

36 bhma abstracts, september '12

Thirty six abstracts covering a multitude of stress, health & wellbeing related subjects including use of hormonal contraceptives & female sexuality, cocoa's benefits for early cognitive impairment, irritable bowel syndrome, unfortunate first names, shoes as a source of accurate first impressions, physical activity & mental health, the safety of organic foods, the health of children born to older mothers, and much more.

(Bedrosian, Weil et al. 2012; Burrows, Basha et al. 2012; Desideri, Kwik-Urbe et al. 2012; Eberth and Sedlmeier 2012; Ford and Talley 2012; Fraley, Griffin et al. 2012; Gebauer, Leary et al. 2012; Gillath, Bahns et al. 2012; Gray 2012; Hawkes 2012; Hill, Rodeheffer et al. 2012; Hurley and Kwon 2012; Jazaieri, Jinpa et al. 2012; Kim, Park et al. 2012; Knabb 2012; Larsen, Darby et al. 2012; Lavda, Webb et al. 2012; Lee and Ernst 2012; Lynn, Malaktaris et al. 2012; Manrique-Garcia, Zammit et al. 2012; Mariano and Vaillant 2012; Moreau and Mageau 2012; Munshi, Eisendrath et al. 2012; Nedeljkovic, Wirtz et al. 2012; O'Hara, Gibbons et al. 2012; Rizos, Ntzani et al. 2012; Rizzuto, Orsini et al. 2012; Schnitker 2012; Selcuk, Zayas et al. 2012; Sivertsen, Salo et al. 2012; Smith-Spangler, Brandeau et al. 2012; Strauss and Lang 2012; Sutcliffe, Barnes et al. 2012; Tan, Overall et al. 2012; van Dierendonck 2012; Vaucher, Druais et al. 2012)

Bedrosian, T. A., Z. M. Weil, et al. (2012). **"Chronic dim light at night provokes reversible depression-like phenotype: Possible role for tnf."** *Mol Psychiatry*. <http://dx.doi.org/10.1038/mp.2012.96>

The prevalence of major depression has increased in recent decades and women are twice as likely as men to develop the disorder. Recent environmental changes almost certainly have a role in this phenomenon, but a complete set of contributors remains unspecified. Exposure to artificial light at night (LAN) has surged in prevalence during the past 50 years, coinciding with rising rates of depression. Chronic exposure to LAN is linked to increased risk of breast cancer, obesity and mood disorders, although the relationship to mood is not well characterized. In this study, we investigated the effects of chronic exposure to 5 lux LAN on depression-like behaviors in female hamsters. Using this model, we also characterized hippocampal brain-derived neurotrophic factor expression and hippocampal dendritic morphology, and investigated the reversibility of these changes 1, 2 or 4 weeks following elimination of LAN. Furthermore, we explored the mechanism of action, focusing on hippocampal proinflammatory cytokines given their dual role in synaptic plasticity and the pathogenesis of depression. Using reverse transcription-quantitative PCR, we identified a reversible increase in hippocampal tumor necrosis factor (TNF), but not interleukin-1 β , mRNA expression in hamsters exposed to LAN. Direct intracerebroventricular infusion of a dominant-negative inhibitor of soluble TNF, XPro1595, prevented the development of depression-like behavior under LAN, but had no effect on dendritic spine density in the hippocampus. These results indicate a partial role for TNF in the reversible depression-like phenotype observed under chronic dim LAN. Recent environmental changes, such as LAN exposure, may warrant more attention as possible contributors to rising rates of mood disorders. (See comment in at *Psychiatric News* at <http://psychnews.psychiatryonline.org/newsArticle.aspx?articleid=1361759>.)

Burrows, L. J., M. Basha, et al. (2012). **"The effects of hormonal contraceptives on female sexuality: A review."** *The Journal of Sexual Medicine* 9(9): 2213-2223. <http://dx.doi.org/10.1111/j.1743-6109.2012.02848.x>

Introduction. Hormonal contraceptives can influence female sexual function. Aim. The goal of this article was to provide a comprehensive review of the effects that various hormonal contraceptives may have on female sexual function. Methods. A Medline search was conducted using several terms related to and including the terms contraception, oral contraceptive, female sexual function, dyspareunia, libido, and sexual desire. Results. A thorough review of the effects of hormonal contraceptives on female sexual function. Conclusions. The sexual side effects of hormonal contraceptives are not well studied, particularly with regard to impact on libido. There appears to be mixed effects on libido, with a small percentage of women experiencing an increase or a decrease, and the majority being unaffected. Healthcare providers must be aware that hormonal contraceptive can have negative effects on female sexuality so they can counsel and care for their patients appropriately.

Desideri, G., C. Kwik-Urbe, et al. (2012). **"Benefits in cognitive function, blood pressure, and insulin resistance through cocoa flavanol consumption in elderly subjects with mild cognitive impairment / novelty and significance."** *Hypertension* 60(3): 794-801. <http://hyper.ahajournals.org/content/60/3/794.abstract>

Flavanol consumption is favorably associated with cognitive function. We tested the hypothesis that dietary flavanols might improve cognitive function in subjects with mild cognitive impairment. We conducted a double-blind, parallel arm study in 90 elderly individuals with mild cognitive impairment randomized to consume once daily for 8 weeks a drink containing \approx 990 mg (high flavanols), \approx 520 mg (intermediate flavanols), or \approx 45 mg (low flavanols) of cocoa flavanols per day. Cognitive function was assessed by Mini Mental State Examination, Trail Making Test A and B, and verbal fluency test. At the end of the follow-up period, Mini Mental State Examination was similar in the 3 treatment groups ($P=0.13$). The time required to complete Trail Making Test A and Trail Making Test B was significantly ($P<0.05$) lower in subjects assigned to high flavanols (38.10 ± 10.94 and 104.10 ± 28.73 seconds, respectively) and intermediate flavanols (40.20 ± 11.35 and 115.97 ± 28.35 seconds, respectively) in comparison with those assigned to low flavanols (52.60 ± 17.97 and 139.23 ± 43.02 seconds, respectively). Similarly, verbal fluency test score was significantly ($P<0.05$) better in subjects assigned to high flavanols in comparison with those assigned to low flavanols (27.50 ± 6.75 versus 22.30 ± 8.09 words per 60 seconds). Insulin resistance, blood pressure, and lipid peroxidation also decreased among subjects in the high-flavanol and intermediate-flavanol groups. Changes of insulin resistance explained \approx 40% of composite z score variability through the study period (partial $r^2=0.4013$; $P<0.0001$). To the best of our knowledge, this is the first dietary intervention study demonstrating that the regular consumption of cocoa flavanols might be effective in improving cognitive function in elderly subjects with mild cognitive impairment. This effect appears mediated in part by an improvement in insulin sensitivity.

Eberth, J. and P. Sedlmeier (2012). **"The effects of mindfulness meditation: A meta-analysis."** *Mindfulness (N.Y.)* 3(3): 174-189. <http://dx.doi.org/10.1007/s12671-012-0101-x>

Previous meta-analyses on the effects of mindfulness meditation were predominantly concerned with clinical research. In contrast, the present study aims at giving a comprehensive overview of the effects of mindfulness meditation on various psychological variables, for meditators in nonclinical settings. Included are 39 studies that fulfilled our six selection criteria: (1) a mindfulness meditation treatment, (2) the existence of an inactive control group, (3) a population of nonclinical adults, (4) the investigation of psychological measures that were (5) assessed at temporal distance from a meditation session, and (6) the availability of sufficient data to calculate effect sizes. The dependent variables examined included, among others, attention, intelligence, self-attributed mindfulness, positive and negative emotions, emotion regulation, personality traits, self-concept, self-realization, stress, and well-being. We found an effect size of $r = 0.27$ averaged across all studies and dependent variables. The effects differed widely across dependent variables. Moreover, we found large differences between the effect sizes reported

for complete Mindfulness-based Stress Reduction (MBSR) programs vs. "pure" meditation. MBSR seems to have its most powerful effect on attaining higher psychological well-being, whereas pure mindfulness meditation studies reported the largest effects on variables associated with the concept of mindfulness. This raises the question if some effect sizes found for MBSR might be partly inflated by effects that are not attributable to its mindfulness meditation component. Future theorizing should address meditation-specific concepts more extensively to account for the changes in healthy practitioners.

Ford, A. C. and N. J. Talley (2012). **"Irritable bowel syndrome."** *BMJ* 345. <http://www.bmj.com/content/345/bmj.e5836>

Summary points: Irritable bowel syndrome (IBS) affects up to one in five people at some point in their lives. The condition is commoner in younger people and women, and is not associated with increased mortality. A positive diagnosis of IBS should be reached using symptom based clinical criteria, not after excluding organic disease by exhaustive investigation. Exclusion diets (for example, low levels of fermentable oligosaccharides, disaccharides, monosaccharides, and polyols) and exercise may be of benefit. Soluble fibre, antispasmodics (including peppermint oil), antidepressants, agents acting on the 5-HT receptor, rifaximin, and probiotics are all more effective than placebo for treating IBS. Psychological therapies should be reserved for patients failing these treatments.

Fraleigh, R. C., B. N. Griffin, et al. (2012). **"Developmental antecedents of political ideology: A longitudinal investigation from birth to age 18 years."** *Psychol Sci.* <http://www.ncbi.nlm.nih.gov/pubmed/23054474>

The study reported here examined the developmental antecedents of conservative versus liberal ideologies using data from the National Institute of Child Health and Human Development Study of Early Child Care and Youth Development and a follow-up study conducted when the sample was 18 years old. Specifically, we examined variation in conservative versus liberal ideologies at age 18 years as a function of parenting attitudes and child temperament during the first 5 years of life. Consistent with long-standing theories on the development of political attitudes, our results showed that parents' authoritarian attitudes assessed when children were 1 month old predicted conservative attitudes in those children more than 17 years later. Consistent with the findings of Block and Block (2006), our results also showed that early childhood temperament predicted variation in conservative versus liberal ideologies.

Gebauer, J. E., M. R. Leary, et al. (2012). **"Unfortunate first names: Effects of name-based relational devaluation and interpersonal neglect."** *Social psychological and personality science* 3(5): 590-596. <http://spp.sagepub.com/content/3/5/590.abstract>

Can negative first names cause interpersonal neglect? Study 1 (N = 968) compared extremely negatively named online-daters with extremely positively named online-daters. Study 2 (N = 4,070) compared less extreme groups—namely, online-daters with somewhat unattractive versus somewhat attractive first names. Study 3 (N = 6,775) compared online-daters with currently popular versus currently less popular first names, while controlling for name-popularity at birth. Across all studies, negatively named individuals were more neglected by other online-daters, as indicated by fewer first visits to their dating profiles. This form of neglect arguably mirrors a name-based life history of neglect, discrimination, prejudice, or even ostracism. Supporting this argument, neglect mediated the relation between negative names and lower self-esteem, more frequent smoking, and less education. These results are consistent with the name-based interpersonal neglect hypothesis: Negative names evoke negative interpersonal reactions, which in turn influence people's life outcomes for the worse.

Gillath, O., A. J. Bahns, et al. (2012). **"Shoes as a source of first impressions."** *Journal of Research in Personality* 46(4): 423-430. <http://www.sciencedirect.com/science/article/pii/S0092656612000608>

Surprisingly minimal appearance cues lead perceivers to accurately judge others' personality, status, or politics. We investigated people's precision in judging characteristics of an unknown person, based solely on the shoes he or she wears most often. Participants provided photographs of their shoes, and during a separate session completed self-report measures. Coders rated the shoes on various dimensions, and these ratings were found to correlate with the owners' personal characteristics. A new group of participants accurately judged the age, gender, income, and attachment anxiety of shoe owners based solely on the pictures. Shoes can indeed be used to evaluate others, at least in some domains.

Gray, K. (2012). **"The power of good intentions: Perceived benevolence soothes pain, increases pleasure, and improves taste."** *Social psychological and personality science* 3(5): 639-645. <http://spp.sagepub.com/content/3/5/639.abstract>

The experience of physical stimuli would seem to depend primarily on their physical characteristics—chocolate tastes good, getting slapped hurts, and snuggling is pleasurable. This research examined, however, whether physical experience is influenced by the interpersonal context in which stimuli occur. Specifically, three studies examined whether perceiving benevolent intentions behind stimuli can improve their experience. Experiment 1 tested whether benevolently intended shocks hurt less, Experiment 2 tested whether benevolently intended massages were more pleasurable, and Experiment 3 tested whether benevolently intended candy tastes sweeter. The results confirm that good intentions—even misguided ones—can soothe pain, increase pleasure, and make things taste better. More broadly, these studies suggest that basic physical experience depends upon how we perceive the minds of others.

Hawkes, N. (2012). **"Lives saved by breast screening outnumber cases of overdiagnosis, review says."** *BMJ* 345. <http://www.bmj.com/content/345/bmj.e6155>

A Europe-wide review of breast cancer screening has concluded that the benefits in lives saved outweigh the risks of overdiagnosis. The analysis, carried out by a working group from nine European countries, showed that for every 1000 women between the ages of 50 and 69 who are screened, between seven and nine lives are saved and four women are "overdiagnosed." The conclusion contradicts that of critics of breast cancer screening, who have argued that the number of women damaged by false positive findings exceeds the number who benefit by having their cancers detected earlier ... Expressed as a "number needed to screen," 14 women would need to be screened every two years between the ages of 50 and 69 for one case of breast cancer to be detected, and for every life saved 111 to 114 women would need to be screened. On the negative side, for every six women screened one woman would be given a false positive result and be recalled for further non-invasive assessment before being cleared, and for every 33 women screened one would require an invasive procedure before being cleared ... "There has been quite a lot of discussion recently over the worth of breast cancer screening, and for this reason it is timely that the international group of experts has assessed the impact of population based screening in Europe and has found that it is contributing to the reduction in deaths from the disease. "We believe that not only should our conclusions be communicated to women offered breast screening in Europe but that, in addition, communication methods should be improved in order to raise women's awareness and to make information more accessible, relevant, and comprehensible."

Hill, S. E., C. D. Rodeheffer, et al. (2012). **"Boosting beauty in an economic decline: Mating, spending, and the lipstick effect."** *J Pers Soc Psychol* 103(2): 275-291. <http://www.ncbi.nlm.nih.gov/pubmed/22642483>

Although consumer spending typically declines in economic recessions, some observers have noted that recessions appear to increase women's spending on beauty products--the so-called lipstick effect. Using both historical spending data and rigorous experiments, the authors examine how and why economic recessions influence women's consumer behavior. Findings revealed that recessionary cues--whether naturally occurring or experimentally primed--decreased desire for most products (e.g., electronics, household items). However, these cues consistently increased women's desire for products that increase attractiveness to mates--the first experimental demonstration of the lipstick effect. Additional studies show that this effect is driven by women's desire to attract mates with resources and depends on the perceived mate attraction function served by these products. In addition to showing how and why economic recessions influence women's desire for beauty products, this research provides novel insights into women's mating psychology, consumer behavior, and the relationship between the two.

Hurley, D. and P. Kwon (2012). **"Results of a study to increase savoring the moment: Differential impact on positive and negative outcomes."** *Journal of Happiness Studies* 13(4): 579-588. <http://dx.doi.org/10.1007/s10902-011-9280-8>

Positive psychology has been increasingly moving towards testing interventions to increase positive outcomes and decrease negative outcomes. One of these possible interventions involves increasing savoring the moment. During savoring the moment, one focuses on positive events while they occur to increase, intensify, or prolong positive emotions in the present. This study tested a group savoring the moment intervention to increase positive outcomes and decrease negative outcomes over 2 weeks. The sample consisted of 193 undergraduate students who completed both sessions (94 intervention and 99 control condition). The intervention group experienced significant decreases in self-reported depressive symptoms and negative affect when compared to the control group. However, positive affect did not differ between the groups. Clinical and research implications are explored.

Jazaieri, H., G. Jinpa, et al. (2012). **"Enhancing compassion: A randomized controlled trial of a compassion cultivation training program."** *Journal of Happiness Studies*: 1-14. <http://dx.doi.org/10.1007/s10902-012-9373-z>

Psychosocial interventions often aim to alleviate negative emotional states. However, there is growing interest in cultivating positive emotional states and qualities. One particular target is compassion, but it is not yet clear whether compassion can be trained. A community sample of 100 adults were randomly assigned to a 9-week compassion cultivation training (CCT) program (n = 60) or a waitlist control condition (n = 40). Before and after this 9-week period, participants completed self-report inventories that measured compassion for others, receiving compassion from others, and self-compassion. Compared to the waitlist control condition, CCT resulted in significant improvements in all three domains of compassion—compassion for others, receiving compassion from others, and self-compassion. The amount of formal meditation practiced during CCT was associated with increased compassion for others. Specific domains of compassion can be intentionally cultivated in a training program. These findings may have important implications for mental health and well-being. (Free full text available at <http://ccare.stanford.edu/publications/ccare-articles>).

Kim, Y. S., Y. S. Park, et al. (2012). **"Relationship between physical activity and general mental health."** *Prev Med*(0). <http://www.sciencedirect.com/science/article/pii/S0091743512003945>

Purpose We investigated the relationship between physical activity and mental health and determined the optimal amount of physical activity associated with better mental health. Method Self-reported data from a national random sample of 7674 adult respondents collected during the 2008 U.S. Health Information National Trends 2007 Survey (HINTS) were analyzed in 2012. Mental health was plotted against the number of hours of physical activity per week using a fractional 2-degree polynomial function. Demographic and physical health factors related to poorer mental health were examined. The optimal range of physical activity associated with poorer mental health was examined by age, gender, and physical health. Results A curvilinear association was observed between physical activity and general mental health. The optimal threshold volume for mental health benefits was of 2.5 to 7.5 h of weekly physical activity. The associations varied by gender, age, and physical health status. Individuals who engaged in the optimal amount of physical activity were more likely to have reported better mental health (odds ratio = 1.39, p = 0.006). Conclusions This study established a hyperbolic dose-response relationship between physical activity and general mental health, with an optimal range of 2.5 to 7.5 h of physical activity per week.

Knabb, J. (2012). **"Centering prayer as an alternative to mindfulness-based cognitive therapy for depression relapse prevention."** *Journal of Religion and Health* 51(3): 908-924. <http://dx.doi.org/10.1007/s10943-010-9404-1>

In the last two decades, mindfulness has made a significant impact on Western secular psychology, as evidenced by several new treatment approaches that utilize mindfulness practices to ameliorate mental illness. Based on Buddhist teachings, mindfulness offers individuals the ability to, among other things, decenter from their thoughts and live in the present moment. As an example, mindfulness-based cognitive therapy (MBCT) teaches decentering and mindfulness techniques to adults in an eight-session group therapy format so as to reduce the likelihood of depression relapse. Yet, some Christian adults may prefer to turn to their own religious heritage, rather than the Buddhist tradition, in order to stave off depression relapse. Thus, the purpose of this article is to present centering prayer, a form of Christian meditation that is rooted in Catholic mysticism, as an alternative treatment for preventing depression relapse in adults. I argue that centering prayer overlaps considerably with MBCT, which makes it a suitable treatment alternative for many Christians in remission from depressive episodes.

Larsen, B. A., R. S. Darby, et al. (2012). **"The immediate and delayed cardiovascular benefits of forgiving."** *Psychosomatic Medicine* 74(7): 745-750. <http://www.psychosomaticmedicine.org/content/74/7/745.abstract>

Background The putative health benefits of forgiveness may include long-term buffering against cardiovascular reactivity associated with rumination. Although studies show short-term benefits of adopting a forgiving perspective, it is uncertain whether this perspective protects against repeated future rumination on offenses, which may be necessary for long-term health benefits. Also unclear is whether forgiveness offers unique benefits beyond simple distraction. Methods Cardiovascular parameters (systolic blood pressure [SBP], diastolic blood pressure [DBP], and heart rate) were measured while 202 participants thought about a previous offense from an angry or forgiving perspective or were distracted. All participants were then distracted for 5 minutes, after which they freely ruminated on the offense. Results Angry rumination initially yielded the greatest increase in blood pressure from baseline (mean [M] [standard deviation {SD}]: SBP = 9.24 [11.16]; M [SD]: DBP = 4.69 [7.48]) compared with forgiveness (M [SD]: SBP = 3.30 [6.48]; M [SD]: DBP = 1.51 [4.94]) and distraction (M [SD]: SBP = 4.81 [6.28]; M [SD]: DBP = 1.75 [3.80]), which did not differ from each other (p > .30). During free rumination, however, those who had previously focused on forgiveness showed less reactivity (M [SD]: SBP = 7.33 [9.61]; M [SD]: DBP = 4.73 [7.33]) than those who had been distracted (M [SD]: SBP = 10.50 [7.77]; M [SD]: DBP = 7.71 [6.83]) and those who previously focused on angry rumination (M [SD]: SBP = 12.04 [11.74]; M [SD]: DBP = 8.64 [12.63]). There were no differences for heart rate. Conclusions Forgiveness seems to lower reactivity both during the initial cognitive process and, more importantly, during mental recreations of an offense soon thereafter, potentially offering sustained protection, whereas effects of distraction appear transient.

Lavda, A. C., T. L. Webb, et al. (2012). **"A meta-analysis of the effectiveness of psychological interventions for adults with skin conditions."** *British Journal of Dermatology* 167(5): 970-979. <http://dx.doi.org/10.1111/j.1365-2133.2012.11183.x>

Skin conditions can be associated with heightened levels of psychological morbidity, suggesting the need for psychological interventions. A number of specific interventions (such as habit reversal) have been developed. However, to date, there has not been a systematic review of the effectiveness of psychological interventions. We sought to systematically evaluate the effectiveness of psychological interventions designed to improve the severity of and adjustment to skin conditions in adults. Database, archival and citation searches were conducted. Studies were included if participants were allocated to either a psychological intervention (excluding educational interventions and complementary therapies) or a comparison condition, and if they measured outcomes relevant to the skin condition. Twenty-two studies met these inclusion criteria. Effect sizes for each intervention were computed and we also coded a number of potential moderators of intervention efficacy. Psychological interventions were found to have a medium-sized effect on skin conditions ($g = 0.54$). The type of skin condition, age of sample, nature of the intervention, time interval between the end of the intervention and follow-up, and type of outcome measure all moderated the effect of interventions on outcomes. For example, interventions had a medium effect on the severity of the condition ($g = 0.40$) and psychosocial outcomes ($g = 0.53$), and a medium-to-large effect on itch/scratch reactions ($g = 0.67$). Psychological interventions are beneficial for people with skin conditions. However, more research is needed to extend the variety and focus of the psychological interventions that are available. Studies are also needed to explore the longer-term benefits of such interventions.

Lee, M. S. and E. Ernst (2012). **"Systematic reviews of t'ai chi: An overview."** *British Journal of Sports Medicine* 46(10): 713-718. <http://bjsm.bmj.com/content/46/10/713.abstract>

Several systematic reviews (SRs) have assessed the effectiveness of t'ai chi for many conditions including hypertension, osteoarthritis and fall prevention; however, their conclusions have been contradictory. The aim of this overview was to critically evaluate the SRs of t'ai chi for any improvement of medical conditions or clinical symptoms. English, Chinese and Korean electronic databases were searched for relevant articles, and data were extracted according to predefined criteria; 35 SRs met our inclusion criteria. They were related to the following conditions: cancer, older people, Parkinson's disease, musculoskeletal pain, osteoarthritis, rheumatoid arthritis (RA), muscle strength and flexibility, improving aerobic capacity, cardiovascular disease and risk factors, lowering resting blood pressure, osteoporosis or bone mineral density, type 2 diabetes, psychological health, fall prevention and improving balance, and any chronic conditions. In several instances, the conclusions of these articles were contradictory. Relatively clear evidence emerged to suggest that t'ai chi is effective for fall prevention and improving psychological health and was associated with general health benefits for older people. However, t'ai chi seems to be ineffective for the symptomatic treatment of cancer and RA. In conclusion, many SRs of t'ai chi have recently been published; however, the evidence is convincingly positive only for fall prevention and for improvement of psychological health.

Lynn, S., A. Malaktaris, et al. (2012). **"Do hypnosis and mindfulness practices inhabit a common domain? Implications for research, clinical practice, and forensic science."** *Journal of Mind-Body Regulation* 2(1): 12-26. <http://mbr.synergiesprairies.ca/mbr/index.php/mbr/article/view/510>

(Free full text available) Hypnosis and mindfulness practices provide clinicians with two viable yet distinct methods, or more accurately families of methods, for increasing well-being and ameliorating problems in living. In this article, we compare and contrast hypnotic and mindfulness interventions, address the question of whether they inhabit a common domain, describe how they may be combined to advantage, and discuss clinical and research implications. We contend that hypnosis and mindfulness inhabit a common, albeit broad, domain of suggestive approaches. However, we also argue that meaningful differences exist that are particularly salient and consequential in the forensic arena.

Manrique-Garcia, E., S. Zammit, et al. (2012). **"Cannabis use and depression: A longitudinal study of a national cohort of Swedish conscripts."** *BMC Psychiatry* 12(1): 112. <http://www.biomedcentral.com/1471-244X/12/112>

BACKGROUND: While there is increasing evidence on the association between cannabis use and psychotic outcomes, it is still unclear whether this also applies to depression. We aim to assess whether risk of depression and other affective outcomes is increased among cannabis users. METHODS: A cohort study of 45 087 Swedish men with data on cannabis use at ages 18-20. Diagnoses of unipolar disorder, bipolar disorder, affective psychosis and schizoaffective disorder were identified from inpatient care records over a 35-year follow-up period. Cox proportional hazard modeling was used to assess the hazard ratio (HR) of developing these disorders in relation to cannabis exposure. RESULTS: Only subjects with the highest level of cannabis use had an increased crude hazard ratio for depression (HR 1.5, 95% confidence interval (CI), 1.0-2.2), but the association disappeared after adjustment for confounders. There was a strong graded association between cannabis use and schizoaffective disorder, even after control for confounders, although the numbers were small (HR 7.4, 95% CI, 1.0-54.3). CONCLUSION: We did not find evidence for an increased risk of depression among those who used cannabis. Our finding of an increased risk of schizoaffective disorder is consistent with previous findings on the relation between cannabis use and psychosis.

Mariano, J. M. and G. E. Vaillant (2012). **"Youth purpose among the 'greatest generation'."** *The Journal of Positive Psychology* 7(4): 281-293. <http://dx.doi.org/10.1080/17439760.2012.686624>

Purpose is a stable and generalized intention to accomplish something that is at once important to self and directed at making a difference in the world beyond the self. In the present study, ratings of one aspect of purpose, pro-social beyond-the-self intentions, were gleaned from data collected from young men attending college between 1938 and 1942 as a part of the Study of Adult Development. Associations were examined between pro-social beyond-the-self intentions and childhood environment, and between pro-social beyond-the-self intentions and college and adult personality, psychological adjustment, and achievement. Higher levels of pro-social beyond-the-self intentions were associated with informant ratings of global impressions of positive childhood environment, and with humanistic, political, and well-integrated personality dispositions in college.

Moreau, E. and G. Mageau (2012). **"The importance of perceived autonomy support for the psychological health and work satisfaction of health professionals: Not only supervisors count, colleagues too!"** *Motivation and Emotion* 36(3): 268-286. <http://dx.doi.org/10.1007/s11031-011-9250-9>

Previous studies show that supervisors' autonomy-supportive style predicts greater psychological health (Baard et al. in *J Appl Soc Psychol* 34:2045-2068, 2004 ; Blais and Brière 1992 ; Lynch et al. in *Prof Psychol Res Pract* 36:415-425, 2005) and lower psychological distress (Deci et al. in *Personal Soc Psychol Bull* 27:930-942, 2001). The goal of the present study is to extend these results and investigate the contribution of colleagues' perceived autonomy support in the prediction of health professionals' work satisfaction and psychological health. The combined impact of supervisors' and colleagues' perceived autonomy support is also examined. A sample of 597 health professionals from the province of Quebec (Canada) completed a questionnaire, which included measures of perceived supervisors' and colleagues' autonomy support and outcome variables. Results confirm that supervisors' and colleagues' perceived autonomy support predict health professionals' work satisfaction and

psychological health. Results also show that colleagues' perceived autonomy support adds to the prediction of health professionals' work satisfaction, subjective well-being, and suicidal ideation above and beyond supervisors' perceived autonomy support.

Munshi, K., S. Eisendrath, et al. (2012). **"Preliminary long-term follow-up of mindfulness-based cognitive therapy-induced remission of depression."** *Mindfulness* (N Y): 1-8. <http://dx.doi.org/10.1007/s12671-012-0135-0>

Major depressive disorder is often chronic and characterized by relapse and recurrence despite successful treatments to induce remission. Mindfulness-based cognitive therapy (MBCT) was developed as a means of preventing relapse for individuals in remission using cognitive interventions. In addition, MBCT has preliminarily been found to be useful in treating active depression. This current investigation is unique in evaluating the long-term outcome of individuals with active depression who achieved remission with MBCT. Eighteen participants who achieved remission after an 8-week MBCT group were seen for evaluation at a mean follow-up interval of 48.7 months (SD = 10.2) after completing treatment. The current study shows that in these participants, the gains achieved after the initial treatment including remission of depression, decreased rumination, decreased anxiety, and increased mindfulness continued for up to 58.9 months of follow-up. The data suggest that all levels of depression from less recurrent and mild to more recurrent and severe were responsive to MBCT. The average number of minutes per week of continued practice in our cohort was 210, but the number of minutes of practice did not correlate with depression outcomes. MBCT's effects may be more related to regularity of practice than specific quantity. This study provides a preliminary exploration of MBCT's long-term effects, which can aid in future research with a typically chronic illness.

Nedeljkovic, M., P. Wirtz, et al. (2012). **"Effects of taiji practice on mindfulness and self-compassion in healthy participants—a randomized controlled trial."** *Mindfulness* (N Y) 3(3): 200-208. <http://dx.doi.org/10.1007/s12671-012-0092-7>

Taiji is regarded as a mind-body practice that is characterized by gentle and mindful body movements. In contrast to the continuously growing evidence base supporting the beneficial effects of Taiji on physical and mental well-being, studies investigating its underlying mechanisms are still scarce. The aim of our study was to examine the impact of Taiji practice on self-attribution of mindfulness and self-compassion, two potential components well known for their health promoting effects. Seventy healthy participants (age range: 23–50 years) were randomly assigned either to the intervention group or to a wait list control group. The intervention group attended Taiji classes twice a week for 3 months. Before, shortly after and 2 months after the intervention, we measured the degree of self-attributed mindfulness and self-compassion in all study participants by using self-report questionnaires. Compared to the control group, the intervention group showed significantly higher increase scores in self-attributed mindfulness after the intervention that persisted 2 months later. Increases in self-attributed self-compassion were also higher in Taiji practitioners, with significant group differences from preintervention to follow-up assessment. Our findings suggest that Taiji practice can effectively enhance self-attribution of mindfulness and is likely to have beneficial effects on self-compassion in healthy participants. The role of mindfulness as a mechanism underlying the beneficial effects of Taiji practice warrants further research.

O'Hara, R. E., F. X. Gibbons, et al. (2012). **"Greater exposure to sexual content in popular movies predicts earlier sexual debut and increased sexual risk taking."** *Psychological Science* 23(9): 984-993. <http://pss.sagepub.com/content/23/9/984.abstract>

Early sexual debut is associated with risky sexual behavior and an increased risk of unplanned pregnancy and sexually transmitted infections later in life. The relations among early movie sexual exposure (MSE), sexual debut, and risky sexual behavior in adulthood (i.e., multiple sexual partners and inconsistent condom use) were examined in a longitudinal study of U.S. adolescents. MSE was measured using the Beach method, a comprehensive procedure for media content coding. Controlling for characteristics of adolescents and their families, analyses showed that MSE predicted age of sexual debut, both directly and indirectly through changes in sensation seeking. MSE also predicted engagement in risky sexual behaviors both directly and indirectly via early sexual debut. These results suggest that MSE may promote sexual risk taking both by modifying sexual behavior and by accelerating the normal rise in sensation seeking during adolescence.

Rizos, E. C., E. E. Ntzani, et al. (2012). **"Association between omega-3 fatty acid supplementation and risk of major cardiovascular disease events: A systematic review and meta-analysis."** *JAMA* 308(10): 1024-1033. <http://dx.doi.org/10.1001/2012.jama.11374>

Context Considerable controversy exists regarding the association of omega-3 polyunsaturated fatty acids (PUFAs) and major cardiovascular end points. Objective To assess the role of omega-3 supplementation on major cardiovascular outcomes. Data Sources MEDLINE, EMBASE, and the Cochrane Central Register of Controlled Trials through August 2012. Study Selection Randomized clinical trials evaluating the effect of omega-3 on all-cause mortality, cardiac death, sudden death, myocardial infarction, and stroke. Data Extraction Descriptive and quantitative information was extracted; absolute and relative risk (RR) estimates were synthesized under a random-effects model. Heterogeneity was assessed using the Q statistic and I². Subgroup analyses were performed for the presence of blinding, the prevention settings, and patients with implantable cardioverter-defibrillators, and meta-regression analyses were performed for the omega-3 dose. A statistical significance threshold of .0063 was assumed after adjustment for multiple comparisons. Data Synthesis Of the 3635 citations retrieved, 20 studies of 68 680 patients were included, reporting 7044 deaths, 3993 cardiac deaths, 1150 sudden deaths, 1837 myocardial infarctions, and 1490 strokes. No statistically significant association was observed with all-cause mortality (RR, 0.96; 95% CI, 0.91 to 1.02; risk reduction [RD] -0.004, 95% CI, -0.01 to 0.02), cardiac death (RR, 0.91; 95% CI, 0.85 to 0.98; RD, -0.01; 95% CI, -0.02 to 0.00), sudden death (RR, 0.87; 95% CI, 0.75 to 1.01; RD, -0.003; 95% CI, -0.012 to 0.006), myocardial infarction (RR, 0.89; 95% CI, 0.76 to 1.04; RD, -0.002; 95% CI, -0.007 to 0.002), and stroke (RR, 1.05; 95% CI, 0.93 to 1.18; RD, 0.001; 95% CI, -0.002 to 0.004) when all supplement studies were considered. Conclusion Overall, omega-3 PUFA supplementation was not associated with a lower risk of all-cause mortality, cardiac death, sudden death, myocardial infarction, or stroke based on relative and absolute measures of association.

Rizzuto, D., N. Orsini, et al. (2012). **"Lifestyle, social factors, and survival after age 75: Population based study."** *BMJ* 345: e5568. <http://www.bmj.com/content/345/bmj.e5568>

OBJECTIVE: To identify modifiable factors associated with longevity among adults aged 75 and older. DESIGN: Population based cohort study. SETTING: Kungsholmen, Stockholm, Sweden. PARTICIPANTS: 1810 adults aged 75 or more participating in the Kungsholmen Project, with follow-up for 18 years. MAIN OUTCOME MEASURE: Median age at death. Vital status from 1987 to 2005. RESULTS: During follow-up 1661 (91.8%) participants died. Half of the participants lived longer than 90 years. Half of the current smokers died 1.0 year (95% confidence interval 0.0 to 1.9 years) earlier than non-smokers. Of the leisure activities, physical activity was most strongly associated with survival; the median age at death of participants who regularly swam, walked, or did gymnastics was 2.0 years (0.7 to 3.3 years) greater than those who did not. The median survival of people with a low risk profile (healthy lifestyle behaviours, participation in at least one leisure activity, and a rich or moderate

social network) was 5.4 years longer than those with a high risk profile (unhealthy lifestyle behaviours, no participation in leisure activities, and a limited or poor social network). Even among the oldest old (85 years or older) and people with chronic conditions, the median age at death was four years higher for those with a low risk profile compared with those with a high risk profile. CONCLUSION: Even after age 75 lifestyle behaviours such as not smoking and physical activity are associated with longer survival. A low risk profile can add five years to women's lives and six years to men's. These associations, although attenuated, were also present among the oldest old (≥ 85 years) and in people with chronic conditions.

Schnitker, S. A. (2012). **"An examination of patience and well-being."** *The Journal of Positive Psychology* 7(4): 263-280. <http://www.tandfonline.com/doi/abs/10.1080/17439760.2012.697185>

Patience is the propensity to wait calmly in the face of frustration or adversity. The new 3-Factor Patience Scale (Study 1) measures three types of patience (interpersonal, life hardship, and daily hassles patience), which differentially relate to well-being and personality. In Study 2, goal pursuit and achievement mediated the relation between patience and well-being. Participants rated 10 personal goals on 15 dimensions of goal pursuit (e.g. patience enacted, difficulty, achievement satisfaction, effort). Patience facilitated goal pursuit and satisfaction especially in the face of obstacles. In Study 3, participants took part in a training program designed to increase trait patience. The program led to increased patience, decreased depression, and increased positive affect relative to a control condition, suggesting that patience may be modifiable.

Selcuk, E., V. Zayas, et al. (2012). **"Mental representations of attachment figures facilitate recovery following upsetting autobiographical memory recall."** *J Pers Soc Psychol* 103(2): 362-378. <http://www.ncbi.nlm.nih.gov/pubmed/22486677>

A growing literature shows that even the symbolic presence of an attachment figure facilitates the regulation of negative affect triggered by external stressors. Yet, in daily life, pernicious stressors are often internally generated--recalling an upsetting experience reliably increases negative affect, rumination, and susceptibility to physical and psychological health problems. The present research provides the first systematic examination of whether activating the mental representation of an attachment figure enhances the regulation of affect triggered by thinking about upsetting memories. Using 2 different techniques for priming attachment figure representations and 2 types of negative affect measures (explicit and implicit), activating the mental representation of an attachment figure (vs. an acquaintance or stranger) after recalling an upsetting memory enhanced recovery--eliminating the negative effects of the memory recall (Studies 1-3). In contrast, activating the mental representation of an attachment figure before recalling an upsetting memory had no such effect (Studies 1 and 2). Furthermore, activating the mental representation of an attachment figure after thinking about upsetting memories reduced negative thinking in a stream of consciousness task, and the magnitude of the attachment-induced affective recovery effects as assessed with explicit affect measures predicted mental and physical health in daily life (Study 3). Finally, a meta-analysis of the 3 studies (Study 4) showed that the regulatory benefits conferred by the mental representation of an attachment figure were weaker for individuals high on attachment avoidance. The implications of these findings for attachment, emotion regulation, and mental and physical health are discussed.

Sivertsen, B., P. Salo, et al. (2012). **"The bidirectional association between depression and insomnia: The HUNT study."** *Psychosomatic Medicine* 74(7): 758-765. <http://www.psychosomaticmedicine.org/content/74/7/758.abstract>

Objective Depression and insomnia are closely linked, yet our understanding of their prospective relationships remains limited. The aim of the current study was to investigate the directionality of association between depression and insomnia. Methods Data were collected from a prospective population-based study comprising the most recent waves of the Nord-Trøndelag Health Study (HUNT) (the HUNT2 in 1995-1997 and the HUNT3 in 2006-2008). A total of 24,715 persons provided valid responses on the relevant questionnaires from both surveys. Study outcomes were onset of depression or insomnia at HUNT3 in persons not reporting the other disorder in HUNT2. Results Both insomnia and depression significantly predicted the onset of the other disorder. Participants who did not have depression in HUNT2 but who had insomnia in both HUNT2 and HUNT3 had an odds ratio (OR) of 6.2 of developing depression at HUNT3. Participants who did not have insomnia in HUNT2 but who had depression in both HUNT2 and HUNT3 had an OR of 6.7 of developing insomnia at HUNT3. ORs were only slightly attenuated when adjusting for potential confounding factors. Conclusions The results support a bidirectional relationship between insomnia and depression. This finding stands in contrast to the previous studies, which have mainly focused on insomnia as a risk factor for the onset of depression.

Smith-Spangler, C., M. L. Brandeau, et al. (2012). **"Are organic foods safer or healthier than conventional alternatives? A systematic review."** *Annals of Internal Medicine* 157(5): 348-366. <http://dx.doi.org/10.7326/0003-4819-157-5-201209040-00007>

Background: The health benefits of organic foods are unclear. Purpose: To review evidence comparing the health effects of organic and conventional foods. Data Sources: MEDLINE (January 1966 to May 2011), EMBASE, CAB Direct, Agricola, TOXNET, Cochrane Library (January 1966 to May 2009), and bibliographies of retrieved articles. Study Selection: English-language reports of comparisons of organically and conventionally grown food or of populations consuming these foods. Data Extraction: 2 independent investigators extracted data on methods, health outcomes, and nutrient and contaminant levels. Data Synthesis: 17 studies in humans and 223 studies of nutrient and contaminant levels in foods met inclusion criteria. Only 3 of the human studies examined clinical outcomes, finding no significant differences between populations by food type for allergic outcomes (eczema, wheeze, atopic sensitization) or symptomatic *Campylobacter* infection. Two studies reported significantly lower urinary pesticide levels among children consuming organic versus conventional diets, but studies of biomarker and nutrient levels in serum, urine, breast milk, and semen in adults did not identify clinically meaningful differences. All estimates of differences in nutrient and contaminant levels in foods were highly heterogeneous except for the estimate for phosphorus; phosphorus levels were significantly higher than in conventional produce, although this difference is not clinically significant. The risk for contamination with detectable pesticide residues was lower among organic than conventional produce (risk difference, 30% [CI, -37% to -23%]), but differences in risk for exceeding maximum allowed limits were small. *Escherichia coli* contamination risk did not differ between organic and conventional produce. Bacterial contamination of retail chicken and pork was common but unrelated to farming method. However, the risk for isolating bacteria resistant to 3 or more antibiotics was higher in conventional than in organic chicken and pork (risk difference, 33% [CI, 21% to 45%]). Limitation: Studies were heterogeneous and limited in number, and publication bias may be present. Conclusion: The published literature lacks strong evidence that organic foods are significantly more nutritious than conventional foods. Consumption of organic foods may reduce exposure to pesticide residues and antibiotic-resistant bacteria.

Strauss, J. L. and A. J. Lang (2012). **"Complementary and alternative treatments for PTSD."** *PTSD Research Quarterly* 23(2): 1-7. <http://www.ptsd.va.gov/professional/newsletters/research-quarterly/v23n2.pdf>

Broadly conceptualized, the term "complementary and alternative medicine" (CAM) refers to treatments not considered to be standard to the current practice of Western medicine. "Complementary" refers to the use of these techniques in

combination with conventional approaches, whereas "alternative" refers to their use in lieu of conventional practices. Of course, many treatments and techniques (e.g., acupuncture) that are considered CAM within U.S. borders are elemental to conventional medicinal practices in other parts of the world. As Western practitioners and consumers increasingly adopt these approaches, the boundaries between conventional medicine and CAM continue to shift. The National Center for Complementary and Alternative Medicine (NCCAM) has proposed a five-category classification system for CAM therapies: 1) natural products (e.g., herbal dietary supplements); 2) mind-body medicine (e.g., meditation, acupuncture, yoga); 3) manipulative and body-based practices (e.g., massage, spinal manipulation); 4) other alternative practices (e.g., movement therapies, energy therapies); and 5) whole medicine systems (e.g., traditional Chinese medicine, Ayurvedic medicine). The current review does not address natural products, which fall outside our area of expertise, nor does it address whole medicine systems, as our interest is in exploring applications of CAM within conventional Western medicine.

Sutcliffe, A. G., J. Barnes, et al. (2012). **"The health and development of children born to older mothers in the United Kingdom: Observational study using longitudinal cohort data."** *BMJ* 345: e5116. <http://www.bmj.com/content/345/bmj.e5116>

OBJECTIVE: To assess relations between children's health and development and maternal age. **DESIGN:** Observational study of longitudinal cohorts. **SETTING:** Millennium Cohort Study (a random sample of UK children) and the National Evaluation of Sure Start study (a random sample of children in deprived areas in England), 2001 to 2007. **PARTICIPANTS:** 31,257 children at age 9 months, 24,781 children at age 3 years, and 22,504 at age 5 years. **MAIN OUTCOME MEASURES:** Childhood unintentional injuries and hospital admissions (aged 9 months, 3 years, and 5 years), immunisations (aged 9 months and 3 years), body mass index, language development, and difficulties with social development (aged 3 and 5 years). **RESULTS:** Associations were independent of personal and family characteristics and parity. The risk of children having unintentional injuries requiring medical attention or being admitted to hospital both declined with increasing maternal age. For example, at three years the risk of unintentional injuries declined from 36.6% for mothers aged 20 to 28.6% for mothers aged 40 and hospital admissions declined, respectively, from 27.1% to 21.6%. Immunisation rates at nine months increased with maternal age from 94.6% for mothers aged 20 to 98.1% for mothers aged 40. At three years, immunisation rates reached a maximum, at 81.3% for mothers aged 27, being lower for younger and older mothers. This was linked to rates for the combined measles, mumps, and rubella immunisation because excluding these resulted in no significant relation with maternal age. An increase in overweight children at ages 3 and 5 years associated with increasing maternal age was eliminated once maternal body mass index was included as a covariate. Language development was associated with improvements with increasing maternal age, with scores for children of mothers aged 20 being lower than those of children of mothers aged 40 by 0.21 to 0.22 standard deviations at ages 3 and 4 years. There were fewer social and emotional difficulties associated with increasing maternal age. Children of teenage mothers had more difficulties than children of mothers aged 40 (difference 0.28 SD at age 3 and 0.16 SD at age 5). **CONCLUSION:** Increasing maternal age was associated with improved health and development for children up to 5 years of age.

Tan, R., N. C. Overall, et al. (2012). **"Let's talk about us: Attachment, relationship-focused disclosure, and relationship quality."** *Personal Relationships* 19(3): 521-534. <http://dx.doi.org/10.1111/j.1475-6811.2011.01383.x>

This research tested whether attachment avoidance and anxiety were associated with couples' (N = 59) disclosure during recorded discussions of recent events. The links between attachment and disclosure with relationship quality across 1 year were also assessed. Attachment was not associated with amount or intimacy of disclosure, but greater attachment anxiety was associated with more relationship-focused disclosure, whereas attachment avoidance was associated with less relationship-focused disclosure. Relationship-focused disclosure was also positively associated with relationship quality across time, whereas attachment avoidance predicted lower relationship quality. These findings indicate that spontaneous relationship-focused disclosure during routine conversations helps maintain relationships, but because people high in avoidance are less focused on sustaining closeness, their relationships tend to deteriorate over time.

van Dierendonck, D. (2012). **"Spirituality as an essential determinant for the good life, its importance relative to self-determinant psychological needs."** *Journal of Happiness Studies* 13(4): 685-700. <http://dx.doi.org/10.1007/s10902-011-9286-2>

(Available in free full text) This study focuses on the relevance of spirituality as an essential element for the Good Life. Despite spirituality's prominence in people's lives and cultures, it has been mostly neglected in psychological needs theories. This paper investigates the value of spirituality compared to that of the three basic psychological needs of self-determination theory: relatedness, competence and autonomy. In a scenario study design, participants in two samples (students and train passengers) were asked to judge a survey on the personal well-being of an imaginary person. The results show that spirituality positively contributes to the qualification of a good life, in terms of desirability and moral goodness. In addition, the crucial role of relatedness was confirmed.

Vaucher, P., P.-L. Druais, et al. (2012). **"Effect of iron supplementation on fatigue in nonanemic menstruating women with low ferritin: A randomized controlled trial."** *Canadian Medical Association Journal* 184(11): 1247-1254. <http://www.cmaj.ca/content/184/11/1247.abstract>

Background: The true benefit of iron supplementation for nonanemic menstruating women with fatigue is unknown. We studied the effect of oral iron therapy on fatigue and quality of life, as well as on hemoglobin, ferritin and soluble transferrin receptor levels, in nonanemic iron-deficient women with unexplained fatigue. **Methods:** We performed a multicentre, parallel, randomized controlled, closed-label, observer-blinded trial. We recruited from the practices of 44 primary care physicians in France from March to July 2006. We randomly assigned 198 women aged 18-53 years who complained of fatigue and who had a ferritin level of less than 50 µg/L and hemoglobin greater than 12.0 g/dL to receive either oral ferrous sulfate (80 mg of elemental iron daily; n = 102) or placebo (n = 96) for 12 weeks. The primary outcome was fatigue as measured on the Current and Past Psychological Scale. Biological markers were measured at 6 and 12 weeks. **Results:** The mean score on the Current and Past Psychological Scale for fatigue decreased by 47.7% in the iron group and by 28.8% in the placebo group (difference - 18.9%, 95% CI -34.5 to -3.2; p = 0.02), but there were no significant effects on quality of life (p = 0.2), depression (p = 0.97) or anxiety (p = 0.5). Compared with placebo, iron supplementation increased hemoglobin (0.32 g/dL; p = 0.002) and ferritin (11.4 µg/L; p < 0.001) and decreased soluble transferrin receptor (-0.54 mg/L; p < 0.001) at 12 weeks. **Interpretation:** Iron supplementation should be considered for women with unexplained fatigue who have ferritin levels below 50 µg/L. We suggest assessing the efficiency using blood markers after six weeks of treatment.