

48 bhma abstracts, november '12

Forty eight abstracts covering a multitude of stress, health & wellbeing related subjects including links between adolescent fitness & strength and future depression, suicide & overall mortality, friendship & the internet, multivitamins & prevention of cancer & heart disease, the safety of taking antidepressants in pregnancy, leadership & lower stress levels, evidence against the low-sugar theory of depleted willpower, tea & cancer prevention, and much more.

(Åberg, Waern et al. 2012; Adolph, Cole et al. 2012; Ainsworth and Maner 2012; Aknin, Hamlin et al. 2012; Armon, Melamed et al. 2012; Bach and Lewis 2012; Bragdon and Lombardo 2012; Brooks 2012; Bufferd, Dougherty et al. 2012; Carter, McCullough et al. 2012; Chowdhury, Stevens et al. 2012; Christensen and Knardahl 2012; Christensen and Knardahl 2012; Cramer, Haller et al. 2012; Cramer, Lauche et al. 2012; Cunningham and Kirkland 2012; Donahue, Forest et al. 2012; Doron, Moulding et al. 2012; Durante, Fiske et al. 2012; Ein-Dor and Tal 2012; Fraley, Griffin et al. 2012; Gaziano J and et al. 2012; Gitlin, Kales et al. 2012; Gold, Sen et al. 2012; Hemmingsson, Johansson et al. 2012; Hilderink, Burger et al. 2012; Hill, Turiano et al. 2012; Jarrett 2012; Kraft and Pressman 2012; Kuyken, Crane et al. 2012; Lee and Schwarz 2012; Levin, Robinson-Cohen et al. 2012; Lindson-Hawley, Aveyard et al. 2012; Luby 2012; Lundgren, Luoma et al. 2012; McAdams, Lucas et al. 2012; McLaughlin, Green et al. 2012; Morrison, Epstude et al. 2012; Nechuta, Shu et al. 2012; Ortega, Silventoinen et al. 2012; Perkins, Leonard et al. 2012; Sesso Hd and et al. 2012; Sherman, Lee et al. 2012; Steiner 2012; Tadmor, Galinsky et al. 2012; Teicher, Polcari et al. 2012; Wilkin and Connolly 2012; Amichai-Hamburger, Kingsbury et al. 2013)

Åberg, M. A. I., M. Waern, et al. (2012). **"Cardiovascular fitness in males at age 18 and risk of serious depression in adulthood: Swedish prospective population-based study."** *British Journal of Psychiatry* 201(5): 352-359. <http://bjp.rcpsych.org/content/201/5/352.abstract>

Background: Studies suggest a role for cardiovascular fitness in the prevention of affective disorders. Aims To determine whether cardiovascular fitness at age 18 is associated with future risk of serious affective illness. Method: Population-based Swedish cohort study of male conscripts (n = 1 117 292) born in 1950–1987 with no history of mental illness who were followed for 3–40 years. Data on cardiovascular fitness at conscription were linked with national hospital registers to calculate future risk of depression (requiring in-patient care) and bipolar disorder. Results: In fully adjusted models low cardiovascular fitness was associated with increased risk for serious depression (hazard ratios (HR) = 1.96, 95% CI 1.71–2.23). No such association could be shown for bipolar disorder (HR = 1.11, 95% CI 0.84–1.47). Conclusions: Lower cardiovascular fitness at age 18 was associated with increased risk of serious depression in adulthood. These results strengthen the theory of a cardiovascular contribution to the aetiology of depression.

Adolph, K. E., W. G. Cole, et al. (2012). **"How do you learn to walk? Thousands of steps and dozens of falls per day."** *Psychological Science* 23(11): 1387-1394. <http://pss.sagepub.com/content/23/11/1387.abstract>

A century of research on the development of walking has examined periodic gait over a straight, uniform path. The current study provides the first corpus of natural infant locomotion derived from spontaneous activity during free play. Locomotor experience was immense: Twelve- to 19-month-olds averaged 2,368 steps and 17 falls per hour. Novice walkers traveled farther faster than expert crawlers, but had comparable fall rates, which suggests that increased efficiency without increased cost motivates expert crawlers to transition to walking. After walking onset, natural locomotion improved dramatically: Infants took more steps, traveled farther distances, and fell less. Walking was distributed in short bouts with variable paths—frequently too short or irregular to qualify as periodic gait. Nonetheless, measures of periodic gait and of natural locomotion were correlated, which indicates that better walkers spontaneously walk more and fall less. Immense amounts of time-distributed, variable practice constitute the natural practice regimen for learning to walk.

Ainsworth, S. E. and J. K. Maner (2012). **"Sex begets violence: Mating motives, social dominance, and physical aggression in men."** *J Pers Soc Psychol* 103(5): 819-829. <http://www.ncbi.nlm.nih.gov/pubmed/22823293>

There are sizable gender differences in aggressive behavior, with men displaying a much higher propensity for violence than women. Evolutionary theories suggest that men's more violent nature derives in part from their historically greater need to compete over access to potential mates. The current research investigates this link between mating and male violence and provides rigorous experimental evidence that mating motives cause men to behave violently toward other men. In these studies, men and women were primed with a mating motive and then performed a noise-blast aggression task. Being primed with mating led men, but not women, to deliver more painful blasts of white noise to a same-sex partner (but not an opposite-sex partner). This effect was particularly pronounced among men with an unrestricted sociosexual orientation, for whom competition over access to new mates is an especially relevant concern. Findings also suggest that mating-induced male violence is motivated by a desire to assert one's dominance over other men: when men were given feedback that they had won a competition with their partner (and thus had achieved dominance through nonaggressive means), the effect of the mating prime on aggression was eliminated. These findings provide insight into the motivational roots of male aggression and illustrate the value of testing theories from evolutionary biology with rigorous experimental methods.

Aknin, L. B., J. K. Hamlin, et al. (2012). **"Giving leads to happiness in young children."** *PLoS ONE* 7(6): e39211. <http://dx.doi.org/10.1371/journal.pone.0039211>

(Free full text accessible): Evolutionary models of cooperation require proximate mechanisms that sustain prosociality despite inherent costs to individuals. The "warm glow" that often follows prosocial acts could provide one such mechanism; if so, these emotional benefits may be observable very early in development. Consistent with this hypothesis, the present study finds that before the age of two, toddlers exhibit greater happiness when giving treats to others than receiving treats themselves. Further, children are happier after engaging in costly giving – forfeiting their own resources – than when giving the same treat at no cost. By documenting the emotionally rewarding properties of costly prosocial behavior among toddlers, this research provides initial support for the claim that experiencing positive emotions when giving to others is a proximate mechanism for human cooperation.

Amichai-Hamburger, Y., M. Kingsbury, et al. (2013). **"Friendship: An old concept with a new meaning?"** *Computers in Human Behavior* 29(1): 33-39. <http://www.sciencedirect.com/science/article/pii/S0747563212002166>

(Accessible in free full text): Today many young people form and maintain what they consider friendships through the net. Internet friendship appears to some as modifying the meaning of real friendship and replacing it with something more trivial. In this paper we explore the complexity of online friendship. We start by seeking to gain an understanding of why and how friendship relates to wellbeing. We then look at how friendships are formed, focusing on the concepts of propinquity and homophily and how they play out within the context of online friendships. We delineate the major dimensions of friendship that

have emerged in theory and research and then comment on how these features of friendship may be affected by the advent of widespread electronic communication. The differences between offline and online companionship, social support, tangible support and protection, exclusiveness, conflict resolution and relationship stability are also considered. The chapter concludes with a discussion of the challenges of conducting research on the behaviour of children and young people on the Internet and the difficulties in defining the term "friendship."

Armon, G., S. Melamed, et al. (2012). **"The relationship of the job demands-control-support model with vigor across time: Testing for reciprocity."** *Applied Psychology: Health and Well-Being* 4(3): 276-298. <http://dx.doi.org/10.1111/j.1758-0854.2012.01074.x>

We used a longitudinal design to investigate the hypotheses that the components of the Job Demands-Control-Support model and changes in their levels over time predict subsequent changes in levels of positive affect of vigor over time, and vice versa. Our study was conducted on a sample of adults working in a variety of occupations (N = 909, 68% men) at three points in time (T1, T2, and T3), over a period of about four years, controlling for neuroticism and other potential confounding variables. Job control at T1 and increase in its levels from T1 to T2 predicted an increase from T2 to T3 in the levels of vigor, whereas for social support, only its level at T1 predicted an increase from T2 to T3 in levels of vigor. An increase from T1 to T2 in levels of job demands predicted an increase from T2 to T3 in levels of vigor only for those rated low on neuroticism. Vigor at T1 predicted an increase from T2 to T3 in levels of job control and social support, but not changes from T2 to T3 in levels of job demands. The reciprocal causal relationship between job resources and vigor exists regardless of the demands of the work environment.

Bach, P. B. and R. J. Lewis (2012). **"Multiplicities in the assessment of multiple vitamins: Is it too soon to tell men that vitamins prevent cancer?"** *JAMA* 308(18): 1916-1917. <http://dx.doi.org/10.1001/jama.2012.53273>

In this issue of JAMA, Gaziano and colleagues report one of several analyses of data from the Physicians' Health Study II (PHS II) randomized controlled trial. Among more than 14 000 male physicians who participated in this study, the authors report a marginally statistically significant (P = .04) inverse relationship between taking a daily multivitamin (Centrum Silver) and the occurrence of cancer. The authors did not find that the supplement prevented any particular cancer preferentially, and there was no evidence of an association between adherence and the protective effect. The vitamin supplement was not demonstrated to reduce overall or cancer-specific mortality, although the authors observed nonsignificant reductions in both ... the marginal statistical significance and the perplexing and somewhat counterintuitive nature of the study findings make drawing any firm conclusion premature.

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

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

Brooks, D. (2012, November 6). **"The heart grows smarter."** *New York Times*. Retrieved A29, from http://www.nytimes.com/2012/11/06/opinion/brooks-the-heart-grows-smarter.html?_r=0.

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

Bufferd, S. J., L. R. Dougherty, et al. (2012). **"Psychiatric disorders in preschoolers: Continuity from ages 3 to 6."** *Am J Psychiatry* 169(11): 1157-1164. <http://ajp.psychiatryonline.org/article.aspx?articleid=1389518>

OBJECTIVE Recent studies indicate that many preschoolers meet diagnostic criteria for psychiatric disorders. However, data on the continuity of these diagnoses are limited, particularly from studies examining a broad range of disorders in community samples. Such studies are necessary to elucidate the validity and clinical significance of psychiatric diagnoses in young children. The authors examined the continuity of specific psychiatric disorders in a large community sample of preschoolers from the preschool period (age 3) to the beginning of the school-age period (age 6). **METHOD** Eligible families with a 3-year child were recruited from the community through commercial mailing lists. For 462 children, the child's primary caretaker was interviewed at baseline and again when the child was age 6, using the parent-report Preschool Age Psychiatric Assessment, a comprehensive diagnostic interview. The authors examined the continuity of DSM-IV diagnoses from ages 3 to 6. **RESULTS** Three-month rates of disorders were relatively stable from age 3 to age 6. Children who met criteria for any diagnosis at age 3 were nearly five times as likely as the others to meet criteria for a diagnosis at age 6. There was significant homotypic continuity from age 3 to age 6 for anxiety, attention deficit hyperactivity disorder (ADHD), and oppositional defiant disorder, and heterotypic continuity between depression and anxiety, between anxiety and oppositional defiant disorder, and between ADHD and oppositional defiant disorder. **CONCLUSIONS** These results indicate that preschool psychiatric disorders are moderately stable, with rates of disorders and patterns of homotypic and heterotypic continuity similar to those observed in samples of older children.

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

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

Chowdhury, R., S. Stevens, et al. (2012). **"Association between fish consumption, long chain omega 3 fatty acids, and risk of cerebrovascular disease: Systematic review and meta-analysis."** *BMJ* 345: e6698. <http://www.ncbi.nlm.nih.gov/pubmed/23112118>

OBJECTIVE: To clarify associations of fish consumption and long chain omega 3 fatty acids with risk of cerebrovascular disease for primary and secondary prevention. **DESIGN:** Systematic review and meta-analysis. **DATA SOURCES:** Studies published before September 2012 identified through electronic searches using Medline, Embase, BIOSIS, and Science Citation Index databases. **ELIGIBILITY CRITERIA:** Prospective cohort studies and randomised controlled trials reporting on associations of fish consumption and long chain omega 3 fatty acids (based on dietary self report), omega 3 fatty acids biomarkers, or supplementations with cerebrovascular disease (defined as any fatal or non-fatal ischaemic stroke, haemorrhagic stroke, cerebrovascular accident, or transient ischaemic attack). Both primary and secondary prevention studies (comprising participants with or without cardiovascular disease at baseline) were eligible. **RESULTS:** 26 prospective cohort studies and 12 randomised controlled trials with aggregate data on 794,000 non-overlapping people and 34,817 cerebrovascular outcomes were included. In cohort studies comparing categories of fish intake the pooled relative risk for cerebrovascular disease for 2-4 servings a week versus ≤ 1 servings a week was 0.94 (95% confidence intervals 0.90 to 0.98) and for ≥ 5 servings a week versus 1 serving a week was 0.88 (0.81 to 0.96). The relative risk for cerebrovascular disease comparing the top thirds of baseline long chain omega 3 fatty acids with the bottom thirds for circulating biomarkers was 1.04 (0.90 to 1.20) and for dietary exposures was 0.90 (0.80 to 1.01). In the randomised controlled trials the relative risk for cerebrovascular disease in the long chain omega 3 supplement compared with the control group in primary prevention trials was 0.98 (0.89 to 1.08) and in secondary prevention trials was 1.17 (0.99 to 1.38). For fish or omega 3 fatty acids the estimates for ischaemic and haemorrhagic cerebrovascular events were broadly similar. Evidence was lacking of heterogeneity and publication bias across studies or within subgroups. **CONCLUSIONS:** Available observational data indicate moderate, inverse associations of fish consumption and long chain omega 3 fatty acids with cerebrovascular risk. Long chain omega 3 fatty acids measured as circulating biomarkers in observational studies or supplements in primary and secondary prevention trials were not associated with cerebrovascular disease. The beneficial effect of fish intake on cerebrovascular risk is likely to be mediated through the interplay of a wide range of nutrients abundant in fish.

Christensen, J. O. and S. Knardahl (2012). **"Work and back pain: A prospective study of psychological, social and mechanical predictors of back pain severity."** *Eur J Pain* 16(6): 921-933. <http://www.ncbi.nlm.nih.gov/pubmed/22337583>

Studies relating occupational psychological and social factors to back pain have traditionally investigated a small number of exposure factors. The current study explored longitudinally a comprehensive set of specific psychological/social and mechanical work factors as predictors of back pain severity (defined as the product of back pain intensity and duration). Employees from 28 organizations in Norway, representing a wide variety of occupations, were surveyed with a follow-up period of 2 years. Several designs were tested: (1) cross-sectional analyses at baseline and follow-up; (2) prospective analyses with baseline exposure; (3) prospective analyses with average exposure over time $[(T1+T2)/2]$; and (4) prospective analyses with measures of change in exposure from T1 to T2. A total of 2808 employees responded at both time points. Fourteen psychological/social and two mechanical exposures were measured. Odds ratios (ORs) were computed by ordinal logistic regressions. Several psychological/social factors predicted back pain severity. After adjustment for age, sex, skill level, back pain severity at T1 and other exposure factors estimated to be potential confounders, the most consistent predictors of back pain were the protective factors decision control [lowest OR 0.68; 99% confidence interval (CI): 0.49-0.95], empowering leadership (lowest OR 0.59; 99% CI: 0.38-0.91) and fair leadership (lowest OR 0.54; 99% CI: 0.34-0.87). Some of the most important predictors included in this study were factors that have previously received little attention in back pain research. This emphasizes the importance of extending the list of factors possibly contributing to back pain.

Christensen, J. O. and S. Knardahl (2012). **"Work and headache: A prospective study of psychological, social, and mechanical predictors of headache severity."** *Pain* 153(10): 2119-2132. <http://www.ncbi.nlm.nih.gov/pubmed/22906887>

Headache is a common health complaint responsible for substantial suffering and disability. Although musculoskeletal complaints such as back and neck pain have frequently been associated with occupational psychological and social factors, headache has received less attention as a possible outcome of such exposures. The aim of the present study was to identify occupational psychological, social, and mechanical factors that predicted headache severity. Furthermore, using a full panel design, cross-lagged and synchronous structural equation models were employed to test reverse causality. Data were obtained by work environment surveys in a wide variety of organizations in Norway, with a two-year follow-up period. At baseline 6421 employees responded and 3574 employees also responded at follow-up. Ordinal logistic regression models revealed that 7 of 16 psychological/social/mechanical factors were prospectively related to headache severity. Most consistently, higher quantitative demands and role conflict, and lower decision control, control over work intensity, and job satisfaction were related to more severe headache at follow-up. Cross-lagged models indicated an impact across a 2-year period of decision control, control over work intensity, and job satisfaction on headache severity. Reverse effects from headache severity to quantitative demands were indicated. For role conflict, no cross-lagged effects were observed. However, synchronous models supported the notion of an effect of each of these factors on headache severity over a time span shorter than 2 years.

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

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

Cramer, H., R. Lauche, et al. (2012). **"A systematic review and meta-analysis of yoga for low back pain."** *Clin J Pain*. <http://www.ncbi.nlm.nih.gov/pubmed/23246998>

OBJECTIVES:: To systematically review and meta-analyze the effectiveness of yoga for low back pain. **METHODS::** MEDLINE, the Cochrane Library, EMBASE, CMBASE, and PsycINFO, were screened through January 2012. Randomized controlled trials comparing yoga to control conditions in patients with low back pain were included. Two authors independently assessed risk of bias using the risk of bias tool recommended by the Cochrane Back Review Group. Main outcome measures were pain, back-specific disability, generic disability, health-related quality of life, and global improvement. For each outcome, standardized mean differences (SMD) and 95% confidence intervals (CI) were calculated. **RESULTS::** Ten randomized controlled trials with a total of 967 chronic low back pain patients were included. Eight studies had low risk of bias. There was strong evidence for short-term effects on pain (SMD=-0.48; 95% CI, -0.65 to -0.31; P<0.01), back-specific disability (SMD=-0.59; 95% CI, -0.87 to -0.30; P<0.01), and global improvement (risk ratio=3.27; 95% CI, 1.89-5.66; P<0.01). There was strong evidence for a long-term effect on pain (SMD=-0.33; 95% CI, -0.59 to -0.07; P=0.01) and moderate evidence for a long-term effect on back-specific disability (SMD=-0.35; 95% CI, -0.55 to -0.15; P<0.01). There was no evidence for either short-term or long-term effects on health-related quality of life. Yoga was not associated with serious adverse events. **DISCUSSION::** This systematic review found strong evidence for short-term effectiveness and moderate evidence for long-term effectiveness of yoga for chronic low back pain in the most important patient-centered outcomes. Yoga can be recommended as an additional therapy to chronic low back pain patients.

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

The scientific study of emotion faces a potentially serious problem: after over a hundred years of psychological study, we lack consensus regarding the very definition of emotion. We propose that part of the problem may be the tendency to define emotion in contrast to cognition, rather than viewing both "emotion" and "cognition" as being comprised of more elemental processes. We argue that considering emotion as a type of cognition (viewed broadly as information processing) may provide an understanding of the mechanisms underlying domains that are traditionally thought to be qualitatively distinct.

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

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

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

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

Durante, F., S. T. Fiske, et al. (2012). **"Nations' income inequality predicts ambivalence in stereotype content: How societies mind the gap."** *British Journal of Social Psychology* (forthcoming). <http://onlinelibrary.wiley.com/doi/10.1111/bjso.12005/abstract>

Income inequality undermines societies: The more inequality, the more health problems, social tensions, and the lower social mobility, trust, life expectancy. Given people's tendency to legitimate existing social arrangements, the stereotype content model (SCM) argues that ambivalence—perceiving many groups as either warm or competent, but not both — may help maintain socio-economic disparities. The association between stereotype ambivalence and income inequality in 37 cross-national samples from Europe, the Americas, Oceania, Asia, and Africa investigates how groups' overall warmth-competence, status-competence, and competition-warmth correlations vary across societies, and whether these variations associate with income inequality (Gini index). More unequal societies report more ambivalent stereotypes, whereas more equal ones dislike competitive groups and do not necessarily respect them as competent. Unequal societies may need ambivalence for system stability: Income inequality compensates groups with partially positive social images. (Full text freely downloadable from Amy Cuddy's Harvard Business School webpage - <http://www.hbs.edu/faculty/Pages/profile.aspx?facId=491042&facInfo=pub>).

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

Attachment-related anxiety has repeatedly been associated with poorer adjustment in various social, emotional, and behavioral domains. Building on social defense theory, we examined a possible advantage of having some group members who score high in attachment anxiety – a heightened tendency to deliver a warning message without delay. We led participants to believe that they accidentally activated a computer virus that erased an experimenter's computer. We then asked them to alert the department's computer technicians to the incident. On their way, they were presented with four decision points where they could choose either to delay their warning or to continue directly to the technicians' office. We found that anxious individuals were less willing to be delayed on their way to deliver a warning message. This result remained significant when attachment avoidance, extroversion, and neuroticism were statistically controlled. Results are discussed in relation to the possible adaptive functions of certain personality characteristics often viewed as undesirable. (BPS Digest - <http://www.bps-research-digest.blogspot.co.uk/2012/11/the-advantage-of-having-anxiously.html> - comments "Psychologists talk about different

attachment styles, such as secure, anxious and avoidant. The secure style is usually the one we're supposed to aspire to. They're the calm people who find it easy to get close to others, but not in a clingy way. By contrast, those with an anxious or avoidant attachment style are often seen in a pathological light - being either too needy or too aloof, respectively. They might sound like the kind of people you want to steer clear of, but now Tsachi Ein-Dor and Orgad Tal have published new research showing the upside to having an anxiously attached person on your team. Eighty undergrads (28 women) completed attachment style and personality questionnaires. High scorers in anxious attachment agreed with statements like "My desire to be very close sometimes scares people away". Two weeks later they returned for what they thought was a study into artistic preferences. Each participant sat down at a computer and was left to rate a series of paintings that appeared on-screen. After the third piece of art, an error message popped up and the next thing, after the participant clicked OK, the computer started running a virus that wiped the whole hard-drive. The experimenter - a trained actress - came back in the room, feigned horror, and asked the participant to take the flash-drive out of the computer and head to the Dean's assistant manager for help. Over the next few minutes, four obstacles were thrown in the way of the participants, potentially diverting them from the aim of seeking help. Outside in the corridor a person asked them to complete a short survey; the Dean's assistant manager, when they got there, directed them to the lab manager, but asked them to do some photocopying first; the lab manager's door had a sign on it asking visitors to wait; and finally, after being directed to the lab technicians' room, the participants passed a student who dropped a load of papers on the floor. The higher that participants scored on anxious attachment, the more likely they were to seek help about the virus with single-minded focus. They more often than others refused to do the survey, shrugged off the photo-copying request, sought help rather than waiting outside the lab manager's office, and left the student to pick up their own papers from the floor. In contrast, the personality variables of extraversion and neuroticism were not related to this single-mindedness. Ein-Dor and Tal have nicknamed anxiously attached people "sentinels". In past research they've shown that they, like people of a generally anxious disposition, are quicker to detect threats (e.g. smoke in the room). This new result confirms the researchers' further prediction that anxiously attached people are also particularly motivated to seek help from others, to raise the alarm - a tendency that "in many real world situations, might save others from a serious threat". Concluding, Ein-Dor and Tal said their study offered "a new perspective on the strengths of individuals who have long been viewed as deficient and poorly adapted.")

Fraleigh, R. C., B. N. Griffin, et al. (2012). **"Developmental antecedents of political ideology: A longitudinal investigation from birth to age 18 years."** *Psychological Science* 23(11): 1425-1431. <http://pss.sagepub.com/content/23/11/1425.abstract>

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.

Gaziano J, S. H. D. C. W. G. and et al. (2012). **"Multivitamins in the prevention of cancer in men: The physicians' health study II randomized controlled trial."** *JAMA* 308(18): 1871-1880. <http://dx.doi.org/10.1001/jama.2012.14641>

(Accessible in free full text): Context Multivitamin preparations are the most common dietary supplement, taken by at least one-third of all US adults. Observational studies have not provided evidence regarding associations of multivitamin use with total and site-specific cancer incidence or mortality. Objective To determine whether long-term multivitamin supplementation decreases the risk of total and site-specific cancer events among men. Design, Setting, and Participants A large-scale, randomized, double-blind, placebo-controlled trial (Physicians' Health Study II) of 14 641 male US physicians initially aged 50 years or older (mean [SD] age, 64.3 [9.2] years), including 1312 men with a history of cancer at randomization, enrolled in a common multivitamin study that began in 1997 with treatment and follow-up through June 1, 2011. Intervention Daily multivitamin or placebo. Main Outcome Measures Total cancer (excluding nonmelanoma skin cancer), with prostate, colorectal, and other site-specific cancers among the secondary end points. Results During a median (interquartile range) follow-up of 11.2 (10.7-13.3) years, there were 2669 men with confirmed cancer, including 1373 cases of prostate cancer and 210 cases of colorectal cancer. Compared with placebo, men taking a daily multivitamin had a statistically significant reduction in the incidence of total cancer (multivitamin and placebo groups, 17.0 and 18.3 events, respectively, per 1000 person-years; hazard ratio [HR], 0.92; 95% CI, 0.86-0.998; P = .04). There was no significant effect of a daily multivitamin on prostate cancer (multivitamin and placebo groups, 9.1 and 9.2 events, respectively, per 1000 person-years; HR, 0.98; 95% CI, 0.88-1.09; P = .76), colorectal cancer (multivitamin and placebo groups, 1.2 and 1.4 events, respectively, per 1000 person-years; HR, 0.89; 95% CI, 0.68-1.17; P = .39), or other site-specific cancers. There was no significant difference in the risk of cancer mortality (multivitamin and placebo groups, 4.9 and 5.6 events, respectively, per 1000 person-years; HR, 0.88; 95% CI, 0.77-1.01; P = .07). Daily multivitamin use was associated with a reduction in total cancer among 1312 men with a baseline history of cancer (HR, 0.73; 95% CI, 0.56-0.96; P = .02), but this did not differ significantly from that among 13 329 men initially without cancer (HR, 0.94; 95% CI, 0.87-1.02; P = .15; P for interaction = .07). Conclusion In this large prevention trial of male physicians, daily multivitamin supplementation modestly but significantly reduced the risk of total cancer.

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

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

Gold, K. J., A. Sen, et al. (2012). **"Details on suicide among us physicians: Data from the national violent death reporting system."** *Gen Hosp Psychiatry*. <http://www.ncbi.nlm.nih.gov/pubmed/23123101>

OBJECTIVE: Physician suicide is an important public health problem as the rate of suicide is higher among physicians than the general population. Unfortunately, few studies have evaluated information about mental health comorbidities and psychosocial stressors which may contribute to physician suicide. We sought to evaluate these factors among physicians versus non-physician suicide victims. **METHODS:** We used data from the United States National Violent Death Reporting System to evaluate demographics, mental health variables, recent stressors and suicide methods among physician versus non-physician suicide victims in 17 states. **RESULTS:** The data set included 31,636 suicide victims of whom 203 were identified as physicians. Multivariable logistic regression found that having a known mental health disorder or a job problem which contributed to the suicide significantly predicted being a physician. Physicians were significantly more likely than non-physicians to have antipsychotics, benzodiazepines and barbiturates present on toxicology testing but not antidepressants. **CONCLUSIONS:** Mental illness is an important comorbidity for physicians who complete a suicide but postmortem toxicology data shows low rates of medication treatment. Inadequate treatment and increased problems related to job stress may be potentially modifiable risk factors to reduce suicidal death among physicians.

Hemmingson, E., K. Johansson, et al. (2012). **"Weight loss and dropout during a commercial weight-loss program including a very-low-calorie diet, a low-calorie diet, or restricted normal food: Observational cohort study."** *Am J Clin Nutr* 96(5): 953-961. <http://ajcn.nutrition.org/content/96/5/953.abstract>

Background: The effectiveness of commercial weight-loss programs consisting of very-low-calorie diets (VLCDs) and low-calorie diets (LCDs) is unclear. **Objective:** The aim of the study was to quantify weight loss and dropout during a commercial weight-loss program in Sweden (Itrim; cost: \$1300/€1000; all participants paid their own fee). **Design:** This observational cohort study linked commercial weight-loss data with National Health Care Registers. Weight loss was induced with a 500-kcal liquid-formula VLCD [$n = 3773$; BMI (in kg/m²): 34 ± 5 (mean \pm SD); 80% women; 45 ± 12 y of age (mean \pm SD)], a 1200–1500-kcal formula and food-combination LCD ($n = 4588$; BMI: 30 ± 4 ; 86% women; 50 ± 11 y of age), and a 1500–1800-kcal/d restricted normal-food diet ($n = 676$; BMI: 29 ± 5 ; 81% women; 51 ± 12 y of age). Maintenance strategies included exercise and a calorie-restricted diet. Weight loss was analyzed by using an intention-to-treat analysis (baseline substitution). **Results:** After 1 y, mean (\pm SD) weight changes were -11.4 ± 9.1 kg with the VLCD (18% dropout), -6.8 ± 6.4 kg with the LCD (23% dropout), and -5.1 ± 5.9 kg with the restricted normal-food diet (26% dropout). In an adjusted analysis, the VLCD group lost 2.8 kg (95% CI: 2.5, 3.2) and 3.8 kg (95% CI: 3.2, 4.5) more than did the LCD and restricted normal-food groups, respectively. A high baseline BMI and rapid initial weight loss were both independently associated with greater 1-y weight loss ($P < 0.001$). Younger age and low initial weight loss predicted an increased dropout rate ($P < 0.001$). Treatment of depression (OR: 1.4; 95% CI: 1.1, 1.9) and psychosis (OR: 2.6; 95% CI: 1.1, 6.3) were associated with an increased dropout rate in the VLCD group. **Conclusion:** A commercial weight-loss program, particularly one using a VLCD, was effective at reducing body weight in self-selected, self-paying adults.

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

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

Hill, P. L., N. A. Turiano, et al. (2012). **"Examining concurrent and longitudinal relations between personality traits and social well-being in adulthood."** *Social psychological and personality science* 3(6): 698-705. <http://spp.sagepub.com/content/3/6/698.abstract>

Past work has demonstrated that Big Five personality traits both predict relationship success and respond to changes in relationship status. The current study extends this work by examining how developments on the Big Five traits correspond to another important social outcome in adulthood, social well-being. Using the Mid-Life Development in the U.S. longitudinal data sample of adults, the authors examined traits and social well-being at two time points, roughly 9 years apart. Results find support for two primary claims. First, initial levels of social well-being correlated positively with initial standing on extraversion, agreeableness, conscientiousness, emotional stability, and openness. Second, changes in social well-being over time coincided with changes on these traits, in the same directions. Taken together, these findings provide broad support that trait development and social well-being development coincide during adulthood.

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

One of the main findings in willpower research is that it's a limited resource. Use self-control up in one situation and you have less left over afterwards - an effect known as "ego-depletion". This discovery led to a search for the underlying physiological mechanism. In 2007, Roy Baumeister, a pioneer in the field, and his colleagues reported that the physiological correlate of ego-depletion is low glucose. Self-control leads the brain to metabolise more glucose, so the theory goes, and when glucose gets too low, we're left with less willpower. The breakthrough 2007 study showed that ego-depleted participants had low blood glucose levels, but those who subsequently consumed a glucose drink were able to sustain their self-control on a second task. In the intervening years the finding has been replicated and the glucose-willpower link has come to be stated as fact. "No glucose, no willpower," wrote Baumeister and his journalist co-author John Tierney in their best-selling popular psychology book *Willpower: Rediscovering Our Greatest Strength* (Allen Lane, 2012). The claim was also endorsed in a guide to willpower published by the American Psychological Association earlier this year. "Maintaining steady blood-glucose levels, such as by eating regular healthy meals and snacks, may help prevent the effects of willpower depletion," the report claims. But now two studies have come along at once (following another published earlier in the year) that together cast doubt on the idea that

depleted willpower is caused by a lack of glucose availability in the brain ... The key point is the new results suggest depleted willpower is about motivation and the allocation of glucose resources, not about a lack of glucose. These findings don't prove that consuming glucose has no benefit for restoring willpower, but they suggest strongly that it's not the principle mechanism. It's notable that the new findings complement previous research in the sports science literature showing that gargling (without ingesting) glucose can boost cycling performance. "While our findings are consistent with the predictions of the resource-depletion account, they also contribute to an increasing literature that glucose may not be a candidate physiological analog for self-control resources," write Hagger and Chatzisarantis. "Instead ego-depletion may be due to problems of self-control resource allocation rather than availability." An important next step is to conduct brain-imaging and related studies to observe the physiological effects of gargling glucose on the brain, and on motivational beliefs. There are also tantalising applications from the new research - for example, could the gargle effect (perhaps in the form of glucose-infused chewing gum) be used as a willpower aid for dieters and people trying to give up smoking?

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

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

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

Depression typically runs a relapsing and recurrent course.¹ Without ongoing treatment people with recurrent depression have a very high risk of repeated depressive relapses throughout their life, even after successful acute treatment. Major inroads into the substantial health burden attributable to depression could be offset through interventions that prevent depressive relapse among people at high risk of recurrent episodes.² If the factors that make people vulnerable to depressive relapse can be attenuated, the relapsing course of depression could potentially be broken. Currently, most depression is treated in primary care, and maintenance antidepressants are the mainstay approach to preventing relapse.³ The UK's National Institute for Health and Clinical Excellence (NICE) recommends that to stay well, people with a history of recurrent depression should continue taking antidepressants for at least two years. However, many patients experience side effects, and some express a preference for psychosocial interventions, which provide long term protection against relapse.⁴ Mindfulness based cognitive therapy (MBCT)⁵ was developed as a psychosocial intervention for teaching people with a history of depression the skills to stay well in the long term. A recent systematic review and meta-analysis of six randomised controlled trials (n=593) suggests that MBCT significantly reduces the rates of depressive relapse compared with usual care or placebo, corresponding to a relative risk reduction of 34% (risk ratio 0.66, 95% confidence interval 0.53 to 0.82).⁶ However, despite the emerging evidence base⁶ and widespread clinical enthusiasm for MBCT,⁷ several uncertainties remain. Firstly, it is not clear how MBCT compares with other approaches to preventing depressive relapse—most notably, maintenance antidepressants. Evidence from two of the six randomised controlled trials included in systematic review mentioned above suggests that MBCT was at least as efficacious as maintenance antidepressants in preventing relapse (risk ratio 0.80, 95% confidence interval 0.60 to 1.08),⁶ but the sample sizes were small and the confidence intervals were wide. Even though antidepressants are the first line approach to preventing depressive relapse, no trials have yet evaluated whether the combination of antidepressants and MBCT provides added benefit over either treatment alone. There are also no head to head trials comparing MBCT with other psychosocial approaches known to help people stay well in the long term (such as cognitive behavioural therapy and interpersonal therapy). Secondly, although the six randomised controlled trials have not yet reported adverse effects, neither have studies explicitly explored in any depth MBCT's acceptability in a broad range of populations. The earliest two trials of MBCT provided evidence through retrospective analyses suggesting that MBCT may be effective only for people who had had three or more episodes of depression.⁶ As a result, subsequent trials have restricted their sample to patients with three or more previous episodes. Future research is needed to establish how acceptable MBCT is to a broad range of patients. Thirdly, even though it is nearly 10 years since NICE first recommended MBCT and even though the 2009 NICE update identified the therapy as a key priority for implementation, there is a substantial gap between the efficacy research and implementation in routine practice settings. A recent survey suggests that only a small number of mental health services in the UK have systematically built MBCT into their depression care pathways ... How do I know when to refer someone for cognitive behavioural therapy, interpersonal therapy, or mindfulness based cognitive therapy? All three psychosocial treatments are recommended by NICE, but cognitive behavioural and interpersonal therapies aim to help patients with current depression get well and stay well. MBCT might therefore be considered for people who are well but still at substantial risk of relapse—that is, those who have experienced three or more previous episodes of depression. This includes people who have relapsed despite antidepressant treatment; who cannot or choose not to continue antidepressant treatment; and/or who have residual symptoms. Such patients may present asking for long term support in the management of their depression or feel at risk of having future relapses after drug or psychological treatment. MBCT is best suited to people interested in a psychosocial approach to preventing future episodes of depression who are open and willing to learn new ways of thinking and behaving and to learn within a group based context, and who can invest the time both to attend the groups and to do the home practice.

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

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

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

Levin, G. P., C. Robinson-Cohen, et al. (2012). **"Genetic variants and associations of 25-hydroxyvitamin D concentrations with major clinical outcomes."** *JAMA* 308(18): 1898-1905. <http://dx.doi.org/10.1001/jama.2012.17304>

Context Lower serum 25-hydroxyvitamin D concentrations are associated with greater risks of many chronic diseases across large, prospective community-based studies. Substrate 25-hydroxyvitamin D must be converted to 1,25-dihydroxyvitamin D for full biological activity, and complex metabolic pathways suggest that interindividual variability in vitamin D metabolism may alter the clinical consequences of measured serum 25-hydroxyvitamin D. **Objective** To investigate whether common variation within genes encoding the vitamin D-binding protein, megalin, cubilin, CYP27B1, CYP24A1, and the vitamin D receptor (VDR) modify associations of low 25-hydroxyvitamin D with major clinical outcomes. **Design, Setting, and Participants** Examination of 141 single-nucleotide polymorphisms in a discovery cohort of 1514 white participants (who were recruited from 4 US regions) from the community-based Cardiovascular Health Study. Participants had serum 25-hydroxyvitamin D measurements in 1992-1993 and were followed up for a median of 11 years (through 2006). Replication meta-analyses were conducted across the independent, community-based US Health, Aging, and Body Composition (n = 922; follow-up: 1998-1999 through 2005), Italian Invecchiare in Chianti (n = 835; follow-up: 1998-2000 through 2006), and Swedish Uppsala Longitudinal Study of Adult Men (n = 970; follow-up: 1991-1995 through 2008) cohort studies. **Main Outcome Measure** Composite outcome of incident hip fracture, myocardial infarction, cancer, and mortality over long-term follow-up. **Results** Interactions between 5 single-nucleotide polymorphisms and low 25-hydroxyvitamin D concentration were identified in the discovery phase and 1 involving a variant in the VDR gene replicated in independent meta-analysis. Among Cardiovascular Health Study participants, low 25-hydroxyvitamin D concentration was associated with hazard ratios for risk of the composite outcome of 1.40 (95% CI, 1.12-1.74) for those who had 1 minor allele at rs7968585 and 1.82 (95% CI, 1.31-2.54) for those with 2 minor alleles at rs7968585. In contrast, there was no evidence of an association (estimated hazard ratio, 0.93 [95% CI, 0.70-1.24]) among participants who had 0 minor alleles at this single-nucleotide polymorphism. **Conclusion** Known associations of low 25-hydroxyvitamin D with major health outcomes may vary according to common genetic differences in the vitamin D receptor.

Lindson-Hawley, N., P. Aveyard, et al. (2012). **"Reduction versus abrupt cessation in smokers who want to quit."** *Cochrane Database Syst Rev* 11: CD008033. <http://www.ncbi.nlm.nih.gov/pubmed/23152252>

BACKGROUND: The standard way to stop smoking is to quit abruptly on a designated quit day. A number of smokers have tried unsuccessfully to quit this way. Reducing smoking before quitting could be an alternative approach to cessation. Before this method is adopted it is important to determine whether it is at least as successful as abrupt quitting. **OBJECTIVES:** 1. To compare the success of reducing smoking to quit and abrupt quitting interventions. 2. To compare adverse events between arms in studies that used pharmacotherapy to aid reduction. **SEARCH METHODS:** We searched the Cochrane Tobacco Addiction Review Group specialised register using topic specific terms. The register contains reports of trials of tobacco addiction interventions identified from searches of MEDLINE, EMBASE and PsycInfo. We also searched reference lists of relevant papers and contacted authors of ongoing trials. Date of most recent search: July 2012. **SELECTION CRITERIA:** We included randomized controlled trials (RCTs) that recruited adults who wanted to quit smoking. Studies included at least one condition which instructed participants to reduce their smoking and then quit and one condition which instructed participants to quit abruptly. **DATA COLLECTION AND ANALYSIS:** The outcome measure was abstinence from smoking after at least six months follow-up. We pooled the included trials using a Mantel-Haenszel fixed-effect model. Trials were split for two sub-group analyses: pharmacotherapy vs no pharmacotherapy, self help therapy vs behavioural support. Adverse events were summarised as a narrative. It was not possible to compare them quantitatively as there was variation in the nature and depth of reporting across studies. **MAIN RESULTS:** Ten studies were relevant for inclusion, with a total of 3760 participants included in the meta-analysis. Three of these studies used pharmacotherapy as part of the interventions. Five studies included behavioural support in the intervention, four included self-help therapy, and the remaining study had arms which included behavioural support and arms which included self-help therapy. Neither reduction or abrupt quitting had superior abstinence rates when all the studies were combined in the main analysis (RR= 0.94, 95% CI= 0.79 to 1.13), whether pharmacotherapy was used (RR= 0.87, 95% CI= 0.65 to 1.22), or not (RR= 0.97, 95% CI= 0.78 to 1.21), whether studies included behavioural support (RR= 0.87, 95% CI= 0.64 to 1.17) or self-help therapy (RR= 0.98, 95% CI= 0.78 to 1.23). We were unable to draw conclusions about the difference in adverse events between interventions, however recent studies suggest that pre-quit NRT does not increase adverse events. **AUTHORS' CONCLUSIONS:** Reducing cigarettes smoked before quit day and quitting abruptly, with no prior reduction, produced comparable quit rates, therefore patients can be given the choice to quit in either of these ways. Reduction interventions can be carried out using self-help materials or aided by behavioural support, and can be carried out with the aid of pre-quit NRT. Further research needs to investigate which method of reduction before quitting is the most effective, and which categories of smokers benefit the most from each method, to inform future policy and intervention development.

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

(Free full text available): Although the field of infant/preschool mental health is not young, it has been met with high levels of skepticism and has yet to be well integrated into mainstream psychiatry. As outlined by Bufferd et al. in their landmark paper in this issue (1), efforts to empirically investigate and validate mental disorders in early childhood have faced a number of impediments. These have included concern that diagnostic labels might stigmatize young children; the lack—until recently—of developmentally sensitive, age-appropriate measures of psychopathology that make accurate distinctions from developmental norms; and, perhaps most importantly, a long-held underlying belief that early emotional and behavioral problems represent normative extremes that young children simply grow out of. Bufferd and colleagues' longitudinal study of a large community sample adds to the literature and provides some of the most rigorous broad-based data to date refuting this notion. Building on the growing body of literature validating the onset of numerous axis I psychiatric disorders as early as age 3 (2-5), Bufferd et al. provide findings from a relatively large community sample of 3-year-old children assessed using a comprehensive interviewer-based diagnostic interview (among other measures) and followed longitudinally to age 6. As the authors point out, unique features of the study design included the community-based sampling and the use of a rigorous and comprehensive diagnostic interview designed specifically to assess discrete disorders in preschoolers (as opposed to more commonly used generic checklist measures). The study findings clearly demonstrated that the manifestation of symptoms meeting DSM-IV criteria for clinical disorders at age 3 was a robust marker of risk for disorders at age 6. Both homotypic and heterotypic continuity were demonstrated. Notably, having a disorder at age 3 was associated with an almost fivefold greater risk of having a disorder at age 6. Conversely, more than 50% of children who met criteria for a disorder at age 6 already had clinically significant symptoms by age 3. One limitation of the study was that the age 6 assessment was done by telephone rather than in person as was done at the age 3 assessment. Another was that the diagnosis was based on parental report and was not supplemented by observational data, thereby introducing possible bias that cannot be offset by child report (since young children have a limited ability to self-report on symptoms directly). It should be noted, however, that the use of parent

informants in research diagnostic assessments of young children stands as the state of the art today, despite some promising efforts to develop feasible valid and reliable observational tools that map onto diagnostic algorithms (6). Notwithstanding these limitations, the study findings clearly add broad evidence supporting the relative stability, rather than transience, of early forms of psychopathology and therefore the importance of early identification and intervention ... The field of psychiatry, facing the need to develop more powerful and effective treatments, has been searching for new models to conceptualize disorders and to understand mechanisms of risk (11). Along this line, there has been an increasing focus on understanding the developmental underpinnings of disorders so that they may be identified before they are full-blown and, in some cases, on the path to chronicity. In this light, the findings of Bufferd et al. should blow new wind into the sails of efforts to identify and define the earliest-onset forms of mental disorders. Such work may help us understand the developmental pathways of adult disorders and develop new methods for intervening earlier in life, during periods of greater developmental change and plasticity.

Lundgren, T., J. B. Luoma, et al. (2012). **"The bull's-eye values survey: A psychometric evaluation."** *Cognitive and Behavioral Practice* 19(4): 518-526. <http://www.sciencedirect.com/science/article/pii/S1077722912000387>

Two studies were conducted to develop and evaluate an instrument intended to identify and measure personal values, values attainment, and persistence in the face of barriers. Study 1 describes a content validity approach to the construction and preliminary validation of the Bull's Eye Values Survey (BEVS), using a sample of institutionalized patients suffering from epilepsy. Study 2 investigated the psychometric properties of the BEVS with a sample of Swedish university students. Results suggest that the BEVS is sensitive to treatment effects and can differentiate between clients who receive values-based interventions and those who do not. The BEVS subscales and total score appear to measure an independent dimension of psychological functioning that is negatively correlated with measures of depression, anxiety, and stress, and positively correlated with a measure of psychological flexibility. The BEVS also exhibits acceptable temporal stability and internal consistency. The study provides preliminary support for the BEVS as both a research and clinical tool for measuring values, values-action discrepancies, and barriers to value-based living.

McAdams, K. K., R. E. Lucas, et al. (2012). **"The role of domain satisfaction in explaining the paradoxical association between life satisfaction and age."** *Social Indicators Research* 109(2): 295-303. <http://dx.doi.org/10.1007/s11205-011-9903-9>

Although aging is associated with declines in many life domains, overall life satisfaction does not appear to decline sharply with age. One explanation for this paradoxical finding is that several life domains improve with age such that increases in certain domains balance the decreases in others. Because different issues are problematic at different life stages, it is likely that specific domains display different life trajectories compared to overall life satisfaction. The observed pattern for overall life satisfaction is likely due to a bottom-up approach. Life and domain satisfaction data from 8 years of the British Household Panel Study were analyzed to evaluate this hypothesis. Results indicated that satisfaction with some life domains increased after middle age (e.g. social life), whereas satisfaction with other life domains decreased (e.g. health). Additionally, results illustrated that although domain satisfaction scores demonstrate distinct trajectories, the aggregate of these distinct domains resembled the overall life satisfaction trajectory. These findings have implications for top-down and bottom-up models of life satisfaction.

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

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

Morrison, M., K. Epstude, et al. (2012). **"Life regrets and the need to belong."** *Social psychological and personality science* 3(6): 675-681. <http://spp.sagepub.com/content/3/6/675.abstract>

The present research documents a link between regret and the need to belong. Across five studies, using diverse methods and samples, the authors established that regrets involving primarily social relationships (e.g., romance and family) are felt more intensely than less socially based regrets (e.g., work and education). The authors ruled out alternative explanations for this pattern and found that it is best explained by the extent to which regrets are judged to constitute threats to belonging. Threats to belonging at the regret level and the need to belong at the individual level were strong predictors of regret intensity across multiple regret domains. These findings highlight the central role social connectedness plays in what people regret most.

Nechuta, S., X.-O. Shu, et al. (2012). **"Prospective cohort study of tea consumption and risk of digestive system cancers: Results from the Shanghai women's health study."** *Am J Clin Nutr* 96(5): 1056-1063. <http://ajcn.nutrition.org/content/96/5/1056.abstract>

Background: Data from in vitro and animal studies support a protective role for tea in the etiology of digestive system cancers; however, results from prospective cohort studies have been inconsistent. In addition, to our knowledge, no study has investigated the association of tea consumption with the incidence of all digestive system cancers in Chinese women. Objective: We investigated the association of regular tea intake (≥ 3 times/wk for >6 mo) with risk of digestive system cancers. Design: We used the Shanghai Women's Health Study, a population-based prospective cohort study of middle-aged and older Chinese women who were recruited in 1996–2000. Adjusted HRs and associated 95% CIs were derived from Cox regression models. Results: After a mean follow-up of 11 y, 1255 digestive system cancers occurred (stomach, esophagus, colorectal, liver,

pancreas, and gallbladder/bile duct cancers) in 69,310 nonsmoking and non-alcohol-drinking women. In comparison with women who never drank tea, regular tea intake (mostly green tea) was associated with reduced risk of all digestive system cancers combined (HR: 0.86; 95% CI: 0.74, 0.98), and the reduction in risk increased as the amount and years of tea consumption increased (P-trend = 0.01 and P-trend < 0.01, respectively). For example, women who consumed ≥ 150 g tea/mo (~2-3 cups/d) had a 21% reduced risk of digestive system cancers combined (HR: 0.79; 95% CI: 0.63, 0.99). The inverse association was found primarily for colorectal and stomach/esophageal cancers. Conclusion: In this large prospective cohort study, tea consumption was associated with reduced risk of colorectal and stomach/esophageal cancers in Chinese women.

Ortega, F. B., K. Silventoinen, et al. (2012). **"Muscular strength in male adolescents and premature death: Cohort study of one million participants."** *BMJ* 345: e7279. <http://www.ncbi.nlm.nih.gov/pubmed/23169869>

OBJECTIVES: To explore the extent to which muscular strength in adolescence is associated with all cause and cause specific premature mortality (<55 years). DESIGN: Prospective cohort study. SETTING: Sweden. PARTICIPANTS: 1 142 599 Swedish male adolescents aged 16-19 years were followed over a period of 24 years. MAIN OUTCOME MEASURES: Baseline examinations included knee extension, handgrip, and elbow flexion strength tests, as well as measures of diastolic and systolic blood pressure and body mass index. Cox regression was used to estimate hazard ratios for mortality according to muscular strength categories (tenths). RESULTS: During a median follow-up period of 24 years, 26 145 participants died. Suicide was a more frequent cause of death in young adulthood (22.3%) than was cardiovascular diseases (7.8%) or cancer (14.9%). High muscular strength in adolescence, as assessed by knee extension and handgrip tests, was associated with a 20-35% lower risk of premature mortality due to any cause or cardiovascular disease, independently of body mass index or blood pressure; no association was observed with mortality due to cancer. Stronger adolescents had a 20-30% lower risk of death from suicide and were 15-65% less likely to have any psychiatric diagnosis (such as schizophrenia and mood disorders). Adolescents in the lowest tenth of muscular strength showed by far the highest risk of mortality for different causes. All cause mortality rates (per 100 000 person years) ranged between 122.3 and 86.9 for the weakest and strongest adolescents; corresponding figures were 9.5 and 5.6 for mortality due to cardiovascular diseases and 24.6 and 16.9 for mortality due to suicide. CONCLUSIONS: Low muscular strength in adolescents is an emerging risk factor for major causes of death in young adulthood, such as suicide and cardiovascular diseases. The effect size observed for all cause mortality was equivalent to that for well established risk factors such as elevated body mass index or blood pressure.

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

Neuroimaging data suggest that emotional brain systems are more strongly engaged by moral dilemmas in which innocent people are directly harmed than by dilemmas in which harm is remotely inflicted. In order to test the possibility that this emotional engagement involves anxiety, we investigated the effects of 1 mg and 2 mg of the anti-anxiety drug lorazepam on the response choices of 40 healthy volunteers (20 male) in moral-personal, moral-impersonal, and nonmoral dilemmas. We found that lorazepam caused a dose-dependent increase in participants' willingness to endorse responses that directly harm other humans in moral-personal dilemmas but did not significantly affect response choices in moral-impersonal dilemmas or nonmoral dilemmas. Within the set of moral-personal dilemmas that we administered, lorazepam increased the willingness to harm others in dilemmas where harm was inflicted for selfish reasons (dubbed low-conflict dilemmas) as well as responses to dilemmas where others were harmed for utilitarian reasons (i.e., for the greater good, dubbed high-conflict dilemmas). This suggests that anxiety exerts a general inhibitory effect on harmful acts toward other humans regardless of whether the motivation for those harmful acts is selfish or utilitarian. Lorazepam is also a sedative drug, but we found that lorazepam slowed decision times equally in all 3 dilemma types. This finding implies that its specific capacity to increase ruthlessness in moral-personal dilemmas was not a confound caused by sedation.

Sesso Hd, C. W. G. B. V. and et al. (2012). **"Multivitamins in the prevention of cardiovascular disease in men: The physicians' health study II randomized controlled trial."** *JAMA* 308(17): 1751-1760. <http://dx.doi.org/10.1001/jama.2012.14805>

Context Although multivitamins are used to prevent vitamin and mineral deficiency, there is a perception that multivitamins may prevent cardiovascular disease (CVD). Observational studies have shown inconsistent associations between regular multivitamin use and CVD, with no long-term clinical trials of multivitamin use. Objective To determine whether long-term multivitamin supplementation decreases the risk of major cardiovascular events among men. Design, Setting, and Participants The Physicians' Health Study II, a randomized, double-blind, placebo-controlled trial of a common daily multivitamin, began in 1997 with continued treatment and follow-up through June 1, 2011. A total of 14 641 male US physicians initially aged 50 years or older (mean, 64.3 [SD, 9.2] years), including 754 men with a history of CVD at randomization, were enrolled. Intervention Daily multivitamin or placebo. Main Outcome Measures Composite end point of major cardiovascular events, including nonfatal myocardial infarction (MI), nonfatal stroke, and CVD mortality. Secondary outcomes included MI and stroke individually. Results During a median follow-up of 11.2 (interquartile range, 10.7-13.3) years, there were 1732 confirmed major cardiovascular events. Compared with placebo, there was no significant effect of a daily multivitamin on major cardiovascular events (11.0 and 10.8 events per 1000 person-years for multivitamin vs placebo, respectively; hazard ratio [HR], 1.01; 95% CI, 0.91-1.10; P = .91). Further, a daily multivitamin had no effect on total MI (3.9 and 4.2 events per 1000 person-years; HR, 0.93; 95% CI, 0.80-1.09; P = .39), total stroke (4.1 and 3.9 events per 1000 person-years; HR, 1.06; 95% CI, 0.91-1.23; P = .48), or CVD mortality (5.0 and 5.1 events per 1000 person-years; HR, 0.95; 95% CI, 0.83-1.09; P = .47). A daily multivitamin was also not significantly associated with total mortality (HR, 0.94; 95% CI, 0.88-1.02; P = .13). The effect of a daily multivitamin on major cardiovascular events did not differ between men with or without a baseline history of CVD (P = .62 for interaction). Conclusion Among this population of US male physicians, taking a daily multivitamin did not reduce major cardiovascular events, MI, stroke, and CVD mortality after more than a decade of treatment and follow-up.

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

As leaders ascend to more powerful positions in their groups, they face ever-increasing demands. As a result, there is a common perception that leaders have higher stress levels than nonleaders. However, if leaders also experience a heightened sense of control - a psychological factor known to have powerful stress-buffering effects - leadership should be associated with reduced stress levels. Using unique samples of real leaders, including military officers and government officials, we found that, compared with nonleaders, leaders had lower levels of the stress hormone cortisol and lower reports of anxiety (study 1). In study 2, leaders holding more powerful positions exhibited lower cortisol levels and less anxiety than leaders holding less powerful positions, a relationship explained significantly by their greater sense of control. Altogether, these findings reveal a clear relationship between leadership and stress, with leadership level being inversely related to stress. (Full text freely

downloadable from Amy Cuddy's Harvard Business School webpage - <http://www.hbs.edu/faculty/Pages/profile.aspx?facId=491042&facInfo=pub>).

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

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

Tadmor, C. T., A. D. Galinsky, et al. (2012). **"Getting the most out of living abroad: Biculturalism and integrative complexity as key drivers of creative and professional success."** *J Pers Soc Psychol* 103(3): 520-542. <http://www.ncbi.nlm.nih.gov/pubmed/22823287>

The current research investigated how patterns of home and host cultural identification can explain which individuals who have lived abroad achieve the greatest creative and professional success. We hypothesized that individuals who identified with both their home and host cultures (i.e., biculturals) would show enhanced creativity and professional success compared with individuals who identified with only a single culture (i.e., assimilated and separated individuals). Further, we expected that these effects would be driven by biculturals' greater levels of integrative complexity, an information processing capacity that involves considering and combining multiple perspectives. Two studies demonstrated that biculturals exhibited more fluency, flexibility, and novelty on a creative uses task (Study 1) and produced more innovations at work (Study 2) than did assimilated or separated individuals. Study 3 extended these findings to general professional outcomes: Bicultural professionals achieved higher promotion rates and more positive reputations compared with assimilated or separated individuals. Importantly, in all 3 studies, integrative complexity mediated the relationship between home/host identification and performance. Overall, the current results demonstrate who is most likely to achieve professional and creative success following experiences abroad and why.

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

(Free full text available) BACKGROUND:Symptoms of hyperactivity are believed to fade with age leaving ADHD adults mostly inattentive and impulsive. Our aim was to test this assertion using objective measures of hyperactivity, impulsivity and inattention.METHOD:Participants were 40 subjects with ADHD (23M/17F; 35+/-10 yrs) and 60 healthy adults (28M/32F; 29+/-9 yrs) blindly assessed using Wender-Reimherr interview ratings, Structured Clinical Interview for DSM-IV Disorders and DSM-IV criteria. Infrared motion capture systems tracked head and leg movements during performance of a No-4's cognitive control task. Subjects also completed the Conners' CPT-II.RESULTS:ADHD and controls differed significantly in activity and attention. Effect sizes for activity measures ($d' = 0.7$ -- 1.6) were, on average, two-fold larger than differences in attention or impulsivity, correlated more strongly with executive function ratings and were more discriminatory (ROC area = 0.83 for activity composite, 0.65 for No-4's distraction composite, 0.63 for Conners' CPT-II confidence index, 0.96 for the combined activity and attention diagnostic index). This finding was true for subjects with the predominantly inattentive subtype as well as subjects with combined or predominantly hyperactive/impulsive subtype. Males and females with ADHD were equally active. The superior

accuracy of activity measures was confirmed using Random Forest and predictive modeling techniques. CONCLUSIONS: Objectively measured hyperactivity persists in adults with ADHD and is a more discriminative feature of the disorder than computerized measures of inattention or impulsivity. This finding supports the hypothesis that a deficient ability to sit still remains a defining feature of the disorder in adults when it is measured objectively.

Wilkin, C. L. and C. E. Connelly (2012). **"Do I look like someone who cares? Recruiters' ratings of applicants' paid and volunteer experience."** *International Journal of Selection and Assessment* 20(3): 308-318. <http://dx.doi.org/10.1111/j.1468-2389.2012.00602.x>

Despite the widespread use of resumes, little is known about whether recruiters value applicants' volunteer experience, and if they value some kinds of volunteer experience more than others. Based on a sample of recruiters (n = 135) who each rated a series of resumes with different amounts and types of paid and volunteer experience, our results suggest that recruiters prefer resumes with relevant experience, and resumes with a combination of volunteer and paid experience. Our results did not suggest significant differences in the ratings given to paid or volunteer experience. We discuss the implications of these findings for researchers and practitioners, with specific advice for human resource professionals and applicants. (And see *BPS Occupational Digest* comment at <http://bps-occupational-digest.blogspot.co.uk/2012/11/applicants-voluntary-experience-is.html>).