

# 25 positive psychology abstracts september '14 newsletter

(Ando, Claridge et al. 2014; Bowen, Witkiewitz et al. 2014; Brooks, Dai et al. 2014; Burrow, Sumner et al. 2014; DeSteno, Li et al. 2014; Eastwick and Hunt 2014; Galinsky and Waite 2014; Goyal, Singh et al. 2014; Guevarra and Howell 2014; Headey, Muffels et al. 2014; Ho, Yeung et al. 2014; Huxhold, Miche et al. 2014; Joseph, Kamarck et al. 2014; Kasser, Rosenblum et al. 2014; Kesebir 2014; Kim, Chopik et al. 2014; Moll, Weingartner et al. 2014; Montoya and Horton 2014; Oerlemans and Bakker 2014; Sandstrom and Dunn 2014; Sheldon and Krieger 2014; Singleton, Holzel et al. 2014; Telzer, Fuligni et al. 2014; Wade, Hoyt et al. 2014; Webster, Westerhof et al. 2014)

Ando, V., G. Claridge, et al. (2014). **"Psychotic traits in comedians."** *The British Journal of Psychiatry* 204(5): 341-345. <http://bjp.rcpsych.org/content/204/5/341.abstract>

**Background**The popular belief that creativity is associated with madness has increasingly become the focus of research for many psychologists and psychiatrists. However, despite being prime examples of creative thinking, comedy and humour have been largely neglected. **Aims**To test the hypothesis that comedians would resemble other creative individuals in showing a higher level of psychotic characteristics related to both schizophrenia and manic depression. **Method**A group of comedians (n = 500+) and a control sample of actors (n = 350+) completed an online questionnaire containing the short version of the Oxford-Liverpool Inventory of Feelings and Experiences (O-LIFE), with scales measuring four dimensions of psychotic traits. Scores were compared with general population norms. **Results**Comedians scored significantly above O-LIFE norms on all four scales. Actors also differed from the norms but on only three of the scales. Most striking was the comedians' high score on both introverted anhedonia and extraverted impulsiveness. **Conclusions**This unusual personality structure may help to explain the facility for comedic performance.

Bowen, S., K. Witkiewitz, et al. (2014). **"Relative efficacy of mindfulness-based relapse prevention, standard relapse prevention, and treatment as usual for substance use disorders: A randomized clinical trial."** *JAMA Psychiatry* 71(5): 547-556. <http://dx.doi.org/10.1001/jamapsychiatry.2013.4546>

**Importance** Relapse is highly prevalent following substance abuse treatments, highlighting the need for improved aftercare interventions. Mindfulness-based relapse prevention (MBRP), a group-based psychosocial aftercare, integrates evidence-based practices from mindfulness-based interventions and cognitive-behavioral relapse prevention (RP) approaches. **Objective** To evaluate the long-term efficacy of MBRP in reducing relapse compared with RP and treatment as usual (TAU [12-step programming and psychoeducation]) during a 12-month follow-up period. **Design, Setting, and Participants** Between October 2009 and July 2012, a total of 286 eligible individuals who successfully completed initial treatment for substance use disorders at a private, nonprofit treatment facility were randomized to MBRP, RP, or TAU aftercare and monitored for 12 months. Participants medically cleared for continuing care were aged 18 to 70 years; 71.5% were male and 42.1% were of ethnic/racial minority. **Interventions** Participants were randomly assigned to 8 weekly group sessions of MBRP, cognitive-behavioral RP, or TAU. **Main Outcomes and Measures** Primary outcomes included relapse to drug use and heavy drinking as well as frequency of substance use in the past 90 days. Variables were assessed at baseline and at 3-, 6-, and 12-month follow-up points. Measures used included self-report of relapse and urinalysis drug and alcohol screenings. **Results** Compared with TAU, participants assigned to MBRP and RP reported significantly lower risk of relapse to substance use and heavy drinking and, among those who used substances, significantly fewer days of substance use and heavy drinking at the 6-month follow-up. Cognitive-behavioral RP showed an advantage over MBRP in time to first drug use. At the 12-month follow-up, MBRP participants reported significantly fewer days of substance use and significantly decreased heavy drinking compared with RP and TAU. **Conclusions and Relevance** For individuals in aftercare following initial treatment for substance use disorders, RP and MBRP, compared with TAU, produced significantly reduced relapse risk to drug use and heavy drinking. Relapse prevention delayed time to first drug use at 6-month follow-up, with MBRP and RP participants who used alcohol also reporting significantly fewer heavy drinking days compared with TAU participants. At 12-month follow-up, MBRP offered added benefit over RP and TAU in reducing drug use and heavy drinking. Targeted mindfulness practices may support long-term outcomes by strengthening the ability to monitor and skillfully cope with discomfort associated with craving or negative affect, thus supporting long-term outcomes.

Brooks, A. W., H. Dai, et al. (2014). **"I'm sorry about the rain! Superfluous apologies demonstrate empathic concern and increase trust."** *Social Psychological and Personality Science* 5(4): 467-474. <http://spp.sagepub.com/content/5/4/467.abstract>

Existing apology research has conceptualized apologies as a device to rebuild relationships following a transgression. Individuals, however, often apologize for circumstances for which they are obviously not culpable (e.g., heavy traffic or bad weather). In this article, we define superfluous apologies as expressions of regret for an undesirable circumstance for which the apologizer is clearly not responsible. Across four studies, we find that superfluous apologies increase trust in the apologizer. This effect is mediated by empathic concern. Issuing a superfluous apology demonstrates empathic concern for the victim and increases the victim's trust in the apologizer.

Burrow, A. L., R. Sumner, et al. (2014). **"Perceived change in life satisfaction and daily negative affect: The moderating role of purpose in life."** *Journal of Happiness Studies* 15(3): 579-592. <http://dx.doi.org/10.1007/s10902-013-9436-9>

Perceiving changes in life satisfaction has been linked to diminished health and well-being. Purpose in life is theorized to promote well-being by providing a sense of personal consistency, which may buffer the negative consequences of perceived change. Using data from the Midlife in the United States study, a cluster analysis was performed to explore profiles of adults' (N = 1,746) ratings of life satisfaction for their past, present, and future. The analysis yielded three distinct profiles: continuous high, incremental, and decremental. Relative to the other profiles, decremental adults reported greater levels and variability of negative affect in everyday life. However, purpose moderated these effects such that no between-profile differences in negative affect level or variability were detected for adults reporting greater levels of purpose. Purpose is discussed as an asset for promoting positive adjustment in adulthood.

DeSteno, D., Y. Li, et al. (2014). **"Gratitude: A tool for reducing economic impatience."** *Psychological Science* 25(6): 1262-1267. <http://pss.sagepub.com/content/25/6/1262.abstract>

The human mind tends to excessively discount the value of delayed rewards relative to immediate ones, and it is thought that "hot" affective processes drive desires for short-term gratification. Supporting this view, recent findings

demonstrate that sadness exacerbates financial impatience even when the sadness is unrelated to the economic decision at hand. Such findings might reinforce the view that emotions must always be suppressed to combat impatience. But if emotions serve adaptive functions, then certain emotions might be capable of reducing excessive impatience for delayed rewards. We found evidence supporting this alternative view. Specifically, we found that (a) the emotion gratitude reduces impatience even when real money is at stake, and (b) the effects of gratitude are differentiable from those of the more general positive state of happiness. These findings challenge the view that individuals must tamp down affective responses through effortful self-regulation to reach more patient and adaptive economic decisions.

Eastwick, P. W. and L. L. Hunt (2014). **"Relational mate value: Consensus and uniqueness in romantic evaluations."** *Journal of Personality and Social Psychology* 106(5): 728-751. <http://psycnet.apa.org/journals/psp/106/5/728/>

Classic evolutionary and social exchange perspectives suggest that some people have more mate value than others because they possess desirable traits (e.g., attractiveness, status) that are intrinsic to the individual. This article broadens mate value in 2 ways to incorporate relational perspectives. First, close relationships research suggests an alternative measure of mate value: whether someone can provide a high quality relationship. Second, person perception research suggests that both trait-based and relationship quality measures of mate value should contain a mixture of target variance (i.e., consensus about targets, the classic conceptualization) and relationship variance (i.e., unique ratings of targets). In Study 1, participants described their personal conceptions of mate value and revealed themes consistent with classic and relational approaches. Study 2 used a social relations model blocked design to assess target and relationship variances in participants' romantic evaluations of opposite-sex classmates at the beginning and end of the semester. In Study 3, a one-with-many design documented target and relationship variances among long-term opposite-sex acquaintances. Results generally revealed more relationship variance than target variance; participants' romantic evaluations were more likely to be unique to a particular person rather than consensual. Furthermore, the relative dominance of relationship to target variance was stronger for relational measures of mate value (i.e., relationship quality projections) than classic trait-based measures (i.e., attractiveness, resources). Finally, consensus decreased as participants got to know one another better, and long-term acquaintances in Study 3 revealed enormous amounts of relationship variance. Implications for the evolutionary, close relationships, and person-perception literatures are discussed.

Galinsky, A. M. and L. J. Waite (2014). **"Sexual activity and psychological health as mediators of the relationship between physical health and marital quality."** *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 69(3): 482-492. <http://psychsocgerontology.oxfordjournals.org/content/69/3/482.abstract>

Objectives. The pathways linking spousal health to marital quality in later life have been little examined at the population level. We develop a conceptual model that links married older adults' physical health and that of their spouse to positive and negative dimensions of marital quality via psychological well-being of both partners and their sexual activity. Methods. We use data from 1,464 older adults in 732 marital dyads in the 2010–2011 wave of the National Social Life Health and Aging Project. Results. We find that own fair or poor physical health is linked to lower positive and higher negative marital quality, spouse's health to positive quality, and that own and spouse's mental health and more frequent sex are associated with higher positive and lower negative marital quality. Further, we find that (a) sexual activity mediates the association between own and partner's physical health and positive marital quality, (b) own mental health mediates the association between one's own physical health and both positive and negative marital quality, and (c) partner's mental health mediates the associations of spouse's physical health with positive marital quality. These results are robust to alternative specifications of the model. Discussion. The results suggest ways to protect marital quality among older adults who are struggling with physical illness in themselves or their partners.

Goyal, M., S. Singh, et al. (2014). **"Meditation programs for psychological stress and well-being: A systematic review and meta-analysis."** *JAMA Internal Medicine* 174(3): 357-368. <http://dx.doi.org/10.1001/jamainternmed.2013.13018>

Importance Many people meditate to reduce psychological stress and stress-related health problems. To counsel people appropriately, clinicians need to know what the evidence says about the health benefits of meditation. Objective To determine the efficacy of meditation programs in improving stress-related outcomes (anxiety, depression, stress/distress, positive mood, mental health–related quality of life, attention, substance use, eating habits, sleep, pain, and weight) in diverse adult clinical populations. Evidence Review We identified randomized clinical trials with active controls for placebo effects through November 2012 from MEDLINE, PsycINFO, EMBASE, PsycArticles, Scopus, CINAHL, AMED, the Cochrane Library, and hand searches. Two independent reviewers screened citations and extracted data. We graded the strength of evidence using 4 domains (risk of bias, precision, directness, and consistency) and determined the magnitude and direction of effect by calculating the relative difference between groups in change from baseline. When possible, we conducted meta-analyses using standardized mean differences to obtain aggregate estimates of effect size with 95% confidence intervals. Findings After reviewing 18 753 citations, we included 47 trials with 3515 participants. Mindfulness meditation programs had moderate evidence of improved anxiety (effect size, 0.38 [95% CI, 0.12-0.64] at 8 weeks and 0.22 [0.02-0.43] at 3-6 months), depression (0.30 [0.00-0.59] at 8 weeks and 0.23 [0.05-0.42] at 3-6 months), and pain (0.33 [0.03- 0.62]) and low evidence of improved stress/distress and mental health–related quality of life. We found low evidence of no effect or insufficient evidence of any effect of meditation programs on positive mood, attention, substance use, eating habits, sleep, and weight. We found no evidence that meditation programs were better than any active treatment (ie, drugs, exercise, and other behavioral therapies). Conclusions and Relevance Clinicians should be aware that meditation programs can result in small to moderate reductions of multiple negative dimensions of psychological stress. Thus, clinicians should be prepared to talk with their patients about the role that a meditation program could have in addressing psychological stress. Stronger study designs are needed to determine the effects of meditation programs in improving the positive dimensions of mental health and stress-related behavior.

Guevarra, D. A. and R. T. Howell (2014). **"To have in order to do: Exploring the effects of consuming experiential products on well-being."** *Journal of Consumer Psychology*(0). <http://www.sciencedirect.com/science/article/pii/S1057740814000631>

(Available in free full text) The experience recommendation – if you want to be happier, buy life experiences instead of material items – is supported in empirical research. However, this evidence is primarily based on the dichotomous comparison of material items and life experiences. The goal of this article is to examine the effects of consuming experiential products – purchases that fall between material items and life experiences – on well-being. Study 1 and Study 2 demonstrate that experiential products provide similar levels of well-being compared to life experiences and more well-being than material items. Study 3 replicates this finding for purchases that turn out well. In addition, Study 3 shows experiential products, when compared to life experiences, lead to more feelings of competence but less feelings of relatedness, which explains why these two purchases result in similar levels of well-being. We discuss why experiential products and life experiences lead to psychological need satisfaction and how our results support the Positive-Activity Model, Self-Determination Theory, and Holbrook and Hirschman's hedonic consumption framework.

Headey, B., R. Muffels, et al. (2014). **"Parents transmit happiness along with associated values and behaviors to their children: A lifelong happiness dividend?"** *Social Indicators Research* 116(3): 909-933. <http://dx.doi.org/10.1007/s11205-013-0326-7>

There are strong two-way links between parent and child happiness (life satisfaction), even for 'children' who have grown up, moved to their own home and partnered themselves. German panel evidence shows that transmission of (un)happiness from parents to children is partly due to transmission of values and behaviors known to be associated with happiness (Headey et al. in *Proc Natl Acad Sci* 107(42):17922–17926, 2010, in *Soc Indic Res* doi:10.1007/s11205-012-0079-8, 2012). These values and behaviors include giving priority to pro-social and family values, rather than material values, maintaining a preferred balance between work and leisure, active social and community participation, and regular exercise. Both parents have about equal influence on the values and behaviors which children adopt. However, the life satisfaction of adult 'children' continues to be directly influenced by the life satisfaction of their mothers, with the influence of fathers being only indirect, via transmission of values and behaviors. There appears to be a lifelong happiness dividend (or unhappiness dividend) due to parenting. Structural equation models with two-way causation indicate that the life satisfaction of offspring can significantly affect the satisfaction of their parents, as well as vice versa, long after the 'children' have left home. Data come from 25 waves of the German Socio-Economic Panel Survey (SOEP 1984–2008). SOEP is the only panel survey worldwide in which data on life satisfaction have been obtained from parents and an adequate sub-sample of children no longer living in the parental home.

Ho, H. C. Y., D. Y. Yeung, et al. (2014). **"Development and evaluation of the positive psychology intervention for older adults."** *The Journal of Positive Psychology* 9(3): 187-197. <http://dx.doi.org/10.1080/17439760.2014.888577>

(Available in free full text) Although research suggests that positive psychology intervention can enhance subjective well-being and reduce depression, its effectiveness on older adults remains largely unknown. Therefore the present study aimed to develop and evaluate a custom-tailored positive psychology intervention program for older adults. The program offered nine-week group sessions to 74 older people recruited from district community centers and nursing homes in Hong Kong. The intervention program covers eight themes, including optimism, gratitude, savoring, happiness, curiosity, courage, altruism, and meaning of life. The participants consisted mostly of females aged between 63 and 105 years. One-group pre-test/post-test design was adopted to evaluate the effectiveness of the intervention on depression, life satisfaction, gratitude, and happiness. Results revealed that the intervention reduced the number of depressive symptoms and increased the levels of life satisfaction, gratitude, and happiness. Effectiveness of the intervention is discussed in relation to self-awareness, education, self-reinforcement, and sensitivity to age and culture.

Huxhold, O., M. Miche, et al. (2014). **"Benefits of having friends in older ages: Differential effects of informal social activities on well-being in middle-aged and older adults."** *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 69(3): 366-375. <http://psychsocgerontology.oxfordjournals.org/content/69/3/366.abstract>

(Free full text available) Objectives. It has been considered a fact that informal social activities promote well-being in old age, irrespective of whether they are performed with friends or family members. Fundamental differences in the relationship quality between family members (obligatory) and friends (voluntary), however, suggest differential effects on well-being. Further, age-related changes in networks suggest age-differential effects of social activities on well-being, as older adults cease emotionally detrimental relationships. Method. Longitudinal representative national survey study with middle-aged ( $n = 2,830$ ) and older adults ( $n = 2,032$ ). Age-differential effects of activities with family members and friends on changes in life satisfaction, positive affect (PA), and negative affect (NA) were examined in latent change score models. Results. In the middle-aged group, activities with friends and families increased PA and life satisfaction and were unrelated to NA. In the older age group, family activities increased both PA and NA and were unrelated to changes in life satisfaction, but activities with friends increased PA and life satisfaction and decreased NA. Discussion. Social activities differentially affect different facets of well-being. These associations change with age. In older adults, the effects of social activities with friends may become more important and may act as a buffer against negative effects of aging.

Joseph, N. T., T. W. Kamarck, et al. (2014). **"Daily marital interaction quality and carotid artery intima-medial thickness in healthy middle-aged adults."** *Psychosomatic Medicine* 76(5): 347-354. doi:10.1097/PSY.0000000000000071. [http://journals.lww.com/psychosomaticmedicine/Fulltext/2014/06000/Daily\\_Marital\\_Interaction\\_Quality\\_and\\_Carotid.5.aspx](http://journals.lww.com/psychosomaticmedicine/Fulltext/2014/06000/Daily_Marital_Interaction_Quality_and_Carotid.5.aspx)

Objective: To examine the association between marital interaction quality during daily life and subclinical cardiovascular disease (CVD). Studies have shown that marital status and quality of marriage are associated with cardiovascular health. However, little is known about the role of marital interaction quality during daily life in contributing to these effects. Methods: The sample consisted of 281 healthy, employed middle-aged adults who were married or living with a partner in a marital-like relationship (mean age = 42.0 years, 88% white, 52% men). Marital interaction quality was assessed using hourly real-time ecological momentary assessments for 4 days, with participants rating their current or recent partner interactions on positive and negative characteristics (e.g., agreeableness and conflict). Carotid artery intima-medial thickness (IMT) was assessed using ultrasound imaging. Results: Adjusting for demographics, positive marital interaction was inversely associated with IMT ( $b = -0.02$ ,  $F(1,275) = 9.18$ ,  $p = .002$ ), and negative marital interaction was positively associated with IMT ( $b = 0.02$ ,  $F(1,275) = 10.29$ ,  $p = .001$ ). These associations were not accounted for by behavioral and biological CVD risk factors and were consistent across age, sex, race, and education. The associations were also independent of marital interaction frequency, nonmarital social interaction quality, and personality factors. Global reports of marital quality, in contrast, were not associated with IMT. Conclusions: Marital quality as measured during real-time interactions between partners was associated with subclinical CVD in healthy middle-aged adults. This study supports the use of real-time social interaction assessment for characterizing links between social relationships and cardiovascular health.

Kasser, T., K. Rosenblum, et al. (2014). **"Changes in materialism, changes in psychological well-being: Evidence from three longitudinal studies and an intervention experiment."** *Motivation and Emotion* 38(1): 1-22. <http://dx.doi.org/10.1007/s11031-013-9371-4>

Few studies have examined how changes in materialism relate to changes in well-being; fewer have experimentally manipulated materialism to change well-being. Studies 1, 2, and 3 examined how changes in materialistic aspirations related to changes in well-being, using varying time frames (12 years, 2 years, and 6 months), samples (US young adults and Icelandic adults), and measures of materialism and well-being. Across all three studies, results supported the hypothesis that people's well-being improves as they place relatively less importance on materialistic goals and values, whereas orienting toward materialistic goals relatively more is associated with decreases in well-being over time. Study 2 additionally demonstrated that this association was mediated by changes in psychological need satisfaction. A fourth, experimental study showed that highly materialistic US adolescents who received an intervention that decreased materialism also experienced increases in self-esteem over the next several months, relative to a control group. Thus, well-being changes as people change their relative focus on materialistic goals.

Kesebir, P. (2014). **"A quiet ego quiets death anxiety: Humility as an existential anxiety buffer."** *J Pers Soc Psychol* 106(4): 610-623. <http://www.ncbi.nlm.nih.gov/pubmed/24660992>

Five studies tested the hypothesis that a quiet ego, as exemplified by humility, would buffer death anxiety. Humility is characterized by a willingness to accept the self and life without comforting illusions, and by low levels of self-focus. As a consequence, it was expected to render mortality thoughts less threatening and less likely to evoke potentially destructive behavior patterns. In line with this reasoning, Study 1 found that people high in humility do not engage in self-serving moral disengagement following mortality reminders, whereas people low in humility do. Study 2 showed that only people low in humility respond to death reminders with increased fear of death, and established that this effect was driven uniquely by humility and not by some other related personality trait. In Study 3, a low sense of psychological entitlement decreased cultural worldview defense in response to death thoughts, whereas a high sense of entitlement tended to increase it. Study 4 demonstrated that priming humility reduces self-reported death anxiety relative to both a baseline and a pride priming condition. Finally, in Study 5, experimentally induced feelings of humility prevented mortality reminders from leading to depleted self-control. As a whole, these findings obtained from relatively diverse Internet samples illustrate that the dark side of death anxiety is brought about by a noisy ego only and not by a quiet ego, revealing self-transcendence as a sturdier, healthier anxiety buffer than self-enhancement. (PsycINFO Database Record (c) 2014 APA, all rights reserved).

Kim, E. S., W. J. Chopik, et al. (2014). **"Are people healthier if their partners are more optimistic? The dyadic effect of optimism on health among older adults."** *Journal of Psychosomatic Research* 76(6): 447-453. <http://www.sciencedirect.com/science/article/pii/S0022399914001731>

Objective Optimism has been linked with an array of positive health outcomes at the individual level. However, researchers have not examined how a spouse's optimism might impact an individual's health. We hypothesized that being optimistic (and having an optimistic spouse) would both be associated with better health. Methods Participants were 3940 adults (1970 couples) from the Health and Retirement Study, a nationally representative panel study of American adults over the age of 50. Participants were tracked for four years and outcomes included: physical functioning, self-rated health, and number of chronic illnesses. We analyzed the dyadic data using the actor-partner interdependence model. Results After controlling for several psychological and demographic factors, a person's own optimism and their spouse's optimism predicted better self-rated health and physical functioning ( $b_s = .08-.25, p < .01$ ). More optimistic people also reported better physical functioning ( $b = -.11, p < .01$ ) and fewer chronic illnesses ( $b = -.01, p < .05$ ) over time. Further, having an optimistic spouse uniquely predicted better physical functioning ( $b = -.09, p < .01$ ) and fewer chronic illnesses ( $b = -.01, p < .05$ ) over time. The strength of the relationship between optimism and health did not diminish over time. Conclusions Being optimistic and having an optimistic spouse were both associated with better health. Examining partner effects is important because such analyses reveal the unique role that spouses play in promoting health. These findings may have important implications for future health interventions.

Moll, J., J. H. Weingartner, et al. (2014). **"Voluntary enhancement of neural signatures of affiliative emotion using fmri neurofeedback."** *PLoS ONE* 9(5): e97343. <http://dx.doi.org/10.1371/journal.pone.0097343>

(Free full text available) In Ridley Scott's film "Blade Runner", empathy-detection devices are employed to measure affiliative emotions. Despite recent neurocomputational advances, it is unknown whether brain signatures of affiliative emotions, such as tenderness/affection, can be decoded and voluntarily modulated. Here, we employed multivariate voxel pattern analysis and real-time fMRI to address this question. We found that participants were able to use visual feedback based on decoded fMRI patterns as a neurofeedback signal to increase brain activation characteristic of tenderness/affection relative to pride, an equally complex control emotion. Such improvement was not observed in a control group performing the same fMRI task without neurofeedback. Furthermore, the neurofeedback-driven enhancement of tenderness/affection-related distributed patterns was associated with local fMRI responses in the septohypothalamic area and frontopolar cortex, regions previously implicated in affiliative emotion. This demonstrates that humans can voluntarily enhance brain signatures of tenderness/affection, unlocking new possibilities for promoting prosocial emotions and countering antisocial behavior.

Montoya, R. M. and R. S. Horton (2014). **"A two-dimensional model for the study of interpersonal attraction."** *Personality and Social Psychology Review* 18(1): 59-86. <http://psr.sagepub.com/content/18/1/59.abstract>

We describe a model for understanding interpersonal attraction in which attraction can be understood as a product of the initial evaluations we make about others. The model posits that targets are evaluated on two basic dimensions, capacity and willingness, such that affective and behavioral attraction result from evaluations of (a) a target's capacity to facilitate the perceiver's goals/needs and (b) a target's potential willingness to facilitate those goals/needs. The plausibility of the two-dimensional model of attraction is evaluated vis-à-vis the extant literature on various attraction phenomena including the reciprocity of liking effect, pratfall effect, matching hypothesis, arousal effects, and similarity effect. We conclude that considerable evidence across a wide range of phenomena supports the idea that interpersonal attraction is principally determined by inferences about the target's capacity and willingness.

Oerlemans, W. G. M. and A. B. Bakker (2014). **"Why extraverts are happier: A day reconstruction study."** *Journal of Research in Personality* 50(0): 11-22. <http://www.sciencedirect.com/science/article/pii/S0092656614000063>

The study contributes to the literature on extraversion and momentary happiness by examining processes that might underlie this robust effect. The affective-reactivity hypothesis suggests that extraverts react more positively to rewarding situations as compared to introverts. According to the person-by-situation model, extraverts should enjoy social interactions more than introverts do. Global reports of extraversion were combined with an ecologically valid Day Reconstruction Method (DRM) to assess time spent and happiness of 1364 participants during 13,973 activities. Multilevel results confirm that extraverts (versus introverts) experience a higher boost in momentary happiness when spending time on rewarding – but not pleasurable – activities, especially when rewarding activities are executed with others. These processes partly explain why extraverts are happier in the moment.

Sandstrom, G. M. and E. W. Dunn (2014). **"Is efficiency overrated?: Minimal social interactions lead to belonging and positive affect."** *Social Psychological and Personality Science* 5(4): 437-442. <http://spp.sagepub.com/content/5/4/437.abstract>

When we buy our daily cup of coffee, sometimes we engage in a social interaction with the barista, and sometimes we are in a rush. Every day we have opportunities to transform potentially impersonal, instrumental exchanges into genuine social interactions, and the happiness literature suggests that we may reap benefits by doing so; in other words, treating a service provider like we would an acquaintance (i.e., weak tie) might make us happier. In the current study, people who had a social interaction with a barista (i.e., smiled, made eye contact, and had a brief conversation) experienced more positive affect than people who were as efficient as possible. Further, we found initial evidence that these effects were mediated by feelings of

belonging. These results suggest that, although people are often reluctant to have a genuine social interaction with a stranger, they are happier when they treat a stranger like a weak tie.

Sheldon, K. M. and L. S. Krieger (2014). **"Service job lawyers are happier than money job lawyers, despite their lower income."** *The Journal of Positive Psychology* 9(3): 219-226. <http://dx.doi.org/10.1080/17439760.2014.888583>

(Free full text available) Giving too much emphasis to extrinsic values and too little emphasis to intrinsic values is known to depress well-being. But is simply working in an extrinsic job also risky, even if that job delivers the money? We compared 1414 'Money' (extrinsic) lawyers, 1145 'Service' (intrinsic) lawyers, and 3415 'Other' lawyers as to their income, values, well-being, and drinking behavior. Although service lawyers had much lower incomes, they also experienced more well-being and less negative affect compared to money lawyers, and drank less and less often. ANCOVAs showed that the intrinsic vs. extrinsic job-type effects were independent of rated intrinsic vs. extrinsic values, current income, years of work experience, and class rank at graduation, suggesting that the job-contexts themselves were operative. We discuss the difficult choice that pre-professional students face, between two versions of the American dream: one emphasizing wealth and status, and the other, service and personal development.

Singleton, O., B. K. Holzel, et al. (2014). **"Change in brainstem gray matter concentration following a mindfulness-based intervention is correlated with improvement in psychological well-being."** *Front Hum Neurosci* 8: 33. <http://journal.frontiersin.org/Journal/10.3389/fnhum.2014.00033/full>

(Available in free full text) Individuals can improve their levels of psychological well-being (PWB) through utilization of psychological interventions, including the practice of mindfulness meditation, which is defined as the non-judgmental awareness of experiences in the present moment. We recently reported that an 8-week-mindfulness-based stress reduction (MBSR) course lead to increases in gray matter concentration in several brain areas, as detected with voxel-based morphometry of magnetization prepared rapid acquisition gradient echo MRI scans, including the pons/raphe/locus coeruleus area of the brainstem. Given the role of the pons and raphe in mood and arousal, we hypothesized that changes in this region might underlie changes in well-being. A subset of 14 healthy individuals from a previously published data set completed anatomical MRI and filled out the PWB scale before and after MBSR participation. PWB change was used as the predictive regressor for changes in gray matter density within those brain regions that had previously shown pre- to post-MBSR changes. Results showed that scores on five PWB subscales as well as the PWB total score increased significantly over the MBSR course. The change was positively correlated with gray matter concentration increases in two symmetrically bilateral clusters in the brainstem. Those clusters appeared to contain the area of the pontine tegmentum, locus coeruleus, nucleus raphe pontis, and the sensory trigeminal nucleus. No clusters were negatively correlated with the change in PWB. This preliminary study suggests a neural correlate of enhanced PWB. The identified brain areas include the sites of synthesis and release of the neurotransmitters, norepinephrine and serotonin, which are involved in the modulation of arousal and mood, and have been related to a variety of affective functions as well as associated clinical dysfunctions.

Telzer, E. H., A. J. Fuligni, et al. (2014). **"Neural sensitivity to eudaimonic and hedonic rewards differentially predict adolescent depressive symptoms over time."** *Proc Natl Acad Sci U S A* 111(18): 6600-6605. <http://www.ncbi.nlm.nih.gov/pubmed/24753574>

The pursuit of happiness and reward is an impetus for everyday human behavior and the basis of well-being. Although optimal well-being may be achieved through eudaimonic activities (e.g., meaning and purpose), individuals tend to orient toward hedonic activities (e.g., pleasure seeking), potentially placing them at risk for ill-being. We implemented a longitudinal study and followed adolescents over 1 y to examine whether neural sensitivity to eudaimonic (e.g., prosocial decisions) and hedonic (e.g., selfish rewards and risky decisions) rewards differentially predicts longitudinal changes in depressive symptoms. Ventral striatum activation during eudaimonic decisions predicted longitudinal declines in depressive symptoms, whereas ventral striatum activation to hedonic decisions related to longitudinal increases in depressive symptoms. These findings underscore how the motivational context underlying neural sensitivity to rewards can differentially predict changes in well-being over time. Importantly, to our knowledge, this is the first study to show that striatal activation within an individual can be both a source of risk and protection.

Wade, N. G., W. T. Hoyt, et al. (2014). **"Efficacy of psychotherapeutic interventions to promote forgiveness: A meta-analysis."** *J Consult Clin Psychol* 82(1): 154-170. <http://www.ncbi.nlm.nih.gov/pubmed/24364794>

OBJECTIVE: This meta-analysis addressed the efficacy of psychotherapeutic interventions to help people forgive others and to examine moderators of treatment effects. METHOD: Eligible studies reported quantitative data on forgiveness of a specific hurt following treatment by a professional with an intervention designed explicitly to promote forgiveness. Random effects meta-analyses were conducted using  $k = 53$  posttreatment effect sizes ( $N = 2,323$ ) and  $k = 41$  follow-up effect sizes ( $N = 1,716$ ) from a total of 54 published and unpublished research reports. RESULTS: Participants receiving explicit forgiveness treatments reported significantly greater forgiveness than participants not receiving treatment ( $\Delta + = 0.56 [0.43, 0.68]$ ) and participants, receiving alternative treatments ( $\Delta + = 0.45 [0.21, 0.69]$ ). Also, forgiveness treatments resulted in greater changes in depression, anxiety, and hope than no-treatment conditions. Moderators of treatment efficacy included treatment dosage, offense severity, treatment model, and treatment modality. Multimoderator analyses indicated that treatment dosage (i.e., longer interventions) and modality (individual > group) uniquely predicted change in forgiveness compared with no-treatment controls. Compared with alternative treatment conditions, both modality (individual > group) and offense severity were marginally predictive ( $ps < .10$ ) of treatment effects. CONCLUSIONS: It appears that using theoretically grounded forgiveness interventions is a sound choice for helping clients to deal with past offenses and helping them achieve resolution in the form of forgiveness. Differences between treatment approaches disappeared when controlling for other significant moderators; the advantage for individual interventions was most clearly demonstrated for Enright-model interventions, as there have been no studies of individual interventions using the Worthington model.

Webster, J. D., G. J. Westerhof, et al. (2014). **"Wisdom and mental health across the lifespan."** *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences* 69(2): 209-218. <http://psychsocgerontology.oxfordjournals.org/content/69/2/209.abstract>

Objectives. The relationships between wisdom and age and between wisdom and mental health are complex with empirical results often inconsistent. We used a lifespan sample and broad, psychometrically sound measures of wisdom and mental health to test for possible age trends in wisdom and its subcomponents and the relationship between wisdom and hedonic and eudaimonic aspects of well-being. Method. Participants included 512 Dutch adults ranging in age from 17 to 92 ( $M$  age = 46.46,  $SD = 21.37$ ), including 186 men and 326 women. Participants completed measures of wisdom, physical health, mental health, and personality. Results. Significant quadratic trends indicated that middle-aged adults scored higher on wisdom than younger and older adults. Investigation of wisdom subcomponents illustrated that a complex pattern of increases and decreases in different aspects of wisdom helped account for these age findings. Bivariate correlations showed the expected

positive association between wisdom and mental health. Hierarchic regression analyses indicated that the positive association between wisdom and mental health remained significant after accounting for demographic variables (i.e., sex, age, education) and personality traits (i.e., neuroticism, extraversion, and openness to experience). Discussion. Age trends in the components of wisdom (older adults higher in life experience but lower in openness relative to younger and middle-aged adults) help explain the curvilinear pattern showing an advantage in wisdom for middle-aged adults. The greater association between wisdom and eudaimonic well-being suggests that wise persons enhance mental health by pursuing meaningful activities.