

50 bhma abstracts, september '13

Fifty abstracts covering a multitude of stress, health & wellbeing related subjects including a whole cluster on mindfulness, a comparison of CBT with psychodynamic therapy, a couple of studies on benefits from therapeutic writing, factors in client & therapist that increase dropout rates, several studies on the effects of dietary supplements, reduced suicide rates in coffee drinkers, possible adverse effects of wearing red in work environments, the importance of health professionals' positive voice tone, social network changes across the lifespan, how leaf-stroking can benefit plants, and much more.

(Inbar, Pizarro et al. 2012; Amminger, Chanen et al. 2013; Batink, Peeters et al. 2013; Beall and Tracy 2013; Benikhlef, L'Haridon et al. 2013; Bennik, Ormel et al. 2013; Bergomi, Tschacher et al. 2013; Campbell, Overall et al. 2013; Carlson, Doll et al. 2013; Cavanagh, Strauss et al. 2013; Chocano-Bedoya, O'Reilly et al. 2013; Coan, Kasle et al. 2013; Crane and Kuyken 2013; Cruz, Roter et al. 2013; de Vibe, Solhaug et al. 2013; Desrosiers, Klemanski et al. 2013; Driessen, Van et al. 2013; Feldman, Bamberger et al. 2013; Gebauer, Nehrllich et al. 2013; GMC 2013; Hawkes 2013; Kearney, Malte et al. 2013; Kidd and Castano 2013; Kling, Nofhle et al. 2013; Kmietowicz 2013; Krieger, Altenstein et al. 2013; Krpan, Kross et al. 2013; Lucas, O'Reilly et al. 2013; MacPherson, Richmond et al. 2013; Maier, Elliot et al. 2013; Meston, Lorenz et al. 2013; Mikulincer, Shaver et al. 2013; Miller, Murray et al. 2013; Mossaheb, Schafer et al. 2013; Muraki, Imamura et al. 2013; Pantell, Rehkopf et al. 2013; Prasad, Vandross et al. 2013; Przybylski and Weinstein 2013; Quoidbach and Dunn 2013; Ramagopalan, Goldacre et al. 2013; Richards, Hill et al. 2013; Roos and Werbart 2013; Sachs and Drugs 2013; Sareen, Henriksen et al. 2013; Steck, Egger et al. 2013; Thase 2013; Vohs, Redden et al. 2013; Wang, Liu et al. 2013; Wiltink, Michal et al. 2013; Wrzus, Hanel et al. 2013)

Amminger, G. P., A. M. Chanen, et al. (2013). **"Omega-3 fatty acid supplementation in adolescents with borderline personality disorder and ultra-high risk criteria for psychosis: A post hoc subgroup analysis of a double-blind, randomized controlled trial."** *Can J Psychiatry* 58(7): 402-408. <http://www.ncbi.nlm.nih.gov/pubmed/23870722>

OBJECTIVE: To investigate whether long-chain omega-3 (n-3) polyunsaturated fatty acids (PUFAs) improve functioning and psychiatric symptoms in young people with borderline personality disorder (BPD) who also meet ultra-high risk criteria for psychosis. METHODS: We conducted a post hoc subgroup analysis of a double-blind, randomized controlled trial. Fifteen adolescents with BPD (mean age 16.2 years, [SD 2.1]) were randomized to either 1.2 g/day n-3 PUFAs or placebo. The intervention period was 12 weeks. Study measures included the Positive and Negative Syndrome Scale, the Montgomery-Asberg Depression Rating Scale, and the Global Assessment of Functioning. Side effects were documented with the Udvalg for Kliniske Undersogelser. Fatty acids in erythrocytes were analyzed using capillary gas chromatography. RESULTS: At baseline, erythrocyte n-3 PUFA levels correlated positively with psychosocial functioning and negatively with psychopathology. By the end of the intervention, n-3 PUFAs significantly improved functioning and reduced psychiatric symptoms, compared with placebo. Side effects did not differ between the treatment groups. CONCLUSIONS: Long-chain n-3 PUFAs should be further explored as a viable treatment strategy with minimal associated risk in young people with BPD.

Batink, T., F. Peeters, et al. (2013). **"How does MBCT for depression work? Studying cognitive and affective mediation pathways."** *PLoS ONE* 8(8): e72778. <http://dx.doi.org/10.1371/journal.pone.0072778>

(Free full text available) Mindfulness based cognitive therapy (MBCT) is a non-pharmacological intervention to reduce current symptoms and to prevent recurrence of major depressive disorder. At present, it is not well understood which underlying mechanisms during MBCT are associated with its efficacy. The current study (n = 130) was designed to examine the roles of mindfulness skills, rumination, worry and affect, and the interplay between those factors, in the mechanisms of change in MBCT for residual depressive symptoms. An exploratory but systematic approach was chosen using Sobel-Goodman mediation analyses to identify mediators on the pathway from MBCT to reduction in depressive symptoms. We replicated earlier findings that therapeutic effects of MBCT are mediated by changes in mindfulness skills and worry. Second, results showed that changes in momentary positive and negative affect significantly mediated the efficacy of MBCT, and also mediated the effect of worry on depressive symptoms. Third, within the group of patients with a prior history of ≤ 2 episodes of MDD, predominantly changes in cognitive and to a lesser extent affective processes mediated the effect of MBCT. However, within the group of patients with a prior history of ≥ 3 episodes of MDD, only changes in affect were significant mediators for the effect of MBCT.

Beall, A. T. and J. L. Tracy (2013). **"Women are more likely to wear red or pink at peak fertility."** *Psychological Science* 24(9): 1837-1841. <http://pss.sagepub.com/content/24/9/1837.abstract>

Although females of many species closely related to humans signal their fertile window in an observable manner, often involving red or pink coloration, no such display has been found for humans. Building on evidence that men are sexually attracted to women wearing or surrounded by red, we tested whether women show a behavioral tendency toward wearing reddish clothing when at peak fertility. Across two samples (N = 124), women at high conception risk were more than 3 times more likely to wear a red or pink shirt than were women at low conception risk, and 77% of women who wore red or pink were found to be at high, rather than low, risk. Conception risk had no effect on the prevalence of any other shirt color. Our results thus suggest that red and pink adornment in women is reliably associated with fertility and that female ovulation, long assumed to be hidden, is associated with a salient visual cue.

Benikhlef, L., F. L'Haridon, et al. (2013). **"Perception of soft mechanical stress in Arabidopsis leaves activates disease resistance."** *BMC Plant Biology* 13(1): 133. <http://www.biomedcentral.com/1471-2229/13/133>

So maybe tree-hugging & leaf-stroking are good for plants!!! (Free full text available) BACKGROUND: In a previous study we have shown that wounding of Arabidopsis thaliana leaves induces a strong and transient immunity to Botrytis cinerea, the causal agent of grey mould. Reactive oxygen species (ROS) are formed within minutes after wounding and are required for wound-induced resistance to B. cinerea. RESULTS: In this study, we have further explored ROS and resistance to B. cinerea in leaves of A. thaliana exposed to a soft form of mechanical stimulation without overt tissue damage. After gentle mechanical sweeping of leaf surfaces, a strong resistance to B. cinerea was observed. This was preceded by a rapid change in calcium concentration and a release of ROS, accompanied by changes in cuticle permeability, induction of the expression of genes typically associated with mechanical stress and release of biologically active diffusates from the surface. This reaction to soft mechanical stress (SMS) was fully independent of jasmonate (JA signaling). In addition, leaves exposed soft mechanical stress released a biologically active product capable of inducing resistance to B. cinerea in wild type control leaves. CONCLUSION: Arabidopsis can detect and convert gentle forms of mechanical stimulation into a strong activation of defense against the virulent fungus B. cinerea ... Plants are exposed to various forms of mechanical stress caused by rain, snow, wind, animals, pathogens or plants themselves. Such mechanical stimuli induce responses in the plant that were shown in many cases to have an adaptive value. A classical example is the response of trees to wind that results in shorter and thicker trunks. Reaction or compression wood is an anatomical consequence of sensing mechanical stress with subsequent lignification of cell walls. Plants

also respond to a more delicate mechanical stress referred to as touch that leads to nastic or tropic responses (thigmonasty or thigmotropism). Classical examples include the folding of *Mimosa pudica*'s leaflets, the leaf closure of the Venus fly trap or the coiling of tendrils. Such stimuli lead to visible responses such as a reorientation of organs or changes in shape allowing catching an insect or improved anchorage. The response of plants to mechanical stimuli can also be more discrete without any apparent overt changes. For example, mechanical stress associated with damage or wounds can lead to increased resistance to insects or fungal pathogens ... In this study, we have further explored the responses of *A. thaliana* such as ROS and resistance to *B. cinerea* in leaves that are subjected to more gentle form of mechanical stimulation.

Bennik, E., J. Ormel, et al. (2013). **"Life changes and depressive symptoms: The effects of valence and amount of change."** *BMC Psychology* 1(1): 14. <http://www.biomedcentral.com/2050-7283/1/14>

(Free full text available) BACKGROUND: Only few studies have focused on the effects of positive life changes on depression, and the ones that did demonstrated inconsistent findings. The aim of the present study was to obtain a better understanding of the influence of positive life changes on depressive symptoms by decomposing life changes into a valence and an amount of change component. METHODS: Using hierarchical multiple regression, we examined the unique effects of valence (pleasantness/unpleasantness) and amount of change on depressive symptoms in 2230 adolescents (Mage: 16.28years) from the TRAILS study. RESULTS: Adjusted for age, gender and pre-event depressive symptoms, the amount of life change was positively associated with depressive symptoms. A small excess of positive life changes predicted fewer symptoms, but experiencing a large excess of positive life changes did not have any additional beneficial effects, rather the opposite. Valence was more strongly associated with cognitive-affective than with neurovegetative-somatic symptoms. CONCLUSIONS: More positive life changes relative to negative life changes can protect against depressive symptoms, yet only when the amount of change is limited. This study encourages examination of the effects of life changes on specific symptom clusters instead of total numbers of depressive symptoms, which is the current standard.

Bergomi, C., W. Tschacher, et al. (2013). **"The assessment of mindfulness with self-report measures: Existing scales and open issues."** *Mindfulness (N.Y)* 4(3): 191-202. <http://dx.doi.org/10.1007/s12671-012-0110-9>

During recent years, mindfulness-based approaches have been gaining relevance in clinical populations. Correspondingly, the empirical study of mindfulness has steadily grown; thus, the availability of valid measures of the construct is critically important. This paper gives an overview of the current status in the field of self-report assessment of mindfulness. All eight currently available and validated mindfulness scales (for adults) are evaluated, with a particular focus on their virtues and limitations and on differences among them. It will be argued that none of these scales may be a fully adequate measure of mindfulness, as each of them offers unique advantages but also disadvantages. In particular, none of them seems to provide a comprehensive assessment of all aspects of mindfulness in samples from the general population. Moreover, some scales may be particularly indicated in investigations focusing on specific populations such as clinical samples (Cognitive and Affective Mindfulness Scale, Southampton Mindfulness Questionnaire) or meditators (Freiburg Mindfulness Inventory). Three main open issues are discussed: (1) the coverage of aspects of mindfulness in questionnaires; (2) the nature of the relationships between these aspects; and (3) the validity of self-report measures of mindfulness. These issues should be considered in future developments in the self-report assessment of mindfulness.

Campbell, L., N. C. Overall, et al. (2013). **"Inferring a partner's ideal discrepancies: Accuracy, projection, and the communicative role of interpersonal behavior."** *J Pers Soc Psychol* 105(2): 217-233. <http://www.ncbi.nlm.nih.gov/pubmed/23713702>

Guided by the ideal standards model (Simpson, Fletcher, & Campbell, 2001), we tested in 2 studies whether (a) individuals were accurate when inferring how closely they matched their romantic partner's ideal standards, (b) such accurate inferences explained why people are more satisfied when they more closely match their partner's ideals, and (c) accurate inferences are generated via the partner's behavior during conflict interactions. Both members of dating and/or married couples were recruited for each study. In both studies, people's inferences into how closely they matched their partner's ideals were based on a blend of accuracy and projection processes. Individuals were also less satisfied when they failed to match their partner's ideal standards (as rated by their partner), and, as predicted, this effect was mediated by people's accurate inferences regarding how closely they matched their partner's ideals. In Study 2, spouses were also video-recorded while they attempted to resolve an important marital conflict. As predicted, Partner A's prediscussion ideal discrepancies predicted pre- to postdiscussion changes in Partner B's inferences, and this effect was partly mediated by the observed interpersonal behaviors of Partner A. Results from these dyadic data analyses suggest that people do have accurate insight into the extent to which they match their partner's ideal standards, and these inferences are generated, in part, by the way the partner behaves toward the self during diagnostic conflict interactions.

Carlson, L. E., R. Doll, et al. (2013). **"Randomized controlled trial of mindfulness-based cancer recovery versus supportive expressive group therapy for distressed survivors of breast cancer."** *J Clin Oncol* 31(25): 3119-3126. <http://www.ncbi.nlm.nih.gov/pubmed/23918953>

PURPOSE: To compare the efficacy of the following two empirically supported group interventions to help distressed survivors of breast cancer cope: mindfulness-based cancer recovery (MBCR) and supportive-expressive group therapy (SET). PATIENTS AND METHODS: This multisite, randomized controlled trial assigned 271 distressed survivors of stage I to III breast cancer to MBCR, SET, or a 1-day stress management control condition. MBCR focused on training in mindfulness meditation and gentle yoga, whereas SET focused on emotional expression and group support. Both intervention groups included 18 hours of professional contact. Measures were collected at baseline and after intervention by assessors blind to study condition. Primary outcome measures were mood and diurnal salivary cortisol slopes. Secondary outcomes were stress symptoms, quality of life, and social support. RESULTS: Using linear mixed-effects models, in intent-to-treat analyses, cortisol slopes were maintained over time in both SET ($P = .002$) and MBCR ($P = .011$) groups relative to the control group, whose cortisol slopes became flatter. Women in MBCR improved more over time on stress symptoms compared with women in both the SET ($P = .009$) and control ($P = .024$) groups. Per-protocol analyses showed greater improvements in the MBCR group in quality of life compared with the control group ($P = .005$) and in social support compared with the SET group ($P = .012$). CONCLUSION: In the largest trial to date, MBCR was superior for improving a range of psychological outcomes for distressed survivors of breast cancer. Both SET and MBCR also resulted in more normative diurnal cortisol profiles than the control condition. The clinical implications of this finding require further investigation.

Cavanagh, K., C. Strauss, et al. (2013). **"A randomised controlled trial of a brief online mindfulness-based intervention."** *Behaviour Research and Therapy* 51(9): 573-578. <http://www.sciencedirect.com/science/article/pii/S0005796713001149>

Abstract Objectives There is growing evidence that mindfulness has positive consequences for both psychological and physical health in both clinical and non-clinical populations. The potential benefits of mindfulness underpin a range of therapeutic

intervention approaches designed to increase mindfulness in both clinical and community contexts. Self-guided mindfulness-based interventions may be a way to increase access to the benefits of mindfulness. This study explored whether a brief, online, mindfulness-based intervention can increase mindfulness and reduce perceived stress and anxiety/depression symptoms within a student population. Method One hundred and four students were randomly allocated to either immediately start a two-week, self-guided, online, mindfulness-based intervention or a wait-list control. Measures of mindfulness, perceived stress and anxiety/depression were administered before and after the intervention period. Results Intention to treat analysis identified significant group by time interactions for mindfulness skills, perceived stress and anxiety/depression symptoms. Participation in the intervention was associated with significant improvements in all measured domains, where no significant changes on these measures were found for the control group. Conclusions This provides evidence in support of the feasibility and effectiveness of shorter self-guided mindfulness-based interventions. The limitations and implications of this study for clinical practice are discussed.

Chocano-Bedoya, P. O., E. J. O'Reilly, et al. (2013). **"Prospective study on long-term dietary patterns and incident depression in middle-aged and older women."** *Am J Clin Nutr* 98(3): 813-820. <http://ajcn.nutrition.org/content/98/3/813.abstract>

Background: Although individual nutrients have been investigated in relation to depression risk, little is known about the overall role of diet in depression. Objective: We examined whether long-term dietary patterns derived from a food-frequency questionnaire (FFQ) predict the development of depression in middle-aged and older women. Design: We conducted a prospective study in 50,605 participants (age range: 50–77 y) without depression in the Nurses' Health Study at baseline (1996) who were followed until 2008. Long-term diet was assessed by using FFQs every 4 y since 1986. Prudent (high in vegetables) and Western (high in meats) patterns were identified by using a principal component analysis. We used 2 definitions for clinical depression as follows: a strict definition that required both a reported clinical diagnosis and use of antidepressants (3002 incident cases) and a broad definition that further included women who reported either a clinical diagnosis or antidepressant use (7413 incident cases). Results: After adjustment for age, body mass index, and other potential confounders, no significant association was shown between the diet patterns and depression risk under the strict definition. Under the broad definition, women with the highest scores for the Western pattern had 15% higher risk of depression (95% CI: 1.04, 1.27; P-trend = 0.01) than did women with the lowest scores, but after additional adjustment for psychological scores at baseline, results were no longer significant (RR: 1.09; 95% CI: 0.99, 1.21; P-trend = 0.08). Conclusion: Overall, results of this large prospective study do not support a clear association between dietary patterns from factor analysis and depression risk.

Coan, J. A., S. Kastle, et al. (2013). **"Mutuality and the social regulation of neural threat responding."** *Attachment & Human Development* 15(3): 303-315. <http://dx.doi.org/10.1080/14616734.2013.782656>

Recent studies have shown that the presence of a caring relational partner can attenuate neural responses to threat. Here we report reanalyzed data from Coan, Schaefer, and Davidson (2006), investigating the role of relational mutuality in the neural response to threat. Mutuality reflects the degree to which couple members show mutual interest in the sharing of internal feelings, thoughts, aspirations, and joys - a vital form of responsiveness in attachment relationships. We predicted that wives who were high (versus low) in perceived mutuality, and who attended the study session with their husbands, would show reduced neural threat reactivity in response to mild electric shocks. We also explored whether this effect would depend on physical contact (hand-holding). As predicted, we observed that higher mutuality scores corresponded with decreased neural threat responding in the right dorsolateral prefrontal cortex and supplementary motor cortex. These effects were independent of hand-holding condition. These findings suggest that higher perceived mutuality corresponds with decreased self-regulatory effort and attenuated preparatory motor activity in response to threat cues, even in the absence of direct physical contact with social resources.

Crane, R. and W. Kuyken (2013). **"The implementation of mindfulness-based cognitive therapy: Learning from the UK health service experience."** *Mindfulness (N Y)* 4(3): 246-254. <http://dx.doi.org/10.1007/s12671-012-0121-6>

(Free full text available) Mindfulness-based cognitive therapy (MBCT) is an effective depression prevention programme for people with a history of recurrent depression. In the UK, the National Institute for Clinical Excellence (NICE) has suggested that MBCT is a priority for implementation. This paper explores the exchange, synthesis and application of evidence and guidance on MBCT between the academic settings generating the evidence and delivering practitioner training and the practice settings where implementation takes place. Fifty-seven participants in a workshop on MBCT implementation in the NHS were asked for their experience of facilitators and obstacles to implementation, and a UK-wide online survey of 103 MBCT teachers and stakeholders was conducted. While MBCT is starting to become available in the NHS, this is rarely part of a strategic, coherent or appropriately resourced approach. A series of structural, political cultural, educational, emotional and physical/technological obstacles and facilitators to implementation were identified. Nearly a decade since NICE first recommended MBCT, only a small number of mental health services in the UK have systematically implemented the guidance. Guiding principles for implementation are set out. We offer an implementation resource to facilitate the transfer of MBCT knowledge into action.

Cruz, M., D. L. Roter, et al. (2013). **"Appointment length, psychiatrists' communication behaviors, and medication management appointment adherence."** *Psychiatr Serv* 64(9): 886-892. <http://www.ncbi.nlm.nih.gov/pubmed/23771555>

OBJECTIVE: The authors explored the relationship between critical elements of medication management appointments (appointment length, patient-centered talk, and positive nonverbal affect among providers) and patient appointment adherence. METHODS: The authors used an exploratory, cross-sectional design employing quantitative analysis of 83 unique audio recordings of split treatment medication management appointments for 46 African-American and 37 white patients with 24 psychiatrists at four ambulatory mental health clinics. All patients had a diagnosis of depression. Data collected included demographic information; Patient Health Questionnaire-9 scores for depression severity; psychiatrist verbal and nonverbal communication behaviors during medication management appointments, identified by the Roter Interaction Analysis System during analysis of audio recordings; and appointment adherence. Bivariate analyses were employed to identify covariates that might influence appointment adherence. Generalized estimating equations (GEEs) were employed to assess the relationship between appointment length, psychiatrist patient-centered talk, and positive voice tone ratings and patient appointment adherence, while adjusting for covariates and the clustering of observations within psychiatrists. Wald chi square analyses were used to test whether all or some variables significantly influenced appointment adherence. RESULTS: GEE revealed a significant relationship between positive voice tone ratings and appointment adherence ($p=.03$). Chi square analyses confirmed the hypothesis of a positive and significant relationship between appointment adherence and positive voice tone ratings ($p=.03$) but not longer visit length and more patient-centered communication. CONCLUSIONS: The nonverbal conveyance of positive affect was associated with greater adherence to medication management appointments by depressed patients. These findings potentially have important implications for communication skills training and adherence research.

de Vibe, M., I. Solhaug, et al. (2013). **"Mindfulness training for stress management: A randomised controlled study of medical and psychology students."** *BMC Med Educ* 13(1): 107. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3751423/>

(Free full text available) BACKGROUND: Distress and burnout among medical and psychology professionals are commonly reported and have implications for the quality of patient care delivered. Already in the course of university studies, medicine and psychology students report mental distress and low life satisfaction. There is a need for interventions that promote better coping skills in students in order to prevent distress and future burnout. This study examines the effect of a seven-week Mindfulness-Based Stress Reduction (MBSR) programme on mental distress, study stress, burnout, subjective well-being, and mindfulness of medical and psychology students. METHOD: A total of 288 students (mean age = 23 years, 76% female) from the University of Oslo and the University of Tromsø were randomly allocated to an intervention or control group. The control group continued with their standard university courses and received no intervention. Participants were evaluated using self-reported measures both before and after the intervention. These were: the 'General Health Questionnaire, Maslach Burnout Inventory Student version, Perceived Medical School Stress, Subjective Well-being, and Five Facet Mindfulness Questionnaire' and additional indices of compliance. RESULTS: Following the intervention, a moderate effect on mental distress (Hedges'g 0.65, CI = .41, .88), and a small effect on both subjective well-being (Hedges'g 0.40, CI = .27, .63) and the mindfulness facet 'non-reacting' (Hedges'g 0.33, CI = .10, .56) were found in the intervention group compared with the control group. A higher level of programme attendance and reported mindfulness exercises predicted these changes. Significant effects were only found for female students who additionally reported reduced study stress and an increase in the mindfulness facet 'non-judging'. Gender specific effects of participation in the MBSR programme have not previously been reported, and gender differences in the present study are discussed. CONCLUSION: Female medical and psychology students experienced significant positive improvements in mental distress, study stress, subjective well-being and mindfulness after participating in the MBSR programme.

Desrosiers, A., D. H. Klemanski, et al. (2013). **"Mapping mindfulness facets onto dimensions of anxiety and depression."** *Behavior Therapy* 44(3): 373-384. <http://www.sciencedirect.com/science/article/pii/S0005789413000087>

Mindfulness has been associated with anxiety and depression, but the ways in which specific facets of mindfulness relate to symptoms of anxiety and depression remains unclear. The purpose of the current study was to investigate associations between specific facets of mindfulness (e.g., observing, describing, nonjudging, acting with awareness, and nonreactivity) and dimensions of anxiety and depression symptoms (e.g., anxious arousal, general distress-anxiety, general distress-depression, and anhedonic depression) while controlling for shared variance among variables. Participants were 187 treatment-seeking adults. Mindfulness was measured using the Five Facet Mindfulness Questionnaire and symptoms of depression and anxiety were measured using the Mood and Anxiety Symptom Questionnaire. Bivariate correlations showed that all facets of mindfulness were significantly related to all dimensions of anxiety and depression, with two exceptions: describing was unrelated to general distress-anxiety, and observing was unrelated to all symptom clusters. Path analysis was used to simultaneously examine associations between mindfulness facets and depression and anxiety symptoms. Significant and marginally significant pathways were retained to construct a more parsimonious model and model fit indices were examined. The parsimonious model indicated that nonreactivity was significantly inversely associated with general distress anxiety symptoms. Describing was significantly inversely associated with anxious arousal, while observing was significantly positively associated with it. Nonjudging and nonreactivity were significantly inversely related to general distress-depression and anhedonic depression symptomatology. Acting with awareness was not significantly associated with any dimensions of anxiety or depression. Findings support associations between specific facets of mindfulness and dimensions of anxiety and depression and highlight the potential utility of targeting these specific aspects of mindfulness in interventions for anxiety and mood disorders.

Drissen, E., H. L. Van, et al. (2013). **"The efficacy of cognitive-behavioral therapy and psychodynamic therapy in the outpatient treatment of major depression: A randomized clinical trial."** *Am J Psychiatry* 170(9): 1041-1050. <http://www.ncbi.nlm.nih.gov/pubmed/24030613>

OBJECTIVE: The efficacy of psychodynamic therapies for depression remains open to debate because of a paucity of high-quality studies. The authors compared the efficacy of psychodynamic therapy with that of cognitive-behavioral therapy (CBT), hypothesizing nonsignificant differences and the noninferiority of psychodynamic therapy relative to CBT. METHOD: A total of 341 adults who met DSM-IV criteria for a major depressive episode and had Hamilton Depression Rating Scale (HAM-D) scores ≥ 14 were randomly assigned to 16 sessions of individual manualized CBT or short-term psychodynamic supportive therapy. Severely depressed patients (HAM-D score > 24) also received antidepressant medication according to protocol. The primary outcome measure was posttreatment remission rate (HAM-D score ≤ 7). Secondary outcome measures included mean posttreatment HAM-D score and patient-rated depression score and 1-year follow-up outcomes. Data were analyzed with generalized estimating equations and mixed-model analyses using intent-to-treat samples. Noninferiority margins were prespecified as an odds ratio of 0.49 for remission rates and a Cohen's d value of 0.30 for continuous outcome measures. RESULTS: No statistically significant treatment differences were found for any of the outcome measures. The average posttreatment remission rate was 22.7%. Noninferiority was shown for posttreatment HAM-D and patient-rated depression scores but could not be demonstrated for posttreatment remission rates or any of the follow-up measures. CONCLUSIONS: The findings extend the evidence base of psychodynamic therapy for depression but also indicate that time-limited treatment is insufficient for a substantial number of patients encountered in psychiatric outpatient clinics.

Feldman, R., E. Bamberger, et al. (2013). **"Parent-specific reciprocity from infancy to adolescence shapes children's social competence and dialogical skills."** *Attachment & Human Development* 15(4): 407-423. <http://dx.doi.org/10.1080/14616734.2013.782650>

Reciprocity - the capacity to engage in social exchange that integrates inputs from multiple partners into a unified social event - is a cornerstone of adaptive social life that is learned within dyad-specific attachments during an early period of neuroplasticity. Yet, very little research traced the expression of children's reciprocity with their mother and father in relation to long-term outcomes. Guided by evolutionary models, we followed mothers, fathers, and their firstborn child longitudinally and observed mother-child and father-child reciprocity in infancy, preschool, and adolescence. In preschool, children's social competence, aggression, and prosocial behavior were observed at kindergarten. In adolescence, children's dialogical skills were assessed during positive and conflict interactions with same-sex best friends. Father-child and mother-child reciprocity were individually stable, inter-related at each stage, and consisted of distinct behavioral components. Structural equation modeling indicated that early maternal and paternal reciprocity were each uniquely predictive of social competence and lower aggression in preschool, which, in turn, shaped dialogical skills in adolescence. Father-adolescent reciprocity contributed to the dialogical negotiation of conflict, whereas mother-adolescent reciprocity predicted adolescents' dialogical skills during positive exchanges. Results highlight the role of parent-child reciprocity in shaping children's social collaboration and intimate relationships with non-kin members of their social world.

Gebauer, J. E., A. D. Nehrlich, et al. (2013). **"The psychological benefits of income are contingent on individual-level and culture-level religiosity."** *Social psychological and personality science* 4(5): 569-578. <http://spp.sagepub.com/content/4/5/569.abstract>

Higher income is related to better psychological adjustment. We propose that religiosity attenuates this relation. First, in comforting the poor, religious teachings de-emphasize the importance of money, which would buffer low-income's psychological harms (religiosity as poverty buffer account). Second, religious teachings convey antiwealth norms, which would reduce income's psychological benefits (religiosity as antiwealth norms account). A study involving 187,957 respondents from 11 religiously diverse cultures showed that individual-level, as well as culture-level, religiosity weakens the relation between personal income and psychological adjustment in accordance with the religiosity as antiwealth norms account. Performance self-esteem mediated this relation. Religiosity's moderating effects were so pervasive that religious individuals in religious cultures reported better psychological adjustment when their income was low than high.

GMC (2013) **Supporting medical students with mental health conditions.** <http://www.bmj.com/content/347/bmj.f4842>

(Available in free full text) Our guidance Supporting medical students with mental health conditions (pdf) was developed in partnership with the Medical Schools Council and overseen by an operational group. It includes suggesting preventative measures that may help to reduce mental health problems in their students, the use of occupational health and how to handle students with mental health conditions in relation to fitness to practise. It also contains a series of "myth busters" aimed at medical students. Students have a number of misconceptions as to what will happen when they seek support. The "myth busters" are intended to address these common misconceptions and will form the basis of a programme of engagement with medical students about mental health. Throughout the guidance there are examples of good practice submitted by UK medical schools. Research: The guidance Supporting medical students with mental health conditions is based on research we commissioned and carried out by a joint team from Cardiff Medical School, Exeter Medical School and Prepare to Share Ltd. The final report from the research team, Identifying good practice among medical schools in the support of students with mental health concerns, is available to read on our research pages.

Hawkes, N. (2013). **"2012 was a good year for happiness in the UK, finds survey."** *BMJ* 347: f4842.

<http://www.bmj.com/content/347/bmj.f4842>

People in the United Kingdom reported rising levels of happiness in 2012, rating their satisfaction with life significantly higher than in previous years and the things they did more worthwhile, while levels of anxiety fell. The results are the first year by year comparison possible under the programme launched by the Office for National Statistics (ONS) in 2010 to measure people's wellbeing. The programme has now gathered two years' worth of data from questions answered by 65 000 people each year as part of the national household survey.^{1 2 3} They show that 2012 was a good year for happiness, possibly boosted by the Queen's diamond jubilee, with its extra bank holidays, and the success of the Olympic and Paralympic Games in London. From 2011 to 2012 the proportion of people rating their life satisfaction as 7 or more on a scale from 1 to 10 rose from 75.9% to 77%. The proportion who rated life satisfaction below 4 on the same scale fell from 6.6% to 5.8%. The proportion who gave a rating of 7 or more on whether the things they did were worthwhile rose from 80% to 80.7%, while the proportion who rated their happiness "yesterday" as high also rose. In a league table of 27 European countries that all measure average life satisfaction in one way or another, the UK has moved up two positions since 2007, from 10th to eighth. (These measures predate the ONS programme and are published in the European quality of life survey.) While most European countries have seen a decline in average life satisfaction over the period, that in the UK was the same in 2011 as it was in 2007: 7.3 on a 10 point scale. The top nation in this league is Denmark, scoring 8.4; bottom is Bulgaria, at 5. The average is 7.

Inbar, Y., D. Pizarro, et al. (2012). **"Disgust sensitivity, political conservatism, and voting."** *Social psychological and personality science* 3(5): 537-544. <http://spp.sagepub.com/content/3/5/537.abstract>

In two large samples (combined N = 31,045), we found a positive relationship between disgust sensitivity and political conservatism. This relationship held when controlling for a number of demographic variables as well as the "Big Five" personality traits. Disgust sensitivity was also associated with more conservative voting in the 2008 U.S. presidential election. In Study 2, we replicated the disgust sensitivity-conservatism relationship in an international sample of respondents from 121 different countries. Across both samples, contamination disgust, which reflects a heightened concern with interpersonally transmitted disease and pathogens, was most strongly associated with conservatism.

Kearney, D. J., C. A. Malte, et al. (2013). **"Loving-kindness meditation for posttraumatic stress disorder: A pilot study."** *Journal of Traumatic Stress* 26(4): 426-434. <http://dx.doi.org/10.1002/jts.21832>

Loving-kindness meditation is a practice designed to enhance feelings of kindness and compassion for self and others. Loving-kindness meditation involves repetition of phrases of positive intention for self and others. We undertook an open pilot trial of loving-kindness meditation for veterans with posttraumatic stress disorder (PTSD). Measures of PTSD, depression, self-compassion, and mindfulness were obtained at baseline, after a 12-week loving-kindness meditation course, and 3 months later. Effect sizes were calculated from baseline to each follow-up point, and self-compassion was assessed as a mediator. Attendance was high; 74% attended 9-12 classes. Self-compassion increased with large effect sizes and mindfulness increased with medium to large effect sizes. A large effect size was found for PTSD symptoms at 3-month follow-up ($d = -0.89$), and a medium effect size was found for depression at 3-month follow-up ($d = -0.49$). There was evidence of mediation of reductions in PTSD symptoms and depression by enhanced self-compassion. Overall, loving-kindness meditation appeared safe and acceptable and was associated with reduced symptoms of PTSD and depression. Additional study of loving-kindness meditation for PTSD is warranted to determine whether the changes seen are due to the loving-kindness meditation intervention versus other influences, including concurrent receipt of other treatments.

Kidd, D. C. and E. Castano (2013). **"Reading literary fiction improves theory of mind."** *Science*.

<http://www.sciencemag.org/content/early/2013/10/02/science.1239918.abstract>

Understanding others' mental states is a crucial skill that enables the complex social relationships that characterize human societies. Yet little research has investigated what fosters this skill, which is known as Theory of Mind (ToM), in adults. We present five experiments showing that reading literary fiction led to better performance on tests of affective ToM (experiments 1 to 5) and cognitive ToM (experiments 4 and 5) compared with reading nonfiction (experiments 1), popular fiction (experiments 2 to 5), or nothing at all (experiments 2 and 5). Specifically, these results show that reading literary fiction temporarily enhances ToM. More broadly, they suggest that ToM may be influenced by engagement with works of art. [See related NYT article at <http://well.blogs.nytimes.com/2013/10/03/i-know-how-youre-feeling-i-read-chekhov/?smid=tw-nytimeshealth&seid=auto&r=0>].

Kling, K. C., E. E. Nofle, et al. (2013). **"Why do standardized tests underpredict women's academic performance? The role of conscientiousness."** *Social psychological and personality science* 4(5): 600-606.
<http://spp.sagepub.com/content/4/5/600.abstract>

(Free full text available) Women typically earn higher grades than men, even though they tend to score lower than men on the SAT, a pattern known as the female underprediction effect (FUE). In three samples, we tested our hypothesis that gender differences in Conscientiousness can explain this effect. Within each sample, we created a regression-based measure of under (vs. over) prediction, which reflects the extent to which an individual student's actual grade point average (GPA) exceeded (or fell below) the GPA predicted by his or her SAT score. Significant gender differences in this measure documented the presence of the FUE. Next, we demonstrated that Conscientiousness significantly mediated the link between gender and underprediction. Specifically, women were higher in Conscientiousness, and students who were more conscientious earned grades that were higher than their SAT scores would predict. Thus, our expectation that Conscientiousness is a partial explanation for the FUE was confirmed.

Kmietowicz, Z. (2013). **"Evidence that exercise helps in depression is still weak, finds review."** *BMJ* 347: f5585.
<http://www.bmj.com/content/347/bmj.f5585>

An analysis of trials that looked at the effectiveness of exercise in treating depression found it to be of moderate benefit, but when the analysis was narrowed to only good quality trials it found no additional benefit in exercise. The review, from the Cochrane Library, concluded that more large trials are needed to find out whether exercise is as effective as antidepressants or psychological treatments and to pinpoint how much and what type of exercise helps people with depression. The last Cochrane review on exercise for depression, published in 2012, found only limited evidence that exercise was helpful, but the publication of several new studies meant an update was needed. The latest review analysed the results of 39 trials involving 2326 people with a diagnosis of depression. The researchers used Hedges's g method to calculate effect sizes for each trial and a random effects model risk ratio for dichotomous data to calculate a standardised mean difference (SMD) for the overall pooled effect. The researchers' review of 35 trials that compared exercise with control treatment or no treatment in 1356 people found moderate benefit in using exercise to treat depression (SMD -0.62 (95% confidence interval -0.81 to -0.42)). And pooled data from eight trials involving 377 people found that exercise had a small effect on mood in the long term (SMD -0.33 (-0.63 to -0.03)). However, a separate analysis focusing on just high quality trials (six trials, 464 participants) in which the treatment allocated to the participants was adequately concealed found that the effect of exercise was not significant (SMD -0.18 (-0.47 to 0.11)). Exercise was found to be as effective as psychological therapy (seven trials, 189 people) and antidepressants (four trials, 300 people), although these few trials were small and of low quality. One very small trial (18 participants) found that exercise was more effective than bright light therapy (mean difference -6.4 (-10.20 to -2.6)). Gillian Mead, from the Centre for Clinical Brain Sciences at the University of Edinburgh and one of the review authors, said, "Our review suggested that exercise might have a moderate effect on depression. We can't tell from currently available evidence which kinds of exercise regimes are most effective or whether the benefits continue after a patient stops their exercise programme. "When we looked only at those trials that we considered to be high quality, the effect of exercise on depression was small and not statistically significant. The evidence base would be strengthened by further large scale, high quality studies."

Krieger, T., D. Altenstein, et al. (2013). **"Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients."** *Behavior Therapy* 44(3): 501-513.
<http://www.sciencedirect.com/science/article/pii/S0005789413000397>

Self-compassion involves being kind to oneself when challenged with personal weaknesses or hardship and has been claimed to be associated with resilience in various areas. So far, there are only a handful of studies that investigate self-compassion and its relation to clinical depression. Therefore, the principal goals of the present study were (a) to compare self-compassion in clinically depressed patients and never-depressed subjects, (b) to investigate self-compassion and its relation to cognitive-behavioral avoidance and rumination in depressed outpatients, and (c) to investigate rumination and avoidance as mediators of the relationship between self-compassion and depressive symptoms. One hundred and forty-two depressed outpatients and 120 never-depressed individuals from a community sample completed a self-report measure of self-compassion along with other measures. Results indicate that depressed patients showed lower levels of self-compassion than never-depressed individuals, even when controlled for depressive symptoms. In depressed outpatients, self-compassion was negatively related to depressive symptoms, symptom-focused rumination, as well as cognitive and behavioral avoidance. Additionally, symptom-focused rumination and cognitive and behavioral avoidance mediated the relationship between self-compassion and depressive symptoms. These findings extend previous research on self-compassion, its relation to depression, as well as processes mediating this relationship, and highlight the importance of self-compassion in clinically depressed patients. Since depressed patients seem to have difficulties adopting a self-compassionate attitude, psychotherapists are well advised to explore and address how depressed patients treat themselves.

Krpan, K. M., E. Kross, et al. (2013). **"An everyday activity as a treatment for depression: The benefits of expressive writing for people diagnosed with major depressive disorder."** *J Affect Disord* 150(3): 1148-1151.
<http://www.ncbi.nlm.nih.gov/pubmed/23790815>

BACKGROUND: The benefits of expressive writing have been well documented among several populations, but particularly among those who report feelings of dysphoria. It is not known, however, if those diagnosed with Major Depressive Disorder (MDD) would also benefit from expressive writing. METHODS: Forty people diagnosed with current MDD by the Structured Clinical Interview for DSM-IV participated in the study. On day 1 of testing, participants completed a series of questionnaires and cognitive tasks. Participants were then randomly assigned to either an expressive writing condition in which they wrote for 20 min over three consecutive days about their deepest thoughts and feelings surrounding an emotional event (n=20), or to a control condition (n=20) in which they wrote about non-emotional daily events each day. On day 5 of testing, participants completed another series of questionnaires and cognitive measures. These measures were repeated again 4 weeks later. RESULTS: People diagnosed with MDD in the expressive writing condition showed significant decreases in depression scores (Beck Depression Inventory and Patient Health Questionnaire-9 scores) immediately after the experimental manipulation (Day 5). These benefits persisted at the 4-week follow-up. LIMITATIONS: Self-selected sample. CONCLUSIONS: This is the first study to demonstrate the efficacy of expressive writing among people formally diagnosed with current MDD. These data suggest that expressive writing may be a useful supplement to existing interventions for depression.

Lucas, M., E. J. O'Reilly, et al. (2013). **"Coffee, caffeine, and risk of completed suicide: Results from three prospective cohorts of american adults."** *World J Biol Psychiatry*. <http://www.ncbi.nlm.nih.gov/pubmed/23819683>

Objective. To evaluate the association between coffee and caffeine consumption and suicide risk in three large-scale cohorts of US men and women. Methods. We accessed data of 43,599 men enrolled in the Health Professionals Follow-up Study (HPFS, 1988-2008), 73,820 women in the Nurses' Health Study (NHS, 1992-2008), and 91,005 women in the NHS II (1993-2007). Consumption of caffeine, coffee, and decaffeinated coffee, was assessed every 4 years by validated food-frequency

questionnaires. Deaths from suicide were determined by physician review of death certificates. Multivariate adjusted relative risks (RRs) were estimated with Cox proportional hazard models. Cohort specific RRs were pooled using random-effect models. Results. We documented 277 deaths from suicide. Compared to those consuming ≤ 1 cup/week of caffeinated coffee (< 8 oz/237 ml), the pooled multivariate RR (95% confidence interval [CI]) of suicide was 0.55 (0.38-0.78) for those consuming 2-3 cups/day and 0.47 (0.27-0.81) for those consuming ≥ 4 cups/day (P trend < 0.001). The pooled multivariate RR (95% CI) for suicide was 0.75 (0.63-0.90) for each increment of 2 cups/day of caffeinated coffee and 0.77 (0.63-0.93) for each increment of 300 mg/day of caffeine. Conclusions. These results from three large cohorts support an association between caffeine consumption and lower risk of suicide.

MacPherson, H., S. Richmond, et al. (2013). **"Acupuncture and counselling for depression in primary care: A randomised controlled trial."** *PLoS Med* 10(9): e1001518. <http://dx.doi.org/10.1371/journal.pmed.1001518>

(Free full text downloadable) Background: Depression is a significant cause of morbidity. Many patients have communicated an interest in non-pharmacological therapies to their general practitioners. Systematic reviews of acupuncture and counselling for depression in primary care have identified limited evidence. The aim of this study was to evaluate acupuncture versus usual care and counselling versus usual care for patients who continue to experience depression in primary care. Methods and Findings: In a randomised controlled trial, 755 patients with depression (Beck Depression Inventory BDI-II score ≥ 20) were recruited from 27 primary care practices in the North of England. Patients were randomised to one of three arms using a ratio of 2:2:1 to acupuncture (302), counselling (302), and usual care alone (151). The primary outcome was the difference in mean Patient Health Questionnaire (PHQ-9) scores at 3 months with secondary analyses over 12 months follow-up. Analysis was by intention-to-treat. PHQ-9 data were available for 614 patients at 3 months and 572 patients at 12 months. Patients attended a mean of ten sessions for acupuncture and nine sessions for counselling. Compared to usual care, there was a statistically significant reduction in mean PHQ-9 depression scores at 3 months for acupuncture (-2.46 , 95% CI -3.72 to -1.21) and counselling (-1.73 , 95% CI -3.00 to -0.45), and over 12 months for acupuncture (-1.55 , 95% CI -2.41 to -0.70) and counselling (-1.50 , 95% CI -2.43 to -0.58). Differences between acupuncture and counselling were not significant. In terms of limitations, the trial was not designed to separate out specific from non-specific effects. No serious treatment-related adverse events were reported. Conclusions: In this randomised controlled trial of acupuncture and counselling for patients presenting with depression, after having consulted their general practitioner in primary care, both interventions were associated with significantly reduced depression at 3 months when compared to usual care alone.

Maier, M., A. Elliot, et al. (2013). **"The influence of red on impression formation in a job application context."** *Motivation and Emotion* 37(3): 389-401. <http://dx.doi.org/10.1007/s11031-012-9326-1>

Recent research has shown that the color red can influence psychological functioning. In the present research we tested the hypothesis that red influences impression formation related to another person's abilities. We conducted three experiments examining the influence of red on the evaluation of male target persons. In Experiment 1, participants viewing red, relative to green, on the shirt of a person presented on a photograph perceived him to be less intelligent. This effect was strongest in a job application context compared to other contexts. In Experiment 2, focusing solely on the job application context, participants viewing red, relative to blue, on an applicants' tie perceived him to have less earning and leadership potential. In Experiment 3, participants viewing red, relative to green, on a job applicants' tie rated him as less likely to be hired, and perceptions of ability and leadership potential mediated this effect. Both the conceptual and applied implications of these findings are discussed.

Meston, C. M., T. A. Lorenz, et al. (2013). **"Effects of expressive writing on sexual dysfunction, depression, and ptsd in women with a history of childhood sexual abuse: Results from a randomized clinical trial."** *The Journal of Sexual Medicine* 10(9): 2177-2189. <http://dx.doi.org/10.1111/jsm.12247>

Introduction Women with a history of childhood sexual abuse (CSA) have high rates of depression, posttraumatic stress disorder, and sexual problems in adulthood. Aim We tested an expressive writing-based intervention for its effects on psychopathology, sexual function, satisfaction, and distress in women who have a history of CSA. Methods Seventy women with CSA histories completed five 30-minute sessions of expressive writing, either with a trauma focus or a sexual schema focus. Main Outcome Measures Validated self-report measures of psychopathology and sexual function were conducted at posttreatment: 2 weeks, 1 month, and 6 months. Results Women in both writing interventions exhibited improved symptoms of depression and posttraumatic stress disorder (PTSD). Women who were instructed to write about the impact of the abuse on their sexual schema were significantly more likely to recover from sexual dysfunction. Conclusions Expressive writing may improve depressive and PTSD symptoms in women with CSA histories. Sexual schema-focused expressive writing in particular appears to improve sexual problems, especially for depressed women with CSA histories. Both treatments are accessible, cost-effective, and acceptable to patients. [Available in free full text from <http://homepage.psy.utexas.edu/HomePage/Group/MestonLAB/HTML%20files/pubs.htm> & see instructions at http://homepage.psy.utexas.edu/HomePage/Group/MestonLAB/HTML%20files/CSA_Prompts.htm].

Mikulincer, M., P. R. Shaver, et al. (2013). **"Can security-enhancing interventions overcome psychological barriers to responsiveness in couple relationships?"** *Attachment & Human Development* 15(3): 246-260. <http://dx.doi.org/10.1080/14616734.2013.782653>

Recent studies have shown that both dispositional and experimentally enhanced attachment security facilitate compassion and altruism. Here we report findings from a laboratory experiment, replicated in two countries (Israel and the United States), testing the hypotheses that (a) increased security (accomplished through subliminal priming) fosters caregiving behavior toward a romantic partner who discloses a personal problem, and (b) this increased security overcomes barriers to responsiveness induced by mental depletion. We gathered data on participants' attachment insecurities, randomly assigned them to one of four mental depletion (yes, no) and priming (security, neutral) conditions, and coded their behavior in an interaction with their romantic partner who was disclosing a personal problem. Dispositional attachment insecurities and manipulated mental depletion adversely affected caregiving, but security priming overrode the detrimental effects of both mental depletion and attachment insecurity in both Israel and the United States.

Miller, B. J., L. Murray, et al. (2013). **"Dietary supplements for preventing postnatal depression."** *Cochrane Database Syst Rev* 10: CD009104. <http://www.ncbi.nlm.nih.gov/pubmed/24158923>

BACKGROUND: Postnatal depression is a medical condition that affects many women and the development of their infants. There is a lack of evidence for treatment and prevention strategies that are safe for mothers and infants. Certain dietary deficiencies in a pregnant or postnatal woman's diet may cause postnatal depression. By correcting these deficiencies postnatal depression could be prevented in some women. Specific examples of dietary supplements aimed at preventing postnatal depression include: omega-3 fatty acids, iron, folate, s-adenosyl-L-methionine, cobalamin, pyridoxine, riboflavin, vitamin D and calcium. OBJECTIVES: To assess the benefits of dietary supplements for preventing postnatal depression either in the antenatal period, postnatal period, or both. SEARCH METHODS: We searched the Cochrane Pregnancy and Childbirth Group's Trials

Register (30 April 2013). **SELECTION CRITERIA:** Randomised controlled trials, involving women who were pregnant or who had given birth in the previous six weeks, who were not depressed or taking antidepressants at the commencement of the trials. The trials could use as intervention any dietary supplementation alone or in combination with another treatment compared with any other preventive treatment, or placebo, or standard clinical care. **DATA COLLECTION AND ANALYSIS:** Two review authors independently assessed trials for inclusion and assessed the risk of bias for the two included studies. Two review authors extracted data and the data were checked for accuracy. **MAIN RESULTS:** We included two randomised controlled trials. One trial compared oral 100 microgram (microg) selenium yeast tablets with placebo, taken from the first trimester until birth. The trial randomised 179 women but outcome data were only provided for 85 women. Eighty-three women were randomised to each arm of the trial. Sixty-one women completed the selenium arm, 44 of whom completed an Edinburgh Postnatal Depression Scale (EPDS). In the placebo arm, 64 women completed the trial, 41 of whom completed an EPDS. This included study (n = 85) found selenium had an effect on EPDS scores but did not reach statistical significance (P = 0.07). There was a mean difference (MD) of -1.90 (95% confidence interval (CI) -3.92 to 0.12) of the self-reported EPDS completed by participants within eight weeks of delivery. There was a high risk of attrition bias due to a large proportion of women withdrawing from the study or not completing an EPDS. This included study did not report on any of the secondary outcomes of this review. The other trial compared docosahexanoic acid (DHA) and eicosapentaenoic acid (EPA) with placebo. The trial randomised 126 women at risk of postpartum depression to three arms: 42 were allocated to EPA, 42 to DHA, and 42 to placebo. Three women in the EPA arm, four in the DHA arm, and one woman in the placebo arm were lost to follow-up. Women who were found to have major depressive disorder, bipolar disorder, current substance abuse or dependence, suicidal ideation or schizophrenia at recruitment were excluded from the study. The women who discontinued the intervention (five in the EPA arm, four in the DHA arm and seven in the placebo arm) were included in the intention-to-treat analysis, while those who were lost to follow-up were not. Women received supplements or placebo from recruitment at a gestational age of 12 to 20 weeks until their final review visit six to eight weeks postpartum. The primary outcome measure was the Beck Depression Inventory (BDI) score at the fifth visit (six to eight weeks postpartum). No benefit was found for EPA-rich fish oil (MD 0.70, 95% CI -1.78 to 3.18) or DHA-rich fish oil supplementation (MD 0.90, 95% CI -1.33 to 3.13) in preventing postpartum depression. No difference was found in the effect on postnatal depression comparing EPA with DHA (MD -0.20, 95% CI -2.61 to 2.21). No benefit or significant effect was found in terms of the secondary outcomes of the presence of major depressive disorder at six to eight weeks postpartum, the number of women who commenced antidepressants, maternal estimated blood loss at delivery or admission of neonates to the neonatal intensive care unit. **AUTHORS' CONCLUSIONS:** There is insufficient evidence to conclude that selenium, DHA or EPA prevent postnatal depression. There is currently no evidence to recommend any other dietary supplement for prevention of postnatal depression.

Mossaheb, N., M. R. Schafer, et al. (2013). **"Effect of omega-3 fatty acids for indicated prevention of young patients at risk for psychosis: When do they begin to be effective?"** *Schizophr Res* 148(1-3): 163-167. <http://www.ncbi.nlm.nih.gov/pubmed/23778032>

The results of a recent double-blind, randomized, placebo-controlled trial performed in 81 young patients at ultra-high risk for psychosis indicated that a 12-week intervention of 1.2g/day of omega-3 polyunsaturated fatty acids (PUFA) significantly reduced the risk of transition to psychosis and improved positive, negative and general symptoms as well as functioning. The aim of this post-hoc analysis was to determine at which time point omega-3 PUFAs start to significantly differ from placebo in improving psychopathology and functioning in young people at risk of developing psychosis. Analyses were performed using the mixed model repeated-measures analysis of variance. Compared to placebo, omega-3 PUFAs' significant effects on the amplitude of the reduction in General and Total PANSS scores are evident after the first four weeks of treatment; a reduction of positive symptoms and a lower mean PANSS positive score were apparent after eight weeks, whereas the significant drop in negative symptoms and the significant change and higher mean scores in global functioning occur later at 12 weeks. The delay of onset of omega-3 PUFAs seems comparable to that of antipsychotics and antidepressants.

Muraki, I., F. Imamura, et al. (2013). **"Fruit consumption and risk of type 2 diabetes: Results from three prospective longitudinal cohort studies."** *BMJ* 347: f5001. <http://www.bmj.com/content/347/bmj.f5001>

OBJECTIVE: To determine whether individual fruits are differentially associated with risk of type 2 diabetes. **DESIGN:** Prospective longitudinal cohort study. **SETTING:** Health professionals in the United States. **PARTICIPANTS:** 66,105 women from the Nurses' Health Study (1984-2008), 85,104 women from the Nurses' Health Study II (1991-2009), and 36,173 men from the Health Professionals Follow-up Study (1986-2008) who were free of major chronic diseases at baseline in these studies. **MAIN OUTCOME MEASURE:** Incident cases of type 2 diabetes, identified through self report and confirmed by supplementary questionnaires. **RESULTS:** During 3,464,641 person years of follow-up, 12,198 participants developed type 2 diabetes. After adjustment for personal, lifestyle, and dietary risk factors of diabetes, the pooled hazard ratio of type 2 diabetes for every three servings/week of total whole fruit consumption was 0.98 (95% confidence interval 0.96 to 0.99). With mutual adjustment of individual fruits, the pooled hazard ratios of type 2 diabetes for every three servings/week were 0.74 (0.66 to 0.83) for blueberries, 0.88 (0.83 to 0.93) for grapes and raisins, 0.89 (0.79 to 1.01) for prunes, 0.93 (0.90 to 0.96) for apples and pears, 0.95 (0.91 to 0.98) for bananas, 0.95 (0.91 to 0.99) for grapefruit, 0.97 (0.92 to 1.02) for peaches, plums, and apricots, 0.99 (0.95 to 1.03) for oranges, 1.03 (0.96 to 1.10) for strawberries, and 1.10 (1.02 to 1.18) for cantaloupe. The pooled hazard ratio for the same increment in fruit juice consumption was 1.08 (1.05 to 1.11). The associations with risk of type 2 diabetes differed significantly among individual fruits (P<0.001 in all cohorts). **CONCLUSION:** Our findings suggest the presence of heterogeneity in the associations between individual fruit consumption and risk of type 2 diabetes. Greater consumption of specific whole fruits, particularly blueberries, grapes, and apples, is significantly associated with a lower risk of type 2 diabetes, whereas greater consumption of fruit juice is associated with a higher risk.

Pantell, M., D. Rehkopf, et al. (2013). **"Social isolation: A predictor of mortality comparable to traditional clinical risk factors."** *American Journal of Public Health*: e1-e7. <http://dx.doi.org/10.2105/AJPH.2013.301261>

Objectives. We explored the relationship between social isolation and mortality in a nationally representative US sample and compared the predictive power of social isolation with that of traditional clinical risk factors. **Methods.** We used data on 16,849 adults from the Third National Health and Nutrition Examination Survey and the National Death Index. Predictor variables were 4 social isolation factors and a composite index. Comparison predictors included smoking, obesity, elevated blood pressure, and high cholesterol. Unadjusted Kaplan-Meier tables and Cox proportional hazards regression models controlling for sociodemographic characteristics were used to predict mortality. **Results.** Socially isolated men and women had worse unadjusted survival curves than less socially isolated individuals. Cox models revealed that social isolation predicted mortality for both genders, as did smoking and high blood pressure. Among men, individual social predictors included being unmarried, participating infrequently in religious activities, and lacking club or organization affiliations; among women, significant predictors were being unmarried, infrequent social contact, and participating infrequently in religious activities. **Conclusions.** The strength of social isolation as a predictor of mortality is similar to that of well-documented clinical risk factors. Our results suggest the importance of assessing patients' level of social isolation. [Commentary in *Medscape reads: Social isolation is a risk factor for*

premature death that rivals more traditional mortality risk factors of smoking and high blood pressure, a study shows. Investigators at the University of California Berkeley–University of San Francisco Joint Medical Program in San Francisco found that social isolation predicted mortality for both sexes, as did smoking and high blood pressure. The "power of isolation as a marker of poor health cannot be ignored," lead investigator Matthew Pantell, MD, and colleagues write. The study was published online September 12 in the *American Journal of Public Health*. *More Social Isolation, Increased Mortality: According to investigators, although clinicians routinely monitor biological risk factors, they rarely assess patients' social isolation or engagement. "Understanding the relative predictive value of social isolation with respect to mortality would contribute to a fuller understanding of potentially modifiable risk factors," the authors write. For the study, the researchers analyzed data on 16,849 adults participating in the Third National Health and Nutrition Examination Survey (NHANES III) and the National Death Index. The researchers used the Social Network Index (SNI) to measure social isolation. Participants received a score of 0 or 1 for each SNI domain (marital status, frequency of contact with other people, participation in religious activities, and participation in other club or organization activities). Scores ranged from 0 to 4, with 0 representing the highest level of social isolation and 4 representing the lowest level. The researchers found that low SNI scores (indicating greater social isolation) were predictive of mortality among men (hazard ratio [HR], 1.62; 95% confidence interval [CI], 1.29 - 2.02) and were associated with a risk for mortality similar to that of smoking (HR, 1.72; 95% CI, 1.48 - 2.00) and higher than that of high blood pressure (HR = 1.16; 95% CI, 1.02 - 1.32). Similarly, social isolation was also an important predictor of mortality among women (HR, 1.75; 95% CI, 1.38 - 2.23), as were smoking (HR, 1.86; 95% CI, 1.64 - 2.12) and high blood pressure (HR, 1.32; 95% CI, 1.17 - 1.48). "Gradients in risk were observed for women and men, with increasing isolation associated with a greater risk of mortality," the researchers write. Modifiable Risk Factor: Given overlapping hazard ratios, social isolation factors are "not necessarily better" predictors than traditional factors, but they are "at least equally important. Sensitivity analyses confirmed the strength of the predictive value of social isolation for both men and women," they note. In models incorporating all of the clinical and individual social variables assessed, unmarried status and infrequent religious activity predicted mortality among both men and women. In addition, lack of group memberships predicted mortality among men, and infrequent social contact predicted mortality among women. "Our results emphasize the value of identifying social isolation as a potentially modifiable risk factor" for premature death, the researchers write. In reality, however, a patient's social history is often "inadequately" explored in healthcare encounters. The researchers believe 4 brief questions included in the modified SNI scale, or a similar set of questions, could help clinicians identify individuals at higher risk for mortality. "In a busy clinical setting, adding these items to standardized screening questions administered electronically or by nonmedical clinic staff and highlighting patients' responses for the physician when a threshold is reached would not add substantially to clinician burden, and it could potentially help in discerning which patients have worse health outcomes and targeting those patients for increased surveillance," the authors conclude.]*

Prasad, V., A. Vandross, et al. (2013). **"A decade of reversal: An analysis of 146 contradicted medical practices."** *Mayo Clinic Proceedings* 88(8): 790-798. <http://www.sciencedirect.com/science/article/pii/S0025619613004059>

Objective To identify medical practices that offer no net benefits. Methods We reviewed all original articles published in 10 years (2001-2010) in one high-impact journal. Articles were classified on the basis of whether they addressed a medical practice, whether they tested a new or existing therapy, and whether results were positive or negative. Articles were then classified as 1 of 4 types: replacement, when a new practice surpasses standard of care; back to the drawing board, when a new practice is no better than current practice; reaffirmation, when an existing practice is found to be better than a lesser standard; and reversal, when an existing practice is found to be no better than a lesser therapy. This study was conducted from August 1, 2011, through October 31, 2012. Results We reviewed 2044 original articles, 1344 of which concerned a medical practice. Of these, 981 articles (73.0%) examined a new medical practice, whereas 363 (27.0%) tested an established practice. A total of 947 studies (70.5%) had positive findings, whereas 397 (29.5%) reached a negative conclusion. A total of 756 articles addressing a medical practice constituted replacement, 165 were back to the drawing board, 146 were medical reversals, 138 were reaffirmations, and 139 were inconclusive. Of the 363 articles testing standard of care, 146 (40.2%) reversed that practice, whereas 138 (38.0%) reaffirmed it. Conclusion The reversal of established medical practice is common and occurs across all classes of medical practice. This investigation sheds light on low-value practices and patterns of medical research. [The BMJ's Minerva - <http://www.bmj.com/content/347/bmj.f4743> - comments: ""Most of what you were taught in medical school was wrong," we're told. Minerva hopes this is no longer quite true, but a paper called "A Decade of Reversal" in Mayo Clinic Proceedings shows that there is still a lot of standard practice in all fields of medicine that doesn't bear the scrutiny of well conducted trials. Vinay Prasad and colleagues carefully sought every trial published over 2001-10 in the New England Journal of Medicine, which contradicted standard practice at the time of publication. They found 146 such instances, and if you read through the many pages where these are described, you are bound to find a few that surprise you. Every doctor needs to remember the challenge of John Maynard Keynes: "When the facts change, I change my mind. What do you do?"]

Przybylski, A. K. and N. Weinstein (2013). **"Can you connect with me now? How the presence of mobile communication technology influences face-to-face conversation quality."** *Journal of Social and Personal Relationships* 30(3): 237-246. <http://spr.sagepub.com/content/30/3/237.abstract>

Recent advancements in communication technology have enabled billions of people to connect over great distances using mobile phones, yet little is known about how the frequent presence of these devices in social settings influences face-to-face interactions. In two experiments, we evaluated the extent to which the mere presence of mobile communication devices shape relationship quality in dyadic settings. In both, we found evidence they can have negative effects on closeness, connection, and conversation quality. These results demonstrate that the presence of mobile phones can interfere with human relationships, an effect that is most clear when individuals are discussing personally meaningful topics. [The BPS Digest - <http://bps-research-digest.blogspot.co.uk/2012/09/how-mere-presence-of-mobile-phone.html> - comments: "You sit down for a chat with a new acquaintance but before you're even started they've placed their phone carefully on the table in front of them. Why? Are they waiting for a call? Do they just enjoy marvelling at its chic plastic beauty? Either way, a new study suggests this familiar habit could be interfering with our attempts to socialise. Andrew Przybylski and Netta Weinstein asked 34 pairs of strangers to spend 10 minutes chatting to each other about "an interesting event that occurred to you over the past month". The participants sat on chairs in a private booth and for half of them, close by but out of their direct line of view, a mobile phone was placed on a table-top. For the other pairs, there was a note-book in place of the phone. After they'd finished chatting, the participants answered questions about the partner they'd met. The ones who'd chatted with a phone visible nearby, as opposed to a notebook, were less positive. For example, they were less likely to agree with the statement "It is likely that my partner and I could become friends if we interacted a lot". They also reported feeling less closely related to their conversational partner. A second study with a fresh set of participants was similar, but this time some of the 34 pairs of strangers chatted about a mundane topic, whilst others chatted about "the most meaningful events of the past year." Again, some of them did this with a phone placed nearby, others with a notebook in the same position. For participants with the notebook visible nearby, having a more meaningful conversation (as opposed to a casual one) boosted their feelings of closeness and their trust in their conversational partner. But this extra intimacy was missing for the participants for whom a mobile phone was visible. When the researchers debriefed the participants afterwards they seemed to be unaware of the effects of the mobile phone, suggesting its

adverse effects were at a non-conscious level. Why should the mere presence of a mobile phone interfere with feelings of social intimacy in this way? Przybylski and Weinstein can't be sure, but they think that modern mobile phones might trigger in the mind automatic thoughts about wider social networks, which has the effect of crowding out face-to-face conversations. Considered in this way, the present findings are an extension of the wider literature on what's known as non-conscious priming (for example, the presence of a brief-case makes people more competitive). A weakness of the study is that the researchers didn't compare the effects of the presence of a mobile phone against an old-fashioned land-line phone, or other forms of technology. So it's not clear how specific the effect is to mobile phones. Also, as the authors acknowledge, this is just a preliminary observation that poses all sorts of future questions requiring further research. For example, did the presence of a mobile phone alter the behaviour and conversational style of the participants, or did it merely change their perceptions of the social experience? Would the effects be the same for people who are already in a close relationship? But for now, Przybylski and Weinstein concluded: "These results indicate that mobile communication devices may, by their mere presence, paradoxically hold the potential to facilitate as well as to disrupt human bonding and intimacy."]

Quoidbach, J. and E. W. Dunn (2013). **"Give it up: A strategy for combating hedonic adaptation."** *Social psychological and personality science* 4(5): 563-568. <http://spp.sagepub.com/content/4/5/563.abstract>

(Free full text available) The present research provides the first evidence that temporarily giving up something pleasurable may provide an effective route to happiness. Participants were asked to eat a piece of chocolate during two lab sessions, held 1 week apart. During the intervening week, we randomly assigned them to abstain from chocolate or to eat as much of it as possible, while a control group received no special instructions related to their chocolate consumption. At the second lab session, participants who had temporarily given up chocolate savored it significantly more and experienced more positive moods after eating it, compared to those in either of the other two conditions. Many cultural and religious practices entail temporarily giving up something pleasurable, and our research suggests that such self-denial may carry ironic benefits for well-being by combating hedonic adaptation.

Ramagopalan, S., R. Goldacre, et al. (2013). **"Hospital admissions for vitamin D related conditions and subsequent immune-mediated disease: Record-linkage studies."** *BMC Medicine* 11(1): 171. <http://www.biomedcentral.com/1741-7015/11/171>

(Free full text available) BACKGROUND: Previous studies have suggested that there may be an association between vitamin D deficiency and the risk of developing immune-mediated diseases. METHODS: We analyzed a database of linked statistical records of hospital admissions and death registrations for the whole of England (from 1999 to 2011). Rate ratios for immune-mediated disease were determined, comparing vitamin D deficient cohorts (individuals admitted for vitamin D deficiency or markers of vitamin D deficiency) with comparison cohorts. RESULTS: After hospital admission for either vitamin D deficiency, osteomalacia or rickets, there were significantly elevated rates of Addison's disease, ankylosing spondylitis, autoimmune hemolytic anemia, chronic active hepatitis, celiac disease, Crohn's disease, diabetes mellitus, pemphigoid, pernicious anemia, primary biliary cirrhosis, rheumatoid arthritis, Sjogren's syndrome, systemic lupus erythematosus, thyrotoxicosis, and significantly reduced risks for asthma and myxoedema. CONCLUSIONS: This study shows that patients with vitamin D deficiency may have an increased risk of developing some immune-mediated diseases, although we cannot rule out reverse causality or confounding. Further study of these associations is warranted and these data may aid further public health studies.

Richards, D. A., J. J. Hill, et al. (2013). **"Clinical effectiveness of collaborative care for depression in UK primary care (cadet): Cluster randomised controlled trial."** *BMJ* 347: f4913. <http://www.bmj.com/content/347/bmj.f4913>

(Full text freely available) OBJECTIVE: To compare the clinical effectiveness of collaborative care with usual care in the management of patients with moderate to severe depression. DESIGN: Cluster randomised controlled trial. SETTING: 51 primary care practices in three primary care districts in the United Kingdom. PARTICIPANTS: 581 adults aged 18 years and older who met ICD-10 (international classification of diseases, 10th revision) criteria for a depressive episode on the revised Clinical Interview Schedule. We excluded acutely suicidal patients and those with psychosis, or with type I or type II bipolar disorder; patients whose low mood was associated with bereavement or whose primary presenting problem was alcohol or drug abuse; and patients receiving psychological treatment for their depression by specialist mental health services. We identified potentially eligible participants by searching computerised case records in general practices for patients with depression. INTERVENTIONS: Collaborative care, including depression education, drug management, behavioural activation, relapse prevention, and primary care liaison, was delivered by care managers. Collaborative care involved six to 12 contacts with participants over 14 weeks, supervised by mental health specialists. Usual care was family doctors' standard clinical practice. MAIN OUTCOME MEASURES: Depression symptoms (patient health questionnaire 9; PHQ-9), anxiety (generalised anxiety disorder 7; GAD-7), and quality of life (short form 36 questionnaire; SF-36) at four and 12 months; satisfaction with service quality (client satisfaction questionnaire; CSQ-8) at four months. RESULTS: 276 participants were allocated to collaborative care and 305 allocated to usual care. At four months, mean depression score was 11.1 (standard deviation 7.3) for the collaborative care group and 12.7 (6.8) for the usual care group. After adjustment for baseline depression, mean depression score was 1.33 PHQ-9 points lower (95% confidence interval 0.35 to 2.31, P=0.009) in participants receiving collaborative care than in those receiving usual care at four months, and 1.36 points lower (0.07 to 2.64, P=0.04) at 12 months. Quality of mental health but not physical health was significantly better for collaborative care than for usual care at four months, but not 12 months. Anxiety did not differ between groups. Participants receiving collaborative care were significantly more satisfied with treatment than those receiving usual care. The number needed to treat for one patient to drop below the accepted diagnostic threshold for depression on the PHQ-9 was 8.4 immediately after treatment, and 6.5 at 12 months. CONCLUSIONS: Collaborative care has persistent positive effects up to 12 months after initiation of the intervention and is preferred by patients over usual care.

Roos, J. and A. Werbart (2013). **"Therapist and relationship factors influencing dropout from individual psychotherapy: A literature review."** *Psychotherapy Research* 23(4): 394-418. <http://dx.doi.org/10.1080/10503307.2013.775528>

Among potential predictors of dropout, client variables are most thoroughly examined. This qualitative literature review examines the current state of knowledge about therapist, relationship and process factors influencing dropout. Databases searches identified 44 relevant studies published January 2000-June 2011. Dropout rates varied widely with a weighted rate of 35%. Fewer than half of the studies directly addressed questions of dropout rates in relation to therapist, relationship or process factors. Therapists' experience, training and skills, together with providing concrete support and being emotionally supportive, had an impact on dropout rates. Furthermore, the quality of therapeutic alliance, client dissatisfaction and pre-therapy preparation influenced dropout. To reduce dropout rates, therapists need enhanced skills in building and repairing the therapeutic relationship.

Sachs, H. C. and C. o. Drugs (2013). **"The transfer of drugs and therapeutics into human breast milk: An update on selected topics."** *Pediatrics*. <http://pediatrics.aappublications.org/content/early/2013/08/20/peds.2013-1985.abstract>

(Available in free full text) Many mothers are inappropriately advised to discontinue breastfeeding or avoid taking essential medications because of fears of adverse effects on their infants. This cautious approach may be unnecessary in many cases, because only a small proportion of medications are contraindicated in breastfeeding mothers or associated with adverse effects on their infants. Information to inform physicians about the extent of excretion for a particular drug into human milk is needed but may not be available. Previous statements on this topic from the American Academy of Pediatrics provided physicians with data concerning the known excretion of specific medications into breast milk. More current and comprehensive information is now available on the Internet, as well as an application for mobile devices, at LactMed (<http://toxnet.nlm.nih.gov>). Therefore, with the exception of radioactive compounds requiring temporary cessation of breastfeeding, the reader will be referred to LactMed to obtain the most current data on an individual medication. This report discusses several topics of interest surrounding lactation, such as the use of psychotropic therapies, drugs to treat substance abuse, narcotics, galactagogues, and herbal products, as well as immunization of breastfeeding women. A discussion regarding the global implications of maternal medications and lactation in the developing world is beyond the scope of this report. The World Health Organization offers several programs and resources that address the importance of breastfeeding (see <http://www.who.int/topics/breastfeeding/en/>).

Sareen, J., C. A. Henriksen, et al. (2013). **"Common mental disorder diagnosis and need for treatment are not the same: Findings from a population-based longitudinal survey."** *Psychological Medicine* 43(09): 1941-1951. <http://dx.doi.org/10.1017/S003329171200284X>

Background Controversy exists regarding whether people in the community who meet criteria for a non-psychotic mental disorder diagnosis are necessarily in need of treatment. Some have argued that these individuals require treatment and that policy makers need to develop outreach programs for them, whereas others have argued that the current epidemiologic studies may be diagnosing symptoms of distress that in many cases are self-limiting and likely to remit without treatment. All prior studies that have addressed this issue have been cross-sectional. We examined the longitudinal outcomes of individuals with depressive, anxiety and substance use (DAS) disorder(s) who had not previously received any treatment. Method Data came from a nationally representative US sample. A total of 34 653 non-institutionalized adults (age ≥ 20 years) were interviewed at two time points, 3 years apart. DAS disorders, mental health service use and quality of life (QoL) were assessed at both time points. Results Individuals with a DAS disorder who had not previously received any treatment were significantly more likely than those who had been previously treated to have remission of their index disorder(s) without subsequent treatment, to be free of co-morbid disorder(s) and not to have attempted suicide during the 3-year follow-up period (50.7% v. 33.0% respectively, $p < 0.05$). At wave 2, multiple linear regression demonstrated that people with a remission of their baseline DAS disorder(s) had levels of functioning similar to those without a DAS disorder. Conclusions Individuals with an untreated DAS disorder at baseline have a substantial likelihood of remission without any subsequent intervention.

Steck, N., M. Egger, et al. (2013). **"Euthanasia and assisted suicide in selected european countries and us states: Systematic literature review."** *Med Care* 51(10): 938-944. <http://www.ncbi.nlm.nih.gov/pubmed/23929402>

BACKGROUND: Legal in some European countries and US states, physician-assisted suicide and voluntary active euthanasia remain under debate in these and other countries. OBJECTIVES: The aim of the study was to examine numbers, characteristics, and trends over time for assisted dying in regions where these practices are legal: Belgium, Luxembourg, the Netherlands, Switzerland, Oregon, Washington, and Montana. DESIGN: This was a systematic review of journal articles and official reports. Medline and Embase databases were searched for relevant studies, from inception to end of 2012. We searched the websites of the health authorities of all eligible countries and states for reports on physician-assisted suicide or euthanasia and included publications that reported on cases of physician-assisted suicide or euthanasia. We extracted information on the total number of assisted deaths, its proportion in relation to all deaths, and socio-demographic and clinical characteristics of individuals assisted to die. RESULTS: A total of 1043 publications were identified; 25 articles and reports were retained, including series of reported cases, physician surveys, and reviews of death certificates. The percentage of physician-assisted deaths among all deaths ranged from 0.1%-0.2% in the US states and Luxembourg to 1.8%-2.9% in the Netherlands. Percentages of cases reported to the authorities increased in most countries over time. The typical person who died with assistance was a well-educated male cancer patient, aged 60-85 years. CONCLUSIONS: Despite some common characteristics between countries, we found wide variation in the extent and specific characteristics of those who died an assisted death.

Thase, M. E. (2013). **"Comparative effectiveness of psychodynamic psychotherapy and cognitive-behavioral therapy: It's about time, and what's next?"** *American Journal of Psychiatry* 170(9): 953-956. <http://dx.doi.org/10.1176/appi.ajp.2013.13060839>

(Free full text available) Since depression is one of the world's greatest public health problems, conducting research to accurately weigh the benefits and risks of commonly used interventions should be as much a research priority as developing novel treatments or investigating mechanisms of disease pathophysiology. Psychotherapy is one of the most widely used classes of treatment, but unfortunately there is no commercial entity analogous to the pharmaceutical industry to support research and development of the current and next generations of interventions. The impact of this state of affairs is particularly evident with respect to the ability to conduct larger-scale studies of comparative treatment effectiveness, for which there are only a handful of relevant studies. Thus, although psychodynamic psychotherapy has been used to treat depressed outpatients for decades, the utility of this time-honored approach, as measured by the results of randomized controlled trials of treatment efficacy and effectiveness, has not been extensively studied. The study by Driessen et al. in this issue of the Journal is therefore noteworthy because it provides some of the strongest evidence to date that short-term psychodynamic psychotherapy is an effective treatment for major depressive disorder ... The primary finding of this trial was that psychodynamic psychotherapy was noninferior to CBT; posttreatment score remission rates were 21% (26/122) and 24% (27/111) for the psychodynamic psychotherapy and CBT groups, respectively. No significant differences were seen between treatments on any measure at any time point, and the overall pattern of results generally followed the primary outcome, namely that psychodynamic psychotherapy was not inferior to CBT. ... From another vantage point, whereas Driessen et al. demonstrated that psychodynamic psychotherapy was not inferior to CBT, they also showed that the outcomes of depressed outpatients were far from ideal, even when receiving good treatments from capable therapists. Indeed, the outcomes of both psychotherapy groups are strikingly comparable to those observed in the CBT arms included in the second level of the Sequenced Treatment Alternatives to Relieve Depression study, which likewise was an inclusive, multicenter study aimed at evaluating comparative effectiveness under real-world conditions. Since many clinicians may have already believed that the findings of Driessen et al. were true (i.e., the two therapies are comparably effective), perhaps the more important finding of this study is to underscore the harsh reality that we still need more effective treatments for major depressive disorder, and this need is as true for psychotherapy as it is for pharmacotherapy.

Vohs, K. D., J. P. Redden, et al. (2013). **"Physical order produces healthy choices, generosity, and conventionality, whereas disorder produces creativity."** *Psychological Science* 24(9): 1860-1867. <http://pss.sagepub.com/content/24/9/1860.abstract>

Order and disorder are prevalent in both nature and culture, which suggests that each environ confers advantages for different outcomes. Three experiments tested the novel hypotheses that orderly environments lead people toward tradition and convention, whereas disorderly environments encourage breaking with tradition and convention—and that both settings can alter preferences, choice, and behavior. Experiment 1 showed that relative to participants in a disorderly room, participants in an orderly room chose healthier snacks and donated more money. Experiment 2 showed that participants in a disorderly room were more creative than participants in an orderly room. Experiment 3 showed a predicted crossover effect: Participants in an orderly room preferred an option labeled as classic, but those in a disorderly room preferred an option labeled as new. Whereas prior research on physical settings has shown that orderly settings encourage better behavior than disorderly ones, the current research tells a nuanced story of how different environments suit different outcomes.

Wang, Y., X. J. Liu, et al. (2013). **"Effects of vitamin C and vitamin D administration on mood and distress in acutely hospitalized patients."** *Am J Clin Nutr* 98(3): 705-711. <http://ajcn.nutrition.org/content/98/3/705.abstract>

Background: Hypovitaminosis C and D are highly prevalent in acute-care hospitals. Malnutrition with regard to these vitamins has been linked to mood disturbance and cognitive dysfunction. Objective: The objective was to determine whether vitamin C or D supplementation improves mood state or reduces psychological distress in acutely hospitalized patients with a high prevalence of hypovitaminosis C and D. Design: A randomized, double-blind, active-control clinical trial compared the effects of vitamin C (500 mg twice daily) with those of high-dose vitamin D (5000 IU/d) on mood (Profile of Mood States) and psychological distress (Distress Thermometer). Results: Vitamin C provided for a mean of 8.2 d increased plasma vitamin C concentrations to normal ($P < 0.0001$) and was associated with a 71% reduction in mood disturbance ($P = 0.0002$) and a 51% reduction in psychological distress ($P = 0.0002$). High-dose vitamin D provided for a mean of 8.1 d increased plasma 25-hydroxyvitamin D [25(OH)D] concentrations ($P < 0.0001$), but not into the normal range, and had insignificant effects on mood ($P = 0.067$) and distress ($P = 0.45$). The changes in mood and distress in the vitamin C group were greater than those in the vitamin D group ($P = 0.045$ for mood; $P = 0.009$ for distress). Conclusions: Short-term therapy with vitamin C improves mood and reduces psychological distress in acutely hospitalized patients with a high prevalence of hypovitaminosis C and D. No conclusion is possible regarding the effects of vitamin D because the dose and duration of therapy were insufficient to raise 25(OH)D concentrations into the normal range.

Wiltink, J., M. Michal, et al. (2013). **"Associations between depression and different measures of obesity (bmi, wc, whtr, whr)."** *BMC Psychiatry* 13(1): 223. <http://www.biomedcentral.com/1471-244X/13/223>

(Free full text available) BACKGROUND: Growing evidence suggests that abdominal obesity is a more important risk factor for the prognosis of cardiovascular and metabolic diseases than BMI. Somatic-affective symptoms of depression have also been linked to cardiovascular risk. The relationship between obesity and depression, however, has remained contradictory. Our aim was therefore to relate body mass index (BMI) and different measures for abdominal obesity (waist circumference, WC, waist-to-hip ratio, WHR, waist-to-height ratio, WHtR) to somatic vs. cognitive-affective symptoms of depression. METHODS: In a cross-sectional population based study, data on the first N=5000 participants enrolled in the Gutenberg Health Study (GHS) are reported. To analyze the relationship between depression and obesity, we computed linear regression models with the anthropometric measure (BMI, WC, WHR, WHtR) as the dependent variable and life style factors, cardiovascular risk factors and psychotropic medications as potential confounders of obesity/depression. RESULTS: We found that only the somatic, but not the cognitive-affective symptoms of depression are consistently positively associated with anthropometric measures of obesity. CONCLUSIONS: We could demonstrate that the somatic-affective symptoms of depression rather than the cognitive-affective symptoms are strongly related to anthropometric measures. This is also true for younger obese starting at the age of 35 years. Our results are in line with previous studies indicating that visceral adipose tissue plays a key role in the relationship between obesity, depression and cardiovascular disease.

Wrzus, C., M. Hanel, et al. (2013). **"Social network changes and life events across the life span: A meta-analysis."** *Psychol Bull* 139(1): 53-80. <http://www.ncbi.nlm.nih.gov/pubmed/22642230>

For researchers and practitioners interested in social relationships, the question remains as to how large social networks typically are, and how their size and composition change across adulthood. On the basis of predictions of socioemotional selectivity theory and social convoy theory, we conducted a meta-analysis on age-related social network changes and the effects of life events on social networks using 277 studies with 177,635 participants from adolescence to old age. Cross-sectional as well as longitudinal studies consistently showed that (a) the global social network increased up until young adulthood and then decreased steadily, (b) both the personal network and the friendship network decreased throughout adulthood, (c) the family network was stable in size from adolescence to old age, and (d) other networks with coworkers or neighbors were important only in specific age ranges. Studies focusing on life events that occur at specific ages, such as transition to parenthood, job entry, or widowhood, demonstrated network changes similar to such age-related network changes. Moderator analyses detected that the type of network assessment affected the reported size of global, personal, and family networks. Period effects on network sizes occurred for personal and friendship networks, which have decreased in size over the last 35 years. Together the findings are consistent with the view that a portion of normative, age-related social network changes are due to normative, age-related life events. We discuss how these patterns of normative social network development inform research in social, evolutionary, cultural, and personality psychology.