

48 bhma abstracts, december/january '14

Forty eight abstracts covering a multitude of stress, health & wellbeing related subjects including marital adjustment & life satisfaction, physician mindfulness & healthcare quality, extraordinary research on parental olfactory experience producing changed behaviour in both children & grandchildren, the central value placed by individuals on 'experiencing love', the links between therapists' theoretical orientation and how they behave in both therapeutic & also close personal relationships, the potential value of zinc for depression, and of flaxseed for high blood pressure, and much more.

(Angner, Ghandhi et al. 2013; Auszra, Greenberg et al. 2013; Barker, Kirkham et al. 2013; Be, Whisman et al. 2013; Beach, Roter et al. 2013; Canevello, Granillo et al. 2013; Curtis, Back et al. 2013; Dias and Ressler 2013; Dyer and das Nair 2013; Fortmann, Burda et al. 2013; Gershon, Johnson et al. 2013; Grodstein, O'Brien et al. 2013; Holmen, Langballe et al. 2013; Hortop, Wrosch et al. 2013; Impett, Javam et al. 2013; Johansson, Bjorklund et al. 2013; Kashdan and McKnight 2013; Keng, Robins et al. 2013; Kocovski, Fleming et al. 2013; Lau, White et al. 2013; Lichstein, Nau et al. 2013; Luby, Belden et al. 2013; McCarthy 2013; Milner, Spittal et al. 2013; Montori, Brito et al. 2013; Muise, Impett et al. 2013; Nanri, Mizoue et al. 2013; Neto and Pinto 2013; Oren, Kozirowski et al. 2013; Orlinsky and Heinonen 2013; Paul, Stanton et al. 2013; Pepping, O'Donovan et al. 2013; Persons, Robinson et al. 2013; Plaza, Demarzo et al. 2013; Powers, Kashikar-Zuck et al. 2013; Rodriguez-Leyva, Weighell et al. 2013; Sauer-Zavala, Walsh et al. 2013; Seedall and Wampler 2013; Silberzahn and Uhlmann 2013; Spielmann, MacDonald et al. 2013; Stallard, Spears et al. 2013; Suzuki, Matsumoto et al. 2013; Swardfager, Herrmann et al. 2013; Tadic, Oerlemans et al. 2013; Threapleton, Greenwood et al. 2013; Troy, Shallcross et al. 2013; Yap, Wazlawek et al. 2013; Zgierska, Obasi et al. 2013)

Angner, E., J. Ghandhi, et al. (2013). **"Daily functioning, health status, and happiness in older adults."** *Journal of Happiness Studies* 14(5): 1563-1574. <http://dx.doi.org/10.1007/s10902-012-9395-6>

The hypothesis that the degree to which disease disrupts daily functioning is inversely associated with happiness is widely accepted, yet existing literature offers little direct evidence in its support. This paper explores the hypothesized association in a community-based sample of 383 older adults. To assess the degree to which disease disrupts daily functioning we developed a measure—called the freedom-from-debility score—based on four Short Form-12 (SF-12) Health Survey questions explicitly designed to represent "limitations in physical activities because of health problems" and "limitations in usual role activities because of physical health problems." The results were consistent with the hypothesis. When participants were divided into categories based on their freedom-from-debility score, median happiness scores were monotonically increasing across categories. Controlling for demographic and socio-economic factors as well as health status (measured both subjectively and objectively), a one-point increase in freedom-from-debility score (on a scale from 0 to 100) was associated with a three-percent reduction in the odds of lower-quartile happiness. The results support the contention that health status is one of the most influential predictors of happiness, that the association between health status and happiness depends greatly on the manner in which health status is measured, and that the degree to which disease disrupts daily functioning is inversely associated with happiness.

Auszra, L., L. S. Greenberg, et al. (2013). **"Client emotional productivity – optimal client in-session emotional processing in experiential therapy."** *Psychotherapy Research* 23(6): 732-746. <http://dx.doi.org/10.1080/10503307.2013.816882>

Objective: The goal of this investigation was to examine the predictive validity of Client Emotional Productivity (CEP), an operationalization of optimal client in-session emotional processing, possessing seven features: Attending, symbolization, congruence, acceptance, regulation, agency and differentiation. Method: CEP was related to improvement in depressive and general symptoms, in 74 clients (66% female, 34% male) who received experiential therapy of depression and this was compared to the relationship between client high expressed emotional (CHEEA) arousal and the working alliance (WAI) and outcome. Results: Hierarchical regression analyses revealed that working phase CEP predicted significant reduction of depressive and general symptoms over and above that predicted by beginning phase CEP, the working alliance and working phase CHEEA. Working phase CEP emerged as the sole, independent predictor of outcome for both depressive and general symptoms. Conclusion: Productive emotional processing, thus, mediates the relationship between the alliance and outcome and seems to go beyond mere activation and expression of emotional experience. It rather seems to involve an increase in the ability to process activated primary emotion in a productive manner specified by CEP.

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Barker, E. D., N. Kirkham, et al. (2013). **"Prenatal maternal depression symptoms and nutrition, and child cognitive function."** *The British Journal of Psychiatry* 203(6): 417-421. <http://bjp.rcpsych.org/content/203/6/417.abstract>

Background Little is currently known about how maternal depression symptoms and unhealthy nutrition during pregnancy may developmentally interrelate to negatively affect child cognitive function. Aims To test whether prenatal maternal depression symptoms predict poor prenatal nutrition, and whether this in turn prospectively associates with reduced postnatal child cognitive function. Method In 6979 mother-offspring pairs participating in the Avon Longitudinal Study of Parents and Children (ALSPAC) in the UK, maternal depression symptoms were assessed five times between 18 weeks gestation and 33 months old. Maternal reports of the nutritional environment were assessed at 32 weeks gestation and 47 months old, and child cognitive function was assessed at age 8 years. Results During gestation, higher depressive symptoms were related to lower levels of healthy nutrition and higher levels of unhealthy nutrition, each of which in turn was prospectively associated with reduced cognitive function. These results were robust to postnatal depression symptoms and nutrition, as well as a range of potential prenatal and postnatal confounds (i.e. poverty, teenage mother, low maternal education, parity, birth complications, substance use, criminal lifestyle, partner cruelty towards mother). Conclusions Prenatal interventions aimed at the well-being of children of parents with depression should consider targeting the nutritional environment.

Be, D., M. A. Whisman, et al. (2013). **"Prospective associations between marital adjustment and life satisfaction."** *Personal Relationships* 20(4): 728-739. <http://dx.doi.org/10.1111/pere.12011>

Actor and partner effects for the 2-year longitudinal associations between marital adjustment and life satisfaction were evaluated in a population-based sample of middle-aged and older adults (N = 1,385 couples). Results showed that (a) higher marital adjustment at baseline predicted higher life satisfaction at follow-up, (b) higher life satisfaction at baseline predicted higher marital adjustment at follow-up, (c) marital adjustment more strongly predicted life satisfaction than life satisfaction predicted marital adjustment for women, and (d) higher partner marital adjustment at baseline predicted higher life satisfaction at follow-up. Results suggest that marital adjustment and life satisfaction influence one another in a bidirectional fashion and that the direction is predominantly from marital adjustment to life satisfaction in women.

Beach, M. C., D. Roter, et al. (2013). **"A multicenter study of physician mindfulness and health care quality."** *The Annals of Family Medicine* 11(5): 421-428. <http://www.annfammed.org/content/11/5/421.abstract>

(Free full text available) **PURPOSE** Mindfulness (ie, purposeful and nonjudgmental attentiveness to one's own experience, thoughts, and feelings) is associated with physician well-being. We sought to assess whether clinician self-rated mindfulness is associated with the quality of patient care. **METHODS** We conducted an observational study of 45 clinicians (34 physicians, 8 nurse practitioners, and 3 physician assistants) caring for patients infected with the human immunodeficiency virus (HIV) who completed the Mindful Attention Awareness Scale and 437 HIV-infected patients at 4 HIV specialty clinic sites across the United States. We measured patient-clinician communication quality with audio-recorded encounters coded using the Roter Interaction Analysis System (RIAS) and patient ratings of care. **RESULTS** In adjusted analyses comparing clinicians with highest and lowest tertile mindfulness scores, patient visits with high-mindfulness clinicians were more likely to be characterized by a patient-centered pattern of communication (adjusted odds ratio of a patient-centered visit was 4.14; 95% CI, 1.58–10.86), in which both patients and clinicians engaged in more rapport building and discussion of psychosocial issues. Clinicians with high-mindfulness scores also displayed more positive emotional tone with patients (adjusted $\beta = 1.17$; 95% CI, 0.46–1.9). Patients were more likely to give high ratings on clinician communication (adjusted prevalence ratio [APR] = 1.48; 95% CI, 1.17–1.86) and to report high overall satisfaction (APR = 1.45; 95% CI, 1.15–1.84) with high-mindfulness clinicians. There was no association between clinician mindfulness and the amount of conversation about biomedical issues. **CONCLUSIONS** Clinicians rating themselves as more mindful engage in more patient-centered communication and have more satisfied patients. Interventions should determine whether improving clinician mindfulness can also improve patient health outcomes.

Canevello, A. M. Y., M. T. Granillo, et al. (2013). **"Predicting change in relationship insecurity: The roles of compassionate and self-image goals."** *Personal Relationships* 20(4): 587-618. <http://dx.doi.org/10.1111/pere.12002>

It was hypothesized that self-image goals to construct, defend, and maintain desired images of the self enhance relationship insecurity, whereas compassionate goals to support others diminish relationship insecurity. Study 1 followed 115 new college roommates for 3 weeks; Study 2 followed 230 new college roommates across a semester. Both studies assessed self-image and compassionate goals for and anxiety and avoidance in the roommate relationship. Self-image goals predicted increased relationship anxiety and avoidance across 3 weeks (Study 1) and within weeks, from week to week, and across 3 months (Study 2). Compassionate goals consistently predicted decreased relationship anxiety and avoidance across studies and analyses. These results suggest that through their interpersonal goals, people contribute directly to their own relationship insecurity.

Curtis, J. R., A. L. Back, et al. (2013). **"Effect of communication skills training for residents and nurse practitioners on quality of communication with patients with serious illness: A randomized trial."** *JAMA* 310(21): 2271-2281. <http://www.ncbi.nlm.nih.gov/pubmed/24302090>

IMPORTANCE: Communication about end-of-life care is a core clinical skill. Simulation-based training improves skill acquisition, but effects on patient-reported outcomes are unknown. **OBJECTIVE:** To assess the effects of a communication skills intervention for internal medicine and nurse practitioner trainees on patient- and family-reported outcomes. **DESIGN, SETTING, AND PARTICIPANTS:** Randomized trial conducted with 391 internal medicine and 81 nurse practitioner trainees between 2007 and 2013 at the University of Washington and Medical University of South Carolina. **INTERVENTION:** Participants were randomized to an 8-session, simulation-based, communication skills intervention (N = 232) or usual education (N = 240). **MAIN OUTCOMES AND MEASURES:** Primary outcome was patient-reported quality of communication (QOC; mean rating of 17 items rated from 0-10, with 0 = poor and 10 = perfect). Secondary outcomes were patient-reported quality of end-of-life care (QEOLC; mean rating of 26 items rated from 0-10) and depressive symptoms (assessed using the 8-item Personal Health Questionnaire [PHQ-8]; range, 0-24, higher scores worse) and family-reported QOC and QEOLC. Analyses were clustered by trainee. **RESULTS:** There were 1866 patient ratings (44% response) and 936 family ratings (68% response). The intervention was not associated with significant changes in QOC or QEOLC. Mean values for postintervention patient QOC and QEOLC were 6.5 (95% CI, 6.2 to 6.8) and 8.3 (95% CI, 8.1 to 8.5) respectively, compared with 6.3 (95% CI, 6.2 to 6.5) and 8.3 (95% CI, 8.1 to 8.4) for control conditions. After adjustment, comparing intervention with control, there was no significant difference in the QOC score for patients (difference, 0.4 points [95% CI, -0.1 to 0.9]; P = .15) or families (difference, 0.1 [95% CI, -0.8 to 1.0]; P = .81). There was no significant difference in QEOLC score for patients (difference, 0.3 points [95% CI, -0.3 to 0.8]; P = .34) or families (difference, 0.1 [95% CI, -0.7 to 0.8]; P = .88). The intervention was associated with significantly increased depression scores among patients of postintervention trainees (mean score, 10.0 [95% CI, 9.1 to 10.8], compared with 8.8 [95% CI, 8.4 to 9.2]) for control conditions; adjusted model showed an intervention effect of 2.2 (95% CI, 0.6 to 3.8; P = .006). **CONCLUSIONS AND RELEVANCE:** Among internal medicine and nurse practitioner trainees, simulation-based communication training compared with usual education did not improve quality of communication about end-of-life care or quality of end-of-life care but was associated with a small increase in patients' depressive symptoms. These findings raise questions about skills transfer from simulation training to actual patient care and the adequacy of communication skills assessment.

Dias, B. G. and K. J. Ressler (2013). **"Parental olfactory experience influences behavior and neural structure in subsequent generations."** *Nat Neurosci* advance online publication. <http://dx.doi.org/10.1038/nn.3594>

Using olfactory molecular specificity, we examined the inheritance of parental traumatic exposure, a phenomenon that has been frequently observed, but not understood. We subjected F0 mice to odor fear conditioning before conception and found that subsequently conceived F1 and F2 generations had an increased behavioral sensitivity to the F0-conditioned odor, but not to other odors. When an odor (acetophenone) that activates a known odorant receptor (Olfr151) was used to condition F0 mice, the behavioral sensitivity of the F1 and F2 generations to acetophenone was complemented by an enhanced neuroanatomical representation of the Olfr151 pathway. Bisulfite sequencing of sperm DNA from conditioned F0 males and F1 naive offspring revealed CpG hypomethylation in the Olfr151 gene. In addition, in vitro fertilization, F2 inheritance and cross-fostering revealed that these transgenerational effects are inherited via parental gametes. Our findings provide a framework for addressing how

environmental information may be inherited transgenerationally at behavioral, neuroanatomical and epigenetic levels. [For an example of the widespread commentary on this article see the *New Scientist* - <http://www.newscientist.com/article/dn24677-fear-of-a-smell-can-be-passed-down-several-generations.html> - .UrSY6qOYafA - "If a particular smell makes you uneasy but you don't know why, perhaps you should ask your grandparents. Mice whose father or grandfather learned to associate the smell of cherry blossom with an electric shock became more jumpy in the presence of the same odour, and responded to lower concentrations of it than normal mice. This work, led by Brian Dias at Emory University School of Medicine in Atlanta, provides some of the best evidence yet for the inheritance of memories or traits across generations. It also sheds fresh light on the biological mechanism by which such traits might be passed down generations. Previous studies have hinted that stressful events can affect the emotional behaviour or metabolism of future generations, possibly through chemical changes to the DNA that can turn genes off and on – a mechanism known as epigenetic inheritance. Needle in a haystack However, although epigenetic changes have been observed, identifying which ones are relevant is a bit like searching for a needle in a haystack. That's because many genes control behaviours or metabolic diseases like obesity. Smell is a little different though. Individual odours, such as acetophenone (which smells like cherry blossom) often bind to specific receptors on the olfactory bulb, the interface between the nose and brain – in this case to a smell receptor called M71. "Since we know the gene encoding this receptor, we can look at it and the haystack becomes a little smaller," says Dias. Male mice have previously been conditioned to associate the smell of acetophenone with an electric shock and became fearful of it as a result. They also developed more M71 receptors, which enabled them to detect acetophenone at much lower levels. Dias and Kerry Ressler, also at Emory, took sperm from these conditioned mice and used it to inseminate female mice. When the offspring from these pairings were exposed to acetophenone they were more jumpy than when they smelled a neutral odour – even though they had never smelled acetophenone before. The same was true of their grandpups. When the pups were exposed to a different smell, they showed no enhanced response. Brain change The offspring also had more M71 receptors in their brains than did mice born from parents who had not had the smell conditioning and were more sensitive to it. "There was more real estate devoted to this particular odorant receptor, suggesting that there's something in the sperm that is informing or allowing that information to be inherited," Dias says. DNA sequencing of sperm from the grandfather mice and their sons also revealed epigenetic marks on the gene encoding M71 that weren't seen in control mice. Female mice conditioned to fear acetophenone also appeared to transmit this "memory" to the next generation, although epigenetic marks on their eggs have not yet been analysed. Moshe Szyf at McGill University in Montreal, Canada, describes the results as unprecedented and startling. "It suggests that there is a very particular, specific and organised transgenerational transfer of information," he says. Marcus Pembrey at the University of Bristol, UK agrees. "It is high time public-health researchers took human transgenerational responses seriously," he says. "I suspect we will not understand the rise in neuropsychiatric disorders or obesity, diabetes and metabolic disruptions generally, without taking a multigenerational approach." Permanent changes? The mystery remains as to how a bad memory could get transmitted to the sperm and prompt chemical changes to the DNA, or how these chemical changes could be translated into a behavioural change in offspring – although some theories exist (see "How to inherit a memory, below"). Another question is how many generations such epigenetic changes will affect. "Does the epigenetic change eventually become genetic and then it is fixed?" asks Szyf. Not everyone is convinced that smell memories can be inherited, however. For one thing, not all descendants of smell-conditioned mice were easier to startle than control mice – it is not yet known why. Neither have Dias and Ressler provided evidence that the epigenetic changes they found in the sperm were directly responsible for functional changes in the brain. "The idea that something you smelled and became sensitive to can be transmitted across generations is astonishing, but I think it needs truly robust data to support it," says Isabelle Mansuy at the University of Zurich, Switzerland. "It's such an important question – one that touches fundamental concepts in genetics and epigenetics – so it's extremely important that the experimental design be rigorous and data be carefully interpreted."]

Dyer, K. and R. das Nair (2013). **"Why don't healthcare professionals talk about sex? A systematic review of recent qualitative studies conducted in the united kingdom."** *The Journal of Sexual Medicine* 10(11): 2658-2670. <http://dx.doi.org/10.1111/j.1743-6109.2012.02856.x>

Introduction. Sexuality is considered to be an important aspect of holistic care, yet research has demonstrated that it is not routinely addressed in healthcare services. A greater understanding of this can be achieved through synthesizing qualitative studies investigating healthcare professionals' experiences of talking about sex. In doing so, policy makers and healthcare providers may be able to better address the sexual issues of service users. **Aim.** To gain an in-depth understanding of healthcare professionals' subjective experience of discussing sexuality with service users by identifying the factors that impede and facilitate such discussions. **Main Outcome Measures.** Review of healthcare professionals' experience of discussing sexuality with service users. **Methods.** Electronic databases and reference lists of published articles were searched in July 2011. Primary research studies were included in the review if they explored health professionals' experiences of discussing sexuality with adult service users, used qualitative methods, and were conducted in the United Kingdom over the last 10 years. Each study was reviewed and assessed. A secondary thematic analysis method was used where key themes were extracted and grouped and key concepts were explored. **Results.** Nineteen interconnected themes emerged relating to healthcare professionals' experience of discussing sexuality with service users, including fear about "opening up a can of worms," lack of time, resources, and training, concern about knowledge and abilities, worry about causing offense, personal discomfort, and a lack of awareness about sexual issues. Some themes were particularly marked relating to the sexuality of the opposite-gender, black and ethnic minority groups, older and nonheterosexual service users, and those with intellectual disabilities. **Conclusions.** The majority of healthcare professionals do not proactively discuss sexuality issues with service users, and this warrants further attention. An understanding of the perceived barriers and facilitators indicates that interventions to improve the extent to which sexuality issues are addressed need to take organizational, structural, and personal factors into consideration.

Fortmann, S. P., B. U. Burda, et al. (2013). **"Vitamin and mineral supplements in the primary prevention of cardiovascular disease and cancer: An updated systematic evidence review for the u.S. Preventive services task force."** *Annals of Internal Medicine* 159(12): 824-834. <http://dx.doi.org/10.7326/0003-4819-159-12-201312170-00729>
(Available in free full text) **Background:** Vitamin and mineral supplements are commonly used to prevent chronic diseases. **Purpose:** To systematically review evidence for the benefit and harms of vitamin and mineral supplements in community-dwelling, nutrient-sufficient adults for the primary prevention of cardiovascular disease (CVD) and cancer. **Data Sources:** MEDLINE, Embase, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, and Database of Abstracts of Reviews of Effects were searched from January 2005 to 29 January 2013, with manual searches of reference lists and gray literature. **Study Selection:** Two investigators independently selected and reviewed fair- and good-quality trials for benefit and fair- and good-quality trials and observational studies for harms. **Data Extraction:** Dual quality assessments and data abstraction. **Data Synthesis:** Two large trials (n = 27 658) reported lower cancer incidence in men taking a multivitamin for more than 10 years (pooled unadjusted relative risk, 0.93 [95% CI, 0.87 to 0.99]). The study that included women showed no effect in that group. High-quality studies (k = 24; n = 324 653) of single and paired nutrients (such as vitamins A, C, or D; folic acid; selenium; or calcium) were scant and heterogeneous and showed no clear evidence of benefit or

harm. Neither vitamin E nor β -carotene prevented CVD or cancer, and β -carotene increased lung cancer risk in smokers. Limitations: The analysis included only primary prevention studies in adults without known nutritional deficiencies. Studies were conducted in older individuals and included various supplements and doses under the set upper tolerable limits. Duration of most studies was less than 10 years. Conclusion: Limited evidence supports any benefit from vitamin and mineral supplementation for the prevention of cancer or CVD. Two trials found a small, borderline-significant benefit from multivitamin supplements on cancer in men only and no effect on CVD.

Gershon, A., S. L. Johnson, et al. (2013). "**Chronic stressors and trauma: Prospective influences on the course of bipolar disorder.**" *Psychological Medicine* 43(12): 2583-2592. <http://dx.doi.org/10.1017/S0033291713000147>

Background Exposure to life stress is known to adversely impact the course of bipolar disorder. Few studies have disentangled the effects of multiple types of stressors on the longitudinal course of bipolar I disorder. This study examines whether severity of chronic stressors and exposure to trauma are prospectively associated with course of illness among bipolar patients. Method One hundred and thirty-one participants diagnosed with bipolar I disorder were recruited through treatment centers, support groups and community advertisements. Severity of chronic stressors and exposure to trauma were assessed at study entry with in-person interviews using the Bedford College Life Event and Difficulty Schedule (LEDS). Course of illness was assessed by monthly interviews conducted over the course of 24 months (over 3000 assessments). Results Trauma exposure was related to more severe interpersonal chronic stressors. Multiple regression models provided evidence that severity of overall chronic stressors predicted depressive but not manic symptoms, accounting for 7.5% of explained variance. Conclusions Overall chronic stressors seem to be an important determinant of depressive symptoms within bipolar disorder, highlighting the importance of studying multiple forms of life stress.

Grodstein, F., J. O'Brien, et al. (2013). "**Long-term multivitamin supplementation and cognitive function in men: A randomized trial.**" *Annals of Internal Medicine* 159(12): 806-814. <http://dx.doi.org/10.7326/0003-4819-159-12-201312170-00006>

Background: Despite widespread use of multivitamin supplements, their effect on cognitive health—a critical issue with aging—remains inconclusive. To date, no long-term clinical trials have studied multivitamin use and cognitive decline in older persons. Objective: To evaluate whether long-term multivitamin supplementation affects cognitive health in later life. Design: Randomized, double-blind, placebo-controlled trial of a multivitamin from 1997 to 1 June 2011. The cognitive function substudy began in 1998. Up to 4 repeated cognitive assessments by telephone interview were completed over 12 years. (ClinicalTrials.gov: NCT00270647) Setting: The Physicians' Health Study II. Patients: 5947 male physicians aged 65 years or older. Intervention: Daily multivitamin or placebo. Measurements: A global composite score averaging 5 tests of global cognition, verbal memory, and category fluency. The secondary end point was a verbal memory score combining 4 tests of verbal memory, which is a strong predictor of Alzheimer disease. Results: No difference was found in mean cognitive change over time between the multivitamin and placebo groups or in the mean level of cognition at any of the 4 assessments. Specifically, for the global composite score, the mean difference in cognitive change over follow-up was -0.01 SU (95% CI, -0.04 to 0.02 SU) when treatment was compared with placebo. Similarly, cognitive performance did not differ between the multivitamin and placebo groups on the secondary outcome, verbal memory (mean difference in cognitive change over follow-up, -0.005 SU [CI, -0.04 to 0.03 SU]). Limitation: Doses of vitamins may be too low or the population may be too well-nourished to benefit from a multivitamin. Conclusion: In male physicians aged 65 years or older, long-term use of a daily multivitamin did not provide cognitive benefits.

Holmen, J., E. Langballe, et al. (2013). "**Gender differences in subjective memory impairment in a general population: The hunt study, norway.**" *BMC Psychology* 1(1): 19. <http://www.biomedcentral.com/2050-7283/1/19>

(Free full text available) BACKGROUND: There is increased focus on early diagnosis of dementia, and subjective awareness of memory impairment is often assumed to be an early symptom of dementia. Subjective memory impairment (SMI) is used to describe subjective awareness of memory problems in the elderly after identifiable diseases which include this symptom are excluded. The aim of the present cross-sectional study was to examine the occurrence of SMI in a general adult population and its association with education level, subjective health, anxiety, depression and satisfaction with life. METHODS: Nine items about memory were included in the questionnaire for participants aged 30+ in the large population based HUNT Study (2006-08). Health data, such as global health, symptoms of anxiety and depression and satisfaction with life in addition to level of education was collected. Stratified analyses were used to study gender differences in SMI sum score. Cohen's d was measured as an effect size. One-way ANOVA followed by a Tukey post-hoc test was used to test the association between SMI sum score and each category of gender, age, education, global health and satisfaction with life. Bivariate correlation between symptoms of anxiety and depression and SMI were tested and finally the association between SMI sum score and age, gender, education level, subjective health and symptoms of depression and anxiety was tested in a linear regression model. RESULTS: Nearly half of the participants ($n=37,405$: 44.6% women, 46.2% men) reported minor memory problems. Severe problems were reported by 1.2% of women and 1.6% of men. Remembering names and dates were the most frequent problems, and they increased with age. In eight out of nine items, more men than women reported memory problems. Elevated SMI was associated with poor self-perceived global health, symptoms of anxiety and depression and low education in both men and women and in all age groups. CONCLUSION: Minor subjective memory problems were very common, and SMI was clearly associated with health measures and with level of education. The relatively strong association between SMI and symptoms of depression might be of clinical interest. The reason for men reporting more memory problems than women remains unexplained.

Hortop, E. G., C. Wrosch, et al. (2013). "**The why and how of goal pursuits: Effects of global autonomous motivation and perceived control on emotional well-being.**" *Motivation and Emotion* 37(4): 675-687. <http://dx.doi.org/10.1007/s11031-013-9349-2>

This study examined the effects of global autonomous motivation and global perceived control on young adults' adaptive goal striving and emotional well-being. We reasoned that autonomously motivated participants who also perceive high levels of control would make accelerated progress with the pursuit of their most important goal and experience associated increases in emotional well-being. By contrast, we predicted that these benefits of autonomous motivation would be reduced among participants who perceive low levels of control. A 6-month longitudinal study of 125 college students was conducted, and self-reported global autonomous motivation, global perceived control, progress towards the most important goal, and emotional well-being were assessed. Regression analyses showed that the combination of high baseline levels of global autonomous motivation and global perceived control was associated with accelerated goal progress after 6 months, which mediated 6-month increases in emotional well-being. These benefits were not apparent among autonomously motivated participants who perceived low levels of control. The study's findings suggest that global autonomous motivation and perceived control may need to work together to foster adaptive goal striving and emotional well-being.

Impett, E. A., L. Javam, et al. (2013). **"The joys of genuine giving: Approach and avoidance sacrifice motivation and authenticity."** *Personal Relationships* 20(4): 740-754. <http://dx.doi.org/10.1111/per.12012>

Why do sacrifices undertaken in pursuit of approach and avoidance goals differentially influence well-being and relationship quality? A cross-sectional study (Study 1), an experiment (Study 2), and a 2-week daily experience study (Study 3) demonstrate that the personal and interpersonal outcomes of approach and avoidance sacrifice goals in dating and married relationships are mediated by felt authenticity. When people sacrificed for approach goals such as to make their partner happy, they felt more authentic, in turn contributing to greater personal and relationship well-being. However, when they sacrificed for avoidance goals such as to avoid conflict, they felt less authentic, in turn detracting from personal and relationship well-being. Implications for research and theory on motivational processes in close relationships are discussed.

Johansson, R., M. Bjorklund, et al. (2013). **"Affect-focused psychodynamic psychotherapy for depression and anxiety through the internet: A randomized controlled trial."** *PeerJ* 1: e102. <http://www.ncbi.nlm.nih.gov/pubmed/23862104>

Background. Psychodynamic psychotherapy is a psychological treatment approach that has a growing empirical base. Research has indicated an association between therapist-facilitated affective experience and outcome in psychodynamic therapy. Affect-phobia therapy (APT), as outlined by McCullough et al., is a psychodynamic treatment that emphasizes a strong focus on expression and experience of affect. This model has neither been evaluated for depression nor anxiety disorders in a randomized controlled trial. While Internet-delivered psychodynamic treatments for depression and generalized anxiety disorder exist, they have not been based on APT. The aim of this randomized controlled trial was to investigate the efficacy of an Internet-based, psychodynamic, guided self-help treatment based on APT for depression and anxiety disorders. Methods. One hundred participants with diagnoses of mood and anxiety disorders participated in a randomized (1:1 ratio) controlled trial of an active group versus a control condition. The treatment group received a 10-week, psychodynamic, guided self-help treatment based on APT that was delivered through the Internet. The treatment consisted of eight text-based treatment modules and included therapist contact (9.5 min per client and week, on average) in a secure online environment. Participants in the control group also received online therapist support and clinical monitoring of symptoms, but received no treatment modules. Outcome measures were the 9-item Patient Health Questionnaire Depression Scale (PHQ-9) and the 7-item Generalized Anxiety Disorder Scale (GAD-7). Process measures were also included. All measures were administered weekly during the treatment period and at a 7-month follow-up. Results. Mixed models analyses using the full intention-to-treat sample revealed significant interaction effects of group and time on all outcome measures, when comparing treatment to the control group. A large between-group effect size of Cohen's $d = 0.77$ (95% CI: 0.37-1.18) was found on the PHQ-9 and a moderately large between-group effect size $d = 0.48$ (95% CI: 0.08-0.87) was found on the GAD-7. The number of patients who recovered (had no diagnoses of depression and anxiety, and had less than 10 on both the PHQ-9 and the GAD-7) were at post-treatment 52% in the treatment group and 24% in the control group. This difference was significant, $\chi^2(2)(N = 100, df = 1) = 8.3, p < .01$. From post-treatment to follow-up, treatment gains were maintained on the PHQ-9, and significant improvements were seen on the GAD-7. Conclusion. This study provides initial support for the efficacy of Internet-delivered psychodynamic therapy based on the affect-phobia model in the treatment of depression and anxiety disorders. The results support the conclusion that psychodynamic treatment approaches may be transferred to the guided self-help format and delivered via the Internet.

Kashdan, T. B. and P. E. McKnight (2013). **"Commitment to a purpose in life: An antidote to the suffering by individuals with social anxiety disorder."** *Emotion* 13(6): 1150-1159. <http://www.ncbi.nlm.nih.gov/pubmed/23795592>

Recent acceptance- and mindfulness-based cognitive-behavioral interventions explicitly target the clarification and commitment to a purpose in life. Yet, scant empirical evidence exists on the value of purpose as a mechanism relevant to psychopathology or well-being. The present research explored daily (within-person) fluctuations in purposeful pursuits and well-being in a community sample of 84 adults with ($n = 41$) and without ($n = 43$) the generalized subtype of social anxiety disorder (SAD). After completing an idiographic measure of purpose in life, participants monitored their effort and progress toward this purpose, along with their well-being each day. Across 2 weeks of daily reports, we found that healthy controls reported increased self-esteem, meaning in life, positive emotions, and decreased negative emotions. People with SAD experienced substantial boosts in well-being indicators on days characterized by significant effort or progress toward their life purpose. We found no evidence for the reverse direction (with well-being boosting the amount of effort or progress that people with SAD devote to their purpose), and effects could not be attributed to comorbid mood or anxiety disorders. Results provide evidence for how commitment to a purpose in life enriches the daily existence of people with SAD. The current study supports principles that underlie what many clinicians are already doing with clients for SAD.

Keng, S. L., C. J. Robins, et al. (2013). **"Reappraisal and mindfulness: A comparison of subjective effects and cognitive costs."** *Behav Res Ther* 51(12): 899-904. <http://www.ncbi.nlm.nih.gov/pubmed/24225174>

The present study investigated the relative effects of mindfulness and reappraisal in reducing sad mood and whether trait mindfulness and habitual reappraisal moderated the effects. The study also compared the extent to which implementation of these strategies incurred cognitive resources. A total of 129 participants were randomly assigned to receiving training in mindfulness, reappraisal, or no training prior to undergoing an autobiographical sad mood induction. Results showed that mindfulness and reappraisal were superior to no training, and equivalent in their effects in lowering sad mood. Compared to mindfulness, reappraisal resulted in significantly higher interference scores on a subsequent Stroop test, reflecting greater depletion of cognitive resources. Higher trait mindfulness, but not habitual reappraisal, predicted greater reductions in sadness across conditions. The study suggests that although mindfulness and reappraisal are equally effective in down-regulating sad mood, they incur different levels of cognitive costs.

Kocovski, N. L., J. E. Fleming, et al. (2013). **"Mindfulness and acceptance-based group therapy versus traditional cognitive behavioral group therapy for social anxiety disorder: A randomized controlled trial."** *Behav Res Ther* 51(12): 889-898. <http://www.ncbi.nlm.nih.gov/pubmed/24220538>

Recent research has supported the use of mindfulness and acceptance-based interventions for Social Anxiety Disorder (SAD). OBJECTIVE: The purpose of the present study was to compare mindfulness and acceptance-based group therapy (MAGT) with cognitive behavioral group therapy (CBGT) with respect to outcome. It was hypothesized that MAGT and CBGT would both be superior to a control group but not significantly different from one another. METHOD: Individuals ($N = 137$, mean age = 34 years, 54% female, 62% White, 20% Asian) diagnosed with SAD were randomly assigned to MAGT ($n = 53$), CBGT ($n = 53$) or a waitlist control group ($n = 31$). The primary outcome was social anxiety symptom severity assessed at baseline, treatment midpoint, treatment completion, and 3-month follow-up. Secondary outcomes were cognitive reappraisal, mindfulness, acceptance, and rumination. Depression, valued living, and group cohesion were also assessed. RESULTS: As hypothesized, MAGT and CBGT were both more effective than the control group but not significantly different from one another on social anxiety reduction and most other variables assessed. CONCLUSIONS: The present research provides additional support for the use of mindfulness and acceptance-based treatments for SAD, and future research should examine the processes by which these treatments lead to change.

Lau, H. P. B., M. White, et al. (2013). **"Quantifying the value of emotions using a willingness to pay approach."** *Journal of Happiness Studies* 14(5): 1543-1561. <http://dx.doi.org/10.1007/s10902-012-9394-7>

(Free full text available) People generally seek out positive moods and avoid negative moods; however, it is unclear which motivation is more pronounced. Two studies addressed this issue by developing a value-based ranking of emotions based on the willingness to pay (WTP) approach. The approach utilizes money's cardinal properties and assumes opportunity costs as with everyday purchases. In Study 1 British participants indicated they would be willing to pay more to experience positive than to avoid negative emotions. In Study 2 this positivity bias was replicated with another sample of British participants. However, Hong Kong Chinese participants did not show such a preference, and were willing to pay significantly less to experience positive emotions but more to avoid negative emotions when compared with British participants. Experiencing Love was given the highest WTP judgment in all samples. Thus, some emotions are universally valued, whereas preferences for others differ across cultural groups, perhaps shaped by norms. Implications concerning valuations of psychological states for policy purposes are discussed.

Lichstein, K. L., S. D. Nau, et al. (2013). **"Psychological treatment of hypnotic-dependent insomnia in a primarily older adult sample."** *Behav Res Ther* 51(12): 787-796. <http://www.ncbi.nlm.nih.gov/pubmed/24121096>

OBJECTIVE: This study tested cognitive behavior therapy (CBT) in hypnotic-dependent, late middle-age and older adults with insomnia. METHOD: Seventy volunteers age 50 and older were randomized to CBT plus drug withdrawal, placebo biofeedback (PL) plus drug withdrawal, or drug withdrawal (MED) only. The CBT and PL groups received eight, 45 min weekly treatment sessions. The drug withdrawal protocol comprised slow tapering monitored with about six biweekly, 30 min sessions. Assessment including polysomnography (PSG), sleep diaries, hypnotic consumption, daytime functioning questionnaires, and drug screens collected at baseline, posttreatment, and 1-year follow-up. RESULTS: Only the CBT group showed significant sleep diary improvement, sleep onset latency significantly decreased at posttreatment. For all sleep diary measures for all groups, including MED, sleep trended to improvement from baseline to follow-up. Most PSG sleep variables did not significantly change. There were no significant between group differences in medication reduction. Compared to baseline, the three groups decreased hypnotic use at posttreatment, down 84%, and follow-up, down 66%. There was no evidence of withdrawal side-effects. Daytime functioning, including anxiety and depression, improved by posttreatment. Rigorous methodological features, including documentation of strong treatment implementation and the presence of a credible placebo, elevated the confidence due these findings. CONCLUSIONS: Gradual drug withdrawal was associated with substantial hypnotic reduction at posttreatment and follow-up, and withdrawal side-effects were absent. When supplemented with CBT, participants accrued incremental self-reported, but not PSG, sleep benefits.

Luby, J., A. Belden, et al. (2013). **"The effects of poverty on childhood brain development: The mediating effect of caregiving and stressful life events."** *JAMA Pediatrics* 167(12): 1135-1142. <http://dx.doi.org/10.1001/jamapediatrics.2013.3139>

Importance The study provides novel data to inform the mechanisms by which poverty negatively impacts childhood brain development. Objective To investigate whether the income-to-needs ratio experienced in early childhood impacts brain development at school age and to explore the mediators of this effect. Design, Setting, and Participants This study was conducted at an academic research unit at the Washington University School of Medicine in St Louis. Data from a prospective longitudinal study of emotion development in preschool children who participated in neuroimaging at school age were used to investigate the effects of poverty on brain development. Children were assessed annually for 3 to 6 years prior to the time of a magnetic resonance imaging scan, during which they were evaluated on psychosocial, behavioral, and other developmental dimensions. Preschoolers included in the study were 3 to 6 years of age and were recruited from primary care and day care sites in the St Louis metropolitan area; they were annually assessed behaviorally for 5 to 10 years. Healthy preschoolers and those with clinical symptoms of depression participated in neuroimaging at school age/early adolescence. Exposure Household poverty as measured by the income-to-needs ratio. Main Outcomes and Measures Brain volumes of children's white matter and cortical gray matter, as well as hippocampus and amygdala volumes, obtained using magnetic resonance imaging. Mediators of interest were caregiver support/hostility measured observationally during the preschool period and stressful life events measured prospectively. Results Poverty was associated with smaller white and cortical gray matter and hippocampal and amygdala volumes. The effects of poverty on hippocampal volume were mediated by caregiving support/hostility on the left and right, as well as stressful life events on the left. Conclusions and Relevance The finding that exposure to poverty in early childhood materially impacts brain development at school age further underscores the importance of attention to the well-established deleterious effects of poverty on child development. Findings that these effects on the hippocampus are mediated by caregiving and stressful life events suggest that attempts to enhance early caregiving should be a focused public health target for prevention and early intervention. Findings substantiate the behavioral literature on the negative effects of poverty on child development and provide new data confirming that effects extend to brain development. Mechanisms for these effects on the hippocampus are suggested to inform intervention.

McCarthy, M. (2013). **"Antidepressant use has doubled in rich nations in past 10 years."** *BMJ* 347. <http://www.bmj.com/content/347/bmj.f7261>

Consumption of antidepressants has increased markedly in the world's richest nations over the past decade, show new data. The figures, collected from 24 member nations of the Organisation of Economic Co-operation and Development and included in the OECD's annual Health at a Glance report, show that Iceland had the highest antidepressant consumption. Its defined daily dose of antidepressants was 106 for every 1000 people a day in 2011, nearly twice the average of 56 for the countries included in the study and up from 70.5 in 2000. The defined daily dose is a statistical measure that represents the average daily maintenance dosage for the main indication of a drug or drug category. It is used to aggregate data on different doses, strengths, and formulations to enable comparison of consumption across different settings. Antidepressant use almost doubled in the second ranked country, Australia, its defined daily dose rising from 45 in 2000 to 89 in 2011. After Australia came Canada (86), Denmark (85), and Sweden (79). The United Kingdom's defined daily dose was 71 in 2011, up from 37 in 2000. The study did not include figures for the United States, but the US National Center on Health Statistics said that 11% of Americans aged 12 years or over take antidepressants. Part of the rise seen across countries could be explained by an increase in the intensity and duration of treatments, the report said. "In England, for example, the increase in antidepressant consumption has been associated with a longer duration of drug treatment," it said. Another factor behind the rise is the growing number of indications for which these drugs were used, including milder forms of depression, anxiety, and social phobias, the report added. "These extensions have raised concerns about appropriateness."

Milner, A., M. J. Spittal, et al. (2013). **"Suicide by occupation: Systematic review and meta-analysis."** *The British Journal of Psychiatry* 203(6): 409-416. <http://bjp.rcpsych.org/content/203/6/409.abstract>

Background Previous research has shown that those employed in certain occupations, such as doctors and farmers, have an elevated risk of suicide, yet little research has sought to synthesise these findings across working-age populations. Aims To summarise published research in this area through systematic review and meta-analysis. Method Random effects meta-analyses were used to calculate a pooled risk of suicide across occupational skill-level groups. Results Thirty-four studies were included in the meta-analysis. Elementary professions (e.g. labourers and cleaners) were at elevated risk compared with the working-age population (rate ratio (RR) = 1.84, 95% CI 1.46-2.33), followed by machine operators and deck crew (RR = 1.78, 95% CI 1.22-2.60) and agricultural workers (RR = 1.64, 95% CI 1.19-2.28). Results suggested a stepwise gradient in risk, with the lowest skilled occupations being at greater risk of suicide than the highest skill-level group. Conclusions This is the first comprehensive meta-analytical review of suicide and occupation. There is a need for future studies to investigate explanations for the observed skill-level differences, particularly in people employed in lower skill-level groups.

Montori, V. M., J. P. Brito, et al. (2013). **"The optimal practice of evidence-based medicine: Incorporating patient preferences in practice guidelines."** *JAMA* 310(23): 2503-2504.

<http://jama.jamanetwork.com/article.aspx?articleid=1763247>

(Free full text available) Research evidence is necessary but insufficient for making patient care decisions. An effective but toxic chemotherapeutic regimen is the treatment one patient with cancer can and will take, another patient can take but will not, and yet another patient could not take even if wanted. Careful attention to the biopsychosocial context of patients and to their informed preferences when crafting treatments requires expertise and practical wisdom. This represents the optimal practice of evidence-based medicine. Patient preferences refer to patient perspectives, beliefs, expectations, and goals for health and life, and to the processes that individuals use in considering the potential benefits, harms, costs, and inconveniences of the management options in relation to one another. Patients may have preferences when it comes to defining the problem, identifying the range of management options, selecting the outcomes used to compare these options, and ranking these outcomes by importance ... Guideline panelists must recognize, with humility, the challenges they face in working often without access to informed patient preferences and acknowledge that their recommendations should rarely assume uniform patient values and contexts in favor of a particular course of action. Guideline panels, therefore, should rarely formulate strong recommendations. Panels should become much more comfortable with ambiguity, both in the tradeoffs involved and in the recommendations given, and explicitly report how patient preferences and context were considered in formulating the panels' recommendations. Clinicians need guidance and clear guidance helps and supports efficient practices. Yet, panels must be wise in recognizing when this expediency is appropriate for patient care and when it hinders patient-centered care. Clinicians should remember that taking care of patients is supposed to be difficult. Although guidelines may simplify this task, when patient preferences and context matter, guidelines must not replace clinicians' compassionate and mindful engagement of the patient in making decisions together. This is the optimal practice of evidence-based medicine.

Muise, A., E. A. Impett, et al. (2013). **"Getting it on versus getting it over with: Sexual motivation, desire, and satisfaction in intimate bonds."** *Pers Soc Psychol Bull* 39(10): 1320-1332. <http://www.ncbi.nlm.nih.gov/pubmed/23812928>

Across three studies, we demonstrate that pursuing sex for approach goals, such as to enhance intimacy, fuels satisfaction and pursuing sex for avoidance goals, such as to avoid disappointing a partner, detracts from satisfaction. In Study 1, we use hypothetical scenarios to provide experimental support for the associations between sexual goals and sexual and relationship satisfaction. In Study 2, a dyadic daily experience study of dating couples, we demonstrate that daily sexual goals are associated with both partners' daily relationship and sexual satisfaction. In Study 3, a dyadic daily experience study, we replicate the daily associations between sexual goals and satisfaction in a sample of long-term couples, and demonstrate that sexual goals impact partner's relationship and sexual quality 4 months later. In all studies, the associations between sexual goals and enhanced satisfaction as reported by both partners were mediated by sexual desire. Implications for research on sexual motivation and close relationships are discussed.

Nanri, A., T. Mizoue, et al. (2013). **"Dietary patterns and suicide in Japanese adults: The Japan Public Health Center-based Prospective Study."** *The British Journal of Psychiatry* 203(6): 422-427.

<http://bjp.rcpsych.org/content/203/6/422.abstract>

Background Although dietary patterns have been linked to depression, a frequently observed precondition for suicide, no study has yet examined the association between dietary patterns and suicide risk. Aims To prospectively investigate the association between dietary patterns and death from suicide. Method Participants were 40 752 men and 48 285 women who took part in the second survey of the Japan Public Health Center-based Prospective Study (1995-1998). Dietary patterns were derived from principal component analysis of the consumption of 134 food and beverage items ascertained by a food frequency questionnaire. Hazard ratios of suicide from the fourth year of follow-up to December 2005 were calculated. Results Among both men and women, a 'prudent' dietary pattern characterised by a high intake of vegetables, fruits, potatoes, soy products, mushrooms, seaweed and fish was associated with a decreased risk of suicide. The multivariable-adjusted hazard ratio of suicide for the highest v. lowest quartiles of the dietary pattern score was 0.46 (95% CI 0.28-0.75) (P for trend, 0.005). Other dietary patterns (Westernised and traditional Japanese) were not associated with suicide risk. Conclusions Our findings suggest that a prudent dietary pattern may be associated with a decreased risk of death from suicide.

Neto, F. and M. Pinto (2013). **"The satisfaction with sex life across the adult life span."** *Social Indicators Research* 114(3): 767-784. <http://link.springer.com/article/10.1007/s11205-012-0181-y>

Three separate issues concerning the relation between age and satisfaction with sex life are addressed in this article. The first issue was concerned with the age generalizability of the factor structure produced by responses to the Satisfaction with Sex Life Scale (SWLS). The second issue was to examine whether there were differences in the satisfaction with sex life according to certain background characteristics, namely age. Finally, the relationship between scores on the SWLS with those on other relational constructs was explored. Data collection involved completion of a questionnaire. The sample consisted of 1,144 participants. The mean ages of the sample were 38.99 years in (SD = 16.91); ages ranged from 20 to 80. The data indicated that the factor structure of responses to the SWLS were highly similar through adult life. Religious involvement, marital status, and love status influenced satisfaction with sex life. Expected correlations with measures of other relationship constructs were found. The strongest predictor of satisfaction with sex life across the adult life span was love satisfaction. Suggestions concerning the use of the SWLS for research and clinical purposes are offered.

Oren, D. A., M. Koziorowski, et al. (2013). **"SAD and the not-so-single photoreceptors."** *Am J Psychiatry* 170(12): 1403-1412. <http://ajp.psychiatryonline.org/article.aspx?articleid=1725888>

Research in the last century has demonstrated that light is a critical regulator of physiology in animals. More recent research has exposed the influence of light on human behavior, including the phenomenon of seasonal affective disorder (SAD). Repeated studies have shown that light treatment is effective in this disorder. The molecular mechanism by which the body absorbs the light that has energizing and antidepressant effects is still uncertain. This review presents evidence regarding the

role of rod and cone photoreceptors, as well as the role of recently discovered nonvisual neuronal melanopsin-containing photoreceptors. The authors discuss an evolutionary-based theoretical model of humoral phototransduction. This model postulates that tetrapyrrole pigments, including hemoglobin and bilirubin, are blood-borne photoreceptors, regulating gasotransmitters such as carbon monoxide when exposed to light in the eye. Recent studies in an animal model for seasonality provide data consistent with this model. Understanding the molecular mechanisms by which light affects physiology may guide the development of therapies for SAD and other pathologies of circadian and circannual regulation.

Orlinsky, D. E. and E. Heinonen (2013). **"Psychotherapists' personal identities, theoretical orientations, and professional relationships: Elective affinity and role adjustment as modes of congruence."** *Psychotherapy Research* 23(6): 718-731. <http://www.tandfonline.com/doi/full/10.1080/10503307.2013.814926> - .Ut-uJXk4kuC

Research shows psychotherapists espousing different theoretical approaches differ in mentality (e.g., cognitive styles, beliefs and epistemologies) and personality (e.g., neuroticism). However, studies have not investigated the association between professional relational style prescribed by therapists' theoretical orientations and therapists' manner of relating in personal life. Analyses of over 4000 therapists of varied nationalities, professions and career levels having different theoretical preferences indicate: (i) therapists' self-experience in close personal relationships was significantly associated with the manner their theoretical orientations prescribed for relating with clients; (ii) therapists were less accepting, less tolerant and more demanding in their personal relationships than with clients; and (iii) therapists adjusted their professional relational manner in practice to meet the specific expectations of their preferred orientations.

Paul, N. A., S. J. Stanton, et al. (2013). **"Psychological and neural mechanisms of trait mindfulness in reducing depression vulnerability."** *Soc Cogn Affect Neurosci* 8(1): 56-64. <http://www.ncbi.nlm.nih.gov/pubmed/22717383>

Mindfulness-based interventions are effective for reducing depressive symptoms. However, the psychological and neural mechanisms are unclear. This study examined which facets of trait mindfulness offer protection against negative bias and rumination, which are key risk factors for depression. Nineteen male volunteers completed a 2-day functional magnetic resonance imaging study. One day utilized a stress-induction task and the other day utilized a mindful breathing task. An emotional inhibition task was used to measure neural and behavioral changes related to state negative bias, defined by poorer performance in inhibiting negative relative to neutral stimuli. Associations among trait mindfulness [measured by the Five Facet Mindfulness Questionnaire (FFMQ)], trait rumination, and negative bias were examined. Non-reactivity scores on the FFMQ correlated negatively with rumination and negative bias following the stress induction. Non-reactivity was inversely correlated with insula activation during inhibition to negative stimuli after the mindful breathing task. Our results suggest non-reactivity to inner experience is the key facet of mindfulness that protects individuals from psychological risk for depression. Based on these results, mindfulness could reduce vulnerability to depression in at least two ways: (i) by buffering against trait rumination and negative bias and (ii) by reducing automatic emotional responding via the insula.

Pepping, C. A., A. O'Donovan, et al. (2013). **"The positive effects of mindfulness on self-esteem."** *The Journal of Positive Psychology* 8(5): 376-386. <http://dx.doi.org/10.1080/17439760.2013.807353>

Positive psychological research has clearly highlighted the importance of investigating factors that contribute to well-being. One factor contributing greatly to psychological well-being is mindfulness, which has been related to a wide range of positive outcomes, including healthy self-esteem. Here, we present two studies that aim to extend prior research on mindfulness and self-esteem. In Study 1, we propose and test a theoretically derived model of the role that mindfulness plays in the prediction of self-esteem and life satisfaction. Four facets of mindfulness significantly predicted increased self-esteem, which in turn predicted overall life satisfaction. In Study 2, we extended this study by examining the direct effects of a brief mindfulness induction on state self-esteem, and found that experimentally enhancing state mindfulness led to an increase in state self-esteem. The two studies presented clearly demonstrate that mindfulness and self-esteem are related, and, importantly, that mindfulness training has direct positive effects on self-esteem.

Persons, J. E., J. G. Robinson, et al. (2013). **"Omega-3 fatty acid biomarkers and subsequent depressive symptoms."** *Int J Geriatr Psychiatry*. <http://www.ncbi.nlm.nih.gov/pubmed/24338726>

OBJECTIVE: We sought to determine the relationship between the omega-3 fatty acid content of red blood cell membranes (RBC), in particular docosahexaenoic acid (DHA) and eicosapentaenoic acid (EPA), and baseline and new-onset depressive symptoms in post-menopausal women. We secondarily sought to characterize the association between dietary omega-3 fatty acid intake and depressive symptomatology. METHODS: Study participants included 7086 members of the Women's Health Initiative Memory Study (aged 63-81 years) who had an assessment of RBC omega-3 fatty acid concentrations at the baseline screening visit. Depressive symptoms at baseline and follow-up were characterized using the Burnam eight-item scale for depressive disorders (Center for Epidemiologic Studies Depression Scale/Diagnostic Interview Schedule short form) and secondarily additionally inferred by antidepressant medication use. RESULTS: In multivariable-adjusted models, our primary exposure, RBC DHA + EPA, was not related to depressive symptoms by any measure at baseline or follow-up, nor were RBC total omega-3, DHA, or EPA (all $p > 0.2$). In contrast, dietary intake of omega-3 was positively associated with depressive symptoms at baseline (adjusted odds ratio 1.082, 95% confidence interval 1.004-1.166; $p = 0.04$ for dietary DHA + EPA and Burnam score ≥ 0.06), although this generally did not persist at follow-up. CONCLUSION: No relationship between RBC omega-3 levels and subsequent depressive symptoms was evident, and associations between dietary omega-3 and depressive symptoms were variable. Biomarkers of omega-3 status do not appear to be related to risk of new depression in post-menopausal women.

Plaza, I., M. M. P. Demarzo, et al. (2013). **"Mindfulness-based mobile applications: Literature review and analysis of current features."** *JMIR Mhealth and Uhealth* 1(2): e24. <http://mhealth.jmir.org/2013/2/e24/>

(Free full text available) Background: Interest in mindfulness has increased exponentially, particularly in the fields of psychology and medicine. The trait or state of mindfulness is significantly related to several indicators of psychological health, and mindfulness-based therapies are effective at preventing and treating many chronic diseases. Interest in mobile applications for health promotion and disease self-management is also growing. Despite the explosion of interest, research on both the design and potential uses of mindfulness-based mobile applications (MBMAs) is scarce. Objective: Our main objective was to study the features and functionalities of current MBMAs and compare them to current evidence-based literature in the health and clinical setting. Methods: We searched online vendor markets, scientific journal databases, and grey literature related to MBMAs. We included mobile applications that featured a mindfulness-based component related to training or daily practice of mindfulness techniques. We excluded opinion-based articles from the literature. Results: The literature search resulted in 11 eligible matches, two of which completely met our selection criteria—a pilot study designed to evaluate the feasibility of a MBMA to train the practice of "walking meditation," and an exploratory study of an application consisting of mood reporting scales and mindfulness-based mobile therapies. The online market search eventually analyzed 50 available MBMAs. Of these, 8% (4/50) did not work, thus we only gathered information about language, downloads, or prices. The most common operating system was

Android. Of the analyzed apps, 30% (15/50) have both a free and paid version. MBMAs were devoted to daily meditation practice (27/46, 59%), mindfulness training (6/46, 13%), assessments or tests (5/46, 11%), attention focus (4/46, 9%), and mixed objectives (4/46, 9%). We found 108 different resources, of which the most used were reminders, alarms, or bells (21/108, 19.4%), statistics tools (17/108, 15.7%), audio tracks (15/108, 13.9%), and educational texts (11/108, 10.2%). Daily, weekly, monthly statistics, or reports were provided by 37% (17/46) of the apps. 28% (13/46) of them permitted access to a social network. No information about sensors was available. The analyzed applications seemed not to use any external sensor. English was the only language of 78% (39/50) of the apps, and only 8% (4/50) provided information in Spanish. 20% (9/46) of the apps have interfaces that are difficult to use. No specific apps exist for professionals or, at least, for both profiles (users and professionals). We did not find any evaluations of health outcomes resulting from the use of MBMAs. Conclusions: While a wide selection of MBMAs seem to be available to interested people, this study still shows an almost complete lack of evidence supporting the usefulness of those applications. We found no randomized clinical trials evaluating the impact of these applications on mindfulness training or health indicators, and the potential for mobile mindfulness applications remains largely unexplored.

Powers, S. W., S. M. Kashikar-Zuck, et al. (2013). **"Cognitive behavioral therapy plus amitriptyline for chronic migraine in children and adolescents: A randomized clinical trial."** *JAMA* 310(24): 2622-2630.

<http://jama.jamanetwork.com/article.aspx?articleid=1793798>

IMPORTANCE: Early, safe, effective, and durable evidence-based interventions for children and adolescents with chronic migraine do not exist. **OBJECTIVE:** To determine the benefits of cognitive behavioral therapy (CBT) when combined with amitriptyline vs headache education plus amitriptyline. **DESIGN, SETTING, AND PARTICIPANTS:** A randomized clinical trial of 135 youth (79% female) aged 10 to 17 years diagnosed with chronic migraine (≥ 15 days with headache/month) and a Pediatric Migraine Disability Assessment Score (PedMIDAS) greater than 20 points were assigned to the CBT plus amitriptyline group (n = 64) or the headache education plus amitriptyline group (n = 71). The study was conducted in the Headache Center at Cincinnati Children's Hospital between October 2006 and September 2012; 129 completed 20-week follow-up and 124 completed 12-month follow-up. **INTERVENTIONS:** Ten CBT vs 10 headache education sessions involving equivalent time and therapist attention. Each group received 1 mg/kg/d of amitriptyline and a 20-week end point visit. In addition, follow-up visits were conducted at 3, 6, 9, and 12 months. **MAIN OUTCOMES AND MEASURES:** The primary end point was days with headache and the secondary end point was PedMIDAS (disability score range: 0-240 points; 0-10 for little to none, 11-30 for mild, 31-50 for moderate, >50 for severe); both end points were determined at 20 weeks. Durability was examined over the 12-month follow-up period. Clinical significance was measured by a 50% or greater reduction in days with headache and a disability score in the mild to none range (<20 points). **RESULTS:** At baseline, there were a mean (SD) of 21 (5) days with headache per 28 days and the mean (SD) PedMIDAS was 68 (32) points. At the 20-week end point, days with headache were reduced by 11.5 for the CBT plus amitriptyline group vs 6.8 for the headache education plus amitriptyline group (difference, 4.7 [95% CI, 1.7-7.7] days; P = .002). The PedMIDAS decreased by 52.7 points for the CBT group vs 38.6 points for the headache education group (difference, 14.1 [95% CI, 3.3-24.9] points; P = .01). In the CBT group, 66% had a 50% or greater reduction in headache days vs 36% in the headache education group (odds ratio, 3.5 [95% CI, 1.7-7.2]; P < .001). At 12-month follow-up, 86% of the CBT group had a 50% or greater reduction in headache days vs 69% of the headache education group; 88% of the CBT group had a PedMIDAS of less than 20 points vs 76% of the headache education group. Measured treatment credibility and integrity was high for both groups. **CONCLUSIONS AND RELEVANCE:** Among young persons with chronic migraine, the use of CBT plus amitriptyline resulted in greater reductions in days with headache and migraine-related disability compared with use of headache education plus amitriptyline. These findings support the efficacy of CBT in the treatment of chronic migraine in children and adolescents.

Rodriguez-Leyva, D., W. Weighell, et al. (2013). **"Potent antihypertensive action of dietary flaxseed in hypertensive patients."** *Hypertension* 62(6): 1081-1089. <http://hyper.ahajournals.org/content/62/6/1081.abstract>

Flaxseed contains ω -3 fatty acids, lignans, and fiber that together may provide benefits to patients with cardiovascular disease. Animal work identified that patients with peripheral artery disease may particularly benefit from dietary supplementation with flaxseed. Hypertension is commonly associated with peripheral artery disease. The purpose of the study was to examine the effects of daily ingestion of flaxseed on systolic (SBP) and diastolic blood pressure (DBP) in peripheral artery disease patients. In this prospective, double-blinded, placebo-controlled, randomized trial, patients (110 in total) ingested a variety of foods that contained 30 g of milled flaxseed or placebo each day over 6 months. Plasma levels of the ω -3 fatty acid α -linolenic acid and enterolignans increased 2- to 50-fold in the flaxseed-fed group but did not increase significantly in the placebo group. Patient body weights were not significantly different between the 2 groups at any time. SBP was ≈ 10 mm Hg lower, and DBP was ≈ 7 mm Hg lower in the flaxseed group compared with placebo after 6 months. Patients who entered the trial with a SBP ≥ 140 mm Hg at baseline obtained a significant reduction of 15 mm Hg in SBP and 7 mm Hg in DBP from flaxseed ingestion. The antihypertensive effect was achieved selectively in hypertensive patients. Circulating α -linolenic acid levels correlated with SBP and DBP, and lignan levels correlated with changes in DBP. In summary, flaxseed induced one of the most potent antihypertensive effects achieved by a dietary intervention.

Sauer-Zavala, S. E., E. C. Walsh, et al. (2013). **"Comparing mindfulness-based intervention strategies: Differential effects of sitting meditation, body scan, and mindful yoga."** *Mindfulness* 4(4): 383-388.

<http://link.springer.com/article/10.1007/s12671-012-0139-9>

We investigated whether three different meditation practices that are commonly used in mindfulness-based interventions lead to differential changes in psychological health outcomes when presented separately. Participants included 141 undergraduates assigned to a sitting meditation, body scan, or mindful yoga condition. Participants in all conditions attended three weekly 1-h sessions (105 min of guided meditation and 75 min of discussion) in addition to pre- and post-intervention questionnaires collected in separate sessions. Participants reported significant improvements in the tendency to describe one's experience, rumination, self-compassion, and psychological well-being regardless of condition. The following between-group differences in change over time emerged: (1) mindful yoga was associated with greater increases in psychological well-being than the other two practices, (2) sitting meditation and mindful yoga were both associated with greater decreases in difficulties with emotion regulation than the body scan, and (3) sitting meditation was associated with greater increases in the tendency to take a nonevaluative stance toward observed stimuli than the body scan.

Seedall, R. B. and K. S. Wampler (2013). **"An attachment primer for couple therapists: Research and clinical implications."** *Journal of Marital and Family Therapy* 39(4): 427-440. <http://dx.doi.org/10.1111/jmft.12024>

According to attachment theory, humans are relational beings and even a child's earliest experiences with caregivers have a profound effect on emotional development and an overall approach to relationships. With increasing regularity, couple therapy has utilized attachment language as a conceptual tool, but more work is needed to understand the full clinical implications of attachment theory. These include understanding the intergenerational nature of attachment and adapting the

delivery, timing, and pace of interventions to client attachment strategies. In this article, we summarize the origins of attachment theory, its measurement, the role of attachment in couple relationships, attachment stability and change, and ways that attachment informs therapy process and intervention. We hope that this article will provide an impetus for couple therapists to expand their conceptualization and use of attachment in their clinical work and for couple researchers to conduct more clinically relevant, attachment-oriented process research.

Silberzahn, R. and E. L. Uhlmann (2013). **"It pays to be herr Kaiser: Germans with noble-sounding surnames more often work as managers than as employees."** *Psychological Science* 24(12): 2437-2444.

<http://pss.sagepub.com/content/24/12/2437.abstract>

In the field study reported here (N = 222,924), we found that Germans with noble-sounding surnames, such as Kaiser ("emperor"), König ("king"), and Fürst ("prince"), more frequently hold managerial positions than Germans with last names that either refer to common everyday occupations, such as Koch ("cook"), Bauer ("farmer"), and Becker/Bäcker ("baker"), or do not refer to any social role. This phenomenon occurs despite the fact that noble-sounding surnames never indicated that the person actually held a noble title. Because of basic properties of associative cognition, the status linked to a name may spill over to its bearer and influence his or her occupational outcomes.

Spielmann, S. S., G. MacDonald, et al. (2013). **"Settling for less out of fear of being single."** *J Pers Soc Psychol* 105(6): 1049-1073. <http://www.ncbi.nlm.nih.gov/pubmed/24128187>

The present research demonstrates that fear of being single predicts settling for less in romantic relationships, even accounting for constructs typically examined in relationship research such as anxious attachment. Study 1 explored the content of people's thoughts about being single. Studies 2A and 2B involved the development and validation of the Fear of Being Single Scale. Study 2C provided preliminary support for the hypothesis that fear of being single predicts settling for less in ongoing relationships, as evidenced by greater dependence in unsatisfying relationships. Study 3 replicated this effect in a longitudinal study demonstrating that fear of being single predicts lower likelihood of initiating the dissolution of a less satisfying relationship. Studies 4A and 4B explored the predictive ability of fear of being single for self-reported dating standards. Across both samples, fear of being single was unrelated to self-reported standards for a mate, with the exception of consistently higher standards for parenting. Studies 5 and 6 explored romantic interest in targets that were manipulated to vary in responsiveness and physical attractiveness. These studies found that fear of being single consistently predicted romantic interest in less responsive and less attractive dating targets. Study 7 explored fear of being single during a speed-dating event. We found that fear of being single predicted being less selective in expressing romantic interest but did not predict other daters' romantic interest. Taken together, the present research suggests that fear of being single is a meaningful predictor of settling for less in relationships.

Stallard, P., M. Spears, et al. (2013). **"Self-harm in young adolescents (12-16 years): Onset and short-term continuation in a community sample."** *BMC Psychiatry* 13(1): 328. <http://www.biomedcentral.com/1471-244X/13/328>

(Available in free full text) BACKGROUND: To investigate the prevalence of self-harm in young adolescents and factors associated with onset and continuity over a one year period. METHOD: Prospective longitudinal study. Participants were young adolescents (n = 3964) aged 12-16 years attending 8 secondary schools in the Midlands and South West of England. RESULTS: Over a one year period 27% of young adolescents reported thoughts of self-harm and 15% reported at least one act of self-harm. Of those who self-harmed, less than one in five (18%) had sought help for psychological problems of anxiety or depression. Compared with boys, girls were at increased risk of developing thoughts (OR 1.61, 95% CI 1.26-2.06) and acts (OR 1.40, 95% CI 1.06-1.84) of self-harm, particularly amongst those girls in school year 9 (aged 13/14, thoughts adjusted Odds Ratio (aOR) 1.97, 95% CI 1.27-3.04; acts aOR 2.59, 95% CI 1.52-4.41). Of those reporting thoughts of self-harm at baseline, 60% also reported these thoughts at follow-up. Similarly 55% of those who reported an act of self-harm at baseline also reported that they had self-harmed at follow-up. Insecure peer relationships increased the likelihood that boys and girls would develop self-harming behaviours, as did being bullied for boys. Low mood was associated with the development of self-harming thoughts and behaviours for boys and girls, whilst a strong sense of school membership was associated with a reduced risk of developing thoughts of self-harm for boys and increased the likelihood of self-harming thoughts and behaviours ceasing for girls. CONCLUSION: Self harm in young adolescents is common with one in four reporting self-harming thoughts and one in six engaging in self-harming behaviour over a one year period. Self-harm is already established by 12/13 years of age and for over half of our sample, self-harming thoughts and behaviour persisted over the year. Secure peer and strong school relationships were associated with less self-harm. Few seek help for psychological problems, suggesting a need to increase awareness amongst all professionals who work with young adolescents about self-harm and associated risk factors.

Suzuki, K. O., Akihito, Y. Matsumoto, et al. (2013). **"Parental overprotection engenders dysfunctional attitudes about achievement and dependency in a gender-specific manner."** *BMC Psychiatry* 13(1): 345.

<http://www.biomedcentral.com/1471-244X/13/345>

(Available in free full text) BACKGROUND: It has been suggested that dysfunctional attitudes, cognitive vulnerability to depression, have developmental origins. The present study examined the effects of parental rearing on dysfunctional attitudes in three areas of life with special attention to gender specificity. METHODS: The subjects were 665 Japanese healthy volunteers. Dysfunctional attitudes were assessed by the 24-item Dysfunctional Attitude Scale, which has the Achievement, Dependency and Self-control subscales. Perceived parental rearing was assessed by the Parental Bonding Instrument, which has the Care and Protection subscales. RESULTS: Higher scores of the Achievement (beta=0.293, p<0.01) and Dependency (beta=0.224, p<0.05) subscales were correlated with higher scores of the Protection subscale in the combination of mother and daughter, but not in other combinations of parents and recipients. Scores of the Self-control subscale were not correlated with paternal or maternal rearing scores. CONCLUSIONS: The present study suggests that parental overprotection engenders dysfunctional attitudes about achievement and dependency in a gender-specific manner.

Swardfager, W., N. Herrmann, et al. (2013). **"Zinc in depression: A meta-analysis."** *Biological Psychiatry* 74(12): 872-878.

<http://linkinghub.elsevier.com/retrieve/pii/S0006322313004514?showall=true>

Zinc is an essential micronutrient with diverse biological roles in cell growth, apoptosis and metabolism, and in the regulation of endocrine, immune, and neuronal functions implicated in the pathophysiology of depression. This study sought to quantitatively summarize the clinical data comparing peripheral blood zinc concentrations between depressed and nondepressed subjects. PubMed, Cumulated Index to Nursing and Allied Health Literature, and PsycINFO were searched for original peer-reviewed studies (to June 2012) measuring zinc concentrations in serum or plasma from depressed subjects (identified by either screening or clinical criteria) and nondepressed control subjects. Mean (\pm SD) zinc concentrations were extracted, combined quantitatively in random-effects meta-analysis, and summarized as a weighted mean difference (WMD). Seventeen studies, measuring peripheral blood zinc concentrations in 1643 depressed and 804 control subjects, were included. Zinc concentrations were approximately $-1.85 \mu\text{mol/L}$ lower in depressed subjects than control subjects (95% confidence interval: [CI]: -2.51 to

-1.19 $\mu\text{mol/L}$, $Z_{17} = 5.45$, $p < .00001$). Heterogeneity was detected ($\chi^2_{17} = 142.81$, $p < .00001$, $I^2 = 88\%$) and explored; in studies that quantified depressive symptoms, greater depression severity was associated with greater relative zinc deficiency ($B = -1.503$, $t_9 = -2.82$, $p = .026$). Effect sizes were numerically larger in studies of inpatients (WMD -2.543 , 95% CI: -3.522 to -1.564 , $Z_9 = 5.09$, $p < .0001$) versus community samples (WMD -0.943 , 95% CI: -1.563 to -0.323 , $Z_7 = 2.98$, $p = .003$) and in studies of higher methodological quality (WMD -2.354 , 95% CI: -2.901 to -1.807 , $Z_7 = 8.43$, $p < .0001$). Depression is associated with a lower concentration of zinc in peripheral blood. The pathophysiological relationships between zinc status and depression, and the potential benefits of zinc supplementation in depressed patients, warrant further investigation.

Tadic, M., W. G. M. Oerlemans, et al. (2013). **"Daily activities and happiness in later life: The role of work status."** *Journal of Happiness Studies* 14(5): 1507-1527. <http://link.springer.com/article/10.1007/s10902-012-9392-9>

The aim of this study was to examine the role of work status (i.e. working versus not working) in the relationship between time-use and momentary happiness. We employed a longitudinal research design using monthly assessments via the day reconstruction method over 3 years among 579 older adults. In total, participants reported 84,247 daily activities and accompanying momentary happiness levels. Hierarchical linear modeling results revealed that working older individuals are not happier than nonworking individuals in the overall. However, involvement in work as a daily activity does coincide with higher levels of momentary happiness. Furthermore, working older individuals experience more happiness during relaxing activities, and during weekends, whereas nonworking older individuals experience more happiness during administrative activities. These findings provide novel information on intraindividual differences in lifestyle relating to the everyday happiness between working and nonworking older people which cannot be accurately captured by global survey methods.

Threapleton, D. E., D. C. Greenwood, et al. (2013). **"Dietary fibre intake and risk of cardiovascular disease: Systematic review and meta-analysis."** *BMJ* 347: f6879. <http://www.ncbi.nlm.nih.gov/pubmed/24355537>

OBJECTIVE: To investigate dietary fibre intake and any potential dose-response association with coronary heart disease and cardiovascular disease. DESIGN: Systematic review of available literature and dose-response meta-analysis of cohort studies using random effects models. DATA SOURCES: The Cochrane Library, Medline, Medline in-process, Embase, CAB Abstracts, ISI Web of Science, BIOSIS, and hand searching. ELIGIBILITY CRITERIA FOR STUDIES: Prospective studies reporting associations between fibre intake and coronary heart disease or cardiovascular disease, with a minimum follow-up of three years and published in English between 1 January 1990 and 6 August 2013. RESULTS: 22 cohort study publications met inclusion criteria and reported total dietary fibre intake, fibre subtypes, or fibre from food sources and primary events of cardiovascular disease or coronary heart disease. Total dietary fibre intake was inversely associated with risk of cardiovascular disease (risk ratio 0.91 per 7 g/day (95% confidence intervals 0.88 to 0.94)) and coronary heart disease (0.91 (0.87 to 0.94)). There was evidence of some heterogeneity between pooled studies for cardiovascular disease ($I^2=45\%$ (0% to 74%)) and coronary heart disease ($I^2=33\%$ (0% to 66%)). Insoluble fibre and fibre from cereal and vegetable sources were inversely associated with risk of coronary heart disease and cardiovascular disease. Fruit fibre intake was inversely associated with risk of cardiovascular disease. CONCLUSIONS: Greater dietary fibre intake is associated with a lower risk of both cardiovascular disease and coronary heart disease. Findings are aligned with general recommendations to increase fibre intake. The differing strengths of association by fibre type or source highlight the need for a better understanding of the mode of action of fibre components.

Troy, A. S., A. J. Shallcross, et al. (2013). **"A person-by-situation approach to emotion regulation: Cognitive reappraisal can either help or hurt, depending on the context."** *Psychological Science* 24(12): 2505-2514. <http://pss.sagepub.com/content/24/12/2505.abstract>

Emotion regulation is central to psychological health. For instance, cognitive reappraisal (reframing an emotional situation) is generally an adaptive emotion-regulation strategy (i.e., it is associated with increased psychological health). However, a person-by-situation approach suggests that the adaptiveness of different emotion-regulation strategies depends on the context in which they are used. Specifically, reappraisal may be adaptive when stressors are uncontrollable (when the person can regulate only the self) but maladaptive when stressors can be controlled (when the person can change the situation). To test this prediction, we measured cognitive-reappraisal ability, the severity of recent life stressors, stressor controllability, and level of depression in 170 participants. For participants with uncontrollable stress, higher cognitive-reappraisal ability was associated with lower levels of depression. In contrast, for participants with controllable stress, higher cognitive-reappraisal ability was associated with greater levels of depression. These findings support a theoretical model in which particular emotion-regulation strategies are not adaptive or maladaptive per se; rather, their adaptiveness depends on the context.

Yap, A. J., A. S. Wazlawek, et al. (2013). **"The ergonomics of dishonesty: The effect of incidental posture on stealing, cheating, and traffic violations."** *Psychological Science* 24(11): 2281-2289. <http://pss.sagepub.com/content/24/11/2281.abstract>

Research in environmental sciences has found that the ergonomic design of human-made environments influences thought, feeling, and action. In the research reported here, we examined the impact of physical environments on dishonest behavior. In four studies, we tested whether certain bodily configurations—or postures—incidentally imposed by the environment led to increases in dishonest behavior. The first three experiments showed that individuals who assumed expansive postures (either consciously or inadvertently) were more likely to steal money, cheat on a test, and commit traffic violations in a driving simulation. Results suggested that participants' self-reported sense of power mediated the link between postural expansiveness and dishonesty. Study 4 revealed that automobiles with more expansive driver's seats were more likely to be illegally parked on New York City streets. Taken together, the results suggest that, first, environments that expand the body can inadvertently lead people to feel more powerful, and second, these feelings of power can cause dishonest behavior.

Zgierska, A., C. N. Obasi, et al. (2013). **"Randomized controlled trial of mindfulness meditation and exercise for the treatment of acute respiratory infection: Possible mechanisms of action."** *Evidence-Based Complementary and Alternative Medicine* 2013: 14. <http://dx.doi.org/10.1155/2013/952716>

(Free full text available) Background. A randomized trial suggests that meditation and exercise may prevent acute respiratory infection (ARI). This paper explores potential mediating mechanisms. Methods. Community-recruited adults were randomly assigned to three nonblinded arms: 8-week mindfulness-based stress reduction (MBSR), moderate-intensity exercise (EX), or wait-list control (WL). Primary outcomes were ARI illness burden (validated Wisconsin Upper Respiratory Symptom Survey). Potential mediators included self-reported psychophysical health and exercise intensity (baseline, 9 weeks, and 3 months). A Baron and Kenny approach-based mediational analysis model, adjusted for group status, age, and gender, evaluated the relationship between the primary outcome and a potential mediator using zero-inflated modeling and Sobel testing. Results. Of 154 randomized, 149 completed the trial (51, 47, and 51 in meditation, exercise, and control groups) and were analyzed (82% female, 94% Caucasian, $59.3 \pm \text{SD } 6.6$ years old). Mediation analyses suggested that improved mindfulness (Mindful Attention Awareness Scale) at 3 months may mediate intervention effects on ARI severity and duration (EX); 1 point increase in the mindfulness score corresponded to a shortened ARI duration by 7.2–9.6 hours. Conclusions. Meditation and exercise may

decrease the ARI illness burden through increased mindfulness. These preliminary findings need confirmation, if confirmed, they would have important policy and clinical implications.