

36 bhma abstracts, may '12

Thirty six abstracts covering a multitude of stress, health & wellbeing related subjects including prosocial spending & happiness, when do people prefer lower social status, purpose in life & reduced Alzheimer's risk, psychological treatments for tinnitus, vitamin C & blood pressure, the importance of active engagement for successful organization, embodied metaphor, mindfulness based cognitive therapy & current depression, and much more.

(Singh and Das 2011; Ahrens, Ciechanowski et al. 2012; Akin, Dunn et al. 2012; Anderson, Willer et al. 2012; Boyle, Buchman et al. 2012; Cima, Maes et al. 2012; Cimpian, Mu et al. 2012; de Boer, Levin et al. 2012; Ellis and Patel 2012; Fisher, Moffitt et al. 2012; Gracious, Finucane et al. 2012; Haibach, Homish et al. 2012; Iffland, Sansen et al. 2012; Juraschek, Guallar et al. 2012; Laham, Koval et al. 2012; Leung, Kim et al. 2012; Limb 2012; Macdonald, Higgins et al. 2012; Matsubayashi and Ueda 2012; Mekary, Giovannucci et al. 2012; Mitchell, Gehrman et al. 2012; Netuveli, Pikhart et al. 2012; Paris 2012; Perkins, Inchley-Mort et al. 2012; Sabol and Pianta 2012; Sanchez-Villegas, Ara et al. 2012; Stadler, Snyder et al. 2012; Szasz, Szentagotai et al. 2012; Terburg, Aarts et al. 2012; Topolinski and Sparenberg 2012; Valenzuela, Matthews et al. 2012; van Aalderena, Dondersa et al. 2012; Verschueren and Koomen 2012; Vess 2012; Webster, Urland et al. 2012; Xun, Liu et al. 2012)

Ahrens, K. R., P. Ciechanowski, et al. (2012). **"Associations between adult attachment style and health risk behaviors in an adult female primary care population."** *Journal of Psychosomatic Research* 72(5): 364-370. <http://www.sciencedirect.com/science/article/pii/S0022399912000475>

Objective To examine the relationship between adult attachment style and health risk behaviors among adult women in a primary care setting. **Methods** In this analysis of a population of women enrolled in a large health maintenance organization (N=701), we examined the relationship between anxious and avoidant dimensions of adult attachment style and a variety of sexual, substance-related, and other health risk behaviors. After conducting descriptive statistics of the entire population, we determined the relationships between the two attachment dimensions and health behaviors using multiple regression analyses in which we controlled for demographic and socioeconomic factors. **Results** After adjustment for covariates, the anxious dimension of attachment style was significantly associated with increased odds of self-report of having sex without knowing a partner's history, having multiple (≥ 2) male partners in the past year, and history of having a sexually transmitted infection (ORs [95% CIs] = 1.11 [1.03, 1.20], 1.23 [1.04, 1.45]; and 1.17 [1.05, 1.30], respectively). The avoidant attachment dimension was associated with increased odds of being a smoker and not reporting regular seatbelt use (ORs [95% CIs] = 1.15 [1.01, 1.30] and 1.16 [1.01, 1.33], respectively). **Conclusions** Both anxious and avoidant dimensions of attachment were associated with health risk behaviors in this study. This framework may be a useful tool to allow primary care clinicians to guide screening and intervention efforts.

Akin, L., E. Dunn, et al. (2012). **"Happiness runs in a circular motion: Evidence for a positive feedback loop between prosocial spending and happiness."** *Journal of Happiness Studies* 13(2): 347-355. <http://dx.doi.org/10.1007/s10902-011-9267-5>

We examine whether a positive feedback loop exists between spending money on others (i.e. prosocial spending) and happiness. Participants recalled a previous purchase made for either themselves or someone else and then reported their happiness. Afterward, participants chose whether to spend a monetary windfall on themselves or someone else. Participants assigned to recall a purchase made for someone else reported feeling significantly happier immediately after this recollection; most importantly, the happier participants felt, the more likely they were to choose to spend a windfall on someone else in the near future. Thus, by providing initial evidence for a positive feedback loop between prosocial spending and well-being, these data offer one potential path to sustainable happiness: prosocial spending increases happiness which in turn encourages prosocial spending.

Anderson, C., R. Willer, et al. (2012). **"The origins of deference: When do people prefer lower status?"** *J Pers Soc Psychol* 102(5): 1077-1088. <http://www.ncbi.nlm.nih.gov/pubmed/22369047>

Although the desire for high status is considered universal, prior research suggests individuals often opt for lower status positions. Why would anyone favor a position of apparent disadvantage? In 5 studies, we found that the broad construct of status striving can be broken up into two conceptions: one based on rank, the other on respect. While individuals might universally desire high levels of respect, we find that they vary widely in the extent to which they strive for high-status rank, with many individuals opting for middle- or low-status rank. The status rank that individuals preferred depended on their self-perceived value to the group: when they believed they provided less value, they preferred lower status rank. Mediation and moderation analyses suggest that beliefs about others' expectations were the primary driver of these effects. Individuals who believed they provided little value to their group inferred that others expected them to occupy a lower status position. Individuals in turn conformed to these perceived expectations, accepting lower status rank in such settings.

Boyle, P. A., A. S. Buchman, et al. (2012). **"Effect of purpose in life on the relation between Alzheimer Disease pathologic changes on cognitive function in advanced age."** *Arch Gen Psychiatry* 69(5): 499-504. <http://www.ncbi.nlm.nih.gov/pubmed/22566582>

CONTEXT: Purpose in life is associated with a substantially reduced risk of Alzheimer disease (AD), but the neurobiologic basis of this protective effect remains unknown. **OBJECTIVE:** To test the hypothesis that purpose in life reduces the deleterious effects of AD pathologic changes on cognition in advanced age. **DESIGN:** A longitudinal, epidemiologic, clinicopathologic study of aging was conducted that included detailed annual clinical evaluations and brain autopsy. **PARTICIPANTS:** Two hundred forty-six community-based older persons from the Rush Memory and Aging Project participated. **MAIN OUTCOME MEASURES:** Purpose in life was assessed via structured interview, and cognitive function was evaluated annually and proximate to death. On postmortem examination, 3 indexes of AD pathologic features were quantified: global AD pathologic changes, amyloid, and tangles. The associations of disease pathologic changes and purpose in life with cognition were examined using linear regression and mixed models. **RESULTS:** Purpose in life modified the association between the global measure of AD pathologic changes and cognition (mean [SE] parameter estimate, 0.532 [0.211]; $P = .01$), such that participants who reported higher levels of purpose in life exhibited better cognitive function despite the burden of the disease. Purpose in life also reduced the association of tangles with cognition (parameter estimate, 0.042 [0.019]; $P = .03$), and the protective effect of purpose in life persisted even after controlling for several potentially confounding variables. Furthermore, in analyses examining whether purpose in life modified the association between AD pathologic effects and the rate of cognitive decline, we found that higher levels of purpose in life reduced the effect of AD pathologic changes on cognitive decline (parameter estimate, 0.085 [0.039]; $P = .03$). **CONCLUSION:** Higher levels of purpose in life reduce the deleterious effects of AD pathologic changes on cognition in advanced age.

Cima, R. F. F., I. H. Maes, et al. (2012). **"Specialised treatment based on cognitive behaviour therapy versus usual care for tinnitus: A randomised controlled trial."** *The Lancet* 379(9830): 1951-1959. <http://linkinghub.elsevier.com/retrieve/pii/S0140673612604693>

Up to 21% of adults will develop tinnitus, which is one of the most distressing and debilitating audiological problems. The absence of medical cures and standardised practice can lead to costly and prolonged treatment. We aimed to assess effectiveness of a stepped-care approach, based on cognitive behaviour therapy, compared with usual care in patients with varying tinnitus severity. In this randomised controlled trial, undertaken at the Adelante Department of Audiology and Communication (Hoensbroek, Netherlands), we enrolled previously untreated Dutch speakers (aged >18 years) who had a primary complaint of tinnitus but no health issues precluding participation. An independent research assistant randomly allocated patients by use of a computer-generated allocation sequence in a 1:1 ratio, stratified by tinnitus severity and hearing ability, in block sizes of four to receive specialised care of cognitive behaviour therapy with sound-focused tinnitus retraining therapy or usual care. Patients and assessors were masked to treatment assignment. Primary outcomes were health-related quality of life (assessed by the health utilities index score), tinnitus severity (tinnitus questionnaire score), and tinnitus impairment (tinnitus handicap inventory score), which were assessed before treatment and at 3 months, 8 months, and 12 months after randomisation. We used multilevel mixed regression analyses to assess outcomes in the intention-to-treat population. This study is registered with ClinicalTrials.gov, number NCT00733044. Between September, 2007 and January, 2011, we enrolled and treated 492 (66%) of 741 screened patients. Compared with 247 patients assigned to usual care, 245 patients assigned to specialised care improved in health-related quality of life during a period of 12 months (between-group difference 0.059, 95% CI 0.025 to 0.094; effect size of Cohen's $d=0.24$; $p=0.0009$), and had decreased tinnitus severity (-8.062 , -10.829 to -5.295 ; $d=0.43$; $p<0.0001$) and tinnitus impairment (-7.506 , -10.661 to -4.352 ; $d=0.45$; $p<0.0001$). Treatment seemed effective irrespective of initial tinnitus severity, and we noted no adverse events in this trial. Specialised treatment of tinnitus based on cognitive behaviour therapy could be suitable for widespread implementation for patients with tinnitus of varying severity.

Cimpian, A., Y. Mu, et al. (2012). **"Who is good at this game? Linking an activity to a social category undermines children's achievement."** *Psychological Science* 23(5): 533-541. <http://pss.sagepub.com/content/23/5/533.abstract>

Children's achievement-related theories have a profound impact on their academic success. Children who adopt entity theories believe that their ability to perform a task is dictated by the amount of natural talent they possess for that task—a belief that has well-documented adverse consequences for their achievement (e.g., lowered persistence, impaired performance). It is thus important to understand what leads children to adopt entity theories. In the experiments reported here, we hypothesized that the mere act of linking success at an unfamiliar, challenging activity to a social group gives rise to entity beliefs that are so powerful as to interfere with children's ability to perform the activity. Two experiments showed that, as predicted, the performance of 4- to 7-year-olds ($N = 192$) was impaired by exposure to information that associated success in the task at hand with membership in a certain social group (e.g., "boys are good at this game"), regardless of whether the children themselves belonged to that group.

de Boer, I. H., G. Levin, et al. (2012). **"Serum 25-hydroxyvitamin D concentration and risk for major clinical disease events in a community-based population of older adults: a cohort study."** *Annals of Internal Medicine* 156(9): 627-634. <http://dx.doi.org/>

Background: Circulating concentrations of 25-hydroxyvitamin D [25-(OH)D] are used to define vitamin D deficiency. Current clinical 25-(OH)D targets based on associations with intermediate markers of bone metabolism may not reflect optimal levels for other chronic diseases and do not account for known seasonal variation in 25-(OH)D concentration. Objective: To evaluate the relationship of 25-(OH)D concentration with the incidence of major clinical disease events that are pathophysiologically relevant to vitamin D. Design: Cohort study. Setting: The Cardiovascular Health Study conducted in 4 U.S. communities. Data from 1992 to 2006 were included in this analysis. Participants: 1621 white older adults. Measurements: Serum 25-(OH)D concentration (using a high-performance liquid chromatography–tandem mass spectrometry assay that conforms to National Institute of Standards and Technology reference standards) and associations with time to a composite outcome of incident hip fracture, myocardial infarction, cancer, or death. Results: Over a median 11-year follow-up, the composite outcome occurred in 1018 participants (63%). Defining events included 137 hip fractures, 186 myocardial infarctions, 335 incidences of cancer, and 360 deaths. The association of low 25-(OH)D concentration with risk for the composite outcome varied by season ($P = 0.057$). A concentration lower than a season-specific Z score of -0.54 best discriminated risk for the composite outcome and was associated with a 24% higher risk in adjusted analyses (95% CI, 9% to 42%). Corresponding season-specific 25-(OH)D concentrations were 43, 50, 61, and 55 nmol/L (17, 20, 24, and 22 ng/mL) in winter, spring, summer, and autumn, respectively. Limitation: The observational study was restricted to white participants. Conclusion: Threshold concentrations of 25-(OH)D associated with increased risk for relevant clinical disease events center near 50 nmol/L (20 ng/mL). Season-specific targets for 25-(OH)D concentration may be more appropriate than static targets when evaluating health risk.

Ellis, T. E. and A. B. Patel (2012). **"Client suicide: What now?"** *Cognitive and Behavioral Practice* 19(2): 277-287. <http://www.sciencedirect.com/science/article/pii/S1077722911000654>

The loss of a client to suicide is a painful personal and professional experience for mental health providers. Whether trainee or experienced professional, the affected clinician often reports feeling overwhelmed and unprepared for the experience of client suicide, together with significant emotional distress and diminished work performance. In this article, we present a brief overview of the literature on the impact of client suicide and ideas for coping with the psychological and professional issues that typically arise. We also provide suggestions for managing the associated practical and administrative tasks, as well as resources for obtaining professional support and guidance in the wake of this tragic event.

Fisher, H. L., T. E. Moffitt, et al. (2012). **"Bullying victimisation and risk of self harm in early adolescence: Longitudinal cohort study."** *BMJ* 344: e2683. <http://www.bmj.com/content/344/bmj.e2683>

OBJECTIVES: To test whether frequent bullying victimisation in childhood increases the likelihood of self harming in early adolescence, and to identify which bullied children are at highest risk of self harm. DESIGN: The Environmental Risk (E-Risk) longitudinal study of a nationally representative UK cohort of 1116 twin pairs born in 1994-95 (2232 children). SETTING: England and Wales, United Kingdom. PARTICIPANTS: Children assessed at 5, 7, 10, and 12 years of age. MAIN OUTCOME MEASURES: Relative risks of children's self harming behaviour in the six months before their 12th birthday. RESULTS: Self harm data were available for 2141 children. Among children aged 12 who had self harmed (2.9%; $n=62$), more than half were victims of frequent bullying (56%; $n=35$). Exposure to frequent bullying predicted higher rates of self harm even after children's pre-morbid emotional and behavioural problems, low IQ, and family environmental risks were taken into account (bullying victimisation reported by mother: adjusted relative risk 1.92, 95% confidence interval 1.18 to 3.12; bullying victimisation reported by child: 2.44, 1.36 to 4.40). Victimised twins were more likely to self harm than were their non-victimised twin sibling

(bullying victimisation reported by mother: 13/162 v 3/162, ratio=4.3, 95% confidence interval 1.3 to 14.0; bullying victimisation reported by child: 12/144 v 7/144, ratio=1.7, 0.71 to 4.1). Compared with bullied children who did not self harm, bullied children who self harmed were distinguished by a family history of attempted/completed suicide, concurrent mental health problems, and a history of physical maltreatment by an adult. CONCLUSIONS: Prevention of non-suicidal self injury in young adolescents should focus on helping bullied children to cope more appropriately with their distress. Programmes should target children who have additional mental health problems, have a family history of attempted/completed suicide, or have been maltreated by an adult.

Gracious, B., T. Finucane, et al. (2012). **"Vitamin D deficiency and psychotic features in mentally ill adolescents: A cross-sectional study."** *BMC Psychiatry* 12(1): 38. <http://www.biomedcentral.com/1471-244X/12/38>

(Free full text available): BACKGROUND:Vitamin D deficiency is a re-emerging epidemic, especially in minority populations. Vitamin D is crucial not only for bone health but for proper brain development and functioning. Low levels of vitamin D are associated with depression, seasonal affective disorder, and schizophrenia in adults but little is known about vitamin D and mental health in the pediatric population.METHODS:One hundred four adolescents presenting for acute mental health treatment over a 16-month period were assessed for vitamin D status and the relationship of 25-OH vitamin D levels to severity of illness, defined by presence of psychotic features.RESULTS:Vitamin D deficiency (25-OH D levels <20 ng/ml) was present in 34%; vitamin D insufficiency (25-OH D levels 20-30 ng/ml) was present in 38%, with a remaining 28% in the normal range. Adolescents with psychotic features had lower vitamin D levels (20.4 ng/ml vs. 24.7 ng/ml; p=0.04, 1 df). The association for vitamin D deficiency and psychotic features was substantial (OR 3.5; 95% CI 1.4-8.9; p <0.009). Race was independently associated with vitamin D deficiency and independently associated with psychosis for those who were Asian or biracial vs. white (OR=3.8; 95% CI 1.113.4; p<0.04). Race was no longer associated with psychosis when the results were adjusted for vitamin D level.CONCLUSIONS:Vitamin D deficiency and insufficiency are both highly prevalent in adolescents with severe mental illness. The preliminary associations between vitamin D deficiency and presence of psychotic features warrant further investigation as to whether vitamin D deficiency is a mediator of illness severity, result of illness severity, or both. Higher prevalence of vitamin D deficiency but no greater risk of psychosis in African Americans, if confirmed, may have special implications for health disparity and treatment outcome research.

Haibach, J. P., G. G. Homish, et al. (2012). **"A longitudinal evaluation of fruit and vegetable consumption and cigarette smoking."** *Nicotine & Tobacco Research*. <http://ntr.oxfordjournals.org/content/early/2012/05/20/ntr.nts130.abstract>

Introduction: Cross-sectional studies consistently find that cigarette smokers consume fewer fruits and vegetables each day than do nonsmokers. However, there are no published cohort studies on this relationship. This study evaluated the longitudinal relationship between fruit and vegetable consumption (FVC) and cigarette smoking, including measures of dependence and abstinence in a national population-based cohort analysis. Methods: A national random-digit-dialed sample of 1,000 smokers (aged 25 years and older) assessed baseline FVC and indicators of general health orientation. Multivariable analyses were used to assess whether baseline FVC was associated with smoking intensity, time to first cigarette (TTFC), and total score on an abbreviated version of the Nicotine Dependence Syndrome Scale (NDSS), adjusting for age, gender, race/ethnicity, education, and household income. The study also assessed whether baseline FVC predicted 30-day abstinence from all tobacco products at 14-month follow-up among baseline cigarette smokers, with additional adjustment for indicators of general health orientation (heavy drinking, exercise, and illicit drug use). Results: Higher FVC was associated with fewer cigarettes smoked per day, longer TTFC, and lower NDSS score. Those in the highest quartile of FVC were 3.05 times more likely (p < .01) than those in the lowest quartile to be abstinent for at least 30 days at follow-up. Conclusions: FVC was inversely associated with indicators of nicotine dependence and predicted abstinence at follow-up among baseline cigarette smokers. Further observational studies and experimental research would provide useful information on the consistency of the relationship and help elucidate possible mechanisms. *Medscape* - <http://www.medscape.com/viewarticle/765990?src=mpnews&spon=12> - commented "Cigarette smokers who eat more fruits and vegetables are more likely to quit smoking and stay off cigarettes over the long term, new research shows. Investigators from the University of Buffalo in New York found that smokers who ate fruits and vegetables an average of 4 or more times per day were 3 times more likely to be abstinent from all tobacco products, including cigarettes, at 14-month follow-up ... Scott McIntosh, PhD, associate professor in the Department of Community and Preventive Medicine at the University of Rochester, in New York, said the study was "noteworthy" for finding an important relationship between fruit and vegetable consumption and a smoker's current level of addiction, as well as their future success with being abstinent from smoking. "This tells us that future research might not only confirm these relationships but will lead to interventions with smokers to incorporate changes in their diet to increase their chances of being successful with their quit attempts," Dr. McIntosh told *Medscape Medical News*. "This study and related future studies can give us improved evidence-based strategies for patient education of proper diet, not only during a quit attempt but as a long-term strategy to successfully remain smoke-free for good," he said."

Iffland, B., L. Sansen, et al. (2012). **"Emotional but not physical maltreatment is independently related to psychopathology in subjects with various degrees of social anxiety: A web-based internet survey."** *BMC Psychiatry* 12(1): 49. <http://www.biomedcentral.com/1471-244X/12/49>

(Full free text available) BACKGROUND:Previous studies reported that social phobia is associated with a history of child maltreatment. However, most of these studies focused on physical and sexual maltreatment whilst little is known about the specific impact of emotional abuse and neglect on social anxiety. We examined the association between emotional maltreatment, including parental emotional maltreatment as well as emotional peer victimization, and social anxiety symptoms in subjects with various degrees of social anxiety. METHODS:The study was conducted as a web-based Internet survey of participants (N = 995) who had social anxiety symptoms falling within the high range, and including many respondents who had scores in the clinical range. The assessment included measures of child maltreatment, emotional peer victimization, social anxiety symptoms and general psychopathology. RESULTS:Regression and mediation analyses revealed that parental emotional maltreatment and emotional peer victimization were independently related to social anxiety and mediated the impact of physical and sexual maltreatment. Subjects with a history of childhood emotional maltreatment showed higher rates of psychopathology than subjects with a history of physical maltreatment. CONCLUSIONS:Although our findings are limited by the use of an Internet survey and retrospective self-report measures, data indicated that social anxiety symptoms are mainly predicted by emotional rather than physical or sexual types of victimization.

Juraschek, S. P., E. Guallar, et al. (2012). **"Effects of vitamin C supplementation on blood pressure: A meta-analysis of randomized controlled trials."** *Am J Clin Nutr* 95(5): 1079-1088. <http://www.ajcn.org/content/95/5/1079.abstract>

Background: In observational studies, increased vitamin C intake, vitamin C supplementation, and higher blood concentrations of vitamin C are associated with lower blood pressure (BP). However, evidence for blood pressure-lowering effects of vitamin C in clinical trials is inconsistent.Objective: The objective was to conduct a systematic review and meta-analysis of clinical trials that examined the effects of vitamin C supplementation on BP.Design: We searched Medline, EMBASE,

and Central databases from 1966 to 2011. Prespecified inclusion criteria were as follows: 1) use of a randomized controlled trial design; 2) trial reported effects on systolic BP (SBP) or diastolic BP (DBP) or both; 3) trial used oral vitamin C and concurrent control groups; and 4) trial had a minimum duration of 2 wk. BP effects were pooled by random-effects models, with trials weighted by inverse variance. Results: Twenty-nine trials met eligibility criteria for the primary analysis. The median dose was 500 mg/d, the median duration was 8 wk, and trial sizes ranged from 10 to 120 participants. The pooled changes in SBP and DBP were -3.84 mm Hg (95% CI: $-5.29, -2.38$ mm Hg; $P < 0.01$) and -1.48 mm Hg (95% CI: $-2.86, -0.10$ mm Hg; $P = 0.04$), respectively. In trials in hypertensive participants, corresponding reductions in SBP and DBP were -4.85 mm Hg ($P < 0.01$) and -1.67 mm Hg ($P = 0.17$). After the inclusion of 9 trials with imputed BP effects, BP effects were attenuated but remained significant. Conclusions: In short-term trials, vitamin C supplementation reduced SBP and DBP. Long-term trials on the effects of vitamin C supplementation on BP and clinical events are needed.

Laham, S. M., P. Koval, et al. (2012). **"The name-pronunciation effect: Why people like Mr. Smith more than Mr. Colquhoun."** *Journal of Experimental Social Psychology* 48(3): 752-756.
<http://www.sciencedirect.com/science/article/pii/S0022103111002927>

Names are rich sources of information. They can signal gender, ethnicity, or class; they may connote personality characteristics ranging from warmth and cheerfulness to morality. But names also differ in a much more fundamental way: some are simply easier to pronounce than others. Five studies provide evidence for the name-pronunciation effect: easy-to-pronounce names (and their bearers) are judged more positively than difficult-to-pronounce names. Studies 1–3 demonstrate that people form more positive impressions of easy-to-pronounce names than of difficult-to-pronounce names. Study 4 finds this effect generalizable to ingroup targets. Study 5 highlights an important real-world implication of the name-pronunciation effect: people with easier-to-pronounce surnames occupy higher status positions in law firms. These effects obtain independent of name length, unusualness, typicality, foreignness, and orthographic regularity. This work demonstrates the potency of processing fluency in the information rich context of impression formation.

Leung, A. K.-y., S. Kim, et al. (2012). **"Embodied metaphors and creative "acts"."** *Psychological Science* 23(5): 502-509.
<http://pss.sagepub.com/content/23/5/502.abstract>

Creativity is a highly sought-after skill. Prescriptive advice for inspiring creativity abounds in the form of metaphors: People are encouraged to "think outside the box," to consider a problem "on one hand, then on the other hand," and to "put two and two together" to achieve creative breakthroughs. These metaphors suggest a connection between concrete bodily experiences and creative cognition. Inspired by recent advances in the understanding of body-mind linkages in the research on embodied cognition, we explored whether enacting metaphors for creativity enhances creative problem solving. Our findings from five studies revealed that both physical and psychological embodiment of metaphors for creativity promoted convergent thinking and divergent thinking (i.e., fluency, flexibility, or originality) in problem solving. Going beyond prior research, which focused primarily on the kind of embodiment that primes preexisting knowledge, we provide the first evidence that embodiment can also activate cognitive processes that facilitate the generation of new ideas and connections.

Limb, M. (2012). **"Trusts can improve care by engaging their staff better, says think tank."** *BMJ* 344.
<http://www.bmj.com/content/344/bmj.e3543>

A UK health think tank says it has produced "compelling evidence" that NHS organisations are safer, more effective, and financially stronger when they "engage" properly with doctors and other staff. Studies show that performance improves across a range of measures, the King's Fund says, with fewer errors, lower infection and mortality rates, higher staff motivation, and better experiences for patients. Chris Ham, the fund's chief executive, said it was clear that the NHS should give greater priority to involving doctors and other clinicians in decision making and encouraging medical leadership. "The business case for leadership and engagement for improvement is compelling at a time when the NHS needs to deliver unprecedented efficiency savings over many years," he said. The fund's report is published this week (23 May - www.kingsfund.org.uk/publications/leadership_review_12.html), a year after its commission on the future of leadership and management in the NHS called for a new model of leadership that is based on responsibility being shared "from the board to the ward." The report is a series of commissioned papers examining the role of leaders in engaging others to improve health and healthcare. It defines engagement as ensuring that staff feel valued, respected, supported, and able to communicate and actively implement their ideas for improving services. A striking feature of the NHS, the report says, is that it "employs some of the brightest people in the country, then disempowers and alienates them." Research carried out at 30 hospitals found a "very strong relationship" between medical management and performance. Hospitals' ratings on a "medical engagement index" were compared with their Care Quality Commission ratings over the period 2008-9. John Clark, a senior fellow at the King's Fund who worked on the study, said that hospitals were rated on several measures, including access, quality, safety, and financial performance. He told the *BMJ*, "It's interesting that those which had high engagement—where the doctors felt they had been valued, involved in setting the direction for the hospital, and were contributing to the priorities—were the ones which were rated excellent or good. "Those in the bottom 10 of our sample of 30 ended up being rated as fair or poor." By increasing engagement of staff to the level achieved by the top 20% of hospitals, the average acute trust could reduce patient mortality by 2.4%, the research found. It also found that this could save an estimated £150 000 (€190 000; \$240 000) in each trust simply by reducing staff absenteeism, indicating the potential to make substantial savings across the NHS as a whole. Evidence was growing that high engagement of staff generally—and doctors in particular—led to higher quality care, Clark said. He added that this did not mean that organisations that had a doctor as a chief executive performed better. Clark said, "In the past we have got pretty preoccupied with a few doctors moving into positional leadership roles like clinical directors. What we're saying is this is about wanting all doctors to be making a much bigger contribution overall to the running of the service or system. That is now also linked in with the profession itself redefining the role of a good doctor and recognising the need for competences around management and leadership." The King's Fund says that staff members' contribution to leadership and service improvement at an early stage of their careers needs to be valued. It says that the importance of leadership across systems of care has been "significantly underdeveloped" and also emphasises the need for strong engagement of patients to improve quality of care. Ham said, "There has been progress in getting more doctors into leadership roles, but I don't think we've seen the pace of change we need." He said that the new NHS Commissioning Board and the NHS Leadership Academy would have a key role in supporting the development of leadership and engagement, although it was unclear so far what resources or priorities they would have. Ham said, "Cutting funding for training and development is an easy target when budgets are under pressure, but the temptation to do so should be resisted if there is a serious commitment to build a cadre of leaders able to navigate the treacherous waters that lie ahead."

Macdonald, G., J. P. Higgins, et al. (2012). **"Cognitive-behavioural interventions for children who have been sexually abused."** *Cochrane Database Syst Rev* 5: CD001930. <http://www.ncbi.nlm.nih.gov/pubmed/22592679>

(Free full text available): BACKGROUND: Despite differences in how it is defined, there is a general consensus amongst clinicians and researchers that the sexual abuse of children and adolescents ('child sexual abuse') is a substantial social problem

worldwide. The effects of sexual abuse manifest in a wide range of symptoms, including fear, anxiety, post-traumatic stress disorder and various externalising and internalising behaviour problems, such as inappropriate sexual behaviours. Child sexual abuse is associated with increased risk of psychological problems in adulthood. Cognitive-behavioural approaches are used to help children and their non-offending or 'safe' parent to manage the sequelae of childhood sexual abuse. This review updates the first Cochrane review of cognitive-behavioural approaches interventions for children who have been sexually abused, which was first published in 2006. OBJECTIVES: To assess the efficacy of cognitive-behavioural approaches (CBT) in addressing the immediate and longer-term sequelae of sexual abuse on children and young people up to 18 years of age. SEARCH METHODS: We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (2011 Issue 4); MEDLINE (1950 to November Week 3 2011); EMBASE (1980 to Week 47 2011); CINAHL (1937 to 2 December 2011); PsycINFO (1887 to November Week 5 2011); LILACS (1982 to 2 December 2011) and OpenGrey, previously OpenSIGLE (1980 to 2 December 2011). For this update we also searched ClinicalTrials.gov and the International Clinical Trials Registry Platform (ICTRP). SELECTION CRITERIA: We included randomised or quasi-randomised controlled trials of CBT used with children and adolescents up to age 18 years who had experienced being sexually abused, compared with treatment as usual, with or without placebo control. DATA COLLECTION AND ANALYSIS: At least two review authors independently assessed the eligibility of titles and abstracts identified in the search. Two review authors independently extracted data from included studies and entered these into Review Manager 5 software. We synthesised and presented data in both written and graphical form (forest plots). MAIN RESULTS: We included 10 trials, involving 847 participants. All studies examined CBT programmes provided to children or children and a non-offending parent. Control groups included wait list controls (n = 1) or treatment as usual (n = 9). Treatment as usual was, for the most part, supportive, unstructured psychotherapy. Generally the reporting of studies was poor. Only four studies were judged 'low risk of bias' with regards to sequence generation and only one study was judged 'low risk of bias' in relation to allocation concealment. All studies were judged 'high risk of bias' in relation to the blinding of outcome assessors or personnel; most studies did not report on these, or other issues of bias. Most studies reported results for study completers rather than for those recruited. Depression, post-traumatic stress disorder (PTSD), anxiety and child behaviour problems were the primary outcomes. Data suggest that CBT may have a positive impact on the sequelae of child sexual abuse, but most results were not statistically significant. Strongest evidence for positive effects of CBT appears to be in reducing PTSD and anxiety symptoms, but even in these areas effects tend to be 'moderate' at best. Meta-analysis of data from five studies suggested an average decrease of 1.9 points on the Child Depression Inventory immediately after intervention (95% confidence interval (CI) decrease of 4.0 to increase of 0.4; I(2) = 53%; P value for heterogeneity = 0.08), representing a small to moderate effect size. Data from six studies yielded an average decrease of 0.44 standard deviations on a variety of child post-traumatic stress disorder scales (95% CI 0.16 to 0.73; I(2) = 46%; P value for heterogeneity = 0.10). Combined data from five studies yielded an average decrease of 0.23 standard deviations on various child anxiety scales (95% CI 0.3 to 0.4; I(2) = 0%; P value for heterogeneity = 0.84). No study reported adverse effects. AUTHORS' CONCLUSIONS: The conclusions of this updated review remain the same as those when it was first published. The review confirms the potential of CBT to address the adverse consequences of child sexual abuse, but highlights the limitations of the evidence base and the need for more carefully conducted and better reported trials.

Matsubayashi, T. and M. Ueda (2012). **"Government partisanship and human well-being."** *Social Indicators Research* 107(1): 127-148. <http://dx.doi.org/10.1007/s11205-011-9831-8>

This paper shows that the partisan composition of government is strongly related to the well-being of citizens, measured by the reported level of life satisfaction and suicide rates in industrial countries. Our analysis, using survey data of 14 nations between 1980 and 2002, shows that the presence of left-leaning parties in government is associated with an increase in the level of individual life satisfaction. The relationship holds true even after controlling for the effects of macroeconomic variables such as gross domestic product, unemployment rates and government welfare policies. Our panel data analysis of 21 nations between 1980 and 2004 also shows that suicide rates decrease when a country experiences a shift to more left-leaning government. The increased presence of right-wing parties in government has a negligible effect on suicide rates.

Mekary, R. A., E. Giovannucci, et al. (2012). **"Eating patterns and type 2 diabetes risk in men: Breakfast omission, eating frequency, and snacking."** *Am J Clin Nutr* 95(5): 1182-1189. <http://www.ajcn.org/content/95/5/1182.abstract>

Background: Little is known about the association between eating patterns and type 2 diabetes (T2D) risk. Objective: The objective of this study was to prospectively examine associations between breakfast omission, eating frequency, snacking, and T2D risk in men. Design: Eating patterns were assessed in 1992 in a cohort of 29,206 US men in the Health Professionals Follow-Up Study who were free of T2D, cardiovascular disease, and cancer and were followed for 16 y. We used Cox proportional hazards analysis to evaluate associations with incident T2D. Results: We documented 1944 T2D cases during follow-up. After adjustment for known risk factors for T2D, including BMI, men who skipped breakfast had 21% higher risk of T2D than did men who consumed breakfast (RR: 1.21; 95% CI: 1.07, 1.35). Compared with men who ate 3 times/d, men who ate 1-2 times/d had a higher risk of T2D (RR: 1.25; 95% CI: 1.08, 1.45). These findings persisted after stratification by BMI or diet quality. Additional snacks beyond the 3 main meals (breakfast, lunch, and dinner) were associated with increased T2D risk, but these associations were attenuated after adjustment for BMI. Conclusions: Breakfast omission was associated with an increased risk of T2D in men even after adjustment for BMI. A direct association between snacking between meals and T2D risk was mediated by BMI.

Mitchell, M. D., P. Gehrman, et al. (2012). **"Comparative effectiveness of cognitive behavioral therapy for insomnia: A systematic review."** *BMC Fam Pract* 13(1): 40. <http://www.ncbi.nlm.nih.gov/pubmed/22631616>

ABSTRACT: BACKGROUND: Insomnia is common in primary care, can persist after co-morbid conditions are treated, and may require long-term medication treatment. A potential alternative to medications is cognitive behavioral therapy for insomnia (CBT-I). METHODS: In accordance with PRISMA guidelines, we systematically reviewed MEDLINE, EMBASE, the Cochrane Central Register, and PsycINFO for randomized controlled trials (RCTs) comparing CBT-I to any prescription or non-prescription medication in patients with primary or comorbid insomnia. Trials had to report quantitative sleep outcomes (e.g. sleep latency) in order to be included in the analysis. Extracted results included quantitative sleep outcomes, as well as psychological outcomes and adverse effects when available. Evidence base quality was assessed using GRADE. RESULTS: Five studies met criteria for analysis. Low to moderate grade evidence suggests CBT-I has superior effectiveness to benzodiazepine and non-benzodiazepine drugs in the long term, while very low grade evidence suggests benzodiazepines are more effective in the short term. Very low grade evidence supports use of CBT-I to improve psychological outcomes. CONCLUSIONS: CBT-I is effective for treating insomnia when compared with medications, and its effects may be more durable than medications. Primary care providers should consider CBT-I as a first-line treatment option for insomnia.

Netuveli, G., H. Pikhart, et al. (2012). **"Generic quality of life predicts all-cause mortality in the short term: Evidence from british household panel survey."** *J Epidemiol Community Health*. <http://jech.bmi.com/content/early/2012/02/20/jech-2011-200310.abstract>

Background Whether the quality of life (QOL) impacts longevity is an interesting research question that has been investigated only in the context of disease and health-related QOL. This paper aims to examine prospectively whether Control, Autonomy, Self-realisation, and Pleasure (CASP) scores, a measure of generic QOL, can predict mortality in the British Household Panel Survey sample during 2001–2006. Methods The authors used data from the British Household Panel Survey wave 11 (2001–2002) when CASP was first presented to the participants in the survey. The authors selected all those who were interviewed directly and face to face and who were 40 years or older (N=10 291). The authors followed them for the next five waves (waves 12–16) and in this study primary outcome was all-cause mortality. Other covariates used were age, sex, socioeconomic position, household income, self-rated health, limiting long-standing illness and medical conditions. Results Compared with a mortality of 12/1000 person-years in those having average QOL (CASP score 29.4–45.8), those with below-average QOL had more than twice (27/1000 person-years) and those above average had a third less (8/1000 person-years) mortality. This gradient was retained for the most part when age and sex strata were examined separately. Regression models adjusted for covariates confirmed the protective effect of QOL on mortality. Domain-specific analysis showed that only control and self-realisation had this effect. Conclusion CASP predicted 5-year all-cause mortality significantly. Improvement in the QOL reduced the probability of death.

Paris, J. (2012). **"The outcome of borderline personality disorder: Good for most but not all patients."** *American Journal of Psychiatry* 169(5): 445-446. <http://dx.doi.org/10.1176/appi.ajp.2012.12010092>

(Free full text available) One of the reasons why clinicians are reluctant to diagnose borderline personality disorder is the perception that patients with this disorder are doomed to chronicity. As discussed by Zanarini et al. (1) in this issue of the Journal, it is now well established that while outcome is heterogeneous, most patients do well, with the majority no longer meeting diagnostic criteria over time. Zanarini et al. buttress this conclusion with a unique 16-year prospective follow-up study of a large cohort of patients with borderline personality disorder. However, they emphasize that remission (defined as not meeting criteria for a formal diagnosis) is not equivalent to recovery. Personality disorders are amalgams of traits and symptoms, and even when symptoms remit, problematic traits can produce difficulty. That is probably why remission is more common than full recovery.

Perkins, A. M., S. L. Inchley-Mort, et al. (2012). **"A facial expression for anxiety."** *J Pers Soc Psychol* 102(5): 910-924. <http://www.ncbi.nlm.nih.gov/pubmed/22229459>

Anxiety and fear are often confounded in discussions of human emotions. However, studies of rodent defensive reactions under naturalistic conditions suggest anxiety is functionally distinct from fear. Unambiguous threats, such as predators, elicit flight from rodents (if an escape-route is available), whereas ambiguous threats (e.g., the odor of a predator) elicit risk assessment behavior, which is associated with anxiety as it is preferentially modulated by anti-anxiety drugs. However, without human evidence, it would be premature to assume that rodent-based psychological models are valid for humans. We tested the human validity of the risk assessment explanation for anxiety by presenting 8 volunteers with emotive scenarios and asking them to pose facial expressions. Photographs and videos of these expressions were shown to 40 participants who matched them to the scenarios and labeled each expression. Scenarios describing ambiguous threats were preferentially matched to the facial expression posed in response to the same scenario type. This expression consisted of two plausible environmental-scanning behaviors (eye darts and head swivels) and was labeled as anxiety, not fear. The facial expression elicited by unambiguous threat scenarios was labeled as fear. The emotion labels generated were then presented to another 18 participants who matched them back to photographs of the facial expressions. This back-matching of labels to faces also linked anxiety to the environmental-scanning face rather than fear face. Results therefore suggest that anxiety produces a distinct facial expression and that it has adaptive value in situations that are ambiguously threatening, supporting a functional, risk-assessing explanation for human anxiety.

Sabol, T. J. and R. C. Pianta (2012). **"Recent trends in research on teacher–child relationships."** *Attachment & Human Development* 14(3): 213-231. <http://dx.doi.org/10.1080/14616734.2012.672262>

Theoretical and empirical work on relationships between teachers and children relies on developmental systems theory as the foundational conceptual model, drawing heavily from basic work in attachment as well as research on social development. Recently, the focus on relational processes in effort to support children's development in the classroom has proliferated, with multiple disciplines and fields engaging in research on teacher?child relationship quality to understand and improve the experiences and learning of students. This paper updates the conceptual framework and continues the necessary integration between disciplines by exploring three areas of research: (1) concordance between children's relationships with teachers and parents; (2) the moderating role of teacher?child relationships for the development of at-risk children; and (3) training teachers from a relational perspective. Each of the three areas of research on teacher?child relationships is examined in light of recent findings and considers implications for understanding the nature and impact of relationships between teachers and children.

Sanchez-Villegas, A., I. Ara, et al. (2012). **"Physical activity during leisure time and quality of life in a Spanish cohort: Sun (seguimiento universidad de navarra) project."** *British Journal of Sports Medicine* 46(6): 443-448. <http://bjsm.bmj.com/content/46/6/443.abstract>

Background Leisure-time physical activity (LTPA) has been associated with better mental and physical health particularly in cross-sectional studies. Purpose To longitudinally assess the association between LTPA, changes in LTPA and health-related quality of life (HRQL). Methods Cross-sectional and prospective analysis of the Seguimiento Universidad de Navarra Project, a dynamic cohort study. Information is gathered through mailed questionnaires biannually since 1999. A validated LTPA questionnaire was used to assess LTPA level at baseline. Changes in LTPA were ascertained at 2 and 4 years of follow-up. HRQL was assessed at 4 and 8 years of follow-up with a validated Spanish version of the SF-36 Health Survey. Multivariate regression coefficients, means and their 95% CIs for each of the eight domains of the SF-36 according to quintiles of baseline LTPA and changes in LTPA over time were calculated using generalised linear models. Results At 4 years of follow-up, mean scores for upper quintiles of LTPA (second to highest quintile) of physical functioning, general health, vitality, social functioning and mental health were significantly higher than the mean score obtained for participants with the lowest level of LTPA (first quintile). In general, and independent of previous scores in SF-36 survey, the maintenance or the increase in LTPA levels during follow-up was associated with better scores in HRQL after 8 years of follow-up, especially for mental domains. Conclusion These findings provide support for an association between LTPA, long-term changes in LTPA and several aspects of HRQL (especially in relation to mental domains) extending previous cross-sectional findings.

Singh, M. and R. R. Das (2011). **"Zinc for the common cold."** *Cochrane Database Syst Rev*(2): CD001364. <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD001364.pub3/abstract>

(Free full text): BACKGROUND: The common cold is one of the most widespread illnesses and is a leading cause of visits to the doctor and absenteeism from school and work. Trials conducted since 1984 investigating the role of zinc for the common cold symptoms have had mixed results. Inadequate treatment masking and reduced bioavailability of zinc from some

formulations have been cited as influencing results. **OBJECTIVES:** To assess the effect of zinc on common cold symptoms. **SEARCH STRATEGY:** We searched CENTRAL (2010, Issue 2) which contains the Acute Respiratory Infections Group's Specialised Register, MEDLINE (1966 to May week 3, 2010) and EMBASE (1974 to June 2010). **SELECTION CRITERIA:** Randomised, double-blind, placebo-controlled trials using zinc for at least five consecutive days to treat, or for at least five months to prevent the common cold. **DATA COLLECTION AND ANALYSIS:** Two review authors independently extracted data and assessed trial quality. **MAIN RESULTS:** We included 13 therapeutic trials (966 participants) and two preventive trials (394 participants). Intake of zinc is associated with a significant reduction in the duration (standardized mean difference (SMD) -0.97; 95% confidence interval (CI) -1.56 to -0.38) ($P = 0.001$), and severity of common cold symptoms (SMD -0.39; 95% CI -0.77 to -0.02) ($P = 0.04$). There was a significant difference between the zinc and control group for the proportion of participants symptomatic after seven days of treatment (OR 0.45; 95% CI 0.2 to 1.00) ($P = 0.05$). The incidence rate ratio (IRR) of developing a cold (IRR 0.64; 95% CI 0.47 to 0.88) ($P = 0.006$), school absence ($P = 0.0003$) and prescription of antibiotics ($P < 0.00001$) was lower in the zinc group. Overall adverse events (OR 1.59; 95% CI 0.97 to 2.58) ($P = 0.06$), bad taste (OR 2.64; 95% CI 1.91 to 3.64) ($P < 0.00001$) and nausea (OR 2.15; 95% CI 1.44 to 3.23) ($P = 0.002$) were higher in the zinc group. **AUTHORS' CONCLUSIONS:** Zinc administered within 24 hours of onset of symptoms reduces the duration and severity of the common cold in healthy people. When supplemented for at least five months, it reduces cold incidence, school absenteeism and prescription of antibiotics in children. There is potential for zinc lozenges to produce side effects. In view of this and the differences in study populations, dosages, formulations and duration of treatment, it is difficult to make firm recommendations about the dose, formulation and duration that should be used.

Stadler, G., K. A. Snyder, et al. (2012). **"Close relationships and health in daily life: A review and empirical data on intimacy and somatic symptoms."** *Psychosomatic Medicine* 74(4): 398-409.

<http://www.psychosomaticmedicine.org/content/74/4/398.abstract>

Objective To review research on close relationships and health in daily life, with a focus on physiological functioning and somatic symptoms, and to present data on the within-person effects of physical intimacy on somatic symptoms in committed couples' daily life. The empirical study tested whether prior change in physical intimacy predicted subsequent change in symptoms, over and above their concurrent association. In addition, the study tested if increasing and decreasing intimacy had asymmetric effects on symptom change. **Methods** In this study, 164 participants in 82 committed couples reported physical intimacy and somatic symptoms once a day for 33 days. **Results** Prior within-person change in intimacy predicted a subsequent reduction in symptoms; when a person's intimacy increased from one day to the next day, then symptoms decreased over the following days ($B = -0.098$, standard error [SE] = 0.038, $p = .013$). This lagged effect of intimacy held over and above the association of concurrent change in intimacy and symptoms ($B = -0.122$, SE = 0.041, $p = .004$). The study found asymmetric effects of prior increase and decrease in intimacy; prior intimacy increase predicted reduced subsequent symptoms ($B = -0.189$, SE = 0.068, $p = .047$), whereas prior intimacy decrease was unrelated to subsequent symptoms ($B = -0.003$, SE = 0.063, not significant). There was no evidence for asymmetric effects of intimacy increase and decrease on concurrent symptom change. **Conclusions** Close relationships exert influences on health in daily life, and part of this influence is due to intimacy.

Szasz, P. L., A. Szentagotai, et al. (2012). **"Effects of emotion regulation strategies on smoking craving, attentional bias, and task persistence."** *Behaviour Research and Therapy* 50(5): 333-340.

<http://www.sciencedirect.com/science/article/pii/S000579671200037X>

The goal of this study was to investigate the effects of different strategies for regulating emotions associated with smoking on subjective, cognitive, and behavioral correlates of smoking. Emotion regulation was manipulated by instructing participants to reappraise ($n = 32$), accept ($n = 31$), or suppress ($n = 31$) their emotions associated with smoking. The dependent measures included subjective reports of craving, negative affect, and attentional biases, as measured by a modified dot-probe task, and persistence during a task to measure distress tolerance. Individuals who were encouraged to reappraise the consequences of smoking showed diminished craving, lower negative affect, had reduced attentional biases for smoking-related cues, and exhibited greater task persistence than those who were instructed to accept and suppress their urge to smoke. These findings suggest that reappraisal techniques are more effective than acceptance or suppression strategies for targeting smoking-related problems.

Terburg, D., H. Aarts, et al. (2012). **"Testosterone affects gaze aversion from angry faces outside of conscious awareness."** *Psychological Science* 23(5): 459-463. <http://pss.sagepub.com/content/23/5/459.abstract>

Throughout vertebrate phylogeny, testosterone has motivated animals to obtain and maintain social dominance—a fact suggesting that unconscious primordial brain mechanisms are involved in social dominance. In humans, however, the prevailing view is that the neocortex is in control of primordial drives, and testosterone is thought to promote social dominance via conscious feelings of superiority, indefatigability, strength, and anger. Here we show that testosterone administration in humans prolongs dominant staring into the eyes of threatening faces that are viewed outside of awareness, without affecting consciously experienced feelings. These findings reveal that testosterone motivates social dominance in humans in much the same ways that it does in other vertebrates: involuntarily, automatically, and unconsciously.

Topolinski, S. and P. Sparenberg (2012). **"Turning the hands of time."** *Social psychological and personality science* 3(3): 308-314. <http://spp.sagepub.com/content/3/3/308.abstract>

The omnipresent abstract symbol for time progression and regression is clockwise versus counterclockwise rotation. It was tested whether merely executing and seeing clockwise (vs. counterclockwise) movements would induce psychological states of temporal progression (vs. regression) and according to motivational orientations toward the future and novelty (vs. the past and familiarity). Supporting this hypothesis, participants who turned cranks counterclockwise preferred familiar over novel stimuli, but participants who turned cranks clockwise preferred novel over old stimuli, reversing the classic mere exposure effect (Experiment 1). Also, participants rotating a cylinder clockwise reported higher scores in the personality measure openness to experience than participants rotating counterclockwise (Experiment 2). Merely passively watching a rotating square had similar but weaker effects on exposure and openness (Experiment 3). Finally, participants chose more unconventional candies from a clockwise than from a counterclockwise Lazy Susan, that is, a turntable (Experiment 4).

Valenzuela, M. J., F. E. Matthews, et al. (2012). **"Multiple biological pathways link cognitive lifestyle to protection from dementia."** *Biological Psychiatry* 71(9): 783-791.

<http://linkinghub.elsevier.com/retrieve/pii/S0006322311009218?showall=true>

An active cognitive lifestyle is linked to diminished dementia risk, but the underlying mechanisms are poorly understood. Potential mechanisms include disease modification, neuroprotection, and compensation. Prospective, population-based brain series provide the rare opportunity to test the plausibility of these mechanisms in humans. Participants came from the United Kingdom Medical Research Council Cognitive Function and Ageing Study, comprising 13,004 individuals aged over 65 years and followed for 14 years. In study 1, a Cognitive Lifestyle Score (CLS) was computed on all Cognitive Function and

Ageing Study subjects to define low, middle, and high groups. By August 2004, 329 individuals with CLS data had come to autopsy and underwent Consortium to Establish a Registry of Alzheimer's Disease assessment. Study 2 involved more detailed quantitative histology in the hippocampus and Brodmann area 9 in 72 clinically matched individuals with high and low CLS. CLS groups did not differ on several Alzheimer disease neuropathologic measures; however, high CLS men had less cerebrovascular disease after accounting for vascular risk factors, and women had greater brain weight. No group differences were evident in hippocampal neuronal density. In Brodmann area 9, cognitively active individuals had significantly greater neuronal density, as well as correlated increases in cortical thickness. An active cognitive lifestyle was associated with protection from cerebrovascular disease in men, but there was no evidence for Alzheimer disease modification or hippocampal neuroprotection. Men and women both exhibited neurotrophic changes in the prefrontal lobe linked to cognitive lifestyle, consistent with a compensatory process. Lifespan complex cognitive activity may therefore protect against dementia through multiple biological pathways.

van Aalderena, J. R., A. R. T. Dondersa, et al. (2012). **"The efficacy of mindfulness-based cognitive therapy in recurrent depressed patients with and without a current depressive episode: A randomized controlled trial."** *Psychological Medicine* 42(05): 989-1001. <http://dx.doi.org/10.1017/S0033291711002054>

Background: The aim of this study is to examine the efficacy of mindfulness-based cognitive therapy (MBCT) in addition to treatment as usual (TAU) for recurrent depressive patients with and without a current depressive episode. Method: A randomized, controlled trial comparing MBCT+TAU (n=102) with TAU alone (n=103). The study population consisted of patients with three or more previous depressive episodes. Primary outcome measure was post-treatment depressive symptoms according to the Hamilton Rating Scale for Depression. Secondary outcome measures included the Beck Depression Inventory, rumination, worry and mindfulness skills. Group comparisons were carried out with linear mixed modelling, controlling for intra-group correlations. Additional mediation analyses were performed. Comparisons were made between patients with and without a current depressive episode. Results: Patients in the MBCT+TAU group reported less depressive symptoms, worry and rumination and increased levels of mindfulness skills compared with patients receiving TAU alone. MBCT resulted in a comparable reduction of depressive symptoms for patients with and without a current depressive episode. Additional analyses suggest that the reduction of depressive symptoms was mediated by decreased levels of rumination and worry. : ConclusionsThe study findings suggest that MBCT is as effective for patients with recurrent depression who are currently depressed as for patients who are in remission. Directions towards a better understanding of the mechanisms of action of MBCT are given, although future research is needed to support these hypotheses.

Verschueren, K. and H. M. Y. Koomen (2012). **"Teacher-child relationships from an attachment perspective."** *Attachment & Human Development* 14(3): 205-211. <http://dx.doi.org/10.1080/14616734.2012.672260>

This special issue aims to prompt reflection on the mutual contribution of attachment theory, on the one hand, and teacher-child relationship research, on the other, by bringing together conceptual and empirical contributions taking an attachment perspective on teacher-child relationships. In this introductory article, we contend that the teacher can be regarded as an ad hoc attachment figure with a safe haven and secure base function, although for most children the relationship with the teacher is probably not an attachment bond. Furthermore, we explain how attachment theory and research: (1) shape the way in which high quality teacher-child relationships are conceptualized and operationalized; (2) highlight the importance of teacher sensitivity to children's needs, as a central proximal determinant of relationship quality; (3) guide research hypotheses regarding the consequences of teacher-child relationship quality and the intervening mechanisms; and (4) inspire the development of interventions to improve teacher-child relationships.

Vess, M. (2012). **"Warm thoughts."** *Psychological Science* 23(5): 472-474. <http://pss.sagepub.com/content/23/5/472.short>

Recent work on embodied cognition has shown that perceptions of interpersonal intimacy are conceptually grounded in physical temperature. For example, holding warm (vs. cold) beverages increases perceptions of social proximity (IJzerman & Semin, 2009), and social isolation promotes perception of temperature as colder (Zhong & Leonardelli, 2008). Such results suggest that temperature and intimacy are psychologically interchangeable (cf. Williams & Bargh, 2008). Activating one, through either physical experience or semantic priming (e.g., IJzerman & Semin, 2010), produces changes in the other. Such results are also reminiscent of classic work on the importance of temperature for attachment bonds (Harlow, 1958), which means that they may be useful for understanding attachment processes. Might individuals with high levels of attachment anxiety, given their enhanced sensitivity to intimacy cues (Mikulincer, Birnbaum, Woddis, & Nachmias, 2000), also show an enhanced sensitivity to temperature cues? In the present research, I tested the hypothesis that attachment anxiety positively predicts sensitivity to temperature cues, with the aim of integrating research on associations between temperature and intimacy with perspectives on adult attachment ... Conclusion: This research was a preliminary examination of the relationship between attachment anxiety and sensitivity to temperature cues. Study 1 indicated that individuals with high levels of attachment anxiety desire physical warmth after reflecting on a distressing event, whereas Study 2 indicated that in individuals with high levels of attachment anxiety, exposure to warm-temperature cues increases satisfaction with their current romantic relationships. These results suggest that individuals with high levels of attachment anxiety may engage associations between temperature and intimacy as a secondary regulatory strategy and may be especially influenced by such associations when evaluating their current romantic relationships. Thus, this research offers future researchers solid ground from which to explore the links between temperature experiences and attachment-relevant outcomes.

Webster, G. D., G. R. Urland, et al. (2012). **"Can uniform color color aggression? Quasi-experimental evidence from professional ice hockey."** *Social psychological and personality science* 3(3): 274-281. <http://spp.sagepub.com/content/3/3/274.abstract>

Is uniform color related to aggressive behavior? Prior research has produced mixed results comparing the effects of black (vs. colored) uniforms on aggressive penalties in the National Hockey League (NHL), and the effect of white (vs. colored) uniforms remains unexamined. Luckily, the NHL has conducted multiple quasi-experiments with uniform (jersey) color over time. To examine the color-aggression link, the authors analyzed the last 25 seasons of NHL penalty-minute data (649 seasons from 30 teams collapsed across 52,098 games). When teams wore black jerseys, they were penalized more than when they did not (d = 1.19; Study 1). When teams switched to wearing colored jerseys at home games, they were penalized more than when they wore white jerseys at home games (d = 0.83; Study 2). Collectively, these quasi-experimental findings suggest that black jerseys are associated with more aggression and that white jerseys are associated with less. The authors discuss possible causes for these color-aggression effects.

Xun, P., K. Liu, et al. (2012). **"Folate intake and incidence of hypertension among american young adults: A 20-y follow-up study."** *Am J Clin Nutr* 95(5): 1023-1030. <http://www.ajcn.org/content/95/5/1023.abstract>

Background: Laboratory studies suggest that folate intake may decrease blood pressure (BP) through increasing nitric oxide synthesis in endothelial cells and/or reducing plasma homocysteine concentrations. However, human studies, particularly

longitudinal data, are limited. Objective: Our objective was to investigate whether dietary folate intake is associated with the 20-y incidence of hypertension. Design: We prospectively followed 4400 men and women (African Americans and whites aged 18–30 y) without hypertension at baseline (1985) in the Coronary Artery Risk Development in Young Adults study 6 times, in 1987, 1990, 1992, 1995, 2000, and 2005. Diet was assessed by dietary-history questionnaire at baseline and in 1992 and 2005. Incident hypertension was defined as the first occurrence at any follow-up examination of systolic BP \geq 140 mm Hg, diastolic BP \geq 90 mm Hg, or use of antihypertensive medication. Results: A total of 989 incident cases were identified during the 20-y follow-up. After adjustment for potential confounders, participants in the highest quintile of total folate intake had a significantly lower incidence of hypertension (HR: 0.48; 95% CI: 0.38, 0.62; P-trend < 0.01) than did those in the lowest quintile. The multivariable HRs for the same comparison were 0.33 (95% CI: 0.22, 0.51; P-trend < 0.01) in whites and 0.54 (95% CI: 0.40, 0.75; P-trend < 0.01) in African Americans (P-interaction = 0.047). The inverse associations were confirmed in a subset of the cohort (n = 1445) with serum folate measured at baseline and in 1992 and 2000. Conclusions: Higher folate intake in young adulthood was longitudinally associated with a lower incidence of hypertension later in life. This inverse association was more pronounced in whites. Additional studies are warranted to establish the causal inference.