36 bhma abstracts, march '12

Thirty six abstracts covering a multitude of stress, health & wellbeing related subjects including stress management's reduction of gene expression in cancer sufferers, the interaction between anxiety & depression, scent's effect on subsequent behaviour, a dark side of creativity, low carbon economies & health, military training & personality, change in couple intimacy & subsequent sexual behaviour, patient enablement & physician empathy, how video produces more flattering images than still cameras, and much more.

(Antoni, Lutgendorf et al. 2012; Appleton 2012; Arehart-Treichel 2012; Buhle, Stevens et al. 2012; Coryell, Fiedorowicz et al. 2012; Cuijpers, Beekman et al. 2012; de Lange, Debets et al. 2012; Delamothe 2012; DeVoe and House 2012; Gebauer, Sedikides et al. 2012; Gino and Ariely 2012; Goldberg and Huxley 2012; Haines and Dora 2012; Holtermann, Hansen et al. 2012; Huta 2012; Jackson, Thoemmes et al. 2012; Kasen, Wickramaratne et al. 2012; Legate, Ryan et al. 2012; Liu, Daviglus et al. 2012; Mercer, Jani et al. 2012; Michels 2012; Neff and Beretvas 2012; Orrow, Kinmonth et al. 2012; Post, Haberman et al. 2012; Rothwell, Price et al. 2012; Rubin and Campbell 2012; Sadideen, Parikh et al. 2012; Sánchez-Villegas, Toledo et al. 2012; Stockwell, Greer et al. 2012; Stone, Whitham et al. 2012; Stott 2012; Tamir and Ford 2012; Toepfer, Cichy et al. 2012; van der Ploeg, Chey et al. 2012; Yang, Cogswell et al. 2012; Zietsch, Verweij et al. 2012)

Antoni, M. H., S. K. Lutgendorf, et al. (2012). "Cognitive-behavioral stress management reverses anxiety-related leukocyte transcriptional dynamics." Biological Psychiatry **71**(4): 366-372. http://www.sciencedirect.com/science/article/pii/S0006322311009656.

Background Chronic threat and anxiety are associated with pro-inflammatory transcriptional profiles in circulating leukocytes, but the causal direction of that relationship has not been established. This study tested whether a cognitive-behavioral stress management (CBSM) intervention targeting negative affect and cognition might counteract anxiety-related transcriptional alterations in people confronting a major medical threat. Methods One hundred ninety-nine women undergoing primary treatment of stage 0–III breast cancer were randomized to a 10-week CBSM protocol or an active control condition. Seventy-nine provided peripheral blood leukocyte samples for genome-wide transcriptional profiling and bioinformatic analyses at baseline, 6-month, and 12-month follow-ups. Results Baseline negative affect was associated with >50% differential expression of 201 leukocyte transcripts, including upregulated expression of pro-inflammatory and metastasis-related genes. CBSM altered leukocyte expression of 91 genes by >50% at follow-up (group × time interaction), including downregulation of pro-inflammatory and metastasis-related genes and upregulation of type I interferon response genes. Promoter-based bioinformatic analyses implicated decreased activity of NF-κB/Rel and GATA family transcription factors and increased activity of interferon response factors and the glucocorticoid receptor as potential mediators of CBSM-induced transcriptional alterations. Conclusions In early-stage breast cancer patients, a 10-week CBSM intervention can reverse anxiety-related upregulation of pro-inflammatory gene expression in circulating leukocytes. These findings clarify the molecular signaling pathways by which behavioral interventions can influence physical health and alter peripheral inflammatory processes that may reciprocally affect brain affective and cognitive processes. *MedicalXpress* - http://medicalxpress.com/news/2012-03-stress-breast-cancer-patients-affect.html - *comments "A team of researchers led by Michael H. Antoni, director of the Center for Psycho-Oncology Research at the University of Miami (UM) has shown that a stress management program tailored to women with breast cancer can alter tumor-promoting processes at the molecular level. The new study recently published in the journal Biological Psychiatry is one of the first to link psychological intervention with genetic expression in cancer patients. According to the study, the group-based Cognitive-Behavioral Stress Management (CBSM) intervention designed by the researchers affects which genes in the cells of the immune system are turned on and off, in ways that may facilitate better recovery during treatment for breast cancer, explains Antoni, professor of Psychology in the College of Arts and Sciences, and professor of Psychiatry and Behavioral Sciences and program leader of Biobehavioral Oncology at the Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine. "For the women in the CBSM groups, there was better psychological adaptation to the whole process of going through treatment for breast cancer and there were physiological changes that indicated that the women were recovering better," Antoni says. "The results suggest that the stress management intervention mitigates the influence of the stress of cancer treatment and promotes recovery over the first year." Previous research has shown that during times of adversity, our nervous and endocrine systems send signals to the immune system, which defends us from disease. In response, our body activates specific genes inside immune cells called white blood cells or leukocytes, Antoni explains. "For the women that participated in the intervention groups, the genes that signal the production of molecules associated with a healthy immune response, such as type I interferon were up-regulated—meaning they were producing more of these substances, compared to levels seen in the control group," Antoni says. "At the same time, the genes responsible for the production of substances involved in cancer progression, such as pro-inflammatory cytokines, chemokines and matrix metalloproteinases were down-regulated." CBSM is a 10-week group-based program developed at UM that combines relaxation, imagery and deep breathing, along with cognitive behavior therapy, which is designed to help patients reduce bodily tension, change the way they deal with intrusive stressful thoughts, decrease negative moods, and improve their interpersonal communication skills. In the study, 79 women undergoing primary treatment for stage 0-III breast cancer were randomized into a 10 week CBSM program or a psychoeducational control group in the weeks following surgery. Six month and 12-month follow up assessments were conducted. "You essentially have this timeframe in a woman's life where she is getting diagnosed with breast cancer, followed by surgery, then chemotherapy or radiation, and it's very stressful," Antoni says. "This can be an emotionally and physically exhausting period offering little opportunity for recovery. If stress affects the immune system in a negative way, then their recovery could be slowed down and those patients taking longer to recover may be at risk for poorer health outcomes. Conversely, if stress management intervention can reduce the impact of stress on the immune system then recovery may be hastened." The research team plans to follow the women in this cohort to see if CBSM intervention and its effects on leukocyte gene expression are predictive of reoccurrence and/or long term health outcomes."*

Appleton, K. (2012). "6 X 40 mins exercise improves body image, even though body weight and shape do not change." Journal of Health Psychology. http://hpq.sagepub.com/content/early/2012/02/08/1359105311434756.abstract.

Body weight, shape and body image were assessed in 16 males and 18 females before and after both 6 × 40 mins exercise and 6 × 40 mins reading. Over both conditions, body weight and shape did not change. Various aspects of body image, however, improved after exercise compared to before, while no changes were found over reading. These findings have implications for exercise promotion where a possible role for body image in exercise adherence is suggested, and confirm current theories of body image, where changes in body image are mediated by body perceptions as opposed to actual body indices.

Arehart-Treichel, J. (2012). "Cancer patients have much to gain from psychiatric treatment " Psychiatric News **47**(6): 14-15. http://psychnews.psychiatryonline.org/newsArticle.aspx?articleid=1032923.

(Accessible in free full text) The most important thing that psychiatrists can do for cancer patients is to help them transition from feeling that "I'm dying from cancer" to feeling that "I'm living with cancer." During the past decade, provocative insights into the psyche and cancer have emerged. For example, new studies refute earlier findings suggesting that stress can cause cancer, David Kissane, M.D., chair of psychiatry at Memorial Sloan-Kettering Cancer Center, reported during an interview. A prime example of one of these new studies, he said, was one conducted in Denmark. Using Denmark's comprehensive national database, researchers assessed whether women who had a child die were more prone to cancer than matched controls. They found no such link. So it looks as if it may be "a myth that stress causes cancer," Kissane said. General emotional distress, maladaptive coping strategies, and psychiatric disorders such as anxiety and depression are common in cancer patients—in about 25 percent to 30 percent of them, Luigi Grassi, M.D., chair of psychiatry at the University of Ferrara in Italy and chair of the International Federation of Psycho-Oncology Societies, told Psychiatric News. Depression can not only negatively impact cancer patients' quality of life, but can reduce their chances of survival, just as it can in heart-disease patients, David Spiegel, M.D., said during an interview. Spiegel, an associate chair of psychiatry at Stanford University, is also a psycho-oncologist. Yet effective treatment of depression may increase the chances of survival. A study conducted by Spiegel and his colleagues and published December 13, 2010, in the Journal of Clinical Oncology found that a decrease in depression symptoms was associated with longer survival in metastatic breast cancer patients. Research during the past decade has also shown that various psychotherapies developed for cancer patients, such as supportive-expressive therapy, meaning-centered therapy, dignity therapy, cognitive-existential therapy, and cognitive-behavioral therapy (CBT) for reducing fear of cancer recurrence, can improve patients' quality of life, Grassi stated. Moreover, CBT can help women with breast cancer not only reduce negative emotions and levels of cortisol and increase positive emotions and levels of interferon, but reduce expression of genes likely to contribute to the cancer process, research by Michael Antoni, Ph.D., a professor of psychiatry at the University of Miami, and his team reported last November in Biological Psychiatry ...

Buhle, J. T., B. L. Stevens, et al. (2012). "Distraction and placebo." Psychological Science **23**(3): 246-253. http://pss.sagepub.com/content/23/3/246.abstract.

An explosion of recent research has studied whether placebo treatments influence health-related outcomes and their biological markers, but almost no research has examined the psychological processes required for placebo effects to occur. This study tested whether placebo treatment and cognitive distraction reduce pain through shared or independent processes. We tested the joint effects of performance of an executive working memory task and placebo treatment on thermal pain perception. An interactive effect of these two manipulations would constitute evidence for shared mechanisms, whereas additive effects would imply separate mechanisms. Participants (N = 33) reported reduced pain both when they performed the working memory task and when they received the placebo treatment, but the reductions were additive, a result indicating that the executive demands of the working memory task did not interfere with placebo analgesia. Furthermore, placebo analgesia did not impair task performance. Together, these data suggest that placebo analgesia does not depend on active redirection of attention and that expectancy and distraction can be combined to maximize pain relief.

Coryell, W., J. G. Fiedorowicz, et al. (2012). "Effects of anxiety on the long-term course of depressive disorders." British Journal of Psychiatry **200**(3): 210-215. http://bjp.rcpsych.org/content/200/3/210.abstract.

Background: It is well established that the presence of prominent anxiety within depressive episodes portends poorer outcomes. Important questions remain as to which anxiety features are important to outcome and how sustained their prognostic effects are over time. Aims: To examine the relative prognostic importance of specific anxiety features and to determine whether their effects persist over decades and apply to both unipolar and bipolar conditions. Method: Participants with unipolar (n = 476) or bipolar (n = 335) depressive disorders were intensively followed for a mean of 16.7 years (s.d. = 8.5). Results: The number and severity of anxiety symptoms, but not the presence of pre-existing anxiety disorders, showed a robust and continuous relationship to the subsequent time spent in depressive episodes in both unipolar and bipolar depressive disorder. The strength of this relationship changed little over five successive 5-year periods. Conclusions: The severity of current anxiety symptoms within depressive episodes correlates strongly with the persistence of subsequent depressive symptoms and this relationship is stable over decades.

Cuijpers, P., A. T. F. Beekman, et al. (2012). "Preventing depression." JAMA: The Journal of the American Medical Association **307**(10): 1033-1034. http://jama.ama-assn.org/content/307/10/1033.short.

Depressive disorders erode quality of life, productivity in the workplace, and fulfillment of social and familial roles. In today's knowledge- and service-driven economies, the population's mental capital (ie, cognitive, emotional, and social skills resources required for role functioning) becomes both more valuable and more vulnerable to the effects of depression. Depressive disorders, severe mental illnesses that should not be confused with normal mood variations, are part of a vicious circle of poverty, discrimination, and poor mental health in middle- and low-income countries. These realities also have major economic ramifications: treatment costs of depression are soaring but are only a fragment of the costs of reduced productivity due to depression. More than half of those with depression develop a recurrent or chronic disorder after a first depressive episode and are likely to spend more than 20% of their lifetime in a depressed condition.

de Lange, M. A., L. W. Debets, et al. (2012). "Making less of a mess: Scent exposure as a tool for behavioral change." Social Influence **7**(2): 90-97. http://dx.doi.org/10.1080/15534510.2012.659509.

Following a cognitive route from olfactory perception to goal-directed behavior, we aimed to influence littering behavior on Dutch trains. In order to achieve this, the scent of a cleaning product was subtly dispersed in train compartments. Compared to passengers in unscented compartments, passengers littered less as measured by the weight and number of items left behind in compartments containing cleaner scent. Apart from extending research on the influence of scent on behavior in a natural environment, the findings suggest that the cognitive route from scents to behavior provides a tool for behavior change in everyday life.

Delamothe, T. (2012). "Deaths from smoking: the avoidable holocaust." BMJ **344**. http://www.bmj.com/content/344/bmj.e2029.

At the beginning of the 20th century hardly anyone smoked cigarettes. By 1948 82% of men in Britain were smoking some form of tobacco. By 2009 only 22% were. Extrapolate forwards this rate of decline and by 2031 Britain should have no male smokers. (Women are on a slightly different trajectory.) Would that it were so simple. A meeting to mark the 50th anniversary of the Royal College of Physicians' report Smoking and Health (BMJ 2012;344:e1676, doi:10.1136/bmj.e1676) offered three main messages on how change on this scale was achieved. Firstly, there was no single magic bullet: controls on marketing and sales, health warnings on packs, and prohibition of smoking in public places all played a part. Secondly, legislation worked much better than persuasion. And lastly, tobacco companies fought the controls every step of the way. Yet

these companies are purveyors of death on an industrial scale. In the 50 years since Smoking and Health's publication smoking has killed six million people in the United Kingdom. It remains the country's number one cause of premature death, responsible for killing about 100 000 people a year. Outside the UK the figures are even more mindboggling. They're to be found, along with much else, in the 20th anniversary issue of Tobacco Control, published this month. Smoking's worldwide toll is predicted to reach six million deaths a year by 2015 (Tobacco Control 2012:21:87-91, doi:10.1136/tobaccocontrol-2011-050338). About 100 million people died from smoking in the 20th century—twice as many deaths as Stalin, Hitler, and Pol Pot were together responsible for. Several times that number are likely to die this century, even if current rates of smoking fall dramatically. Such a decline seems unlikely, given the tobacco industry's shift of marketing focus from heavily regulated developed countries to unregulated developing countries—with their largely youthful populations ... In 2000 a World Health Organization committee of experts judged tobacco use unlike other threats to global health: "Infectious diseases do not employ multinational public relations firms. There are no front groups to promote the spread of cholera. Mosquitoes have no lobbyists" (www.who.int/tobacco/en/who_inquiry.pdf). With such assistance, tobacco companies' profits are growing year on year, with the British companies British American Tobacco and Imperial Tobacco outperforming the UK stock market since the crash of 2007. Shouldn't we care about the product as well as the share price? Stewart Brock raised the alarm in these pages last year: "We may be world leaders in tobacco control at home, but we are exporting tobacco related death and disease to the developing world on a large and growing scale, cheered on by many in the City" (BMJ 2011;343:d6491, doi:10.1136/bmj.d6491). It's an uncanny echo of the 19th century opium wars, when British traders jemmied open the Chinese market to opium imports, robustly supported by the British government, all in the name of free trade ... Here's a suggestion for Mr Lansley. Boot the manufacturers of these "intrinsically harmful products" out of the UK. If Robert Proctor is right that one death results from every million cigarettes smoked, with a latency of about 25 years (Tobacco Control 2012:21:87-91, doi:10.1136/tobaccocontrol-2011-050338), then British American Tobacco and Imperial Tobacco will between them be responsible for one million deaths a year by 2035. As two of the UK's largest companies they're currently fawned over and indulged—like wealthy relatives at a family celebration. They should be shown the door. Their presence in this country shames us all.

DeVoe, S. E. and J. House (2012). "Time, money, and happiness: How does putting a price on time affect our ability to smell the roses?" Journal of Experimental Social Psychology **48**(2): 466-474. http://www.sciencedirect.com/science/article/pii/S0022103111002897.

In this paper, we investigate how the impatience that results from placing a price on time impairs individuals' ability to derive happiness from pleasurable experiences. Experiment 1 demonstrated that thinking about one's income as an hourly wage reduced the happiness that participants derived from leisure time on the internet. Experiment 2 revealed that a similar manipulation decreased participants' state of happiness after listening to a pleasant song and that this effect was fully mediated by the degree of impatience experienced during the music. Finally, Experiment 3 showed that the deleterious effect on happiness caused by impatience was attenuated by offering participants monetary compensation in exchange for time spent listening to music, suggesting that a sensation of unprofitably wasted time underlay the induced impatience. Together these experiments establish that thinking about time in terms of money can influence how people experience pleasurable events by instigating greater impatience during unpaid time.

Gebauer, J. E., C. Sedikides, et al. (2012). "Religiosity, social self-esteem, and psychological adjustment." Psychological Science **23**(2): 158-160. http://pss.sagepub.com/content/23/2/158.short.

The 'Greater Good' centre - http://greatergood.berkeley.edu/article/research_digest/religion_and_resilience - report on this study: "Are religious people happier than non-believers? Not necessarily, according to this study. Through an online dating site (eDarling), researchers collected data on roughly 188,000 adults across several countries. They found that religious people are better adjusted psychologically and more comfortable in social situations—but only when they live in a country that places greater value on being religious. In cultures that don't value religiosity, non-believers enjoyed the same psychological benefits as believers. In other words, the benefits of being religious are related to the values that a society places on religion."

Gino, F. and D. Ariely (2012). "The dark side of creativity: original thinkers can be more dishonest." J Pers Soc Psychol **102**(3): 445-459. http://www.ncbi.nlm.nih.gov/pubmed/22121888.

Creativity is a common aspiration for individuals, organizations, and societies. Here, however, we test whether creativity increases dishonesty. We propose that a creative personality and a creative mindset promote individuals' ability to justify their behavior, which, in turn, leads to unethical behavior. In 5 studies, we show that participants with creative personalities tended to cheat more than less creative individuals and that dispositional creativity is a better predictor of unethical behavior than intelligence (Experiment 1). In addition, we find that participants who were primed to think creatively were more likely to behave dishonestly than those in a control condition (Experiment 2) and that greater ability to justify their dishonest behavior explained the link between creativity and increased dishonesty (Experiments 3 and 4). Finally, we demonstrate that dispositional creativity moderates the influence of temporarily priming creativity on dishonest behavior (Experiment 5). The results provide evidence for an association between creativity and dishonesty, thus highlighting a dark side of creativity.

Goldberg, D. and P. Huxley (2012). "At least 25% with a mental health problem is a conservative estimate." BMJ **344**. http://www.bmj.com/content/344/bmj.e1776.

There are enormous problems in deciding what counts as a mental disorder, but most epidemiologists use an official classification such as the international classification of diseases. We were responsible for providing evidence that the one year prevalence of mental disorders in community samples is about 250/1000. We obtained this figure by combining figures for cross sectional prevalence with admittedly speculative estimates of annual inceptions, so that a cross sectional rate of 180/1000 was inflated by assuming that about a third of that number would develop a new episode during the next year. Even at that time, we had excellent evidence that most episodes are of short duration (fewer than three months). Since then, surveys have asked people to remember their health over the previous year. By 2002 it was shown that survey results were yielding slight underestimates: the rate for the UK was then revised upwards to 270/1000, also taking into account rates reported by the Office for National Statistics. These rates did not include severe mental disorders, such as schizophrenia, bipolar disorder, or dementia, and neither did they include alcohol and drug dependence. These are annual rates, not lifetime rates—the concept of lifetime prevalence is necessary for studies of the genetics of mental disorders, but it is a highly questionable concept where common mental disorders are concerned. This is because it assumes that people not only can, but will, reveal information about minor disorders that occurred many years ago that they might have forgotten or suppressed. For this reason, we have never quoted figures for lifetime rates. However, for those who like to think in these terms, "at least 25%" is almost certainly a conservative estimate.

Haines, A. and C. Dora (2012). "How the low carbon economy can improve health." BMJ **344**. http://www.bmj.com/content/344/bmj.e1018.

Health professionals are uniquely placed to guide the climate change conversation towards better policies that are good for the planet and for people, say Andy Haines and Carlos Dora: The current global economy has generated enormous wealth but simultaneously created profound, and in many cases growing, inequalities. Furthermore, the global economy is based on unsustainable foundations, not only because of a dysfunctional global financial system but also because human activities are undermining the planetary life support systems that sustain human health and development. It has been proposed that there are nine planetary boundaries to the biophysical subsystems that provide the conditions for human civilisation to flourish: climate change, rate of biodiversity loss, ocean acidification, stratospheric ozone depletion, interference with nitrogen and phosphorus cycles, global freshwater use, changes in land use, chemical pollution, and atmospheric aerosol loading. If disrupted beyond certain limits these processes could cause unacceptable environmental damage. For some of these boundaries there is evidence of a threshold level that if exceeded could lead to non-linear, abrupt changes, with adverse, and in some cases potentially catastrophic, consequences for humanity. Thresholds have probably already been exceeded in three of these interlinked processes: climate change, rate of biodiversity loss, and the nitrogen cycle. For some others the boundaries are being approached and without decisive action they are likely to be exceeded in the foreseeable future. Despite scientific uncertainties it is clear that humanity can only flourish within finite ecological limits. At the same time, as awareness of the global scale of the environmental challenges has become evident, concern is also growing about the burgeoning epidemic of non-communicable diseases in low and middle income countries. The recent UN High Level Meeting on Non-communicable Diseases concluded with a ringing endorsement of a range of policies to promote health, prevent non-communicable diseases, and scale up cost effective treatments.4 However, there was little consideration of the critical links between the current non-communicable disease epidemic (including cardiovascular disease, chronic pulmonary diseases, and obesity related conditions) and environmental drivers, such as exposures to air pollution and urban environments that profoundly shape sedentary lifestyles. These drivers are in many cases related to processes that emit greenhouse gases to power economies and produce food. Health and sustainability are indivisible at a global level, as improvements in health cannot be maintained without safeguarding the underlying systems on which human health and development depend. We outline some of the policies that can significantly improve both health and promote sustainability, with a particular focus on reducing greenhouse gas emissions to mitigate climate change. Some of these policies could also have added environmental benefits, by reducing biodiversity loss and land use change, for example.

Holtermann, A., J. V. Hansen, et al. (2012). "The health paradox of occupational and leisure-time physical activity." British Journal of Sports Medicine **46**(4): 291-295. http://bjsm.bmj.com/content/46/4/291.abstract.

Background Occupational and leisure-time physical activity are considered to provide similar health benefits. The authors tested this hypothesis.Methods A representative sample of Danish employees (n=7144, 52% females) reported levels of occupational and leisure-time physical activity in 2005. Long-term sickness absence (LTSA) spells of ≥3 consecutive weeks were retrieved from a social-transfer payment register from 2005 to 2007.Results 341 men and 620 females experienced a spell of LTSA during the period. Cox analyses adjusted for age, gender, smoking, alcohol, body mass index, chronic disease, social support from immediate superior, emotional demands, social class and occupational or leisure-time physical activity showed a decreased risk for LTSA among workers with moderate (HR 0.85, CI 0.72 to 1.01) and high (HR 0.77, CI 0.62 to 0.95) leisure-time physical activity in reference to those with low leisure-time physical activity. In contrast, an increased risk for LTSA was shown among workers with moderate (HR 1.59, CI 1.35 to 1.88) and high (HR 1.84, CI 1.55 to 2.18) occupational physical activity referencing those with low occupational physical activity.Conclusion The hypothesis was rejected. In a dose–response manner, occupational physical activity increased the risk for LTSA, while leisure-time physical activity decreased the risk for LTSA. The findings indicate opposing effects of occupational and leisure-time physical activity on global health.

Huta, V. (2012). "Linking peoples' pursuit of eudaimonia and hedonia with characteristics of their parents: Parenting styles, verbally endorsed values, and role modeling." Journal of Happiness Studies **13**(1): 47-61. http://dx.doi.org/10.1007/s10902-011-9249-7.

(For free full text, see http://veronikahuta.weebly.com/) Research on eudaimonia (seeking to use and develop the best in oneself) and hedonia (seeking pleasure, enjoyment, comfort), two dominant ways of pursuing the good life, has previously focused on their well-being consequences and correlates. Little is known about their predictors. Two retrospective studies with undergraduates began investigating the links between the behavior of one's parents when one was a child, and the degree to which one pursues eudaimonia and/or hedonia and derives well-being from these pursuits. Study 1 (n = 105) showed that participants engaged in eudaimonic pursuits if their parents had been high on responsiveness and/or demandingness, the two dimensions that define positive parenting. Hedonic pursuits did not relate to either parenting dimension. Study 2 (n = 110) showed that people engaged in eudaimonic pursuits if their parents had either verbally endorsed eudaimonia or actually role modeled it by pursuing eudaimonia themselves. However, people derived well-being from eudaimonic pursuits only if their parents had role modeled eudaimonia, not if their parents had merely verbally endorsed it. The same pattern was found for engaging in hedonic pursuits and deriving well-being from them. It was also found that parents who role modeled eudaimonia had children who grew up to derive well-being not only from eudaimonia but also from hedonia. Parents who role modeled hedonia had children who grew up to derive well-being only from hedonia and not from eudaimonia.

Jackson, J. J., F. Thoemmes, et al. (2012). "Military Training and Personality Trait Development." Psychological Science **23**(3): 270-277. http://pss.sagepub.com/content/23/3/270.abstract.

Military experience is an important turning point in a person's life and, consequently, is associated with important life outcomes. Using a large longitudinal sample of German males, we examined whether personality traits played a role during this period. Results indicated that personality traits prospectively predicted the decision to enter the military. People lower in agreeableness, neuroticism, and openness to experience during high school were more likely to enter the military after graduation. In addition, military training was associated with changes in personality. Compared with a control group, military recruits had lower levels of agreeableness after training. These levels persisted 5 years after training, even after participants entered college or the labor market. This study is one of the first to identify life experiences associated with changes in personality traits. Moreover, our results suggest that military experiences may have a long-lasting influence on individual-level characteristics.

Kasen, S., P. Wickramaratne, et al. (2012). "Religiosity and resilience in persons at high risk for major depression." Psychological Medicine **42**(03): 509-519. http://dx.doi.org/10.1017/S0033291711001516.

Background: Few studies have examined religiosity as a protective factor using a longitudinal design to predict resilience in persons at high risk for major depressive disorder (MDD). Method: High-risk offspring selected for having a depressed parent and control offspring of non-depressed parents were evaluated for psychiatric disorders in childhood/adolescence and at 10-year and 20-year follow-ups. Religious/spiritual importance, services attendance and negative life events (NLEs) were assessed at the 10-year follow-up. Models tested differences in relationships between religiosity/spirituality and subsequent disorders among offspring based on parent depression status, history of prior MDD and

level of NLE exposure. Resilience was defined as lower odds for disorders with greater religiosity/spirituality in higher-risk versus lower-risk offspring. Results: Increased attendance was associated with significantly reduced odds for mood disorder (by 43%) and any psychiatric disorder (by 53%) in all offspring; however, odds were significantly lower in offspring of non-depressed parents than in offspring of depressed parents. In analyses confined to offspring of depressed parents, those with high and those with average/low NLE exposure were compared: increased attendance was associated with significantly reduced odds for MDD, mood disorder and any psychiatric disorder (by 76, 69 and 64% respectively) and increased importance was associated with significantly reduced odds for mood disorder (by 74%) only in offspring of depressed parents with high NLE exposure. Moreover, those associations differed significantly between offspring of depressed parents with high NLE exposure and offspring of depressed parents with average/low NLE exposure. Conclusions: Greater religiosity may contribute to development of resilience in certain high-risk individuals.

Legate, N., R. M. Ryan, et al. (2012). "Is coming out always a "good thing"? Exploring the relations of autonomy support, outness, and wellness for lesbian, gay, and bisexual individuals." Social psychological and personality science **3**(2): 145-152. http://spp.sagepub.com/content/3/2/145.abstract.

Prior research suggests that, on average, disclosing sexual identity (being "out") yields wellness benefits for lesbian, gay, and bisexual (LGB) individuals. LGB individuals vary, however, both in how much they disclose their sexual orientation in different social contexts and in the experiences that follow from disclosure. The present research examines this within-person variation in disclosure and its consequences as a function of the autonomy supportive versus controlling character of social contexts. LGB individuals rated experiences of autonomy support and control in the contexts of family, friends, coworkers, school, and religious community, as well how "out" they were, and their context-specific self-esteem, depression, and anger. Findings from multilevel modeling revealed that LGB individuals were more likely to disclose in autonomy supportive contexts. Additionally, whereas disclosure was associated with more positive well-being in autonomy supportive contexts, in controlling contexts it was not. Practical and research implications are discussed.

Liu, K., M. L. Daviglus, et al. (2012). "Healthy Lifestyle Through Young Adulthood and the Presence of Low Cardiovascular Disease Risk Profile in Middle Age / Clinical Perspective." Circulation **125**(8): 996-1004. http://circ.ahajournals.org/content/125/8/996.abstract.

Background—A low cardiovascular disease risk profile (untreated cholesterol <200 mg/dL, untreated blood pressure <120/<80 mm Hg, never smoking, and no history of diabetes mellitus or myocardial infarction) in middle age is associated with markedly better health outcomes in older age, but few middle-aged adults have this low risk profile. We examined whether adopting a healthy lifestyle throughout young adulthood is associated with the presence of the low cardiovascular disease risk profile in middle age.Methods and Results—The Coronary Artery Risk Development in (Young) Adults (CARDIA) study sample consisted of 3154 black and white participants 18 to 30 years of age at year 0 (1985–1986) who attended the year 0, 7, and 20 examinations. Healthy lifestyle factors defined at years 0, 7, and 20 included average body mass index <25 kg/m2, no or moderate alcohol intake, higher healthy diet score, higher physical activity score, and never smoking. Mean age (25 years) and percentage of women (56%) were comparable across groups defined by number of healthy lifestyle factors. The age-, sex-, and race-adjusted prevalences of low cardiovascular disease risk profile at year 20 were 3.0%, 14.6%, 29.5%, 39.2%, and 60.7% for people with 0 or 1, 2, 3, 4, and 5 healthy lifestyle factors, respectively (P for trend <0.0001). Similar graded relationships were observed for each sex-race group (all P for trend <0.0001).Conclusions—Maintaining a healthy lifestyle throughout young adulthood is strongly associated with a low cardiovascular disease risk profile in middle age. Public health and individual efforts are needed to improve the adoption and maintenance of healthy lifestyles in young adults.

Mercer, S. W., B. D. Jani, et al. (2012). "Patient enablement requires physician empathy: a cross-sectional study of general practice consultations in areas of high and low socioeconomic deprivation in Scotland." BMC Fam Pract **13**: 6. http://www.ncbi.nlm.nih.gov/pubmed/22316293.

ABSTRACT: BACKGROUND: Patient 'enablement' is a term closely aligned with 'empowerment' and its measurement in a general practice consultation has been operationalised in the widely used patient enablement instrument (PEI), a patient-rated measure of consultation outcome. However, there is limited knowledge regarding the factors that influence enablement, particularly the effect of socio-economic deprivation. The aim of the study is to assess the factors influencing patient enablement in GP consultations in areas of high and low deprivation. METHODS: A questionnaire study was carried out on 3,044 patients attending 26 GPs (16 in areas of high socio-economic deprivation and 10 in low deprivation areas, in the west of Scotland). Patient expectation (confidence that the doctor would be able to help) was recorded prior to the consultation. PEI, GP empathy (measured by the CARE Measure), and a range of other measures and variables were recorded after the consultation. Data analysis employed multi-level modelling and multivariate analyses with the PEI as the dependant variable. RESULTS: Although numerous variables showed a univariate association with patient enablement, only four factors were independently predictive after multilevel multivariate analysis; patients with multimorbidity of 3 or more long-term conditions (reflecting poor chronic general health), and those consulting about a long-standing problem had reduced enablement scores in both affluent and deprived areas. In deprived areas, emotional distress (GHQ-caseness) had an additional negative effect on enablement. Perceived GP empathy had a positive effect on enablement in both affluent and deprived areas. Maximal patient enablement was never found with low empathy. CONCLUSIONS: Although other factors influence patient enablement, the patients' perceptions of the doctors' empathy is of key importance in patient enablement in general practice consultations in both high and low deprivation settings.

Michels, R. (2012). "Diagnosing personality disorders." Am J Psychiatry **169**(3): 241-243. http://ajp.psychiatryonline.org/article.aspx?articleid=1028573.

(Available in free full text) In the past, one might have argued that the differential diagnosis of specific personality disorders made little difference, that it wasn't a useful clinical guide for individual patients. However, research has demonstrated differences in clinical course and prognosis among the several personality disorders, and the separate categories have been useful to the growing body of research on therapeutics. As we move toward DSM-5, it is clear that the clinical and research communities view personality disorders differently. The clinical community wants a system that is practical and workable in the real world and that focuses on the essence of each category. The research community wants to capture as much information as possible and to emphasize precise boundaries of categories rather than reifying core syndromes that may have more to do with tradition or theory than with patients. In this issue of the Journal, Westen et al. enter the fray with the goal of "bridging" science and practice. They claim that they are developing a "taxonomy" (the term Linnaeus introduced for classifying living things according to their natural relationships). DSM is more modest, claiming only to be a "nosology" (a classification of diseases). In fact, "nomenclature" (a system of names) might be even more appropriate. Westen and colleagues' important study is the most recent in a 15-year program of research that has established their position as an exemplar representing one important position in the dialogue of personality disorder diagnosis. Westen et al. argue that personality disorders are primarily clinical concepts. The individual disorders are syndromes—clusters of meaningfully related characteristics that are recognized as

syndromic entities, not as collections of independent phenomena. In explaining the concept, the authors use the metaphor of face recognition; it is relatively easy when we see a whole face but much more difficult if we are presented with an assortment of eyebrows, noses, chins, eyes, and mouths. Westen et al. have developed prototypic descriptions of eight personality disorders, two of "neurotic styles," and one of personality health ... The gap between researcher and practitioner in personality disorders may be fundamental—the diagnoses are used for different purposes. Westen et al. have provided a state-of-the-art strategy for constructing categories that reflect how clinicians think and that clinicians will find friendly to use. The architects of DSM-5 will have to decide how it should resolve the tensions between the clinical and research communities and their different goals in using the nosology.

Neff, K. D. and S. N. Beretvas (2012). "The role of self-compassion in romantic relationships." Self and Identity: 1-21. http://dx.doi.org/10.1080/15298868.2011.639548.

Self-compassion (SC) involves being kind to oneself when confronting personal inadequacies or situational difficulties, framing the imperfection of life in terms of common humanity, and being mindful of negative emotions so that one neither suppresses nor ruminates on them. The current study explored whether being self-compassionate is linked to healthier romantic relationship behavior, such as being more caring and supportive rather than controlling or verbally aggressive with partners. A total of 104 couples participated in the study, with self-reported SC levels being associated with partner reports of relationship behavior. Results indicated that self-compassionate individuals displayed more positive relationship behavior than those who lacked SC. SC was also a stronger predictor of positive relationship behavior than trait self-esteem (SE) or attachment style. Finally, partners were able to accurately report on each other's SC levels, suggesting that SC is an observable trait.

Orrow, G., A.-L. Kinmonth, et al. (2012). "Effectiveness of physical activity promotion based in primary care: systematic review and meta-analysis of randomised controlled trials." BMJ **344**. http://www.bmj.com/content/344/bmj.e1389.

Objectives To determine whether trials of physical activity promotion based in primary care show sustained effects on physical activity or fitness in sedentary adults, and whether exercise referral interventions are more effective than other interventions. Design Systematic review and meta-analysis of randomised controlled trials. Data sources Medline, CINAHL, PsycINFO, EMBASE, SPORTDiscus, Centre for Reviews and Dissemination, the Cochrane Library, and article reference lists. Review methods Review of randomised controlled trials of physical activity promotion in sedentary adults recruited in primary care, with minimum follow-up of 12 months, reporting physical activity or fitness (or both) as outcomes, and using intention to treat analyses. Two reviewers independently assessed studies for inclusion, appraised risk of bias, and extracted data. Pooled effect sizes were calculated using a random effects model. Results We included 15 trials (n=8745). Most interventions took place in primary care, included health professionals in delivery, and involved advice or counselling given face to face or by phone (or both) on multiple occasions. Only three trials investigated exercise referral. In 13 trials presenting self reported physical activity, we saw small to medium positive intervention effects at 12 months (odds ratio 1.42, 95% confidence interval 1.17 to 1.73; standardised mean difference 0.25, 0.11 to 0.38). The number needed to treat with an intervention for one additional sedentary adult to meet internationally recommended levels of activity at 12 months was 12 (7 to 33). In four trials reporting cardiorespiratory fitness, a medium positive effect at 12 months was non-significant (standardised mean difference 0.51, −0.18 to 1.20). Three trials of exercise referral found small non-significant effects on self reported physical activity at 12 months (odds ratio 1.38; 0.98 to 1.95; standardised mean difference 0.20, −0.21 to 0.61). Conclusions Promotion of physical activity to sedentary adults recruited in primary care significantly increases physical activity levels at 12 months, as measured by self report. We found insufficient evidence to recommend exercise referral schemes over advice or counselling interventions. Primary care commissioners should consider these findings while awaiting further trial evaluation of exercise referral schemes and other primary care interventions, with longer follow-up and use of objective measures of outcome.

Post, R., J. Haberman, et al. (2012). "The Frozen Face Effect: Why static photographs may not do you justice." Frontiers in Psychology **3**. http://www.frontiersin.org/Journal/Abstract.aspx?s=194&name=cognition&ART_DOI=10.3389/fpsyg.2012.00022.

When a video of someone speaking is paused, the stationary image of the speaker typically appears less flattering than the video, which contained motion. We call this the Frozen Face Effect (FFE). Here we report six experiments intended to quantify this effect and determine its cause. In Experiment 1, video clips of people speaking in naturalistic settings as well as all of the static frames that composed each video were presented, and subjects rated how flattering each stimulus was. The videos were rated to be significantly more flattering than the static images, confirming the FFE. In Experiment 2, videos and static images were inverted, and the videos were again rated as more flattering than the static images. In Experiment 3, a discrimination task measured recognition of the static images that composed each video. Recognition did not correlate with flattery ratings, suggesting that the FFE is not due to better memory for particularly distinct images. In Experiment 4, flattery ratings for groups of static images were compared with those for videos and static images. Ratings for the video stimuli were higher than those for either the group or individual static stimuli, suggesting that the amount of information available is not what produces the FFE. In Experiment 5, videos were presented under four conditions: forward motion, inverted forward motion, reversed motion, and scrambled frame sequence. Flattery ratings for the scrambled videos were significantly lower than those for the other three conditions. In Experiment 6, as in Experiment 2, inverted videos and static images were compared with upright ones, and the response measure was changed to perceived attractiveness. Videos were rated as more attractive than the static images for both upright and inverted stimuli. Overall, the results suggest that the FFE requires continuous, natural motion of faces, is not sensitive to inversion, and is not due to a memory effect. *(The BPS Digest - http://www.bps-research-digest.blogspot.co.uk/2012/03/faces-are-considered-more-attractive.html - comments "Here's some comforting news for anyone who despairs at how they look in photos - research by psychologists at the Universities of California and Harvard finds that the same people are rated as more attractive in videos than in static images taken from those videos. In other words, if you think you look awful in that holiday snap - don't worry, you probably look much better in the flesh when people can see you moving. Robert Post and his team call the relative unattractiveness of static faces, "the frozen face effect". They think it may have to do with the way we form an impression of a moving face that's averaged across the various positions and profiles of that face. This would fit earlier findings showing that more average faces are judged as more attractive. Another possibility is that we find moving faces more attractive because "they optimally drive the neural mechanisms of face recognition". After all, the camera was only invented relatively recently and our face processing brain systems evolved to process moving faces, not still ones. Post and his colleagues made their findings by asking a handful of participants to rate how "flattering" or "attractive" 20 people looked in two-second video clips and in 1200 static frames taken from those clips. The same faces were consistently rated as more attractive and flattering in the video clips than in the stills. Further experiments attempted to establish the mechanism underlying this effect. It was found that the same rule held with the videos and stills turned up-side down. The researchers also showed the effect is nothing to do with the videos containing more information: when the "flattering" ratings of an ensemble of multiple stills of a face was compared against ratings of those same stills in a video, once again the video received the more positive ratings. Memory didn't seem to be a factor either - more or less flattering images weren't remembered any better than average. However it was found that to be judged as more flattering, videos do need to run in sequence. Jumbled-up, out-of-sequence videos of a face didn't receive higher ratings than stills of that face. The researchers*

said their findings could explain why portrait photography is so challenging. "... [The frozen face effect] may explain why photography of faces is so difficult to master and why people anecdotally believe they look worse in photographs," they said.)

Rothwell, P. M., J. F. Price, et al. (2012). "Short-term effects of daily aspirin on cancer incidence, mortality, and non-vascular death: analysis of the time course of risks and benefits in 51 randomised controlled trials." The Lancet **379**(9826): 1602-1612. http://linkinghub.elsevier.com/retrieve/pii/S0140673611617200.

Background: Daily aspirin reduces the long-term risk of death due to cancer. However, the short-term effect is less certain, especially in women, effects on cancer incidence are largely unknown, and the time course of risk and benefit in primary prevention is unclear. We studied cancer deaths in all trials of daily aspirin versus control and the time course of effects of low-dose aspirin on cancer incidence and other outcomes in trials in primary prevention. Methods: We studied individual patient data from randomised trials of daily aspirin versus no aspirin in prevention of vascular events. Death due to cancer, all non-vascular death, vascular death, and all deaths were assessed in all eligible trials. In trials of low-dose aspirin in primary prevention, we also established the time course of effects on incident cancer, major vascular events, and major extracranial bleeds, with stratification by age, sex, and smoking status. Results: Allocation to aspirin reduced cancer deaths (562 vs 664 deaths; odds ratio [OR] 0·85, 95% CI 0·76—0·96, p=0·008; 34 trials, 69 224 participants), particularly from 5 years onwards (92 vs 145; OR 0·63, 95% CI 0·49—0·82, p=0·0005), resulting in fewer non-vascular deaths overall (1021 vs 1173; OR 0·88, 95% CI 0·78—0·96, p=0·003; 51 trials, 77 549 participants). In trials in primary prevention, the reduction in non-vascular deaths accounted for 87 (91%) of 96 deaths prevented. In six trials of daily low-dose aspirin in primary prevention (35 535 participants), aspirin reduced cancer incidence from 3 years onwards (324 vs 421 cases; OR 0·76, 95% CI 0·66—0·88, p=0·0003) in women (132 vs 176; OR 0·75, 95% CI 0·59—0·94, p=0·01) and in men (192 vs 245; OR 0·77, 95% CI 0·63—0·93, p=0·008). The reduced risk of major vascular events on aspirin was initially offset by an increased risk of major bleeding, but effects on both outcomes diminished with increasing follow-up, leaving only the reduced risk of cancer (absolute reduction 3·13 [95% CI 1·44—4·82] per 1000 patients per year) from 3 years onwards. Case-fatality from major extracranial bleeds was also lower on aspirin than on control (8/203 vs 15/132; OR 0·32, 95% CI 0·12—0·83, p=0·009). Interpretation: Alongside the previously reported reduction by aspirin of the long-term risk of cancer death, the short-term reductions in cancer incidence and mortality and the decrease in risk of major extracranial bleeds with extended use, and their low case-fatality, add to the case for daily aspirin in prevention of cancer. *And the BMJ - http://www.bmj.com/content/344/bmj.e2269 - comments "Further evidence of the anticancer effects of aspirin have emerged from a series of new meta-analyses reporting that an aspirin a day reduces deaths from cancer (odds ratio 0.85, 95% CI 0.76 to 0.96) and the incidence of cancer (0.76, 0.66 to 0.88), and can even help prevent the spread of existing adenocarcinomas (hazard ratio for subsequent metastasis 0.45, 0.28 to 0.72). The evidence looked strongest for colorectal cancer but extended to a range of other types, including other gastrointestinal cancers and breast cancer. The new analyses strengthened previously weak evidence for an anticancer effect in women ... Aspirin was associated with more serious bleeds than the control treatments, but only during the first three years. Bleeding risk seemed to fall away after that, and so did the vascular benefits, leaving just aspirin's beneficial effects on cancer risk ... Should we all be taking an aspirin a day to protect ourselves from cancer? It's still too early for that, says a linked commentary (doi:10.1016/S0140-6736(11)61654-1). These analyses, though impressive, were confined to trials of daily aspirin and had to exclude two of the biggest—the Women's Health Study and the Physicians Health Study—because they tested an aspirin every other day instead. Neither of these trials reported a lower risk of cancer or cancer death among participants taking aspirin.)*

Rubin, H. and L. Campbell (2012). "Day-to-Day Changes in Intimacy Predict Heightened Relationship Passion, Sexual Occurrence, and Sexual Satisfaction." Social psychological and personality science **3**(2): 224-231. http://spp.sagepub.com/content/3/2/224.abstract.

The current research tested a model proposed by Baumeister and Bratslavsky (1999) suggesting that passion's association with intimacy is best understood as being linked with changes in intimacy over time. Within this framework, when intimacy shows relatively large and rapid increases, levels of passion should be high. When intimacy remains unchanged over time, levels of passionate experience should be low. To test this hypothesis, 67 heterosexual couples involved in long-term relationships completed daily measures of intimacy, passion, and sexual satisfaction for 21 consecutive days. Analyses guided by the actor–partner interdependence model (Kenny, Kashy, & Cook, 2006) demonstrated that day-to-day changes in intimacy for both partners predicted relationship passion, sexual frequency, and sexual satisfaction in a manner conforming to Baumeister and Bratslavksy's model. These results represent the first empirical support for this model of intimacy and passionate experience.

Sadideen, H., A. Parikh, et al. (2012). "Is there a role for music in reducing anxiety in plastic surgery minor operations?" Annals of The Royal College of Surgeons of England **94**(3): 152-154. http://www.ingentaconnect.com/content/rcse/arcs/2012/00000094/00000003/art00005 http://dx.doi.org/10.1308/003588412X13171221501861.

INTRODUCTION: It is well documented that music plays a role in reducing anxiety levels. Its role in reducing intra-operative anxiety levels in surgical patients while awake is less well known. We report the effects of music on intra-operative patient anxiety in both the elective and trauma plastic surgical setting. METHODS: Two groups of patients undergoing local anaesthetic surgical procedures were identified: those where music was played in the operating theatre (Group 1) and those where it was not (Group 2). Ninety-six patients were included. Subjectively anxiety was evaluated by the patient with a visual analogue scale (VAS) and objectively by the respiratory rate (RR), both pre and post-operatively. The unpaired t-test was used to evaluate the statistical significance of differences between the groups. RESULTS: The mean pre-operative VAS score was similar in both groups (5.7 in Group 1 and 5.8 in Group 2). The mean pre-operative RR was 15 breaths per minute in both groups. Post-operatively, the VAS score and RR were both lower in Group 1 (VAS: 3.5 vs 4.9; $p<0.01$ and RR: 11 vs 13 breaths per minute; $p<0.05$). CONCLUSIONS: In the era of the patient centred approach to clinical care, it is crucial to minimise patient anxiety. Music appears to reduce intra-operative anxiety in awake patients in both the elective and trauma plastic surgical setting. Easy listening music and chart classics appear to be suitable genres according to patients. We believe there is a role for a large, multicentre, randomised control study to examine the benefits of music in all local anaesthetic procedures across different specialties.

Sánchez-Villegas, A., E. Toledo, et al. (2012). "Fast-food and commercial baked goods consumption and the risk of depression." Public Health Nutrition **15**(03): 424-432. http://dx.doi.org/10.1017/S1368980011001856.

Objective: Whereas the relationship between some components of diet, such as n-3 fatty acids and B-vitamins, and depression risk has been extensively studied, the role of fast-food or processed pastries consumption has received little attention. Design: Consumption of fast food (hamburgers, sausages, pizza) and processed pastries (muffins, doughnuts, croissants) was assessed at baseline through a validated semi-quantitative FFQ. Participants were classified as incident cases of depression if they reported a physician diagnosis of depression or the use of antidepressant medication in at least one of the follow-up questionnaires. Cox regression models were fit to assess the relationship between consumption of fast food and

commercial baked goods and the incidence of depression. Setting: The SUN (Seguimiento Universidad de Navarra – University of Navarra Follow-up) Project, Spain. Subjects: Participants (n 8964) from a Spanish cohort.ResultsAfter a median follow-up of 6·2 years, 493 cases of depression were reported. A higher risk of depression was associated with consumption of fast food (fifth (Q5) v. first quintile (Q1): hazard ratio (HR) = 1·36; 95 % CI 1·02, 1·81; P trend = 0·003). The results did not change after adjustment for the consumption of other food items. No linear relationship was found between the consumption of commercial baked goods and depression. Participants belonging to consumption quintiles Q2–Q5 showed an increased risk of depression compared with those belonging to the lowest level of consumption (Q1; HR = 1·38; 95 % CI 1·06, 1·80). Conclusions: Fast-food and commercial baked goods consumption may have a detrimental effect on depression risk. *Deborah Brauser of Medscape - http://www.medscape.com/psychiatry - commented on 25 April: "Eating too much junk food may increase risk for depression, a large study suggests. In a cohort study of almost 9000 adults in Spain, those who consistently consumed "fast food," such as hamburgers and pizza, were 40% more likely to develop depression than the participants who consumed little to none of these types of food. In addition, investigators found that the depression risk rose steadily as more fast food was consumed. Participants who often ate commercial baked goods, such as croissants and doughnuts, were also at significant risk of developing this disorder. "We were not surprised with the results. Several studies have analyzed the association between fast food and commercial bakery consumption and physical diseases, such as obesity or coronary heart disease," Almudena Sánchez-Villegas, PhD, from the Department of Clinical Sciences at the University of Las Palmas de Gran Canaria and the Department of Preventive Medicine and Public Health at the University of Navarra in Pamplona, Spain, told Medscape Medical News. Dr. Almudena Sánchez-Villegas "With these results, a relatively new line of research is open. Limiting trans fatty acids content in several foods, avoiding the consumption of fast food and bakery, and increasing the consumption of other products such as vegetables, legumes, and fruits should be a primary goal for clinicians and public health makers," she added. The study is published in the March issue of Public Health Nutrition. Croissants, Doughnuts, and Muffins, Oh My! According to the investigators, depression affects around 121 million people throughout the world. Although "little is known about the role of diet in the development of depressive disorders," past studies have suggested that olive oil, B vitamins, and omega-3 fatty acids may play a preventative role, write the researchers. As reported by Medscape Medical News, Dr. Sánchez-Villegas and colleagues published a study last year in PLoS One that linked consumption of trans unsaturated fatty acids (TFA) to a significantly increased risk for depression. For the current study, they sought to specifically examine the role that consumption of fast food and processed food may play in the development of this disorder. The researchers examined data on 8964 adults from the Seguimiento Universidad de Navarra (SUN) Project, an ongoing diet and lifestyle tracking study that started in 1999. None of the SUN participants had been diagnosed with depression or had taken antidepressants before the start of the study. Exposures and outcomes were gathered through surveys mailed out biennially to the participants. A food frequency questionnaire was used to assess dietary intake. Fast food consumption was defined as total consumption of hamburgers, pizza, and hot dogs/sausages. Commercial baked goods consumption was defined as total consumption of croissants, doughnuts, and muffins. Incident depression and/or self-reported physician-made diagnosis of depression, antidepressant use, and demographic and lifestyle data were recorded on other questionnaires. Curb the Junk Food: Results showed that 493 of the participants were diagnosed with depression after a median follow-up of 6.2 years. Those who were found to have the highest levels of consumption of fast food showed a significantly higher risk of developing depression compared with those who had the lowest levels of consumption (adjusted hazard ratio [HR], 1.40; 95% confidence interval [CI], 1.05 - 1.86; P = .01). "Moreover, a significant dose-response relationship was found (P for trend = .001)," report the researchers. However, the researchers note that even small quantities of fast food were linked to a significantly higher risk for depression. Participants who often consumed commercial baked goods were also at increased risk of developing this disorder (adjusted HR, 1.43; 95% CI, 1.06 - 1.93). The investigators also found that the study participants with the highest consumption of fast food and of commercial baked goods were more likely to be single, less active, smoke, work more than 45 hours per week, and eat less fruits, vegetables, nuts, fish, and/or olive oil. "Although more studies are necessary, the intake of this type of food should be controlled because of its implications on both health (obesity, cardiovascular disease) and mental well-being," said Dr. Sánchez-Villegas. The researchers add that the legally permitted content of TFA in these foods "should be reviewed." "This Spanish team conducted very good, quality research and took considerable care to consider multiple possible causes of confounding, such as other factors that may explain both dietary habits and risk for depression," Felice Jacka, PhD, research fellow at Deakin University in Melbourne, Australia, told Medscape Medical News. "For example, they take into account many variables that may be proxies of health consciousness or overall health lifestyle, such as the use of seat belts, frequency of medical and dental checkups, and drunk driving, as well as marital status, smoking, alcohol consumption, and intake of nutrient-dense foods. The study sample is also large and well described, and the prospective cohort design affords the potential for investigating cause-effect relationships," she added. Dr. Jacka noted that the results support a previous study that she and her colleagues published recently in the American Journal of Psychiatry, which showed that women who consumed a diet higher in unhealthy and processed food were likely to be depressed. In a study published in the Australian and New Zealand Journal of Psychiatry, they reported the same results in a cohort of adolescents. The results of the current study "are also concordant with the two prospective studies in this field, in both adults and adolescents, reporting that unhealthy diets are associated with an increased risk for mental health problems over time," she reported. She added that although this study was rigorously conducted and is methodologically sound, "it is perhaps a shame that [it] does not have data on diagnoses of depression ascertained via clinical assessments. However, this is rare in large epidemiological studies, and the measures they have used have been shown to be valid." Dr. Jacka noted that because diet and mental health research is relatively new, it is often uncommon for clinicians to consider diet as an intervention target in clinical care. "However, this study adds to the rapidly growing and highly consistent body of literature suggesting that depression is another common, noncommunicable illness with a significant lifestyle component," she said. "As such, it is prudent for clinicians to assess and address the dietary as well as exercise habits of their patients, in addition to pharmacological and other established treatments."*

Stockwell, T., A. Greer, et al. (2012). "How good is the science?" BMJ **344**. http://www.bmj.com/content/344/bmj.e2276.

Ronksley and colleagues asserted that the association between moderate alcohol consumption and reduced mortality risk was "beyond question." We reviewed all 67 studies that generated the 84 articles in their meta-analysis. All but two had at least one of six serious methodological problems, and these two had mixed findings; see http://carbc.ca/Portals/0/News/FeatureSupplement201203.pdf for bibliography). (1) No control for smoking or health status: A conservative criterion because Naimi and colleagues found moderate drinkers to be healthier than abstainers on 27 risk factors for heart disease. (2) Drinking assessed over fewer than 30 days: A much longer time period is needed to assess lifetime risk of morbidity and mortality. (3) Failure to assess quantity or frequency of consumption: Both are needed to estimate Ronksley's dependent variable of average daily consumption. (4) Former drinkers counted as abstainers: Former drinkers often abstain because of ill health so would make moderate drinkers appear healthy by comparison. (5) Occasional drinkers counted as abstainers: Drinkers also tend to reduce consumption with increasing age and frailty. Counting occasional drinkers as abstainers may make moderate drinkers seem healthier. (6) Occasional drinkers combined with moderate drinkers: Occasional drinkers may have enhanced health status owing to other health protective factors. Combining the two groups may make moderate drinkers seem healthier. We therefore suggest that it is premature to draw firm conclusions from this literature, and that strong

competing hypotheses remain to explain the association of health benefits with moderate drinking. The possibility of uncontrolled confounding from other lifestyle factors is supported by meta-analyses finding biologically implausible benefits from moderate drinking—for example, protection against cirrhosis. We hope future studies will avoid these errors and provide a clearer answer to this important question. *(And Ronksley et al reply - http://www.bmj.com/content/344/bmj.e2294 - Stockwell and colleagues adopted an extreme methodological position, proposing to dismiss an entire body of literature on the basis of the presence of predictable limitations in individual studies.1 2 This dogmatic and dichotomous approach to the evaluation of epidemiological studies is counterproductive to scientific epistemology. Arguably, an alternative means of exploring the impact of specific methodological shortcomings is through stratified meta-analyses. Within our review, this approach found that several of the apparent biases proposed by Stockwell and colleagues result in minimal changes to the pooled relative risks. Furthermore, their group says little about the strong mechanistic data from randomised trials within our companion review that show a biological effect of alcohol on cardiovascular and inflammatory biomarkers.3 Finally, Stockwell and colleagues write from the perspective of their affiliation with a centre for addictions. Concern about alcohol from this perspective is justified, given the well documented harms of excessive alcohol consumption. However, worries and advocacy emanating from those concerns need to be distinguished from the scientific question of whether alcohol can be cardioprotective when consumed in moderation. We reject the notion that an entire body of observational literature should be discarded outright because of limitations inherent in all observational epidemiology, particularly in light of the compelling mechanistic data within our companion review. From an epistemological perspective, the real question is not a dichotomous decision of whether alcohol is harmful or beneficial, but rather what to do with a body of knowledge that is substantial but less than pristine. We hope that our linked reviews continue to inform open minded dialogue around the potential health effects of alcohol—both positive and negative—and the potentially nuanced implications in clinical and public health practice.)*

Stone, K., E. A. Whitham, et al. (2012). "A comparison of psychiatry and internal medicine: a bibliometric study." Acad Psychiatry **36**(2): 129-132. http://www.ncbi.nlm.nih.gov/pubmed/22532204.

OBJECTIVE: Psychiatric education needs to expose students to a broad range of topics. One resource for psychiatric education, both during initial training and in later continuing medical education, is the scientific literature, as published in psychiatric journals. The authors assessed current research trends in psychiatric journals, as compared with internal-medicine counterparts and examined their relevance to psychiatric education. METHODS: The authors classified abstracts and original articles as biological or non-biological, based on methodology, from 2008 in Archives of General Psychiatry and The American Journal of Psychiatry, as compared with The Archives of Internal Medicine and Annals of Internal Medicine. RESULTS: Biological and non-biological studies were similarly frequent in psychiatric journals (48.2% and 51.8%, respectively). Internal-medicine journals had a non-biological and epidemiological predominance (22.2% biological, 77.8% non-biological: epidemiological, 59.9%; reviews, 21.4%; clinical, 13.2%; other, 5.4%). CONCLUSION: Psychiatric journals publish more biological studies than internal-medicine journals. This tendency may influence psychiatric education and practice in a biological direction, with less attention to psychosocial or clinical approaches to psychiatry.

Stott, R. (2012). "Contraction and convergence: the best possible solution to the twin problems of climate change and inequity." BMJ **344**. http://www.bmj.com/content/344/bmj.e1765.

Much is now known about anthropogenically induced climate change, its impacts on the planet's species, and the need for urgent action to avoid catastrophe. The unequal distribution of resources between the materially rich and the materially poor amplifies the multiple adverse effects of climate change, so disrupting ecosystems, reducing agricultural productivity, and displacing populations. The consequences differ for rich and poor populations. In poor countries, life expectancy may be only 40 years (Swaziland and Mozambique), infant mortality as high as 180 in 1000 (Angola), and the lifetime risk of dying in childbirth 1 in 16 (sub-Saharan Africa). In rich countries, life expectancy can exceed 82 years, infant mortality can be as low as 4 in 1000, and the lifetime risk of dying in childbirth is less than 1 in 3000. But, having reaped the health benefits of wealth, these countries now face the diseases of excess. In the United States 30% of the population is obese, for example, and in urban Samoa a staggering 70%, and with obesity comes an increasing prevalence of diabetes, cardiovascular disease, musculoskeletal problems, and rocketing healthcare costs. And despite their affluence, over 10% of many rich populations are on antidepressants. Despite these different disease patterns, most early deaths and many disabilities are preventable. We know what to do: improve the conditions in which people are born, grow, live, work, and age. This improvement entails tackling the structural drivers of these conditions: inequities in power, money, and resources. Fortunately, many of the measures needed to improve global health are the same as those needed to make the required 80% reduction in global greenhouse gas emissions. What is good for tackling climate change is good for health, and responding to climate change is not a distraction from the business of protecting health. Protection of public health is the duty to society of health professionals. Their actions are rooted in the ethical obligation to create the best possible circumstances that enable humanity to flourish and be healthy. Many influential health professional bodies and individuals now recognise that if climate change is tackled in a fair and just way, the health of all will be transformed. Solutions are available that health professionals must vigorously promote, particularly as the global response to date has been woefully inadequate: despite numerous global meetings committed to their reduction, carbon dioxide emissions have risen by 45% since 1990.

Tamir, M. and B. Q. Ford (2012). "Should people pursue feelings that feel good or feelings that do good? Emotional preferences and well-being." Emotion. http://www.ncbi.nlm.nih.gov/pubmed/22309724.

Is it adaptive to seek pleasant emotions and avoid unpleasant emotions all the time or seek pleasant and unpleasant emotions at the right time? Participants reported on their preferences for anger and happiness in general and in contexts in which they might be useful or not (i.e., confrontations and collaborations, respectively). People who generally wanted to feel more happiness and less anger experienced greater well-being. However, when emotional preferences were examined in context, people who wanted to feel more anger or more happiness when they were useful, and people who wanted to feel less of those emotions when they were not useful, experienced greater well-being. Such patterns could not be explained by differences in the perceived usefulness of emotions, intelligence, perceived regulatory skills, emotional acceptance, social desirability, or general emotional preferences. These findings demonstrate that people who want to feel unpleasant emotions when they are useful may be happier overall.

Toepfer, S., K. Cichy, et al. (2012). "Letters of gratitude: Further evidence for author benefits." Journal of Happiness Studies **13**(1): 187-201. http://dx.doi.org/10.1007/s10902-011-9257-7.

This study examined the effects of writing letters of gratitude on three primary qualities of well-being; happiness (positive affect), life-satisfaction (cognitive evaluation), and depression (negative affect). Gratitude was also assessed. Participants included 219 men and women who wrote three letters of gratitude over a 3 week period. A two-way mixed method ANOVA with a between factor (writers vs. non-writers) and within subject factor (time of testing) analysis was conducted. Results indicated that writing letters of gratitude increased participants' happiness and life satisfaction, while decreasing depressive symptoms. The implications of this approach for intervention are discussed.

van der Ploeg, H. P., T. Chey, et al. (2012). "Sitting time and all-cause mortality risk in 222 497 Australian adults." Arch Intern Med **172**(6): 494-500. http://archinte.ama-assn.org/cgi/content/abstract/172/6/494.

Background Prolonged sitting is considered detrimental to health, but evidence regarding the independent relationship of total sitting time with all-cause mortality is limited. This study aimed to determine the independent relationship of sitting time with all-cause mortality. Methods We linked prospective questionnaire data from 222 497 individuals 45 years or older from the 45 and Up Study to mortality data from the New South Wales Registry of Births, Deaths, and Marriages (Australia) from February 1, 2006, through December 31, 2010. Cox proportional hazards models examined all-cause mortality in relation to sitting time, adjusting for potential confounders that included sex, age, education, urban/rural residence, physical activity, body mass index, smoking status, self-rated health, and disability. Results During 621 695 person-years of follow-up (mean follow-up, 2.8 years), 5405 deaths were registered. All-cause mortality hazard ratios were 1.02 (95% CI, 0.95-1.09), 1.15 (1.06-1.25), and 1.40 (1.27-1.55) for 4 to less than 8, 8 to less than 11, and 11 or more h/d of sitting, respectively, compared with less than 4 h/d, adjusting for physical activity and other confounders. The population-attributable fraction for sitting was 6.9%. The association between sitting and all-cause mortality appeared consistent across the sexes, age groups, body mass index categories, and physical activity levels and across healthy participants compared with participants with preexisting cardiovascular disease or diabetes mellitus. Conclusions Prolonged sitting is a risk factor for all-cause mortality, independent of physical activity. Public health programs should focus on reducing sitting time in addition to increasing physical activity levels.

Yang, Q., M. E. Cogswell, et al. (2012). "Trends in cardiovascular health metrics and associations with all-cause and CVD mortality among US adults." JAMA **307**(12): 1273-1283. http://jama.ama-assn.org/content/307/12/1273.abstract.

Context Recent recommendations from the American Heart Association aim to improve cardiovascular health by encouraging the general population to meet 7 cardiovascular health metrics: not smoking; being physically active; having normal blood pressure, blood glucose and total cholesterol levels, and weight; and eating a healthy diet. Objective To examine time trends in cardiovascular health metrics and to estimate joint associations and population-attributable fractions of these metrics in relation to all-cause and cardiovascular disease (CVD) mortality risk. Design, Setting, and Participants Study of a nationally representative sample of 44 959 US adults (≥20 years), using data from the National Health and Nutrition Examination Survey (NHANES) 1988-1994, 1999-2004, and 2005-2010 and the NHANES III Linked Mortality File (through 2006). Main Outcome Measures All-cause, CVD, and ischemic heart disease (IHD) mortality. Results Few participants met all 7 cardiovascular health metrics (2.0% [95% CI, 1.5%-2.5%] in 1988-1994, 1.2% [95% CI, 0.8%-1.9%] in 2005-2010). Among NHANES III participants, 2673 all-cause, 1085 CVD, and 576 IHD deaths occurred (median follow-up, 14.5 years). Among participants who met 1 or fewer cardiovascular health metrics, age- and sex-standardized absolute risks were 14.8 (95% CI, 13.2-16.5) deaths per 1000 person-years for all-cause mortality, 6.5 (95% CI, 5.5-7.6) for CVD mortality, and 3.7 (95% CI, 2.8-4.5) for IHD mortality. Among those who met 6 or more metrics, corresponding risks were 5.4 (95% CI, 3.6-7.3) for all-cause mortality, 1.5 (95% CI, 0.5-2.5) for CVD mortality, and 1.1 (95% CI, 0.7-2.0) for IHD mortality. Adjusted hazard ratios were 0.49 (95% CI, 0.33-0.74) for all-cause mortality, 0.24 (95% CI, 0.13-0.47) for CVD mortality, and 0.30 (95% CI, 0.13-0.68) for IHD mortality, comparing participants who met 6 or more vs 1 or fewer cardiovascular health metrics. Adjusted population-attributable fractions were 59% (95% CI, 33%-76%) for all-cause mortality, 64% (95% CI, 28%-84%) for CVD mortality, and 63% (95% CI, 5%-89%) for IHD mortality. Conclusion Meeting a greater number of cardiovascular health metrics was associated with a lower risk of total and CVD mortality, but the prevalence of meeting all 7 cardiovascular health metrics was low in the study population.

Zietsch, B. P., K. J. H. Verweij, et al. (2012). "Do shared etiological factors contribute to the relationship between sexual orientation and depression?" Psychological Medicine **42**(03): 521-532. http://dx.doi.org/10.1017/S0033291711001577.

Background: Gays, lesbians and bisexuals (i.e. non-heterosexuals) have been found to be at much greater risk for many psychiatric symptoms and disorders, including depression. This may be due in part to prejudice and discrimination experienced by non-heterosexuals, but studies controlling for minority stress, or performed in very socially liberal countries, suggest that other mechanisms must also play a role. Here we test the viability of common cause (shared genetic or environmental etiology) explanations of elevated depression rates in non-heterosexuals. Method: A community-based sample of adult twins (n=9884 individuals) completed surveys investigating the genetics of psychiatric disorder, and were also asked about their sexual orientation. Large subsets of the sample were asked about adverse childhood experiences such as sexual abuse, physical abuse and risky family environment, and also about number of older brothers, paternal and maternal age, and number of close friends. Data were analyzed using the classical twin design. Results: Non-heterosexual males and females had higher rates of lifetime depression than their heterosexual counterparts. Genetic factors accounted for 31% and 44% of variation in sexual orientation and depression respectively. Bivariate analysis revealed that genetic factors accounted for a majority (60%) of the correlation between sexual orientation and depression. In addition, childhood sexual abuse and risky family environment were significant predictors of both sexual orientation and depression, further contributing to their correlation. Conclusions: Non-heterosexual men and women had elevated rates of lifetime depression, partly due to shared etiological factors, although causality cannot be definitively resolved.