeployment emotional reactivity to 35% CO<sub>2</sub> challenge with several indices of subsequent war-zone stress symptoms assessed monthly while deployed in Iraq. **Design, Setting, and Participants** Prospective cohort study of 158 soldiers with no history of deployment to a war zone were recruited from the Texas Combat Stress Risk Study between April 2, 2007, and August 28, 2009. **Main Outcome Measures** Multilevel regression models were used to investigate the association between emotional reactivity to 35% CO<sub>2</sub> challenge (assessed before deployment) and soldiers' reported symptoms of general anxiety/stress, PTSD, and depression while deployed to Iraq. **Results** Growth curves of PTSD, depression, and general anxiety/stress symptoms showed a significant curvilinear relationship during the 16-month deployment period. War-zone stressors reported in theater were associated with symptoms of general anxiety/stress, PTSD, and depression. Consistent with the prediction, soldiers' emotional reactivity to a single inhalation of 35% CO<sub>2</sub>-enriched air before deployment significantly potentiated the effects of war-zone stressors on the subsequent development of PTSD symptoms and general anxiety/stress symptoms but not on the development of depression, even after accounting for the effects of trait anxiety and the presence of past or current Axis I mental disorders. **Conclusion** Soldiers' emotional reactivity to a 35% CO<sub>2</sub> challenge may serve as a vulnerability factor for increasing soldiers' risk for PTSD and general anxiety/stress symptoms in response to war-zone stressors.

Wiles, N., L. Thomas, et al. (2012). **"Cognitive behavioural therapy as an adjunct to pharmacotherapy for primary care based patients with treatment resistant depression: Results of the CoBaIT randomised controlled trial."** *Lancet*. <http://www.ncbi.nlm.nih.gov/pubmed/23219570>

**BACKGROUND:** Only a third of patients with depression respond fully to antidepressant medication but little evidence exists regarding the best next-step treatment for those whose symptoms are treatment resistant. The CoBaIT trial aimed to examine the effectiveness of cognitive behavioural therapy (CBT) as an adjunct to usual care (including pharmacotherapy) for primary care patients with treatment resistant depression compared with usual care alone. **METHODS:** This two parallel-group multicentre randomised controlled trial recruited 469 patients aged 18-75 years with treatment resistant depression (on antidepressants for  $\geq 6$  weeks, Beck depression inventory [BDI] score  $\geq 14$  and international classification of diseases [ICD]-10 criteria for depression) from 73 UK general practices. Participants were randomised, with a computer generated code (stratified by centre and minimised according to baseline BDI score, whether the general practice had a counsellor, previous treatment with antidepressants, and duration of present episode of depression) to one of two groups: usual care or CBT in addition to usual care, and were followed up for 12 months. Because of the nature of the intervention it was not possible to mask participants, general practitioners, CBT therapists, or researchers to the treatment allocation. Analyses were by intention to treat. The primary outcome was response, defined as at least 50% reduction in depressive symptoms (BDI score) at 6 months compared with baseline. This trial is registered, ISRCTN38231611. **FINDINGS:** Between Nov 4, 2008, and Sept 30, 2010, we assigned 235 patients to usual care, and 234 to CBT plus usual care. 422 participants (90%) were followed up at 6 months and 396 (84%) at 12 months, finishing on Oct 31, 2011. 95 participants (46%) in the intervention group met criteria for response at 6 months compared with 46 (22%) in the usual care group (odds ratio 3.26, 95% CI 2.10-5.06,  $p < 0.001$ ). **INTERPRETATION:** Before this study, no evidence from large-scale randomised controlled trials was available for the effectiveness of augmentation of antidepressant medication with CBT as a next-step for patients whose depression has not responded to pharmacotherapy. Our study has provided robust evidence that CBT as an adjunct to usual care that includes antidepressants is an effective treatment, reducing depressive symptoms in this population.

Winsper, C., M. Zanarini, et al. (2012). **"Prospective study of family adversity and maladaptive parenting in childhood and borderline personality disorder symptoms in a non-clinical population at 11 years."** *Psychological Medicine* 42(11): 2405-2420. <http://dx.doi.org/10.1017/S0033291712000542>

**Background** Retrospective studies have consistently indicated an association between maladaptive parenting and borderline personality disorder (BPD). This requires corroboration with prospective, longitudinal designs. We investigated the association between suboptimal parenting and parent conflict in childhood and BPD symptoms in late childhood using a prospective sample. **Method** A community sample of 6050 mothers and their children (born between April 1991 and December 1992) were assessed. Mothers' family adversity was assessed during pregnancy and parenting behaviours such as hitting, shouting, hostility and parent conflict across childhood. Intelligence quotient (IQ) and DSM-IV Axis I diagnoses were assessed at 7-8 years. Trained psychologists interviewed children at 11 years (mean age 11.74 years) to ascertain BPD symptoms. **Results** After adjustment for confounders, family adversity in pregnancy predicted BPD probable 1 to 2 adversities: odds ratio (OR)=1.34 [95% confidence interval (CI) 1.01-1.77];  $> 2$  adversities: OR 1.99 (95% CI 1.34-2.94) and definite 1 to 2 adversities: OR 2.48 (95% CI 1.01-6.08) symptoms. Each point increase in the suboptimal parenting index predicted BPD probable: OR 1.13 (95% CI 1.05-1.23) and definite: OR 1.28 (95% CI 1.03-1.60) symptoms. Parent conflict predicted BPD probable: OR 1.19 (95% CI 1.06-1.34) and definite: OR 1.42 (95% CI 1.06-1.91) symptoms. Within the path analysis, the association between suboptimal parenting and BPD outcome was partially mediated by DSM-IV diagnoses and IQ at 7-8 years. **Conclusions** Children from adverse family backgrounds, who experience suboptimal parenting and more conflict between parents, have poor cognitive abilities and a DSM-IV diagnosis, are at increased risk of BPD symptoms at 11 years.