

34 compassion abstracts

may/august '13

Currently the Compassion SIG covers four overlapping areas - Self Compassion, General Compassion, Compassion in Close Relationships and Compassion in the Therapeutic Relationship. Here are thirty four recent relevant research abstracts:

(Desbordes, Negi et al. 2012; Ijzerman, Gallucci et al. 2012; Kelly, Carter et al. 2012; Akin, Dunn et al. 2013; Arnett 2013; Babula 2013; Bhasin, Dusek et al. 2013; Chapman, Hare et al. 2013; Critcher, Inbar et al. 2013; Eisenberger 2013; Fetterman and Robinson 2013; Finkel, Slotter et al. 2013; Frimer, Biesanz et al. 2013; Heim, Mayberg et al. 2013; Hoge, Chen et al. 2013; Houssais, Oettingen et al. 2013; Hunter, Hurley et al. 2013; Jacobs Bao and Lyubomirsky 2013; Jensen, Petrovic et al. 2013; Kuyken, Weare et al. 2013; Logan and Cobb 2013; Mascaró, Rilling et al. 2013; Mascaró, Rilling et al. 2013; Morledge, Allexandre et al. 2013; Muise, Impett et al. 2013; Okimoto, Wenzel et al. 2013; Overall, Simpson et al. 2013; Pardess, Mikulincer et al. 2013; Riem, van Ijzendoorn et al. 2013; Rosette and Tost 2013; Twenge 2013; Van Doesum, Van Lange et al. 2013; Weng, Fox et al. 2013; Yeager, Purdie-Vaughns et al. 2013)

Akin, L. B., E. W. Dunn, et al. (2013). **"Does social connection turn good deeds into good feelings? On the value of putting the 'social' in prosocial spending."** *Int. J. of Happiness and Development* 1(2): 155-171.
<http://www.inderscience.com/info/inarticle.php?artid=55643>

When are the emotional benefits of generous behaviour most likely to emerge? In three studies, we demonstrate that the hedonic benefits of emotional spending are most likely when spending promotes positive social connection. Study 1 shows that people feel happier after giving more to charity, but only when they give to someone connected with the cause. Studies 2 and 3 show that the emotional rewards associated with giving to friends or acquaintances are greatest in situations that facilitate social connection. Thus, social connection may be important for turning good deeds into good feelings, and maximising connectedness between givers and recipients may enhance the emotional payoff of charitable initiatives. (*Medical Xpress* - <http://medicalxpress.com/news/2013-08-social-happier.html> - comments "People usually feel good when they make a charitable donation, but they feel even better if they make the donation directly to someone they know or in a way that builds social connection. Research to be published in the *International Journal of Happiness and Development* investigates for the first time how social connection helps turn generous behavior into positive feelings on the part of the donor. Lara Akin of Simon Fraser University, in Burnaby, British Columbia, Canada, and colleagues at the University of British Columbia, Vancouver and Harvard Business School, Massachusetts, USA, wanted to examine when the emotional benefits of giving to charity become manifest. They carried out three studies of charitable donations, or more precisely pro-social spending, and found that spending money on others or giving money to charity leads to the greatest happiness boost when giving fosters social connection. The overarching conclusion is that donors feel happiest if they give to a charity via a friend, relative or social connection rather than simply making an anonymous donation to a worthy cause. The research has implications for not-for-profit organizations hoping to maximize donations, suggesting that recruiting advocates and helping them build on their social connections could have benefits for the donors too. Extending these findings, it is possible that if donors have a greater sense of happiness when giving involves making a social connection one might imagine that the positive emotions might even lead to more frequent and perhaps bigger donations. Extrapolating further from the research happy donors might themselves be more likely to become advocates for a given cause or benefit it through their spontaneous word-of-mouth marketing." The findings also complement earlier research that has demonstrated a positive effect on happiness of social interaction and taking part in voluntary work. "While additional factors other than social connection likely influence the happiness gained from pro-social spending our findings suggest that putting the social in pro-social is one way to transform good deeds into good feelings," the team concludes.")

Arnett, J. J. (2013). **"The evidence for generation we and against generation me."** *Emerging Adulthood* 1(1): 5-10.
<http://eax.sagepub.com/content/1/1/5.abstract>

(Free full text - currently - available) This article addresses the question of whether today's emerging adults are excessively "narcissistic" as claimed by Jean Twenge and others. The answer is a decisive "no." There is no persuasive evidence that scores on the Narcissistic Personality Inventory (NPI) have risen among college students in recent decades. In any case, the NPI is a dubious measure of narcissism, and college students are a dubious sample of emerging adults. There is evidence that today's emerging adults have high expectations and are confident in their abilities, but these qualities should be seen as psychological resources during a life stage that is often difficult. If it were true that their narcissism was rising and that narcissism leads to impulsive behavior, then impulsive behavior would also be rising, but in fact it is diminishing across multiple indicators. As a society, we can and should do more to support emerging adults, beginning with a halt to the negative stereotypes.

Babula, M. W. (2013). **"The unlikely samaritans."** *Journal of Applied Social Psychology* 43(4): 899-908.
<http://dx.doi.org/10.1111/jasp.12055>

The helping motivations of wealth-driven college students were investigated. Tang et al. argues that wealth-driven individuals are extrinsically motivated, and that extrinsic motivation negatively relates to helping behavior. The results of questionnaires and experimentation here contradict the recent literature. Seventy-two percent of subjects reported wealth as a top priority in life. Fifty-six percent of subjects would take an insider trading tip, and 78% of subjects offered help to a confederate who just learned his family member was in an accident and needed to make a telephone call. Logistic regression results showed intrinsic motivation among participants significantly predicted increased helping behavior. It is recommended that surveys used to create new paradigms be followed up with experimentation whenever feasible. [*The excellent BPS Digest* - <http://www.bps-research-digest.blogspot.co.uk/2013/04/students-who-want-to-get-rich-are-just.html> - comments: "Bankers, investors, stock market traders and their ilk have been vilified in recent years, in large part because the global financial crisis has been blamed on their allegedly unchecked selfishness and greed. In fact, there's a widespread implicit belief that a love of money goes hand in hand with selfishness. A study published in 2008 backed this up - people with a greater love of money tended to report being more selfish at work. A new study with business students at Loyola University challenges this narrative. In contrast to the 2008 paper, Michael Babula's study measured actual behaviour. The fifty students completed questionnaires about their religiosity and desire for wealth, then they headed, one at a time, across the building to give a short presentation, either about careers for economics students or about the relevance of the Good Samaritan parable to their future career. Before they headed over to give their speech, half were told to hurry, time was short; the others were told there was no rush. Then, just before they reached the lecture room, a distressed, anxious stranger approached them. This person had just heard news

that a relative had had an accident, but now their mobile phone had run out of battery and they had no change for a public pay-phone. The key test was whether and how much each student would offer to help the stranger in distress. Seventy-eight per cent of the business students offered some kind of help to the stranger. Sixty-six per cent went so far as refusing to leave the stranger or giving him/her their mobile phone. The degree to which the students reported being wealth-driven was not associated with their levels of helping. Neither was their self-reported willingness to accept an illegal stock trading tip off. Being in a hurry also made no difference, neither did the content of the speech they were about to give. A factor that was linked with helping behaviour was "intrinsic religiosity" - that is, pursuing religion as an end in itself, not for the sake of status or other gain. Babula cautioned that this was an exploratory study and he acknowledged the small size of his sample. However, he said it showed the importance of measuring actual behaviour, rather than relying on questionnaires as past research has tended to do. "Wealth-driven individuals often do engage in intrinsically motivated helping behaviour when directly facing an emergency situation," he said. Though today's executives are widely reviled - an attitude reflected by Hollywood's release of a new version of *Wall Street: Money Never Sleeps*, and Vatican official Tarcisio Bertone's statement: "Greed market has substituted free market" - Babula urged social scientists to "reserve judgment" and to "take a cautious approach to studying the helping behaviour of wealth-driven individuals. "The world has certainly encountered modern-day Samaritans coming from the business community," he added. "Witness the life of Oskar Schindler."]

Bhasin, M. K., J. A. Dusek, et al. (2013). "**Relaxation response induces temporal transcriptome changes in energy metabolism, insulin secretion and inflammatory pathways.**" *PLoS ONE* 8(5): e62817. <http://dx.doi.org/10.1371/journal.pone.0062817>

The relaxation response (RR) is the counterpart of the stress response. Millennia-old practices evoking the RR include meditation, yoga and repetitive prayer. Although RR elicitation is an effective therapeutic intervention that counteracts the adverse clinical effects of stress in disorders including hypertension, anxiety, insomnia and aging, the underlying molecular mechanisms that explain these clinical benefits remain undetermined. To assess rapid time-dependent (temporal) genomic changes during one session of RR practice among healthy practitioners with years of RR practice and also in novices before and after 8 weeks of RR training, we measured the transcriptome in peripheral blood prior to, immediately after, and 15 minutes after listening to an RR-eliciting or a health education CD. Both short-term and long-term practitioners evoked significant temporal gene expression changes with greater significance in the latter as compared to novices. RR practice enhanced expression of genes associated with energy metabolism, mitochondrial function, insulin secretion and telomere maintenance, and reduced expression of genes linked to inflammatory response and stress-related pathways. Interactive network analyses of RR-affected pathways identified mitochondrial ATP synthase and insulin (INS) as top upregulated critical molecules (focus hubs) and NF- κ B pathway genes as top downregulated focus hubs. Our results for the first time indicate that RR elicitation, particularly after long-term practice, may evoke its downstream health benefits by improving mitochondrial energy production and utilization and thus promoting mitochondrial resiliency through upregulation of ATPase and insulin function. Mitochondrial resiliency might also be promoted by RR-induced downregulation of NF- κ B-associated upstream and downstream targets that mitigates stress.

Chapman, M. J., D. J. Hare, et al. (2013). "**The use of mindfulness with people with intellectual disabilities: A systematic review and narrative analysis.**" *Mindfulness (N.Y.)* 4(2): 179-189. <http://dx.doi.org/10.1007/s12671-013-0197-7>

This paper presents a systematic review of the evidence on the effectiveness of mindfulness for people with intellectual disabilities. Primary studies published in the English language between 1980 and 2012 were identified from electronic databases, experts and citation tracking. Eleven relevant studies evaluating mindfulness training and practice were identified: seven studies with people with intellectual disabilities, two studies with staff members or teams and two studies with parents. The studies found improvements in aggression and sexual arousal for people with intellectual disabilities after mindfulness training. Training staff led to benefits for people with intellectual disabilities, decreased use of physical restraint for aggressive behaviour and increased job satisfaction. Training parents led to improved parental satisfaction and well-being and improved parent-child interactions. The reported positive findings suggest that service providers, people with intellectual disabilities and their families may want to consider mindfulness approaches. However, the findings have to be interpreted with caution due to methodological weaknesses identified in the studies. Further high-quality independent research is needed before the reported improvements can be more confidently attributed to mindfulness.

Critcher, C. R., Y. Inbar, et al. (2013). "**How quick decisions illuminate moral character.**" *Social psychological and personality science* 4(3): 308-315. <http://spp.sagepub.com/content/4/3/308.abstract>

It has been suggested that people attend to others' actions in the service of forming impressions of their underlying dispositions. If so, it follows that in considering others' morally relevant actions, social perceivers should be responsive to accompanying cues that help illuminate actors' underlying moral character. This article examines one relevant cue that can characterize any decision process: the speed with which the decision is made. Two experiments show that actors who make an immoral decision quickly (vs. slowly) are evaluated more negatively. In contrast, actors who arrive at a moral decision quickly (vs. slowly) receive particularly positive moral character evaluations. Quick decisions carry this signal value because they are assumed to reflect certainty in the decision (Experiments 1 and 2), which in turn signals that more unambiguous motives drove the behavior (Experiment 2), which in turn explains the more polarized moral character evaluations. Implications for moral psychology and the law are discussed.

Desbordes, G., L. T. Negi, et al. (2012). "**Effects of mindful-attention and compassion meditation training on amygdala response to emotional stimuli in an ordinary, non-meditative state.**" *Front Hum Neurosci* 6: 292. <http://www.ncbi.nlm.nih.gov/pubmed/23125828>

The amygdala has been repeatedly implicated in the emotional processing of both positive and negative-valence stimuli. Previous studies suggest that the amygdala response to emotional stimuli is lower when the subject is in a meditative state of mindful-attention, both in beginner meditators after an 8-week meditation intervention and in expert meditators. However, the longitudinal effects of meditation training on amygdala responses have not been reported when participants are in an ordinary, non-meditative state. In this study, we investigated how 8 weeks of training in meditation affects amygdala responses to emotional stimuli in subjects when in a non-meditative state. Healthy adults with no prior meditation experience took part in 8 weeks of either Mindful Attention Training (MAT), Cognitively-Based Compassion Training (CBCT; a program based on Tibetan Buddhist compassion meditation practices), or an active control intervention. Before and after the intervention, participants underwent an fMRI experiment during which they were presented images with positive, negative, and neutral emotional valences from the IAPS database while remaining in an ordinary, non-meditative state. Using a region-of-interest analysis, we found a longitudinal decrease in right amygdala activation in the Mindful Attention group in response to positive images, and in response to images of all valences overall. In the CBCT group, we found a trend increase in right amygdala response to negative

images, which was significantly correlated with a decrease in depression score. No effects or trends were observed in the control group. This finding suggests that the effects of meditation training on emotional processing might transfer to non-meditative states. This is consistent with the hypothesis that meditation training may induce learning that is not stimulus- or task-specific, but process-specific, and thereby may result in enduring changes in mental function.

Eisenberger, N. I. (2013). **"An empirical review of the neural underpinnings of receiving and giving social support: Implications for health."** *Psychosomatic Medicine* 75(6): 545-556. <http://www.psychosomaticmedicine.org/content/75/6/545.abstract>

Decades of research have demonstrated strong links between social ties and health. Although considerable evidence has shown that social support can attenuate downstream physiological stress responses that are relevant to health, the neurocognitive mechanisms that translate perceptions of social ties into altered physiological responses are still not fully understood. This review integrates research from social and affective neuroscience to illuminate some of the neural mechanisms involved in social support processes, which may further our understanding of the ways in which social support influences health. This review focuses on two types of social support that have been shown to relate to health: receiving and giving social support. As the neural basis of receiving support, this article reviews the hypothesis that receiving support may benefit health through the activation of neural regions that respond to safety and inhibit threat-related neural and physiological responding. This article will then review neuroimaging studies in which participants were primed with or received support during a negative experience as well as studies in which self-reports of perceived support were correlated with neural responses to a negative experience. As the neural basis of giving support, this article reviews the hypothesis that neural regions involved in maternal caregiving behavior may be critical for the health benefits of support-giving through the inhibition of threat-related neural and physiological responding. Neuroimaging studies in which participants provided support to others or engaged in other related forms of prosocial behavior will then be reviewed. Implications of these findings for furthering our understanding of the relationships between social support and health are discussed.

Fetterman, A. K. and M. D. Robinson (2013). **"Do you use your head or follow your heart? Self-location predicts personality, emotion, decision making, and performance."** *J Pers Soc Psychol* 105(2): 316-334. <http://www.ncbi.nlm.nih.gov/pubmed/23773045>

The head is thought to be rational and cold, whereas the heart is thought to be emotional and warm. In 8 studies (total N = 725), we pursued the idea that such body metaphors are widely consequential. Study 1 introduced a novel individual difference variable, one asking people to locate the self in the head or the heart. Irrespective of sex differences, head-locators characterized themselves as rational, logical, and interpersonally cold, whereas heart-locators characterized themselves as emotional, feminine, and interpersonally warm (Studies 1-3). Study 4 showed that head-locators were more accurate in answering general knowledge questions and had higher grade point averages, and Study 5 showed that heart-locators were more likely to favor emotional over rational considerations in moral decision making. Study 6 linked self-locations to reactivity phenomena in daily life--for example, heart-locators experienced greater negative emotion on high stressor days. In Study 7, we manipulated attention to the head versus the heart and found that head-pointing facilitated intellectual performance, whereas heart-pointing led to emotional decision making. Study 8 replicated Study 3's findings with a nearly year-long delay between the self-location and outcome measures. The findings converge on the importance of head-heart metaphors for understanding individual differences in cognition, emotion, and performance.

Finkel, E. J., E. B. Slotter, et al. (2013). **"A brief intervention to promote conflict reappraisal preserves marital quality over time."** *Psychological Science* 24(8): 1595-1601. <http://pss.sagepub.com/content/24/8/1595.abstract>

(Downloadable in free full text from author's website - <http://faculty.wcas.northwestern.edu/eli-finkel/>) Marital quality is a major contributor to happiness and health. Unfortunately, marital quality normatively declines over time. We tested whether a novel 21-min intervention designed to foster the reappraisal of marital conflicts could preserve marital quality in a sample of 120 couples enrolled in an intensive 2-year study. Half of the couples were randomly assigned to receive the reappraisal intervention in Year 2 (following no intervention in Year 1); half were not. Both groups exhibited declines in marital quality over Year 1. This decline continued in Year 2 among couples in the control condition, but it was eliminated among couples in the reappraisal condition. This effect of the reappraisal intervention on marital quality over time was mediated through reductions in conflict-related distress over time. This study illustrates the potential of brief, theory-based, social-psychological interventions to preserve the quality of intimate relationships over time.

Frimer, J. A., J. C. Biesanz, et al. (2013). **"Liberals and conservatives rely on common moral foundations when making moral judgments about influential people."** *J Pers Soc Psychol* 104(6): 1040-1059. <http://www.ncbi.nlm.nih.gov/pubmed/23586414>

Do liberals and conservatives have qualitatively different moral points of view? Specifically, do liberals and conservatives rely on the same or different sets of moral foundations--care, fairness, loyalty, authority, and purity (Haidt, 2012)--when making moral judgments about influential people? In Study 1, 100 experts evaluated the impact that 40 influential figures had on each moral foundation, yielding stimulus materials for the remaining studies. In Study 2, 177 American liberal and conservative professors rated the moral character of the same figures. Liberals and conservatives relied on the same 3 moral foundations: For both groups, promoting care, fairness, and purity--but not authority or loyalty--predicted moral judgments of the targets. For liberals, promoting authority negatively predicted moral judgments. Political ideology moderated the purity-moral and especially authority-moral relationships, implying that purity and authority are grounds for political disagreement. Study 3 replicated these results with 222 folk raters. Folk liberals and conservatives disagreed even less about the moral standing of the targets than did experts. Together, these findings imply that moral foundation theory may have exaggerated differences between liberals and conservatives. The moral codes of liberals and conservatives do differ systematically; however, their similarities outweigh their differences. Liberals and conservatives alike rely on care, fairness, and purity when making moral judgments about influential people.

Heim, C. M., H. S. Mayberg, et al. (2013). **"Decreased cortical representation of genital somatosensory field after childhood sexual abuse."** *Am J Psychiatry* 170(6): 616-623. <http://www.ncbi.nlm.nih.gov/pubmed/23732967>

OBJECTIVE: Sexual dysfunction is a common clinical symptom in women who were victims of childhood sexual abuse. The precise mechanism that mediates this association remains poorly understood. The authors evaluated the relationship between the experience of childhood abuse and neuroplastic thinning of cortical fields, depending on the nature of the abusive experience. **METHOD:** The authors used MRI-based cortical thickness analysis in 51 medically healthy adult women to test whether different forms of childhood abuse were associated with cortical thinning in areas critical to the perception and processing of specific behavior implicated in the type of abuse. **RESULTS:** Exposure to childhood sexual abuse was specifically associated with pronounced cortical thinning in the genital representation field of the primary somatosensory cortex. In contrast, emotional abuse was associated with cortical thinning in regions relevant to self-awareness and self-evaluation. **CONCLUSIONS:**

Neural plasticity during development appears to result in cortical adaptation that may shield a child from the sensory processing of the specific abusive experience by altering cortical representation fields in a regionally highly specific manner. Such plastic reorganization may be protective for the child living under abusive conditions, but it may underlie the development of behavioral problems, such as sexual dysfunction, later in life.

Hoge, E. A., M. M. Chen, et al. (2013). **"Loving-kindness meditation practice associated with longer telomeres in women."** *Brain Behav Immun* 32: 159-163. <http://www.ncbi.nlm.nih.gov/pubmed/23602876>

Relatively short telomere length may serve as a marker of accelerated aging, and shorter telomeres have been linked to chronic stress. Specific lifestyle behaviors that can mitigate the effects of stress might be associated with longer telomere lengths. Previous research suggests a link between behaviors that focus on the well-being of others, such as volunteering and caregiving, and overall health and longevity. We examined relative telomere length in a group of individuals experienced in Loving-Kindness Meditation (LKM), a practice derived from the Buddhist tradition which utilizes a focus on unselfish kindness and warmth towards all people, and control participants who had done no meditation. Blood was collected by venipuncture, and Genomic DNA was extracted from peripheral blood leukocytes. Quantitative real time PCR was used to measure relative telomere length (RTL) (Cawthon, 2002) in fifteen LKM practitioners and 22 control participants. There were no significant differences in age, gender, race, education, or exposure to trauma, but the control group had a higher mean body mass index (BMI) and lower rates of past depression. The LKM practitioners had longer RTL than controls at the trend level ($p=.083$); among women, the LKM practitioners had significantly longer RTL than controls, ($p=.007$), which remained significant even after controlling for BMI and past depression. Although limited by small sample size, these results offer the intriguing possibility that LKM practice, especially in women, might alter RTL, a biomarker associated with longevity.

Houssais, S., G. Oettingen, et al. (2013). **"Using mental contrasting with implementation intentions to self-regulate insecurity-based behaviors in relationships."** *Motivation and Emotion* 37(2): 224-233. <http://dx.doi.org/10.1007/s11031-012-9307-4>

In relationships, behaviors aimed at alleviating insecurity often end up increasing it instead. The present research tested whether a self-regulatory technique, mental contrasting with implementation intentions (MCII), can help people reduce the frequency with which they engage in insecurity-based behaviors. Participants in romantic relationships identified an insecurity-based behavior they wanted to reduce and learned the MCII strategy, a reverse control strategy, or no strategy. One week later, participants in the MCII condition showed a greater reduction in the self-reported frequency of their unwanted behavior compared to participants in the control conditions, as well as a greater increase in relationship commitment from 2 months prior to the intervention. (free PDF available from [http://www.epb.uni-hamburg.de/files/Houssais,%20S.,%20Oettingen,%20G.,%20Mayer,%20D.%20\(2013\).%20Motivation%20and%20Emotion.pdf](http://www.epb.uni-hamburg.de/files/Houssais,%20S.,%20Oettingen,%20G.,%20Mayer,%20D.%20(2013).%20Motivation%20and%20Emotion.pdf)).

Hunter, S., R. A. Hurley, et al. (2013). **"A look inside the mirror neuron system."** *J Neuropsychiatry Clin Neurosci* 25(3): vi-175. <http://dx.doi.org/10.1176/appi.neuropsych.13060128>

(Free full text downloadable) Over 20 years ago, the world was introduced to a fascinating new class of cortical neurons that responded similarly when a goal-directed action was performed and when performance of the same action by another was observed. The authors of these studies called them mirror neurons (MNs) and noted the potential importance of such neurons for learning by imitation and for understanding the actions of others. Since that time, MNs have been identified in many species, including humans. Considered by some a cornerstone of human empathy, language, and other vital processes, MNs are the subject of lively ongoing debates and controversies.

Ijzerman, H., M. Gallucci, et al. (2012). **"Cold-blooded loneliness: Social exclusion leads to lower skin temperatures."** *Acta Psychol (Amst)* 140(3): 283-288. <http://www.ncbi.nlm.nih.gov/pubmed/22717422>

Being ostracized or excluded, even briefly and by strangers, is painful and threatens fundamental needs. Recent work by Zhong and Leonardelli (2008) found that excluded individuals perceive the room as cooler and that they desire warmer drinks. A perspective that many rely on in embodiment is the theoretical idea that people use metaphorical associations to understand social exclusion (see Landau, Meier, & Keefer, 2010). We suggest that people feel colder because they are colder. The results strongly support the idea that more complex metaphorical understandings of social relations are scaffolded onto literal changes in bodily temperature: Being excluded in an online ball tossing game leads to lower finger temperatures (Study 1), while the negative affect typically experienced after such social exclusion is alleviated after holding a cup of warm tea (Study 2). The authors discuss further implications for the interaction between body and social relations specifically, and for basic and cognitive systems in general.

Jacobs Bao, K. and S. Lyubomirsky (2013). **"Making it last: Combating hedonic adaptation in romantic relationships."** *The Journal of Positive Psychology* 8(3): 196-206. <http://dx.doi.org/10.1080/17439760.2013.777765>

(Freely downloadable in full text from <http://sonjaljubomirsky.com/files/2012/09/Bao-Lyubomirsky-in-press.pdf>) Is the waning of passion and satisfaction in romantic relationships inevitable, or can the honeymoon period be sustained? The Hedonic Adaptation Prevention model, which describes the mechanisms by which people adapt to positive life changes, posits that hedonic adaptation is a powerful barrier to sustained relationship well-being and suggests how to thwart it. In this paper, we apply the model to a new area of study - namely, intimate relationships. We explore the practices, habits, and activities that can increase the number of positive events and emotions in relationships, boost their variety, lower a couple's entitled aspirations, and build their appreciation - all variables that can serve to slow adaptation and increase well-being. Additionally, we discuss types of romantic relationships (e.g. long-distance relationships and unhealthy relationships) that may be relatively less susceptible to hedonic adaptation.

Jensen, K. B., P. Petrovic, et al. (2013). **"Sharing pain and relief: Neural correlates of physicians during treatment of patients."** *Mol Psychiatry*. <http://www.ncbi.nlm.nih.gov/pubmed/23358155>

Patient-physician interactions significantly contribute to placebo effects and clinical outcomes. While the neural correlates of placebo responses have been studied in patients, the neurobiology of the clinician during treatment is unknown. This study investigated physicians' brain activations during patient-physician interaction while the patient was experiencing pain, including a 'treatment', 'no-treatment' and 'control' condition. Here, we demonstrate that physicians activated brain regions previously implicated in expectancy for pain-relief and increased attention during treatment of patients, including the right ventrolateral and dorsolateral prefrontal cortices. The physician's ability to take the patients' perspective correlated with increased brain activations in the rostral anterior cingulate cortex, a region that has been associated with processing of reward and subjective value. We suggest that physician treatment involves neural representations of treatment expectation, reward processing and empathy, paired with increased activation in attention-related structures. Our findings further the understanding

of the neural representations associated with reciprocal interactions between clinicians and patients; a hallmark for successful treatment outcomes.

Kelly, A. C., J. C. Carter, et al. (2012). **"Self-compassion and fear of self-compassion interact to predict response to eating disorders treatment: A preliminary investigation."** *Psychotherapy Research* 23(3): 252-264. <http://dx.doi.org/10.1080/10503307.2012.717310>

Gilbert (2005) proposed that the capacity for self-compassion is integral to overcoming shame and psychopathology. We tested this model among 74 individuals with an eating disorder admitted to specialized treatment. Participants completed measures assessing self-compassion, fear of self-compassion, shame, and eating disorder symptoms at admission and every 3 weeks during treatment. At baseline, lower self-compassion and higher fear of self-compassion were associated with more shame and eating disorder pathology. Multilevel modeling also revealed that patients with combinations of low self-compassion and high fear of self-compassion at baseline had significantly poorer treatment responses, showing no significant change in shame or eating disorder symptoms over 12 weeks. Results highlight a new subset of treatment-resistant eating disorder patients.

Kuyken, W., K. Weare, et al. (2013). **"Effectiveness of the mindfulness in schools programme: Non-randomised controlled feasibility study."** *The British Journal of Psychiatry*. <http://bjp.rcpsych.org/content/early/2013/06/11/bjp.bp.113.126649.abstract>

Background: Mindfulness-based approaches for adults are effective at enhancing mental health, but few controlled trials have evaluated their effectiveness among young people. Aims: To assess the acceptability and efficacy of a schools-based universal mindfulness intervention to enhance mental health and well-being. Method: A total of 522 young people aged 12-16 in 12 secondary schools either participated in the Mindfulness in Schools Programme (intervention) or took part in the usual school curriculum (control). Results: Rates of acceptability were high. Relative to the controls, and after adjusting for baseline imbalances, children who participated in the intervention reported fewer depressive symptoms post-treatment ($P = 0.004$) and at follow-up ($P = 0.005$) and lower stress ($P = 0.05$) and greater well-being ($P = 0.05$) at follow-up. The degree to which students in the intervention group practised the mindfulness skills was associated with better well-being ($P < 0.001$) and less stress ($P = 0.03$) at 3-month follow-up. Conclusions: The findings provide promising evidence of the programme's acceptability and efficacy.

Logan, J. M. and R. J. Cobb (2013). **"Trajectories of relationship satisfaction: Independent contributions of capitalization and support perceptions."** *Personal Relationships* 20(2): 277-293. <http://dx.doi.org/10.1111/j.1475-6811.2012.01408.x>

Associations among perceptions of partner responses to disclosures about capitalization and support experiences and relationship satisfaction were examined over 1 year in 268 individuals in romantic relationships. Multilevel modeling indicated that capitalization and support perceptions covaried over 1 year, but they independently predicted contemporaneous relationship satisfaction and appeared to be compensatory processes. However, with increasing relationship duration, support perceptions became more strongly associated with relationship satisfaction, whereas capitalization perceptions became less strongly associated with relationship satisfaction, suggesting that capitalization perceptions may play less of a buffering role with time. Results suggested that perceiving partners as interested and enthusiastic in the face of triumph, and as caring and supportive in the face of difficulties, serve important and independent relationship maintenance functions.

Mascaro, J. S., J. K. Rilling, et al. (2013). **"Pre-existing brain function predicts subsequent practice of mindfulness and compassion meditation."** *Neuroimage* 69: 35-42. <http://www.ncbi.nlm.nih.gov/pubmed/23266748>

While a variety of meditation techniques are increasingly employed as health interventions, the fact that meditation requires a significant commitment of time and effort may limit its potential widespread utility. In the current study, we ask whether baseline subjective reports or brain activity in response to a "Pain for Self and Others" paradigm predicts subsequent engagement in mindfulness and compassion meditation. The study also investigated whether compassion training would impact neural responses when compared to an active health education control group. Prior to training, activation of the left and right anterior insula, an area thought to be important for empathy, in response to the Other pain task was positively related to engagement with compassion meditation as measured by practice time ($n=13$). On the other hand, activity in the left amygdala during the Self pain task was negatively correlated with mindfulness practice time. Following the study intervention, there was no difference between the compassion group ($n=13$), and the control group ($n=8$), in brain responses to either the Self or Other task. These results are the first to indicate that baseline neural responses may predict engagement with meditation training and suggest that pre-existing neurobiological profiles differentially predispose individuals to engage with disparate meditation techniques.

Mascaro, J. S., J. K. Rilling, et al. (2013). **"Compassion meditation enhances empathic accuracy and related neural activity."** *Soc Cogn Affect Neurosci* 8(1): 48-55. <http://www.ncbi.nlm.nih.gov/pubmed/22956676>

The ability to accurately infer others' mental states from facial expressions is important for optimal social functioning and is fundamentally impaired in social cognitive disorders such as autism. While pharmacologic interventions have shown promise for enhancing empathic accuracy, little is known about the effects of behavioral interventions on empathic accuracy and related brain activity. This study employed a randomized, controlled and longitudinal design to investigate the effect of a secularized analytical compassion meditation program, cognitive-based compassion training (CBCT), on empathic accuracy. Twenty-one healthy participants received functional MRI scans while completing an empathic accuracy task, the Reading the Mind in the Eyes Test (RMET), both prior to and after completion of either CBCT or a health discussion control group. Upon completion of the study interventions, participants randomized to CBCT and were significantly more likely than control subjects to have increased scores on the RMET and increased neural activity in the inferior frontal gyrus (IFG) and dorsomedial prefrontal cortex (dmPFC). Moreover, changes in dmPFC and IFG activity from baseline to the post-intervention assessment were associated with changes in empathic accuracy. These findings suggest that CBCT may hold promise as a behavioral intervention for enhancing empathic accuracy and the neurobiology supporting it.

Morledge, T. J., D. Alexandre, et al. (2013). **"Feasibility of an online mindfulness program for stress management - a randomized, controlled trial."** *Ann Behav Med*. <http://www.ncbi.nlm.nih.gov/pubmed/23632913>

BACKGROUND: Chronic stress affects many Americans. Stress management programs may be prohibitively expensive or have limited access. PURPOSE: This study aims to determine feasibility of an 8-week Internet-based stress management program (ISM) based on mindfulness principles in reducing stress in a 12-week, parallel, randomized, controlled trial. METHODS: Participants were randomly allocated to ISM, ISM plus online message board (ISM+), or control groups. Perceived stress, mindfulness, self-transcendence, psychological well-being, vitality, and quality of life were measured at baseline, week 8, and week 12 using standard validated questionnaires. RESULTS: ISM and ISM+ groups demonstrated statistically significant

improvements compared with control on all measures except vitality and physical health. **CONCLUSIONS:** The ISM program effectively and sustainably reduced measures of stress. The magnitude of improvement is comparable to traditional mindfulness programs, although fewer participants were engaged. This feasibility study provides strong support for online stress management programs, which increase access at a fraction of cost of traditional programs.

Muise, A., E. A. Impett, et al. (2013). **"Keeping the spark alive: Being motivated to meet a partner's sexual needs sustains sexual desire in long-term romantic relationships."** *Social psychological and personality science* 4(3): 267-273. <http://spp.sagepub.com/content/4/3/267.abstract>

How can couples keep the sexual spark alive in long-term relationships? The current study draws upon existing research and theory on both communal relationships and approach-avoidance models of social motivation to test the hypothesis that individual differences in the motivation to meet a partner's sexual needs, termed sexual communal strength, predict heightened feelings of sexual desire in long-term partnerships. In a 21-day daily experience study of 44 long-term couples, individuals higher in sexual communal strength engaged in daily sexual interactions for approach goals, and in turn, reported high levels of daily sexual desire. Sexual communal strength also buffered against declines in sexual desire over a 4-month period of time. These associations held after controlling for general communal strength, relationship satisfaction, sexual frequency, age, and whether or not the couples had children. These findings demonstrate the utility of extending theories of communal motivation to the sexual domain of relationships.

Okimoto, T. G., M. Wenzel, et al. (2013). **"Refusing to apologize can have psychological benefits (and we issue no mea culpa for this research finding)."** *European Journal of Social Psychology* 43(1): 22-31. <http://dx.doi.org/10.1002/ejsp.1901>

(Free full text available) Despite an understanding of the perception and consequences of apologies for their recipients, little is known about the consequences of interpersonal apologies, or their denial, for the offending actor. In two empirical studies, we examined the unexplored psychological consequences that follow from a harm-doer's explicit refusal to apologize. Results showed that the act of refusing to apologize resulted in greater self-esteem than not refusing to apologize. Moreover, apology refusal also resulted in increased feelings of power/control and value integrity, both of which mediated the effect of refusal on self-esteem. These findings point to potential barriers to victim-offender reconciliation after an interpersonal harm, highlighting the need to better understand the psychology of harm-doers and their defensive behavior for self-focused motives.

Overall, N. C., J. A. Simpson, et al. (2013). **"Buffering attachment-related avoidance: Softening emotional and behavioral defenses during conflict discussions."** *J Pers Soc Psychol* 104(5): 854-871. <http://www.ncbi.nlm.nih.gov/pubmed/23607533>

This study examined whether partners can soften the defenses associated with attachment-related avoidance. Heterosexual couples (N = 180) were video-recorded having 2 discussions in which 1 partner (the agent of influence) wanted the other partner (the target of influence) to change in some way. After rating how successful the discussion was in producing change, agents and targets reviewed their discussions. At the end of every 30 s of the interaction, they reported how angry they were during that portion of the discussion. For each 30-s interval, objective coders rated the extent to which targets of influence exhibited withdrawal and agents of influence (partners) softened their influence by being sensitive to targets' autonomy needs and by conveying that targets were valued. As predicted, avoidant targets showed greater anger and withdrawal when they were the target of their partner's influence, and these defensive reactions were associated with less successful discussions. However, analyzing within-person changes in emotions and behavior across the discussion revealed that avoidant targets' anger and withdrawal were attenuated at points during the discussion when their partners exhibited higher levels of softening communication. Between-person analyses comparing average levels of anger and partner softening across dyads also revealed that avoidant targets whose partners engaged in more softening experienced less anger and, in turn, couples' discussions were more successful. These results highlight the importance of dyadic processes in understanding the impact of attachment insecurity on relationships, and indicate that partners can buffer avoidant defenses by down-regulating anger and circumventing withdrawal during conflict discussions.

Pardess, E., M. Mikulincer, et al. (2013). **"Dispositional attachment orientations, contextual variations in attachment security, and compassion fatigue among volunteers working with traumatized individuals."** *J Pers.* <http://www.ncbi.nlm.nih.gov/pubmed/23909745>

OBJECTIVE: In the present article, we report a series of studies examining the links between attachment orientations and compassion fatigue among volunteers working with traumatized individuals. **METHOD:** In Study 1 (N = 148), we examined associations between self-reports of attachment insecurities and compassion fatigue. In Study 2 (N = 54), we used a diary design to assess attachment-related differences in emotional reactions to actual helping encounters over a 2-month period. In Study 3 (N = 108), we examined the effects of the experimental enhancement of attachment security (security priming) on reactions to a hypothetical helping encounter. **RESULTS:** As expected, attachment insecurities, either anxiety or avoidance, were associated with heightened compassion fatigue. Moreover, security priming reduced compassion fatigue in response to a hypothetical helping encounter. **CONCLUSIONS:** These findings underscore the relevance of attachment theory for understanding and preventing compassion fatigue.

Riem, M. M., M. H. van Ijzendoorn, et al. (2013). **"Oxytocin effects on complex brain networks are moderated by experiences of maternal love withdrawal."** *Eur Neuropsychopharmacol.* <http://www.ncbi.nlm.nih.gov/pubmed/23453164>

The neuropeptide oxytocin has been implicated in a variety of social processes. However, recent studies indicate that oxytocin does not enhance prosocial behavior in all people in all circumstances. Here, we investigate effects of intranasal oxytocin administration on intrinsic functional brain connectivity with resting state functional magnetic resonance imaging. Participants were 42 women who received a nasal spray containing either 16 IU of oxytocin or a placebo and reported how often their mother used love withdrawal as a disciplinary strategy involving withholding love and affection after a failure or misbehavior. We found that oxytocin changes functional connectivity between the posterior cingulate cortex (PCC) and the brainstem. In the oxytocin group there was a positive connectivity between these regions, whereas the placebo group showed negative connectivity. In addition, oxytocin induced functional connectivity changes between the PCC, the cerebellum and the postcentral gyrus, but only for those participants who experienced low levels of maternal love withdrawal. We speculate that oxytocin enhances prosocial behavior by influencing complex brain networks involved in self-referential processing and affectionate touch, most prominently in individuals with supportive family backgrounds.

Rosette, A. S. and L. P. Tost (2013). **"Perceiving social inequity: When subordinate-group positioning on one dimension of social hierarchy enhances privilege recognition on another."** *Psychological Science* 24(8): 1420-1427. <http://pss.sagepub.com/content/24/8/1420.abstract>

Researchers have suggested that viewing social inequity as dominant-group privilege (rather than subordinate-group disadvantage) enhances dominant-group members' support for social policies aimed at lessening such inequity. However,

because viewing inequity as dominant-group privilege can be damaging to dominant-group members' self-images, this perspective is frequently resisted. In the research reported here, we explored the circumstances that enhance the likelihood of dominant-group members' viewing inequity as privilege. Because social hierarchies have multiple vertical dimensions, individuals may have high status on one dimension but low status on another. We predicted that occupying a subordinate position on one dimension of social hierarchy could enhance perceptions of one's own privilege on a different dimension of hierarchy, but that this tendency would be diminished among individuals who felt they had achieved a particularly high level of success. Results from three studies that considered gender-based and race-based hierarchies in organizational settings supported our hypothesis.

Twenge, J. M. (2013). **"The evidence for generation me and against generation we."** *Emerging Adulthood* 1(1): 11-16. <http://eax.sagepub.com/content/1/1/11.abstract>

(Free full text - currently - available) According to the empirical evidence, today's emerging adults (Millennials/GenY, born after 1980) are more Generation Me than Generation We when compared to previous generations. Five data sets show a generational increase in narcissism, including one that demonstrates significant increases when a confound is controlled. College and child samples increase in self-esteem over the generations. Some high school samples show no change, though high school students increasingly embrace other overly positive self-views. In nationally representative samples of high school and college students, values have shifted toward extrinsic (money, fame, and image) concerns and away from intrinsic (community, affiliation) concerns. These trends have mostly negative consequences, such as lower empathy, less concern for others, and less civic engagement (e.g., interest in social issues, government, and politics). Parents and teachers should focus on teaching children and adolescents the values of hard work and consideration for others instead of an inflated sense of self.

Van Doesum, N. J., D. A. Van Lange, et al. (2013). **"Social mindfulness: Skill and will to navigate the social world."** *J Pers Soc Psychol* 105(1): 86-103. <http://www.ncbi.nlm.nih.gov/pubmed/23647176>

Although one may not always see it, social life often involves choices that make people act in ways that are mindful of others or not. We adopt an interdependence theoretical approach to the novel concept of social mindfulness, which we conceptualize in terms of other-regarding choices involving both skill (to see it, e.g., theory of mind, perspective taking) and will (to do it, e.g., empathic concern, prosocial orientation) to act mindfully toward another person's control over outcomes. We operationalized social mindfulness in a new social decision-making paradigm that focuses on leaving or limiting choice options for others that we tested across 7 studies. Studies 1a through 1c showed that people with other-oriented mindsets left interdependent others more choice than people with self-oriented and/or unspecified mindsets. Studies 2a and 2b revealed that people developed more favorable judgments of a socially mindful than of a socially unmindful person. Study 3 revealed that unknown others with trustworthy (vs. untrustworthy) faces were met with more social mindfulness. Study 4 revealed that social mindfulness could be traced in personality by being positively related to Honesty-Humility and Agreeableness (HEXACO Personality Inventory-Revised) as well as to Empathy (Interpersonal Reactivity Index) and a prosocial value orientation (SVO). Together, these studies contribute to explaining how social mindfulness can help people to navigate the social world by aiming to maximize other people's control over their situational outcomes.

Weng, H. Y., A. S. Fox, et al. (2013). **"Compassion training alters altruism and neural responses to suffering."** *Psychological Science* 24(7): 1171-1180. <http://pss.sagepub.com/content/24/7/1171.abstract>

Compassion is a key motivator of altruistic behavior, but little is known about individuals' capacity to cultivate compassion through training. We examined whether compassion may be systematically trained by testing whether (a) short-term compassion training increases altruistic behavior and (b) individual differences in altruism are associated with training-induced changes in neural responses to suffering. In healthy adults, we found that compassion training increased altruistic redistribution of funds to a victim encountered outside of the training context. Furthermore, increased altruistic behavior after compassion training was associated with altered activation in brain regions implicated in social cognition and emotion regulation, including the inferior parietal cortex and dorsolateral prefrontal cortex (DLPFC), and in DLPFC connectivity with the nucleus accumbens. These results suggest that compassion can be cultivated with training and that greater altruistic behavior may emerge from increased engagement of neural systems implicated in understanding the suffering of other people, executive and emotional control, and reward processing.

Yeager, D. S., V. Purdie-Vaughns, et al. (2013). **"Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the racial divide."** *J Exp Psychol Gen*. <http://www.ncbi.nlm.nih.gov/pubmed/23937186>

Three double-blind randomized field experiments examined the effects of a strategy to restore trust on minority adolescents' responses to critical feedback. In Studies 1 and 2, 7th-grade students received critical feedback from their teacher that, in the treatment condition, was designed to assuage mistrust by emphasizing the teacher's high standards and belief that the student was capable of meeting those standards - a strategy known as wise feedback. Wise feedback increased students' likelihood of submitting a revision of an essay (Study 1) and improved the quality of their final drafts (Study 2). Effects were generally stronger among African American students than among White students, and particularly strong among African Americans who felt more mistrusting of school. Indeed, among this latter group of students, the 2-year decline in trust evident in the control condition was, in the wise feedback condition, halted. Study 3, undertaken in a low-income public high school, used attributional retraining to teach students to attribute critical feedback in school to their teachers' high standards and belief in their potential. It raised African Americans' grades, reducing the achievement gap. Discussion centers on the roles of trust and recursive social processes in adolescent development.