

## **36 bhma abstracts, june '12**

Thirty six abstracts covering a multitude of stress, health & wellbeing related subjects including listening & interpersonal influence, bidirectional connection between depression & sexual dysfunction, mindfulness & self-compassion as predictors of psychological wellbeing, "happy as a lark" – morning or evening types & mood, nurse burnout & increased hospital infection rates, a question over exercise & depression, coffee intake associated with increased life expectancy, and much more.

(Ames, Maissen et al. 2012; Atlantis and Sullivan 2012; Baer, Lykins et al. 2012; Beckman, Wendland et al. 2012; Bergomi, Tschacher et al. 2012; Bergsma and Ardelt 2012; Bieling, Hawley et al. 2012; Biss and Hasher 2012; Boschloo, Vogelzangs et al. 2012; Cimiotti, Aiken et al. 2012; Daley and Jolly 2012; Devore, Kang et al. 2012; Exline and Hill 2012; Freedman, Park et al. 2012; Gordon, Impett et al. 2012; Gruenewald, Liao et al. 2012; Gustavson, Røysamb et al. 2012; Hofmann, Vohs et al. 2012; Jose, Lim et al. 2012; Kmietowicz 2012; Lekes, Hope et al. 2012; Manocha, Black et al. 2012; Melrose, Brown et al. 2012; Meyer, Katsman et al. 2012; Milán, Iborra et al. 2012; Oduwole, Meremikwu et al. 2012; Orth, Robins et al. 2012; Piff, Stancato et al. 2012; Ryan, Safran et al. 2012; Sedlmeier, Eberth et al. 2012; Sheldon and Lyubomirsky 2012; Sowislo and Orth 2012; Tamir and Mitchell 2012; Tripkovic, Lambert et al. 2012; Werner-Seidler and Moulds 2012; Wu, Yeung et al. 2012)

Ames, D., L. B. Maissen, et al. (2012). **"The role of listening in interpersonal influence."** *Journal of Research in Personality* 46(3): 345-349. <http://www.sciencedirect.com/science/article/pii/S0092656612000116>

Using informant reports on working professionals, we explored the role of listening in interpersonal influence and how listening may account for at least some of the relationship between personality and influence. The results extended prior work which has suggested that listening is positively related to influence for informational and relational reasons. As predicted, we found that: (1) listening had a positive effect on influence beyond the impact of verbal expression, (2) listening interacted with verbal expression to predict influence (such that the relationship between listening and influence was stronger among those more expressive), and (3) listening partly mediated the positive relationships between each of the Big Five dimensions of agreeableness and openness and influence.

Atlantis, E. and T. Sullivan (2012). **"Bidirectional association between depression and sexual dysfunction: A systematic review and meta-analysis."** *The Journal of Sexual Medicine* 9(6): 1497-1507. <http://dx.doi.org/10.1111/j.1743-6109.2012.02709.x>

Introduction. Depression is frequently associated with sexual dysfunction in both men and women. Aim. To examine whether depression predicts sexual dysfunction and, conversely, whether sexual dysfunction predicts depression. Method. A systematic review and meta-analysis was conducted. PubMed and EMBASE biomedical answers electronic databases were searched for relevant studies up to November 2011. Reference lists of relevant articles were hand-searched and expert opinions were sought. Studies identified for inclusion had to be prospective cohort studies in adult populations that reported an association between depression and sexual dysfunction variables. Main Outcome Measures. Odds ratios (ORs), prioritized where available, or relative risks (RRs) were pooled across studies using random-effects meta-analysis models. Results. Eight citations included for review yielded six studies on depression and risk of sexual dysfunction in 3,285 participants followed for 2–9 years, and six studies on sexual dysfunction and risk of depression in 11,171 participants followed for 1–10 years. Depression increased the risk of sexual dysfunction in pooled unadjusted (RR/OR 1.52 with 95% confidence intervals [1.02, 2.26]) and adjusted (RR/OR 1.71 [1.05, 2.78]) meta-analyses but not in the partially adjusted model (RR/OR 1.41 [0.90, 2.23]). There was significant heterogeneity between studies, but after removal of a single outlying study was diminished and the pooled partially adjusted, RR/OR increased to 1.69 (1.15, 2.47). Sexual dysfunction increased the odds of depression in the pooled unadjusted (OR 2.30 [1.74, 3.03]), adjusted (OR 3.12 [1.66, 5.85]), and partially adjusted (OR 2.71 [1.93, 3.79]) meta-analyses; heterogeneity was significant only in the adjusted model. Meta-regression analyses did not detect significant sources of heterogeneity in either examination. Conclusions. Clinicians should be aware of a bidirectional association between depression and sexual dysfunction. Patients reporting sexual dysfunction should be routinely screened for depression, whereas patients presenting with symptoms of depression should be routinely assessed for sexual dysfunction.

Baer, R. A., E. L. B. Lykins, et al. (2012). **"Mindfulness and self-compassion as predictors of psychological wellbeing in long-term meditators and matched nonmeditators."** *Journal of Positive Psychology* 7(3): 230-238. <http://dx.doi.org/10.1080/17439760.2012.674548>

Mindfulness training has well-documented effects on psychological health. Recent findings suggest that increases in both mindfulness and self-compassion may mediate these outcomes; however, their separate and combined effects are rarely examined in the same participants. This study investigated cross-sectional relationships between self-reported mindfulness, self-compassion, meditation experience, and psychological wellbeing in 77 experienced meditators and 75 demographically matched nonmeditators. Most mindfulness and self-compassion scores were significantly correlated with meditation experience and psychological wellbeing. Mindfulness and self-compassion accounted for significant independent variance in wellbeing. A significant relationship between meditation experience and wellbeing was completely accounted for by a combination of mindfulness and self-compassion scores. Findings suggest that both mindfulness and self-compassion skills may play important roles in the improved wellbeing associated with mindfulness training; however, longitudinal studies are needed to confirm these findings.

Beckman, H. B., M. Wendland, et al. (2012). **"The impact of a program in mindful communication on primary care physicians."** *Academic Medicine* 87(6): 815-819 810.1097/ACM.1090b1013e318253d318253b318252. [http://journals.lww.com/academicmedicine/Fulltext/2012/06000/The\\_Impact\\_of\\_a\\_Program\\_in\\_Mindful\\_Communication.28.aspx](http://journals.lww.com/academicmedicine/Fulltext/2012/06000/The_Impact_of_a_Program_in_Mindful_Communication.28.aspx)

Purpose: In addition to structural transformations, deeper changes are needed to enhance physicians' sense of meaning and satisfaction with their work and their ability to respond creatively to a dynamically changing practice environment. The purpose of this research was to understand what aspects of a successful continuing education program in mindful communication contributed to physicians' well-being and the care they provide. Method: In 2008, the authors conducted in-depth, semistructured interviews with primary care physicians who had recently completed a 52-hour mindful communication program demonstrated to reduce psychological distress and burnout while improving empathy. Interviews with a random sample of 20 of the 46 physicians in the Rochester, New York, area who attended at least four of eight weekly sessions and four of eight monthly sessions were audio-recorded, transcribed, and analyzed qualitatively. The authors identified salient themes from the interviews. Results: Participants reported three main themes: (1) sharing personal experiences from medical practice with colleagues reduced professional isolation, (2) mindfulness skills improved the participants' ability to be attentive and listen deeply to patients' concerns, respond to patients more effectively, and develop adaptive reserve, and (3) developing greater

self-awareness was positive and transformative, yet participants struggled to give themselves permission to attend to their own personal growth. Conclusions: Interventions to improve the quality of primary care practice and practitioner well-being should promote a sense of community, specific mindfulness skills, and permission and time devoted to personal growth. *MedicalXpress* - <http://medicalxpress.com/news/2012-04-physician-mindfulness-skills-patient.html> - comments "Training physicians in mindfulness meditation and communication skills can improve the quality of primary care for both practitioners and their patients, University of Rochester Medical Center researchers report in a study published online this week in the journal *Academic Medicine*. As ways to improve primary care, the researchers also recommend promoting a sense of community among physicians and providing time to physicians for personal growth. "Programs focused on personal awareness and self-development are only part of the solution," the researchers stated. "Our health care delivery systems must implement systematic change at the practice level to create an environment that supports mindful practice, encourages transparent and clear communication among clinicians, staff, patients, and families, and reduces professional isolation." Medical education can better support self-awareness programs for trainees while also promoting role models—preceptors and attending physicians—who exemplify mindful practice in action, they wrote. The *Academic Medicine* article, which will be published in the journal's June print edition, is a follow-up to a study by the researchers published in the *Journal of the American Medical Association* in 2009. That study found that mindfulness meditation and communication training can alleviate the psychological distress and burnout experienced by many physicians and can improve their well-being. Seventy physicians from the Rochester, N.Y., area were involved in the initial study. The physicians participated in training that involved eight intensive weekly sessions that were 2 ½ hours long, an all-day session and a maintenance phase of 10 monthly 2 ½-hour sessions. For the new report, the researchers conducted in-depth interviews with 20 of the physicians who participated in the mindfulness training program. The findings in the new study include: For 75 percent of the physicians, sharing personal experiences from medical practice with colleagues was one of the most meaningful outcomes of the program. A nonjudgmental atmosphere helped participants feel emotionally safe enough to pause, reflect, and disclose their complex and profound experiences, which, in turn, provided reassurance that they were not alone in their feelings. Sixty percent reported that learning mindfulness skills improved their capacity to listen more attentively and respond more effectively to others at work and home. More than half of the participants acknowledged having increased self-awareness and better ability to respond non-judgmentally during personal or professional conversations. Seventy percent placed a high value on the mindfulness course having an organized, structured, and well-defined curriculum that designated time and space to pause and reflect—not something they would ordinarily consider permissible. Participants also described the personal struggles they have with devoting time and energy toward self-care despite acknowledging its importance. The researchers have developed and implemented required mindful practice curricula for medical students and residents at the University of Rochester School of Medicine and Dentistry. They also are studying the effects of an intensive, four-day residential course for physicians."

Bergomi, C., W. Tschacher, et al. (2012). **"The assessment of mindfulness with self-report measures: Existing scales and open issues."** *Mindfulness* (N Y): 1-12. <http://dx.doi.org/10.1007/s12671-012-0110-9>

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

Bergsma, A. and M. Ardel (2012). **"Self-reported wisdom and happiness: An empirical investigation."** *Journal of Happiness Studies* 13(3): 481-499. <http://dx.doi.org/10.1007/s10902-011-9275-5>

(Free full text available) Possible tensions between wisdom and happiness have been extensively debated in philosophy. Some regard wisdom as the 'supreme part of happiness', whereas others think that a more accurate and wiser view on reality might reduce happiness. Analyzing a Dutch internet survey of 7037 respondents, we discovered that wisdom and happiness were modestly positively related. Wisdom, measured with the Three-Dimensional Wisdom Scale (3D-WS), explained 9.2% of the variation in hedonic happiness. The correlation with the reflective dimension of wisdom was the strongest. In addition, wisdom was more important for happiness among adults with only an elementary education. Our results suggest that happiness and wisdom do not conflict.

Bieling, P. J., L. L. Hawley, et al. (2012). **"Treatment-specific changes in decentering following mindfulness-based cognitive therapy versus antidepressant medication or placebo for prevention of depressive relapse."** *J Consult Clin Psychol* 80(3): 365-372. <http://www.ncbi.nlm.nih.gov/pubmed/22409641>

OBJECTIVE: To examine whether metacognitive psychological skills, acquired in mindfulness-based cognitive therapy (MBCT), are also present in patients receiving medication treatments for prevention of depressive relapse and whether these skills mediate MBCT's effectiveness. METHOD: This study, embedded within a randomized efficacy trial of MBCT, was the first to examine changes in mindfulness and decentering during 6-8 months of antidepressant treatment and then during an 18-month maintenance phase in which patients discontinued medication and received MBCT, continued on antidepressants, or were switched to a placebo. In total, 84 patients (mean age = 44 years, 58% female) were randomized to 1 of these 3 prevention conditions. In addition to symptom variables, changes in mindfulness, rumination, and decentering were assessed during the phases of the study. RESULTS: Pharmacological treatment of acute depression was associated with reductions in scores for rumination and increased wider experiences. During the maintenance phase, only patients receiving MBCT showed significant increases in the ability to monitor and observe thoughts and feelings as measured by the Wider Experiences ( $p < .01$ ) and Decentering ( $p < .01$ ) subscales of the Experiences Questionnaire and by the Toronto Mindfulness Scale. In addition, changes in Wider Experiences ( $p < .05$ ) and Curiosity ( $p < .01$ ) predicted lower Hamilton Rating Scale for Depression scores at 6-month follow-up. CONCLUSIONS: An increased capacity for decentering and curiosity may be fostered during MBCT and may underlie its effectiveness. With practice, patients can learn to counter habitual avoidance tendencies and to regulate dysphoric affect in ways that support recovery. [Correction Notice: An Erratum for this article was reported in Vol 80(3) of *Journal of Consulting and Clinical Psychology* (see record 2012-09923-001). There is an error in the sentence beginning "For TMS-C . . ." in the paragraph below Table 5.]

Biss, R. K. and L. Hasher (2012). **"Happy as a lark: Morning-type younger and older adults are higher in positive affect."** *Emotion* 12(3): 437-441. <http://www.ncbi.nlm.nih.gov/pubmed/22309732>

A literature on young adults reports that morning-type individuals, or "larks," report higher levels of positive affect compared with evening-type individuals, or "owls" (Clark, Watson, & Leeka, 1989; Hasler et al., 2010). Morning types are relatively rare among young adults but frequent among older adults (May & Hasher, 1998; Mecacci et al., 1986), and here we report on the association between chronotype and affect in a large sample of healthy younger and older adults. Overall, older adults reported higher levels of positive affect than younger adults, with both younger and older morning types reporting higher levels of positive affect and subjective health than age mates who scored lower on morningness. Morningness partially mediated the association between age and positive affect, suggesting that greater morningness tendencies among older adults may contribute to their improved well-being relative to younger adults.

Boschloo, L., N. Vogelzangs, et al. (2012). **"Alcohol use disorders and the course of depressive and anxiety disorders."** *The British Journal of Psychiatry* 200(6): 476-484. <http://bjp.rcpsych.org/content/200/6/476.abstract>

Background: Inconsistent findings have been reported on the role of comorbid alcohol use disorders as risk factors for a persistent course of depressive and anxiety disorders. Aims: To determine whether the course of depressive and/or anxiety disorders is conditional on the type (abuse or dependence) or severity of comorbid alcohol use disorders. Method: In a large sample of participants with current depression and/or anxiety (n = 1369) we examined whether the presence and severity of DSM-IV alcohol abuse or alcohol dependence predicted the 2-year course of depressive and/or anxiety disorders. Results: The persistence of depressive and/or anxiety disorders at the 2-year follow-up was significantly higher in those with remitted or current alcohol dependence (persistence 62% and 67% respectively), but not in those with remitted or current alcohol abuse (persistence 51% and 46% respectively), compared with no lifetime alcohol use disorder (persistence 53%). Severe (meeting six or seven diagnostic criteria) but not moderate (meeting three to five criteria) current dependence was a significant predictor as 95% of those in the former group still had a depressive and/or anxiety disorder at follow-up. This association remained significant after adjustment for severity of depression and anxiety, psychosocial factors and treatment factors. Conclusions: Alcohol dependence, especially severe current dependence, is a risk factor for an unfavourable course of depressive and/or anxiety disorders, whereas alcohol abuse is not.

Cimiotti, J. P., L. H. Aiken, et al. (2012). **"Nurse staffing, burnout, and health care-associated infection."** *American journal of infection control* 40(6): 486-490. <http://linkinghub.elsevier.com/retrieve/pii/S0196655312007092?showall=true>

(Free full text available) Each year, nearly 7 million hospitalized patients acquire infections while being treated for other conditions. Nurse staffing has been implicated in the spread of infection within hospitals, yet little evidence is available to explain this association. We linked nurse survey data to the Pennsylvania Health Care Cost Containment Council report on hospital infections and the American Hospital Association Annual Survey. We examined urinary tract and surgical site infection, the most prevalent infections reported and those likely to be acquired on any unit within a hospital. Linear regression was used to estimate the effect of nurse and hospital characteristics on health care-associated infections. There was a significant association between patient-to-nurse ratio and urinary tract infection (0.86; P = .02) and surgical site infection (0.93; P = .04). In a multivariate model controlling for patient severity and nurse and hospital characteristics, only nurse burnout remained significantly associated with urinary tract infection (0.82; P = .03) and surgical site infection (1.56; P < .01) infection. Hospitals in which burnout was reduced by 30% had a total of 6,239 fewer infections, for an annual cost saving of up to \$68 million. We provide a plausible explanation for the association between nurse staffing and health care-associated infections. Reducing burnout in registered nurses is a promising strategy to help control infections in acute care facilities.

Daley, A. and K. Jolly (2012). **"Exercise to treat depression."** *BMJ* 344. <http://www.bmj.com/content/344/bmj.e3181>

Does not seem to benefit patients in clinical settings who receive good standard care. There has been considerable research interest in the effects of exercise on depression over the past three decades and many systematic reviews have reported moderate to large effect sizes, with the standardised mean difference for the most recent Cochrane review being -0.82 (95% confidence interval -1.12 to -0.51).<sup>1</sup> 2 3 A new linked trial (TREATment of Depression with physical activity (TREAD); doi:10.1136/bmj.e2758) adds to this evidence base.<sup>4</sup> At first glance reviews suggest that exercise is effective in the treatment of depression. However, most trials included in systematic reviews recruited small numbers of patients, had a short follow-up, and did not adequately conceal randomisation or recruited non-clinical community volunteers (or both). Volunteers are more likely to be motivated to exercise and may be less severely depressed than people identified in clinical settings. Subgroup analyses that included only the higher quality trials in the Cochrane review reduced the effect size to -0.42 (-0.88 to 0.03),<sup>1</sup> casting doubt on the main finding. In 2009 the UK National Institute for Health and Clinical Excellence recommended that people with persistent subthreshold depressive symptoms or mild-moderate depression should be advised of the benefits of exercise,<sup>5</sup> despite a lack of high quality evidence to support such a recommendation. The investigators in the current trial tried to remedy the methodological concerns of previous trials and answer definitively whether or not physical activity is an effective treatment in patients diagnosed with depression.<sup>4</sup> TREAD was a large (n=361) methodologically rigorous trial that enrolled participants from primary care who presented with depression that had been confirmed by standardised clinical interview. The intervention was theory based and patient centred, and it aimed to be deliverable within the health service by physical activity facilitators, without unsustainable resource implications. TREAD compared usual care plus physical activity with usual care only and reported no significant difference in levels of depression between the groups at follow-up over one year. These negative findings contrast with more positive findings from systematic reviews but are perhaps not surprising, particularly when considered alongside the results of a more recent meta-analysis of 13 trials that had recruited only patients with clinically diagnosed depression.<sup>6</sup> This meta-analysis reported that physical exercise showed a small effect on depression (standardised mean difference -0.40, -0.66 to -0.14). However, no significant difference was found when the analysis was restricted to trials with follow-up beyond the end of the intervention (-0.01, -0.28 to 0.26) or to the three high quality trials (-0.19, -0.70 to 0.31), which suggests that exercise may not be effective in this population in the long term. Should we therefore conclude, on the basis of recent evidence, that physical activity has no effect on depression in clinical populations?<sup>4</sup> 6 Not necessarily. In the TREAD trial, usual care could comprise antidepressants, counselling, referral to exercise on prescription schemes, or referral to secondary care mental health services. Patients in both groups therefore already received high quality care, and 57% were taking antidepressants at recruitment. It may have been difficult for the addition of a physical activity intervention to make an appreciable difference. In addition, about 25% of participants were already meeting the current UK government guidelines for physical activity at baseline (the target level for the intervention),<sup>7</sup> and they could feasibly have already been gaining any benefits that physical activity might provide, leaving little room for the intervention to make a difference. Adherence was good, and 70% of participants received an adequate dose of the intervention, which is an achievement considering that it is difficult to motivate people who are depressed to commit to an exercise intervention.<sup>8</sup> However, although a significant difference in physical activity between groups was reported at follow-up, this was relatively small and based on self reported data, which are prone to overestimation. The relatively severe depression of the recruited population (mean Beck depression inventory score 32 points) may have affected the levels of physical activity achieved. Limited information was available on the intensity of physical

activity achieved, and this might be important because exercise may need to be performed at moderate-hard intensity for it to have a meaningful effect on depression. To date there has been insufficient research on how the intensity and overall duration of exercise affects depression; future trials should include an objective measurement of physical activity. Any future trials should also, as in the TREAD trial, measure longer term outcomes and use standardised clinical interviews to diagnose depression to ensure the usefulness of the findings in a population with clinically diagnosed depression. What should doctors advise their patients who present with depression? Within a clinical setting, for patients who are well managed on usual drugs or psychological treatments (or both), advice and support to be physically active does not seem to offer additional benefit and should not be given as standard. Indeed, recommending exercise to very depressed patients may worsen any thoughts of "failure" if they are unable to comply with the recommendation. However, positive results from trials in volunteers suggest that patients who are motivated to exercise and seek support to do so might benefit and should be supported in achieving this behavioural change.

Devore, E. E., J. H. Kang, et al. (2012). **"Dietary intakes of berries and flavonoids in relation to cognitive decline."** *Ann Neurol* 72(1): 135-143. <http://www.ncbi.nlm.nih.gov/pubmed/22535616>

**OBJECTIVE:** Berries are high in flavonoids, especially anthocyanidins, and improve cognition in experimental studies. We prospectively evaluated whether greater long-term intakes of berries and flavonoids are associated with slower rates of cognitive decline in older women. **METHODS:** Beginning in 1980, a semiquantitative food frequency questionnaire was administered every 4 years to Nurses' Health Study participants. In 1995-2001, we began measuring cognitive function in 16,010 participants, aged  $\geq 70$  years; follow-up assessments were conducted twice, at 2-year intervals. To ascertain long-term diet, we averaged dietary variables from 1980 through the initial cognitive interview. Using multivariate-adjusted, mixed linear regression, we estimated mean differences in slopes of cognitive decline by long-term berry and flavonoid intakes. **RESULTS:** Greater intakes of blueberries and strawberries were associated with slower rates of cognitive decline (eg, for a global score averaging all 6 cognitive tests, for blueberries: p-trend = 0.014 and mean difference = 0.04, 95% confidence interval [CI] = 0.01-0.07, comparing extreme categories of intake; for strawberries: p-trend = 0.022 and mean difference = 0.03, 95% CI = 0.00-0.06, comparing extreme categories of intake), after adjusting for multiple potential confounders. These effect estimates were equivalent to those we found for approximately 1.5 to 2.5 years of age in our cohort, indicating that berry intake appears to delay cognitive aging by up to 2.5 years. Additionally, in further supporting evidence, greater intakes of anthocyanidins and total flavonoids were associated with slower rates of cognitive decline (p-trends = 0.015 and 0.053, respectively, for the global score). **INTERPRETATION:** Higher intake of flavonoids, particularly from berries, appears to reduce rates of cognitive decline in older adults. *ANN NEUROL* 2012.

Exline, J. J. and P. C. Hill (2012). **"Humility: A consistent and robust predictor of generosity."** *The Journal of Positive Psychology* 7(3): 208-218. <http://dx.doi.org/10.1080/17439760.2012.671348>

Does humility predict generous motives and behaviors? Although earlier studies have suggested a positive connection, it has remained unclear whether another trait might better account for the humility/generosity link. Three studies examined associations between a self-report measure of humility, related traits, and generosity. In Study 1 (197 adults in a community sample), humility predicted greater generosity on two behavioral measures: Charitable donations and mailing back an extra survey. In Study 2 (286 undergraduates), humility predicted giving more money to an anonymous future participant. In Study 3 (217 undergraduates), humility was associated with greater self-reported motives to be kind to others, including benefactors, close others, strangers, and enemies. Across all three studies, the role of humility was not better explained by the Big Five, self-esteem, entitlement, religiosity, gratitude, or social desirability. These studies complement prior work by demonstrating that the link between humility and generosity is both consistent and robust.

Freedman, N. D., Y. Park, et al. (2012). **"Association of coffee drinking with total and cause-specific mortality."** *New England Journal of Medicine* 366(20): 1891-1904. <http://www.nejm.org/doi/full/10.1056/NEJMoa1112010>

**Background:** Coffee is one of the most widely consumed beverages, but the association between coffee consumption and the risk of death remains unclear. **Methods:** We examined the association of coffee drinking with subsequent total and cause-specific mortality among 229,119 men and 173,141 women in the National Institutes of Health-AARP Diet and Health Study who were 50 to 71 years of age at baseline. Participants with cancer, heart disease, and stroke were excluded. Coffee consumption was assessed once at baseline. **Results:** During 5,148,760 person-years of follow-up between 1995 and 2008, a total of 33,731 men and 18,784 women died. In age-adjusted models, the risk of death was increased among coffee drinkers. However, coffee drinkers were also more likely to smoke, and, after adjustment for tobacco-smoking status and other potential confounders, there was a significant inverse association between coffee consumption and mortality. Adjusted hazard ratios for death among men who drank coffee as compared with those who did not were as follows: 0.99 (95% confidence interval [CI], 0.95 to 1.04) for drinking less than 1 cup per day, 0.94 (95% CI, 0.90 to 0.99) for 1 cup, 0.90 (95% CI, 0.86 to 0.93) for 2 or 3 cups, 0.88 (95% CI, 0.84 to 0.93) for 4 or 5 cups, and 0.90 (95% CI, 0.85 to 0.96) for 6 or more cups of coffee per day ( $P < 0.001$  for trend); the respective hazard ratios among women were 1.01 (95% CI, 0.96 to 1.07), 0.95 (95% CI, 0.90 to 1.01), 0.87 (95% CI, 0.83 to 0.92), 0.84 (95% CI, 0.79 to 0.90), and 0.85 (95% CI, 0.78 to 0.93) ( $P < 0.001$  for trend). Inverse associations were observed for deaths due to heart disease, respiratory disease, stroke, injuries and accidents, diabetes, and infections, but not for deaths due to cancer. Results were similar in subgroups, including persons who had never smoked and persons who reported very good to excellent health at baseline. **Conclusions:** In this large prospective study, coffee consumption was inversely associated with total and cause-specific mortality. Whether this was a causal or associational finding cannot be determined from our data. *Note too Science Daily reported "The mechanism by which coffee protects against risk of death - if indeed the finding reflects a causal relationship - is not clear, because coffee contains more than 1,000 compounds that might potentially affect health," said lead author, Freedman. "The most studied compound is caffeine, although our findings were similar in those who reported the majority of their coffee intake to be caffeinated or decaffeinated."*

Gordon, A. M., E. A. Impett, et al. (2012). **"To have and to hold: Gratitude promotes relationship maintenance in intimate bonds."** *J Pers Soc Psychol* 103(2): 257-274. <http://www.ncbi.nlm.nih.gov/pubmed/22642482>

This multimethod series of studies merges the literatures on gratitude and risk regulation to test a new process model of gratitude and relationship maintenance. We develop a measure of appreciation in relationships and use cross-sectional, daily experience, observational, and longitudinal methods to test our model. Across studies, we show that people who feel more appreciated by their romantic partners report being more appreciative of their partners. In turn, people who are more appreciative of their partners report being more responsive to their partners' needs (Study 1), and are more committed and more likely to remain in their relationships over time (Study 2). Appreciative partners are also rated by outside observers as relatively more responsive and committed during dyadic interactions in the laboratory, and these behavioral displays are one way in which appreciation is transmitted from one partner to the other (Study 3). These findings provide evidence that gratitude is important for the successful maintenance of intimate bonds.

Gruenewald, T. L., D. H. Liao, et al. (2012). **"Contributing to others, contributing to oneself: Perceptions of generativity and health in later life."** *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. <http://psychsocgerontology.oxfordjournals.org/content/early/2012/03/27/geronb.gbs034.abstract>

Objectives. To examine whether perceptions of generativity (a concern for establishing and guiding the next generation) predict the likelihood of increases in levels of impairment in activities of daily living (ADLs) or of dying over a 10-year period in older adults aged 60–75 from the Study of Midlife in the United States (MIDUS). Method. Perceptions of generativity and current generative contributions as well as select sociodemographic, health status, health behavior, and psychosocial factors, assessed at a baseline exam, were examined as predictors of change in ADL disability level or mortality over the 10-year period between the baseline and follow-up waves of the MIDUS Study. Results. Greater levels of generativity and generative contributions at baseline predicted lower odds of experiencing increases in ADL disability (2 or more new domains of impairment; generativity odds ratio [OR] = 0.93 and generative contributions OR = 0.87), or of dying (generativity OR = 0.94 and generative contributions OR = 0.88), over the 10-year follow-up in models adjusted for sociodemographics and baseline health and disability. Associations remained relatively unchanged with the inclusion of different sets of health behavior and psychosocial variables in analytic models. Discussion. Findings indicate that greater perceptions of generativity are associated with more favorable trajectories of physical functioning and longevity over time in older adults.

Gustavson, K., E. Røysamb, et al. (2012). **"Longitudinal associations between relationship problems, divorce, and life satisfaction: Findings from a 15-year population-based study."** *The Journal of Positive Psychology* 7(3): 188-197. <http://dx.doi.org/10.1080/17439760.2012.671346>

Relationship problems are negatively associated with life satisfaction. Bottom-up theories assume that relationship quality affects life satisfaction while top-down theories assume that global personality dispositions affect evaluations of relationship quality. Only bottom-up theories imply that the negative association between relationship problems and life satisfaction will be removed when the relationship is ended and that divorce thus may be a positive event for persons from troubled relationships. In this study associations between relationship problems, divorce, and life satisfaction were examined among 369 heterosexual couples. Relationship problems predicted life satisfaction 15 years later in both men and women. This association was significantly stronger among not-divorced than among divorced couples. Among couples with severe relationship problems those who divorced had higher life satisfaction at 15-year follow-up than those who remained together while the reverse was true among less troubled couples. The findings thus support bottom-up theories of life satisfaction.

Hofmann, W., K. D. Vohs, et al. (2012). **"What people desire, feel conflicted about, and try to resist in everyday life."** *Psychol Sci* 23(6): 582-588. <http://www.ncbi.nlm.nih.gov/pubmed/22547657>

In the present study, we used experience sampling to measure desires and desire regulation in everyday life. Our analysis included data from 205 adults, who furnished a total of 7,827 reports of their desires over the course of a week. Across various desire domains, results revealed substantial differences in desire frequency and strength, the degree of conflict between desires and other goals, and the likelihood of resisting desire and the success of this resistance. Desires for sleep and sex were experienced most intensively, whereas desires for tobacco and alcohol had the lowest average strength, despite the fact that these substances are thought of as addictive. Desires for leisure and sleep conflicted the most with other goals, and desires for media use and work brought about the most self-control failure. In addition, we observed support for a limited-resource model of self-control employing a novel operationalization of cumulative resource depletion: The frequency and recency of engaging in prior self-control negatively predicted people's success at resisting subsequent desires on the same day.

Jose, P. E., B. T. Lim, et al. (2012). **"Does savoring increase happiness? A daily diary study."** *The Journal of Positive Psychology* 7(3): 176-187. <http://dx.doi.org/10.1080/17439760.2012.671345>

Bryant and Veroff (2007, *Savoring: A new model of positive experience*. Mahwah, NJ: Lawrence Erlbaum Associates) have proposed that savoring, namely, regulating the emotional impact of positive events by one's cognitive or behavioral responses, increases happiness. The present study was designed to determine whether and how savoring influences daily happiness. Experience sampling methodology was used with 101 participants, who provided self-reports of their momentary positive events, savoring responses, and positive affect daily over a period of 30 days. Multilevel modeling analyses verified that (a) these three constructs were positively related to each other within a given day, (b) momentary savoring both mediated and moderated the impact of daily positive events on momentary happy mood, and (c) levels of trait savoring moderated the observed mediational pattern. These results provide support for the hypothesis that savoring is an important mechanism through which people derive happiness from positive events.

Kmietowicz, Z. (2012). **"Increasing access to psychological therapies will cost nhs nothing, says report."** *BMJ* 344. <http://www.bmj.com/content/344/bmj.e4250>

Provision of treatment for people with mental illness in England needs to expand urgently to "remedy a gross inequality" whereby people with physical symptoms are four times as likely to get treatment as people who have mental health problems, says a report from the London School of Economics and Political Science (LSE).<sup>1</sup> Nearly half of all ill health among people under 65 is due to mental illness, yet only a quarter of them get treatment, says the report by the Mental Health Policy Group, a team of economists, psychologists, doctors, and NHS managers convened by the economics professor Richard Layard, programme director at the LSE's Centre for Economic Performance. Investing more money in treating mental illness would cost the NHS nothing because "the average improvement in physical symptoms is so great that the resulting savings on NHS physical care outweigh the cost of the psychological therapy," says the report. Treating mental health effectively can also generate large amounts of money through employment and extra tax receipts, while the costs of treating children for conduct disorder are almost certainly repaid in full through savings in criminal justice, education, and social services. In addition, the costs of psychological therapy are low and recovery rates are high. After an average of 10 sessions half the people with anxiety conditions will recover, most of them permanently, and half the patients with depression will recover—success rates that are much higher than for many physical conditions. The report puts the blame for the disparity in access to treatment for people with mental illness squarely at the feet of local commissioners. As part of the national roll-out of the six year improved access to psychological therapy (IAPT) programme, launched by the Labour government in 2008, commissioners were given £400m (£500m; \$630m) in their budgets for 2011-14, but many are not using it for this purpose. By 2014 this programme should be treating 900 000 people with depression and anxiety, with 50% recovering. The service, which will provide for only 15% of estimated need nationally, should expand beyond 2014 to cover people with long term conditions and medically unexplained symptoms, the report says. The young people's IAPT will also need to continue till 2017, it says. Layard said, "If local NHS commissioners want to improve their budgets, they should all be expanding their provision of psychological therapy. It will save them so much on their physical healthcare budgets that the net cost will be little or nothing." In its mental health strategy, launched in February 2011, the government promised to put mental health on an even footing with physical health.<sup>2</sup> But the IAPT roll-out is not included in the NHS outcomes framework for 2012-13, says the report. This needs to be remedied, as does the inadequate number of psychiatrists. In addition, the NHS Commissioning Board needs to prioritise IAPT, as does Health

Education England, the body that will lead the education and training of doctors from April 2013.3 Commenting on the report, Clare Gerada, chairwoman of the Royal College of General Practitioners, said, "We live in a stressful society, and the number of patients with mental health problems presenting to GPs is on an upward spiral. GPs face tremendous challenges in caring for patients with mental health problems in primary care, and we welcome any development which will help us improve their care. "Talking therapies have the potential to transform thousands of patients' lives, and we applaud Lord Layard and his team for their efforts to extend the programme further. This would be a major step forward, not only for patients but for GPs and other health professionals working in mental health."

Lekes, N., N. H. Hope, et al. (2012). **"Influencing value priorities and increasing well-being: The effects of reflecting on intrinsic values."** *The Journal of Positive Psychology* 7(3): 249-261. <http://dx.doi.org/10.1080/17439760.2012.677468>

A four-week experimental study (N=113) examined the effects of reflecting on intrinsic values. In the experimental group, participants learned about the distinction between intrinsic (e.g. having close relationships) and extrinsic (e.g. being popular) values, wrote about two personal intrinsic values, and then reflected on these values weekly for four weeks. In the control group, participants completed parallel exercises related to the daily details of their lives. Results revealed that participants in the intrinsic values group experienced greater well-being immediately following the written reflection than participants in the control group. Four weeks later, the more engaged participants felt in the reflection exercises, the more they prioritized intrinsic over extrinsic values and the greater their well-being. These effects occurred only for participants in the intrinsic values condition. The implications for changing value priorities and improving well-being are discussed.

Manocha, R., D. Black, et al. (2012). **"Quality of life and functional health status of long-term meditators."** *Evidence-Based Complementary and Alternative Medicine* 2012: 9. <http://dx.doi.org/10.1155/2012/350674>

(Free full text available): Background. There is very little data describing the long-term health impacts of meditation. Aim. To compare the quality of life and functional health of long-term meditators to that of the normative population in Australia. Method. Using the SF-36 questionnaire and a Meditation Lifestyle Survey, we sampled 343 long-term Australian Sahaja Yoga meditation practitioners and compared their scores to those of the normative Australian population. Results. Six SF-36 subscales (bodily pain, general health, mental health, role limitation—emotional, social functioning, and vitality) were significantly better in meditators compared to the national norms whereas two of the subscales (role limitation—physical, physical functioning) were not significantly different. A substantial correlation between frequency of mental silence experience and the vitality, general health, and especially mental health subscales ( $P < 0.005$ ) was found. Conclusion. Long-term practitioners of Sahaja yoga meditation experience better functional health, especially mental health, compared to the general population. A relationship between functional health, especially mental health, and the frequency of meditative experience (mental silence) exists that may be causal. Evidence for the potential role of this definition of meditation in enhancing quality of life, functional health and wellbeing is growing. Implications for primary mental health prevention are discussed. *MedicalXpress - comments "The experience of 'mental silence' is linked with better health outcomes and greater wellbeing according to a University of Sydney study. The area of greatest difference was in mental health, where long-term meditators, with a minimum of two years of regular practice, were more than 10 percent better off than the general population. "We found that the health and wellbeing profile of people who had meditated for at least two years was significantly higher in the majority of health and wellbeing categories when compared to the Australian population," said Dr Ramesh Manocha, Senior Lecturer in the Discipline of Psychiatry, Sydney Medical School, who led the research. He worked with Professor Deborah Black and Dr Leigh Wilson from the Faculty of Health Sciences. "Most markedly there was a robust relationship between the frequency of experiencing mental silence and better mental health. This definition is based on it being the form of meditation practised for centuries." The national study is a world-first health quality-of-life survey of long-term meditators. It used the same measurement instruments as the one used by the federal government's National Health and Wellbeing Survey. More than 350 people from across Australia who have meditated for at least two years were assessed for the national study which has been published in the journal of Evidence-Based Complementary and Alternative Medicine. "We focused on the definition of meditation as mental silence and surveyed practitioners of Sahaja Yoga meditation who practise a form of meditation aimed at achieving this state rather than relaxation or mindfulness methods that are usually the focus of other forms," Dr Manocha said. The meditators were asked how often they experienced 'mental silence' for more than a few minutes at any one time. Fifty-two percent of respondents said that they experienced mental silence "several times per day or more" while 32 percent were experiencing it "once or twice per day". "Our analysis showed very little relationship at all between how often the person who meditated physically sat down to meditate and mental health scores. However the relationship was clearly apparent in relation to how often they experienced the state of mental silence. "The health advantage appears to be connected to this aspect more than any other feature of the meditation lifestyle. In other words it is quality over quantity. "While we did expect that there would be some differences between the meditators and the general population we didn't expect the findings to be so pronounced. We repeated large components of the survey several times to confirm our results and got the same outcomes." The Australian government survey give a numerical score to each facet of mental and physical health and because it has been applied as a national measure for the past 10 years in studies around the world involving millions of people. It allowed the researchers to accurately compare the health profile of the meditators surveyed with the general Australian population. The meditators were primarily non-smokers and non-drinkers, so to adjust for that potential bias the researchers also compared the meditators to those parts of the Australian population who did not drink or smoke, and achieved the same results. "This is one of the first studies to assess the long term health impacts of meditation on health and wellbeing. When we take the evidence of this study, along with the results of our other clinical trials, it makes a strong case for the use of meditation as a primary prevention strategy, especially in mental health," Dr Manocha said."*

Melrose, K. L., G. D. A. Brown, et al. (2012). **"Am i abnormal? Relative rank and social norm effects in judgments of anxiety and depression symptom severity."** *Journal of Behavioral Decision Making*: n/a-n/a. <http://dx.doi.org/10.1002/bdm.1754>

Overdetection and underdetection of depression and anxiety in primary care are common and may partly reflect individuals' misperceptions of the severity of symptoms they experience. Here, we explore how people's judgments about the severity of their own symptoms are influenced by their beliefs about the distribution of symptoms experienced by the rest of the population. We apply the rank-based decision by sampling cognitive model of judgment to symptom severity. The model proposes that judgments depend on the relative rank of an item within a mental sample of comparable items. It is predicted that judgments of symptom severity will be context dependent and more specifically that an individual's judgments will be invalid to the extent that the individual has inaccurate beliefs about the relevant social context. Two studies found that participants' assessments of symptom severity were rank based. Study 1 elicited participants' beliefs about the social distribution of symptoms and found that participants' judgments of whether they were depressed or anxious were mainly predicted not by their symptoms' objective severity but rather by where participants ranked the severity of their symptoms in comparison with the believed symptoms of others. Study 2 varied symptom distributions experimentally and again found relative rank effects as predicted. It is concluded that the real-world application of contextual models of judgment requires investigation of individual differences in participants' background beliefs. *MedicalXpress - <http://medicalxpress.com/news/2012-05-people-depression->*

[anxiety.html](#) - comments "People's judgements about whether they are depressed depend on how they believe their own suffering "ranks" in relation to the suffering of friends and family and the wider world, according to a new study. Research from the Department of Psychology at the University of Warwick finds that people make inaccurate judgements about their depression and anxiety symptoms – potentially leading to missed diagnoses as well as false positive diagnoses of mental health problems. This is of particular concern as vulnerable individuals surrounded by people with mental health problems may decide not to seek help because, compared to those around them, they perceive their suffering to be less severe than it actually is. Conversely, those surrounded by people who feel depressed very rarely may incorrectly believe that their suffering is abnormal, simply because their symptoms appear to be more severe in comparison to others. Researchers performed two experiments which found that people's judgments of whether they were depressed or anxious were not mainly predicted by their symptoms' objective severity - but by where they ranked that severity compared with their perception of others' symptoms. The UK study showed that participants' beliefs about the distribution of symptoms in the wider population varied greatly. For example ten per cent of participants thought that half the population felt depressed on at least 15 days a month, and ten per cent thought they felt so on two days or fewer a month. Ten per cent of participants thought that half the population felt anxious on at least 26 days a month, whereas ten per cent thought they felt so on seven days or fewer. Lead researcher Karen Melrose from the University of Warwick said: "It is the patient that initiates most GP consultations about depression and anxiety, so that personal decision to see a doctor is a vital factor in determining a diagnosis. "Given that fact, our study may explain why there are such high rates of under and over-detection of depression and anxiety. "Worryingly, people who could be the most vulnerable to mental health disorders – for example those from certain geographical areas of the country or demographic groups where depression and anxiety are high – could be the very ones who are at highest risk of missed diagnoses. "This research could help health professionals better target information campaigns aimed at these groups."

Meyer, H. B., A. Katsman, et al. (2012). **"Yoga as an ancillary treatment for neurological and psychiatric disorders: A review."** *J Neuropsychiatry Clin Neurosci* 24(2): 152-164. <http://www.ncbi.nlm.nih.gov/pubmed/22772663>

Yoga is gaining acceptance as an ancillary medical treatment, but there have been few studies evaluating its therapeutic benefits in neurological and major psychiatric conditions. The authors reviewed the literature in English on the efficacy of yoga for these disorders. Only randomized, controlled trials were included, with the exception of the only study of yoga for bipolar disorder, which was observational. Trials were excluded if yoga was not the central component of the intervention. Of seven randomized, controlled trials of yoga in patients with neurological disorders, six found significant, positive effects. Of 13 randomized, controlled trials of yoga in patients with psychiatric disorders, 10 found significant, positive effects. These results, although encouraging, indicate that additional randomized, controlled studies are needed to critically define the benefits of yoga for both neurological and psychiatric disorders.

Milán, E. G., O. Iborra, et al. (2012). **"Auras in mysticism and synaesthesia: A comparison."** *Consciousness and Cognition* 21(1): 258-268. <http://www.sciencedirect.com/science/article/pii/S1053810011002868>

In a variety of synaesthesia, photisms result from affect-laden stimuli as emotional words, or faces of familiar people. For R, who participated in this study, the sight of a familiar person triggers a mental image of "a human silhouette filled with colour". Subjective descriptions of synaesthetic experiences induced by the visual perception of people's figures and faces show similarities with the reports of those who claim to possess the ability to see the aura. It has been proposed that the purported auric perception may be easily explained by the presence of a specific subtype of cross-modal perception. We analyse the subjective reports of four synaesthetes who experience colours in response to human faces and figures. These reports are compared with descriptions of alleged auric phenomena found in the literature and with claims made by experts in esoteric spheres. The discrepancies found suggest that both phenomena are phenomenologically and behaviourally dissimilar. *MedicalXpress* comments - <http://medicalxpress.com/news/2012-05-scientific-evidence-healers-aura-people.html> - "Researchers in Spain have found that many of the individuals claiming to see the aura of people –traditionally called "healers" or "quacks"– actually present the neuropsychological phenomenon known as "synesthesia" (specifically, "emotional synesthesia"). This might be a scientific explanation of their alleged "virtue". In synesthetes, the brain regions responsible for the processing of each type of sensory stimuli are intensely interconnected. This way, synesthetes can see or taste a sound, feel a taste, or associate people with a particular color. The study was conducted by the University of Granada Department of Experimental Psychology Oscar Iborra, Luis Pastor and Emilio Gómez Milán, and has been published in the prestigious journal *Consciousness and Cognition*. This is the first time that a scientific explanation is provided on the esoteric phenomenon of the aura, a supposed energy field of luminous radiation surrounding a person as a halo, which is imperceptible to most human beings. In neurological terms, synesthesia is due to cross-wiring in the brain of some people (synesthetes); in other words, synesthetes present more synaptic connections than "normal" people. "These extra connections cause them to automatically establish associations between brain areas that are not normally interconnected", professor Gómez Milán explains. Many healers claiming to see the aura of people might have this condition. The case of the "Santón de Baza": The University of Granada researchers remark that "not all healers are synesthetes, but there is a higher prevalence of this phenomenon among them. The same occurs among painters and artists, for example". To carry out this study, the researchers interviewed some synesthetes as the healer from Granada "Esteban Sánchez Casas", known as "El Santón de Baza". Many people attribute "paranormal powers" to El Santón, such as his ability to see the aura of people "but, in fact, it is a clear case of synesthesia", the researchers explain. El Santón presents face-color synesthesia (the brain region responsible for face recognition is associated with the color-processing region); touch-mirror synesthesia (when the synesthete observes a person who is being touched or is experiencing pain, s/he experiences the same); high empathy (the ability to feel what other person is feeling), and schizotypy (certain personality traits in healthy people involving slight paranoia and delusions). "These capacities make synesthetes have the ability to make people feel understood, and provide them with special emotion and pain reading skills", the researchers explain. In the light of the results obtained, the researchers remark the significant "placebo effect" that healers have on people, "though some healers really have the ability to see people's auras and feel the pain in others due to synesthesia". Some healers "have abilities and attitudes that make them believe in their ability to heal other people, but it is actually a case of self-deception, as synesthesia is not an extrasensory power, but a subjective and 'adorned' perception of reality", the researchers state."

Oduwole, O., M. M. Meremikwu, et al. (2012). **"Honey for acute cough in children."** *Cochrane Database Syst Rev* 3: CD007094. <http://www.ncbi.nlm.nih.gov/pubmed/22419319>

BACKGROUND: Cough causes concern for parents and is a major cause of outpatient visits. It can impact on quality of life, cause anxiety and affect sleep in parents and children. Several remedies, including honey, have been used to alleviate cough symptoms. OBJECTIVES: To evaluate the effectiveness of honey for acute cough in children in ambulatory settings. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library Issue 4, 2011) which contains the Cochrane Acute Respiratory Infections Group's Specialised Register; MEDLINE (1950 to December week 4, 2011); EMBASE (1990 to January 2012); CINAHL (1981 to January 2012); Web of Science (2000 to January 2012); AMED (1985 to January 2012); LILACS (1982 to January 2012); and CAB abstracts (2009 to January 2012). SELECTION CRITERIA: Randomised controlled trials (RCTs) comparing honey given alone, or in combination with antibiotics, versus nothing,

placebo or other over-the-counter (OTC) cough medications to participants aged from two to 18 years for acute cough in ambulatory settings. DATA COLLECTION AND ANALYSIS: Two review authors independently screened search results for eligible studies and extracted data on reported outcomes. MAIN RESULTS: We included two RCTs of high risk of bias involving 265 children. The studies compared the effect of honey with dextromethorphan, diphenhydramine and 'no treatment' on symptomatic relief of cough using the 7-point Likert scale. Honey was better than 'no treatment' in reducing frequency of cough (mean difference (MD) -1.07; 95% confidence interval (CI) -1.53 to -0.60; two studies; 154 participants). Moderate quality evidence suggests honey did not differ significantly from dextromethorphan in reducing cough frequency (MD -0.07; 95% CI -1.07 to 0.94; two studies; 149 participants). Low quality evidence suggests honey may be slightly better than diphenhydramine in reducing cough frequency (MD -0.57; 95% CI -0.90 to -0.24; one study; 80 participants). Adverse events included mild reactions (nervousness, insomnia and hyperactivity) experienced by seven children (9.3%) from the honey group and two (2.7%) from the dextromethorphan group; the difference was not significant (risk ratio (RR) 2.94; 95% CI 0.74 to 11.71; two studies; 149 participants). Three children (7.5%) in the diphenhydramine group experienced somnolence (RR 0.14; 95% CI 0.01 to 2.68; one study; 80 participants) but there was no significant difference between honey versus dextromethorphan or honey versus diphenhydramine. No adverse event was reported in the 'no treatment' group. AUTHORS' CONCLUSIONS: Honey may be better than 'no treatment' and diphenhydramine in the symptomatic relief of cough but not better than dextromethorphan. There is no strong evidence for or against the use of honey.

Orth, U., R. W. Robins, et al. (2012). **"Life-span development of self-esteem and its effects on important life outcomes."** *J Pers Soc Psychol* 102(6): 1271-1288. <http://www.ncbi.nlm.nih.gov/pubmed/21942279>

We examined the life-span development of self-esteem and tested whether self-esteem influences the development of important life outcomes, including relationship satisfaction, job satisfaction, occupational status, salary, positive and negative affect, depression, and physical health. Data came from the Longitudinal Study of Generations. Analyses were based on 5 assessments across a 12-year period of a sample of 1,824 individuals ages 16 to 97 years. First, growth curve analyses indicated that self-esteem increases from adolescence to middle adulthood, reaches a peak at about age 50 years, and then decreases in old age. Second, cross-lagged regression analyses indicated that self-esteem is best modeled as a cause rather than a consequence of life outcomes. Third, growth curve analyses, with self-esteem as a time-varying covariate, suggested that self-esteem has medium-sized effects on life-span trajectories of affect and depression, small to medium-sized effects on trajectories of relationship and job satisfaction, a very small effect on the trajectory of health, and no effect on the trajectory of occupational status. These findings replicated across 4 generations of participants--children, parents, grandparents, and their great-grandparents. Together, the results suggest that self-esteem has a significant prospective impact on real-world life experiences and that high and low self-esteem are not mere epiphenomena of success and failure in important life domains.

Piff, P. K., D. M. Stancato, et al. (2012). **"Higher social class predicts increased unethical behavior."** *Proc Natl Acad Sci U S A* 109(11): 4086-4091. <http://www.ncbi.nlm.nih.gov/pubmed/22371585>

Seven studies using experimental and naturalistic methods reveal that upper-class individuals behave more unethically than lower-class individuals. In studies 1 and 2, upper-class individuals were more likely to break the law while driving, relative to lower-class individuals. In follow-up laboratory studies, upper-class individuals were more likely to exhibit unethical decision-making tendencies (study 3), take valued goods from others (study 4), lie in a negotiation (study 5), cheat to increase their chances of winning a prize (study 6), and endorse unethical behavior at work (study 7) than were lower-class individuals. Mediator and moderator data demonstrated that upper-class individuals' unethical tendencies are accounted for, in part, by their more favorable attitudes toward greed.

Ryan, A., J. D. Safran, et al. (2012). **"Therapist mindfulness, alliance and treatment outcome."** *Psychotherapy Research* 22(3): 289-297. <http://dx.doi.org/10.1080/10503307.2011.650653>

Abstract The present study investigated the association between therapist dispositional mindfulness and therapist self-affiliation, the therapeutic alliance, and treatment outcome. Total therapist mindfulness was associated with therapist self-affiliation,  $r = .413$ ,  $p < .05$ . Therapist mindfulness was positively correlated with therapist ratings of the working alliance,  $r = .456$ ,  $p < .05$ , though only the Act with Awareness subscale showed a relationship with patient rated alliance,  $r = .379$ . Therapist mindfulness was not associated with patient rated decreases in global symptomatology, but was associated with patient rated improvements in interpersonal functioning,  $r = .481$ ,  $p < .05$ . All correlations correspond to a medium effect size. The results indicate that therapist dispositional mindfulness may be an important pre-treatment variable in psychotherapy outcome.

Sedlmeier, P., J. Eberth, et al. (2012). **"The psychological effects of meditation: A meta-analysis."** *Psychol Bull.* <http://www.ncbi.nlm.nih.gov/pubmed/22582738>

In this meta-analysis, we give a comprehensive overview of the effects of meditation on psychological variables that can be extracted from empirical studies, concentrating on the effects of meditation on nonclinical groups of adult meditators. Mostly because of methodological problems, almost (3/4) of an initially identified 595 studies had to be excluded. Most studies appear to have been conducted without sufficient theoretical background. To put the results into perspective, we briefly summarize the major theoretical approaches from both East and West. The 163 studies that allowed the calculation of effect sizes exhibited medium average effects ( $r = .28$  for all studies and  $r = .27$  for the  $n = 125$  studies from reviewed journals), which cannot be explained by mere relaxation or cognitive restructuring effects. In general, results were strongest (medium to large) for changes in emotionality and relationship issues, less strong (about medium) for measures of attention, and weakest (small to medium) for more cognitive measures. However, specific findings varied across different approaches to meditation (transcendental meditation, mindfulness meditation, and other meditation techniques). Surprisingly, meditation experience only partially covaried with long-term impact on the variables examined. In general, the dependent variables used cover only some of the content areas about which predictions can be made from already existing theories about meditation; still, such predictions lack precision at present. We conclude that to arrive at a comprehensive understanding of why and how meditation works, emphasis should be placed on the development of more precise theories and measurement devices.

Sheldon, K. M. and S. Lyubomirsky (2012). **"The challenge of staying happier: Testing the hedonic adaptation prevention model."** *Pers Soc Psychol Bull* 38(5): 670-680. <http://www.ncbi.nlm.nih.gov/pubmed/22361725>

The happiness that comes from a particular success or change in fortune abates with time. The Hedonic Adaptation Prevention (HAP) model specifies two routes by which the well-being gains derived from a positive life change are eroded--the first involving bottom-up processes (i.e., declining positive emotions generated by the positive change) and the second involving top-down processes (i.e., increased aspirations for even more positivity). The model also specifies two moderators that can forestall these processes--continued appreciation of the original life change and continued variety in change-related experiences. The authors formally tested the predictions of the HAP model in a 3-month three-wave longitudinal study of 481 students. Temporal path analyses and moderated regression analyses provided good support for the model. Implications for the stability of well-being, the feasibility of "the pursuit of happiness," and the appeal of overconsumption are discussed. *MedicalXpress* -

<http://medicalxpress.com/news/2012-05-happiness-mu-people-good-great.html> - comments "The sayings "variety is the spice of life" and "happiness isn't getting what you want, but wanting what you get" seem to have a psychological basis, according to a new study by an MU psychologist who identified two keys to becoming happier and staying that way. "Although the Declaration of Independence upholds the right to pursue happiness, that search can be a never-ending quest," said Kennon Sheldon, professor of psychological sciences in the College of Arts and Sciences. "Previous research shows that an individual's happiness can increase after major life changes, such as starting a new romantic relationship, but over time happiness tends to return to a previous level. Through our research, we developed a model to help people maintain higher levels of happiness derived from beneficial changes. The model consists of two major components: the need to keep having new and positive life-changing experiences and the need to keep appreciating what you already have and not want more too soon." In the recent study, Sheldon, along with co-author Sonja Lyubomirsky of the University of California, Riverside, first surveyed 481 people about their happiness. Six weeks later participants identified a recent positive change in their lives that had made them happier. Six weeks after that, the psychologists evaluated whether the original happiness boost had lasted. For some it had, but for most it had not. The psychologists then tested and confirmed their model for predicting whose boost had lasted. "The majority got used to the change that had made them happy in the first place," Sheldon said. "They stopped being happy because they kept wanting more and raising their standards, or because they stopped having fresh positive experiences of the change, for example they stopped doing fun things with their new boyfriend and started wishing he was better looking. A few were able to appreciate what they had and to keep having new experiences. In the long term, those people tended to maintain their boost, rather than falling back where they started." Due to genetics and other factors, individuals have a certain "set-point" of happiness they normally feel. Some people tend to be bubbly, while others are more somber, though individuals vary in a range around their set-point. Sheldon's research suggests how people can train themselves to stay at the top of their possible range of happiness. "A therapist can help a person get from miserable to OK; our study shows how people can take themselves from good to great," Sheldon said. Sheldon also noted that the best life changes don't necessarily equate to new purchases. Although a shiny new possession can boost happiness, that purchase has to be experienced anew every day and appreciated for what it brings to have any lasting effect on happiness. "The problem with many purchases is that they tend to just sit there," said Sheldon. "They don't keep on providing varied positive experiences. Also, relying on material purchases to make us happy can lead to a faster rise in aspirations, like an addiction. Hence, many purchases tend to be only quick fixes. Our model suggests ways to reduce the 'let down' from those purchases. For example, if you renovate your house, enjoy it and have many happy experiences in the new environment, but don't compare your new decor to the Joneses'."

Sowislo, J. F. and U. Orth (2012). **"Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies."** Psychol Bull. <http://www.ncbi.nlm.nih.gov/pubmed/22730921>

Low self-esteem and depression are strongly related, but there is not yet consistent evidence on the nature of the relation. Whereas the vulnerability model states that low self-esteem contributes to depression, the scar model states that depression erodes self-esteem. Furthermore, it is unknown whether the models are specific for depression or whether they are also valid for anxiety. We evaluated the vulnerability and scar models of low self-esteem and depression, and low self-esteem and anxiety, by meta-analyzing the available longitudinal data (covering 77 studies on depression and 18 studies on anxiety). The mean age of the samples ranged from childhood to old age. In the analyses, we used a random-effects model and examined prospective effects between the variables, controlling for prior levels of the predicted variables. For depression, the findings supported the vulnerability model: The effect of self-esteem on depression ( $\beta = -.16$ ) was significantly stronger than the effect of depression on self-esteem ( $\beta = -.08$ ). In contrast, the effects between low self-esteem and anxiety were relatively balanced: Self-esteem predicted anxiety with  $\beta = -.10$ , and anxiety predicted self-esteem with  $\beta = -.08$ . Moderator analyses were conducted for the effect of low self-esteem on depression; these suggested that the effect is not significantly influenced by gender, age, measures of self-esteem and depression, or time lag between assessments. If future research supports the hypothesized causality of the vulnerability effect of low self-esteem on depression, interventions aimed at increasing self-esteem might be useful in reducing the risk of depression.

Tamir, D. I. and J. P. Mitchell (2012). **"Disclosing information about the self is intrinsically rewarding."** Proc Natl Acad Sci U S A 109(21): 8038-8043. <http://www.ncbi.nlm.nih.gov/pubmed/22566617>

Humans devote 30-40% of speech output solely to informing others of their own subjective experiences. What drives this propensity for disclosure? Here, we test recent theories that individuals place high subjective value on opportunities to communicate their thoughts and feelings to others and that doing so engages neural and cognitive mechanisms associated with reward. Five studies provided support for this hypothesis. Self-disclosure was strongly associated with increased activation in brain regions that form the mesolimbic dopamine system, including the nucleus accumbens and ventral tegmental area. Moreover, individuals were willing to forgo money to disclose about the self. Two additional studies demonstrated that these effects stemmed from the independent value that individuals placed on self-referential thought and on simply sharing information with others. Together, these findings suggest that the human tendency to convey information about personal experience may arise from the intrinsic value associated with self-disclosure. *MedicalXpress* - <http://medicalxpress.com/news/2012-05-people-brain-scans.html> - comments "Got something to report about yourself? An opinion, perhaps, or a status update? Nobody may care except you, but new brain research suggests you can make yourself feel good simply by sharing. Participants who talked about themselves showed signs of activity in the areas of the brain that are linked to value and motivation, said Diana Tamir, lead author of a study published in this week's issue of the Proceedings of the National Academy of Sciences. "This helps to explain why people so obsessively engage in this behavior. It's because it provides them with some sort of subjective value: It feels good, basically," said Tamir, a graduate student in the Social Cognitive and Affective Neuroscience Lab at Harvard University. Indeed, the researchers found that the regions of the brain that are activated by talking about oneself are also responsible for the thrills of food, sex, money and drug addiction, Tamir said. The findings are more than a scientific curiosity, Tamir said, considering how much time people spend discussing themselves. By one estimate, 30 percent to 40 percent of your speech has to do with you. "Self-disclosure is a behavior that we do all of the time, day in and day out: When you talk to people, they'll often talk about themselves," Tamir said. "On Twitter and Facebook, people are primarily posting about what they're thinking and feeling in the moment. This is one piece of evidence about why we may do that." In the study, Tamir and a colleague conducted several experiments on subjects whose brains were scanned as they were told to do various things. In one experiment, 78 participants alternately disclosed their own opinions -- about things like whether they preferred coffee or tea -- and judged the opinions of others whose photographs they looked at. In another experiment, 117 people alternately talked about their personality traits (among other things, declaring whether they're "curious" or "ambitious") and those of the U.S. president at the time, either George W. Bush or Barack Obama. The researchers found that certain parts of the brain were more active when people talked about themselves. In terms of monetary value, participants valued being able to share a thought as being worth about a penny, Tamir said: "We like to call it a penny for your thoughts." So, why did evolution encourage humans to feel good when they talk about themselves? "We're doing some tests to see what larger role this behavior may play, whether people's motivation to self-disclose changes depending on their motivations to bond with someone," Tamir said. "Some studies show that the more you self-disclose to someone, the more you like them, the more

they like you. It may have something to do with forming social bonds." Paul Zak, a brain researcher and founding director of the Center for Neuroeconomics Studies at Claremont Graduate University, said the findings are "very convincing" and offer insight into human evolution. "If a social creature did not disclose information, then other creatures might stop interacting with it," he said. "Animals do this with smells and movements, and humans do this with language. This study reveals how our brain evolved to motivate sociality, which is pretty cool."

Tripkovic, L., H. Lambert, et al. (2012). "**Comparison of vitamin d2 and vitamin d3 supplementation in raising serum 25-hydroxyvitamin d status: A systematic review and meta-analysis.**" *Am J Clin Nutr* 95(6): 1357-1364. <http://www.ajcn.org/content/95/6/1357.abstract>

(Free full text available) Background: Currently, there is a lack of clarity in the literature as to whether there is a definitive difference between the effects of vitamins D2 and D3 in the raising of serum 25-hydroxyvitamin D [25(OH)D]. Objective: The objective of this article was to report a systematic review and meta-analysis of randomized controlled trials (RCTs) that have directly compared the effects of vitamin D2 and vitamin D3 on serum 25(OH)D concentrations in humans. Design: The ISI Web of Knowledge (January 1966 to July 2011) database was searched electronically for all relevant studies in adults that directly compared vitamin D3 with vitamin D2. The Cochrane Clinical Trials Registry, International Standard Randomized Controlled Trials Number register, and clinicaltrials.gov were also searched for any unpublished trials. Results: A meta-analysis of RCTs indicated that supplementation with vitamin D3 had a significant and positive effect in the raising of serum 25(OH)D concentrations compared with the effect of vitamin D2 ( $P = 0.001$ ). When the frequency of dosage administration was compared, there was a significant response for vitamin D3 when given as a bolus dose ( $P = 0.0002$ ) compared with administration of vitamin D2, but the effect was lost with daily supplementation. Conclusions: This meta-analysis indicates that vitamin D3 is more efficacious at raising serum 25(OH)D concentrations than is vitamin D2, and thus vitamin D3 could potentially become the preferred choice for supplementation. However, additional research is required to examine the metabolic pathways involved in oral and intramuscular administration of vitamin D and the effects across age, sex, and ethnicity, which this review was unable to verify.

Werner-Seidler, A. and M. L. Moulds (2012). "**Mood repair and processing mode in depression.**" *Emotion* 12(3): 470-478. <http://www.ncbi.nlm.nih.gov/pubmed/22023367>

Recalling positive autobiographical memories is a powerful emotion regulation strategy that can be used to repair low mood and alleviate negative affect. Unlike healthy individuals, those with current or past depression do not experience an improvement in mood as a consequence of recalling positive memories. We tested whether differences in processing mode might account for this impairment. Following mood induction procedures designed to ensure equivalence of mood state, depressed ( $n = 35$ ) and recovered depressed ( $n = 33$ ) participants were instructed to recall a positive memory and focus on it while adopting either an abstract or a concrete mode of processing. Participants in the abstract processing condition experienced no change in mood, while those in the concrete processing condition showed improved mood after memory recall. This research illustrates that the process by which positive autobiographical memories are recalled is important in determining their emotional impact and suggests that psychological interventions for depression may be improved by explicitly targeting processing mode.

Wu, J., A. S. Yeung, et al. (2012). "**Acupuncture for depression: A review of clinical applications.**" *Can J Psychiatry* 57(7): 397-405. <http://www.ncbi.nlm.nih.gov/pubmed/22762294>

While increasing numbers of patients are seeking acupuncture treatment for depression in recent years, there is limited evidence of the antidepressant (AD) effectiveness of acupuncture. Given the unsatisfactory response rates of many Food and Drug Administration-approved ADs, research on acupuncture remains of potential value. Therefore, we sought to review the efficacy and safety of acupuncture treatment for depression in clinical applications. We conducted a PubMed search for publications through 2011. We assessed the adequacy of each report and abstracted information on reported effectiveness or efficacy of acupuncture as monotherapy for major depressive disorder (MDD) and as augmentation of ADs. We also examined adverse events associated with acupuncture, and evidence for acupuncture as a means of reducing side effects of ADs. Published data suggest that acupuncture, including manual-, electrical-, and laser-based, is a generally beneficial, well-tolerated, and safe monotherapy for depression. However, acupuncture augmentation in AD partial responders and nonresponders is not as well studied as monotherapy; and available studies have only investigated MDD, but not other depressive spectrum disorders. Manual acupuncture reduced side effects of ADs in MDD. We found no data on depressive recurrence rates after recovery with acupuncture treatment. Acupuncture is a potential effective monotherapy for depression, and a safe, well-tolerated augmentation in AD partial responders and nonresponders. However, the body of evidence based on well-designed studies is limited, and further investigation is called for.