34 mindfulness & compassion relevant abstracts: may '18 newsletter

Abraham, E., G. Raz, et al. (2017). *"Empathy networks in the parental brain and their long-term effects on children's stress reactivity and behavior adaptation."* Neuropsychologia. https://www.ncbi.nlm.nih.gov/pubmed/28412510
  Parental empathy is a key component of sensitive parenting that supports children's social adaptation throughout life. Consistent with a two dissociable network perspective on empathy, we measured within- and between-network integrity of two empathy-related networks in the parental brain as predictors of children's social outcomes across the first six years of life. We focused on two empathy networks; embodied simulation, which supports parents' capacity to resonate with infant state and emotions and implicates cingulo-insulary structures, and mentalizing, which underpins parents' theory-of-mind and mental attributions via prefrontal-temporo-parietal circuit. We followed 87 first-time parents across the first six years of family formation, including heterosexual and homosexual parents. In infancy, parents' brain response to own versus unfamiliar infant stimuli was imaged; in preschool, children's cortisol production and emotion regulation were assessed; and at six years, children's behavior problems were reported. Parents' intra- and inter- network integrity increased when viewing their own infant compared to unfamiliar infant, suggesting that attachment stimuli increase network coherence in the parental brain. Functional connectivity within the parent's embodied simulation network in infancy predicted lower child cortisol production while inter-network connectivity among the embodied simulation and mentalizing networks was associated with more advanced child emotion regulation skills in preschool and lower internalizing problems at six years. Children's emotion regulation capacities mediated the link between inter-network integrity in the parental brain and internalizing symptoms. Our findings, the first to demonstrate that integrity of empathy-related networks in the parental brain shape children's long-term stress reactivity and emotional adaptation, highlight the brain component of the parental empathy attribute, suggest that increased coherence within the "parental caregiving network" marks a key feature of parent-infant attachment, and contribute to discussion on biobehavioral mechanisms underpinning the cross-generation transmission of human stress reactivity and sociality.

Bartolini, S. and F. Sarracino (2017). *"Twenty-five years of materialism: Do the us and europe diverge?"* Social Indicators Research 133(2): 787-817. https://doi.org/10.1007/s11205-016-1381-7
  Using data from the World Values Survey and the European Values Study, we compare the trends of materialism over the last quarter of century among the US and six major European countries: France, Spain, Italy, Germany, Great Britain and Sweden. We use the definition of materialism adopted by positive psychologists. We find that the trends in Europe and in the US diverged. In the US materialism increased, while in Europe it decreased. However, some mixed patterns arise. In particular, Great Britain, Spain and Sweden showed some symptoms of an increase of materialistic values, although they were far less pronounced compared to the American ones. As far as the levels of materialism are concerned, it is interesting that, according to most of our measures, Americans were relatively less materialistic at the beginning of our period of observation. Yet, towards the end of the period they scored very high in the ranking of materialism in our sample of countries.

Brienza, J. P. and I. Grossmann (2017). *"Social class and wise reasoning about interpersonal conflicts across regions, persons and situations."* Proceedings of the Royal Society B: Biological Sciences 284(1869). http://rspb.royalsocietypublishing.org/content/royprsb/284/1869/20171870.full.pdf
  (Available in free full text) We propose that class is inversely related to a propensity for using wise reasoning (recognizing limits of their knowledge, consider world in flux and change, acknowledges and integrate different perspectives) in interpersonal situations, contrary to established class advantage in abstract cognition. Two studies—an online survey from regions differing in economic affluence (n = 2 145) and a representative in-lab study with stratified sampling of adults from working and middle-class backgrounds (n = 299)—tested this proposition, indicating that higher social class consistently related to lower levels of wise reasoning across different levels of analysis, including regional and individual differences, and subjective construal of specific situations. The results held across personal and standardized hypothetical situations, across self-reported and observed wise reasoning, and when controlling for fluid and crystallized cognitive abilities. Consistent with an ecological framework, class differences in wise reasoning were specific to interpersonal (versus societal) conflicts. These findings suggest that higher social class weighs individuals down by providing the ecological constraints that undermine wise reasoning about interpersonal affairs.

Cacioppo, J. T., H. Y. Chen, et al. (2017). *"Reciprocal influences between loneliness and self-centeredness: A cross-lagged panel analysis in a population-based sample of african american, hispanic, and caucasian adults."* Personality and Social Psychology Bulletin 43(8): 1125-1135. http://journals.sagepub.com/doi/abs/10.1177/0146167217705120
  Loneliness has been posited to increase the motivation to repair or replace deficient social relationships and, seemingly paradoxically, to increase the implicit motivation for self-preservation. In the current research, we report a cross-lagged panel analysis of 10 waves of longitudinal data (N = 229) on loneliness and self-centeredness (as gauged by Feeney and Collins's measure of chronic self-focus) in a representative sample of middle-aged and older adults. As predicted by the proposition that loneliness increases the implicit motivation for self-preservation, loneliness in the current year predicts self-centeredness in the subsequent year beyond what is explained by current-year demographic variables, self-centeredness, depressive symptomatology, and overall negative mood. Analyses also show that self-centeredness in the current year (net covariates) predicts loneliness in the subsequent year, a reciprocal relationship that could potentially contribute to the maintenance of loneliness. Theoretical and practical implications are discussed.

Conradi, H. J., J. H. Kamphuis, et al. (2018). *"Adult attachment predicts the seven-year course of recurrent depression in primary care."* Journal of Affective Disorders 225: 160-166. http://www.sciencedirect.com/science/article/pii/S0165032717304093
  (Available in free full text) Background Attachment theory posits that attachment has a persistent, long-term impact on depression. Empirical data on associations between adult attachment and the long-term course of depression is, however, scarce. The present study addresses this omission. Method Primary care patients with a history of depression (n = 103) completed the Experiences in Close Relationships questionnaire measuring adult attachment dimensions (avoidance and anxiety) and styles (secure, preoccupied, dismissing and fearful). The subsequent seven-year course of depression was assessed with the face-to-face administered Composite International Diagnostic Interview (CIDI) and a life-chart interview based on the Longitudinal Interval Follow-up Evaluation (LIFE). At the end of the seven-year follow-up severity of depression was additionally measured with the Beck Depression Inventory (BDI). Results The attachment dimensions avoidance and anxiety both showed significant associations during the seven-year course with lower proportions of depressive symptom-free time and higher severity of depression (LIFE and BDI). The secure style predicted compared to preoccupied attachment a significantly higher

proportion of symptom-free time (4.97 vs. 1.10 years), compared to dismissing attachment a higher proportion of symptom-free time (4.97 vs. 2.20 years) and lower severity of depression (LIFE: 1.65 vs. 2.14; BDI 6.04 vs. 9.52), and compared to fearful attachment a lower relapse/recurrence rate (45.7% vs. 76.9%), higher proportions of depression diagnosis-free time (7.31 vs. 6.65 years) and symptom-free time (4.97 vs. 0.29 years), and lower severity of depression (LIFE: 1.65 vs. 2.19; BDI 6.04 vs. 15.54). Limitations Sample size was restricted. Conclusion Insecure attachment predicts an unfavorable course of depression over a seven-year period.

Cruwys, T., J. R. H. Wakefield, et al. (2018). *"Social isolation predicts frequent attendance in primary care."* Annals of Behavioral Medicine: kax054-kax054. http://dx.doi.org/10.1093/abm/kax054
        Background Frequent attenders in primary care have complex physical and mental healthcare needs as well as low satisfaction with their health care. Interventions targeting mental health or psychoeducation have not been effective in reducing attendance. Here, we test the proposition that both frequent attendance and poor health are partly explained by unmet social needs (i.e., limited social group support networks). Methods Study 1 (N = 1,752) was a large, cross-sectional community sample of primary care attenders in Scotland. Study 2 (N = 79) was a longitudinal study of a group of young people undergoing a life transition (moving countries and commencing university) that increased their risk of frequent attendance. Study 3 (N = 46) was a pre–post intervention study examining whether disadvantaged adults who joined a social group subsequently had reduced frequency of primary care attendance. Results All three studies found that low social group connectedness was associated with a higher frequency of primary care attendance. This was not attributable to poorer health among those who were socially isolated. In Study 3, joining a social group led to reduced primary care attendance to the extent that participants experienced a (subjective) increase in their social group connectedness. Conclusions Unmet social needs among frequent attenders warrant closer consideration. Interventions that target social group connectedness show promise for reducing overutilization of primary care services.

Demir, M., A. Tyra, et al. (2018). *"Be there for me and i will be there for you: Friendship maintenance mediates the relationship between capitalization and happiness."* Journal of Happiness Studies. https://doi.org/10.1007/s10902-017-9957-8
        Friends share positive events with each other, and the perception of the responses as active and constructive (i.e., enthusiastic) is related to happiness. Two studies (N = 685) investigated friendship maintenance (FM) in same-sex best friendships as the mediator of the relationship between perceived responses to capitalization attempts (PRCA) and happiness. Results in both studies showed that PRCA was positively related to FM, and that FM explained why PRCA was associated with happiness, even when different measures of happiness were utilized. Although women reported higher levels of PRCA and FM compared to men, the associations of the friendship experiences with happiness were similar and the model was supported for both women and men. The results are discussed in terms of the importance of understanding the role of friendship experiences in the capitalization process. Also, directions for future research were provided.

Doenyas, C. (2017). *"Self versus other oriented social motivation, not lack of empathic or moral ability, explains behavioral outcomes in children with high theory of mind abilities."* Motivation and Emotion. https://doi.org/10.1007/s11031-017-9636-4
        Although traditionally it was believed that having advanced Theory of Mind (ToM) abilities led to social competence and prosocial behaviors in children, it has also been shown that some children use their high ToM abilities to strategically manipulate others instead of acting prosocially towards them. It is an important developmental task to understand the factors contributing to this behavioral divergence for children with advanced ToM understanding, which also has significant practical implications for bullying interventions. We contend that this divergence cannot be explained by a lack of moral competence or empathy, but that the existing evidence lends itself better to a motivational explanation. We propose that the direction of social motivation varies across children and the self versus other oriented social motivation determines if children will use their developed morality and empathy competencies in social interactions to act prosocially or instead cognitively divert moral and empathic emotions to avoid negative feelings about manipulating others. We show how self versus other orientation has been used as a legitimate distinction to inform other domains of psychology and conclude by discussing possible correlates and precursors of this difference in the direction of social orientation in children.

Dunbar, R. I. M. (2018). *"The anatomy of friendship."* Trends in Cognitive Sciences 22(1): 32-51. http://dx.doi.org/10.1016/j.tics.2017.10.004
        Friendship is the single most important factor influencing our health, well-being, and happiness. Creating and maintaining friendships is, however, extremely costly, in terms of both the time that has to be invested and the cognitive mechanisms that underpin them. Nonetheless, personal social networks exhibit many constancies, notably in their size and their hierarchical structuring. Understanding the processes that give rise to these patterns and their evolutionary origins requires a multidisciplinary approach that combines social and neuropsychology as well as evolutionary biology.

Farb, N., A. Anderson, et al. (2018). *"Prevention of relapse/recurrence in major depressive disorder with either mindfulness-based cognitive therapy or cognitive therapy."* Journal of Consulting and Clinical Psychology 86(2): 200-204. http://psycnet.apa.org/record/2017-56964-001
        Objective: Both Mindfulness Based Cognitive Therapy (MBCT) and Cognitive Therapy (CT) enhance self-management of prodromal symptoms associated with depressive relapse, albeit through divergent therapeutic procedures. We evaluated rates of relapse in remitted depressed patients receiving MBCT and CT. Decentering and dysfunctional attitudes were assessed as treatment-specific process markers. Method: Participants in remission from Major Depressive Disorder (MDD; N = 166) were randomized to 8 weeks of either MBCT (N = 82) or CT (N = 84) and were followed for 24 months, with process markers measured every 3 months. Attendance in both treatments was high (6.3/8 session) and treatment fidelity and competence were evaluated. Relapse was defined as a return of symptoms meeting the criteria for major depression on Module A of the Structured Clinical Interview for Diagnostic and Statistical Manual of Mental Disorders (SCID). Results: Intention-to-treat analyses indicated no differences between MBCT and CT in either rates of relapse to MDD or time to relapse across 24 months of follow up. Both groups experienced significant increases in decentering and participants in CT reported greater reductions in dysfunctional attitudes. Within both treatments, participants who relapsed evidenced lower decentering scores than those who stayed well over the follow up. Conclusions: This is the first study to directly compare relapse prophylaxis following MBCT and CT directly. The lack of group differences in time to relapse supports the view that both interventions are equally effective and that increases in decentering achieved via either treatment are associated with greater protection. These findings lend credence to Teasdale et al.'s (2002) contention that, even though they may be taught through dissimilar methods, CT and MBCT help participants develop similar metacognitive skills for the regulation of distressing thoughts and emotions.

Feldman, R. (2017). ***"The neurobiology of human attachments."*** <u>Trends Cogn Sci</u> 21(2): 80-99. https://www.ncbi.nlm.nih.gov/pubmed/28041836

Attachment bonds are a defining feature of mammals. A conceptual framework on human attachments is presented, integrating insights from animal research with neuroimaging studies. Four mammalian bonds are described, including parent-infant, pair-bonds, peers, and conspecifics, all built upon systems shaped by maternal provisions during sensitive periods, and evolution from rodents to humans is detailed. Bonding is underpinned by crosstalk of oxytocin and dopamine in striatum, combining motivation and vigor with social focus, and their time sensitivity/pulsatility enables reorganization of neural networks. Humans' representation-based attachments are characterized by biobehavioral synchrony and integrate subcortical with cortical networks implicated in reward/motivation, embodied simulation, and mentalization. The neurobiology of love may open perspectives on the 'situated' brain and initiate dialog between science and humanities, arts, and clinical wisdom.

Gebauer, J. E., C. Sedikides, et al. (2017). ***"The religiosity as social value hypothesis: A multi-method replication and extension across 65 countries and three levels of spatial aggregation."*** <u>J Pers Soc Psychol</u> 113(3): e18-e39. https://www.ncbi.nlm.nih.gov/pubmed/27442765

Are religious people psychologically better or worse adjusted than their nonreligious counterparts? Hundreds of studies have reported a positive relation between religiosity and psychological adjustment. Recently, however, a comparatively small number of cross-cultural studies has questioned this staple of religiosity research. The latter studies find that religious adjustment benefits are restricted to religious cultures. Gebauer, Sedikides, and Neberich (2012) suggested the religiosity as social value hypothesis (RASV) as one explanation for those cross-cultural differences. RASV states that, in religious cultures, religiosity possesses much social value, and, as such, religious people will feel particularly good about themselves. In secular cultures, however, religiosity possesses limited social value, and, as such, religious people will feel less good about themselves, if at all. Yet, previous evidence has been inconclusive regarding RASV and regarding cross-cultural differences in religious adjustment benefits more generally. To clarify matters, we conducted 3 replication studies. We examined the relation between religiosity and self-esteem (the most direct and appropriate adjustment indicator, according to RASV) in a self-report study across 65 countries (N = 2,195,301), an informant-report study across 36 countries (N = 560,264), and another self-report study across 1,932 urban areas from 243 federal states in 18 countries (N = 1,188,536). Moreover, we scrutinized our results against 7, previously untested, alternative explanations. Our results fully and firmly replicated and extended prior evidence for cross-cultural differences in religious adjustment benefits. These cross-cultural differences were best explained by RASV.

Gendron, M. and L. Feldman Barrett (2018). ***"Emotion perception as conceptual synchrony."*** <u>Emotion Review</u> 0(0): 1754073917705717. http://journals.sagepub.com/doi/abs/10.1177/1754073917705717

Psychological research on emotion perception anchors heavily on an object perception analogy. We present static "cues," such as facial expressions, as objects for perceivers to categorize. Yet in the real world, emotions play out as dynamic multidimensional events. Current theoretical approaches and research methods are limited in their ability to capture this complexity. We draw on insights from a predictive coding account of neural activity and a grounded cognition account of concept representation to conceive of emotion perception as a stream of synchronized conceptualizations between two individuals, which is supported and shaped by language. We articulate how this framework can illuminate the fundamental need to study culture, as well as other sources of conceptual variation, in unpacking conceptual synchrony in emotion. We close by suggesting that the conceptual system provides the necessary flexibility to overcome gaps in emotional synchrony.

Goldberg, S. B., R. P. Tucker, et al. (2018). ***"Mindfulness-based interventions for psychiatric disorders: A systematic review and meta-analysis."*** <u>Clin Psychol Rev</u> 59: 52-60. https://www.ncbi.nlm.nih.gov/pubmed/29126747

Despite widespread scientific and popular interest in mindfulness-based interventions, questions regarding the empirical status of these treatments remain. We sought to examine the efficacy of mindfulness-based interventions for clinical populations on disorder-specific symptoms. To address the question of relative efficacy, we coded the strength of the comparison group into five categories: no treatment, minimal treatment, non-specific active control, specific active control, and evidence-based treatment. A total of 142 non-overlapping samples and 12,005 participants were included. At post-treatment, mindfulness-based interventions were superior to no treatment (d=0.55), minimal treatment (d=0.37), non-specific active controls (d=0.35), and specific active controls (d=0.23). Mindfulness conditions did not differ from evidence-based treatments (d=-0.004). At follow-up, mindfulness-based interventions were superior to no treatment conditions (d=0.50), non-specific active controls (d=0.52), and specific active controls (d=0.29). Mindfulness conditions did not differ from minimal treatment conditions (d=0.38) and evidence-based treatments (d=0.09). Effects on specific disorder subgroups showed the most consistent evidence in support of mindfulness for depression, pain conditions, smoking, and addictive disorders. Results support the notion that mindfulness-based interventions hold promise as evidence-based treatments.

Golec de Zavala, A., D. Lantos, et al. (2017). ***"Yoga poses increase subjective energy and state self-esteem in comparison to 'power poses'."*** <u>Frontiers in Psychology</u> 8(752). https://www.frontiersin.org/article/10.3389/fpsyg.2017.00752

(Available in free full text) Research on beneficial consequences of yoga focuses on the effects of yogic breathing and meditation. Less is known about the psychological effects of performing yoga postures. The present study investigated the effects of yoga poses on subjective sense of energy and self-esteem. The effects of yoga postures were compared to the effects of 'power poses', which arguably increase the sense of power and self-confidence due to their association with interpersonal dominance (Carney et al., 2010). The study tested the novel prediction that yoga poses, which are not associated with interpersonal dominance but increase bodily energy, would increase the subjective feeling of energy and therefore increase self-esteem compared to 'high power' and 'low power' poses. A two factorial, between participants design was employed. Participants performed either two standing yoga poses with open front of the body (n = 19), two standing yoga poses with covered front of the body (n = 22), two expansive, high power poses (n = 21), or two constrictive, low power poses (n = 20) for 1-minute each. The results showed that yoga poses in comparison to 'power poses' increased self-esteem. This effect was mediated by an increased subjective sense of energy and was observed when baseline trait self-esteem was controlled for. These results suggest that the effects of performing open, expansive body postures may be driven by processes other than the poses' association with interpersonal power and dominance. This study demonstrates that positive effects of yoga practice can occur after performing yoga poses for only 2 minutes.

Grossmann, I., J. P. Brienza, et al. (2017). ***"Wise deliberation sustains cooperation."*** <u>Nature Human Behaviour</u> 1: 0061. http://dx.doi.org/10.1038/s41562-017-0061

Humans are intuitively cooperative. Humans are also capable of deliberation, which includes social comparison, self-reflection and mental simulation of the future. Does deliberation undermine or sustain cooperation? Some studies suggest that deliberation is positively associated with cooperation, whereas other work indicates that deliberation (vis-à-vis intuition) impairs cooperation in social dilemmas. Do some aspects of reasoning qualify whether deliberation sustains cooperation or impairs it?

Here, we propose that wise reasoning—that is, taking a bigger-picture perspective of the situation, including sensitivity to temporal and social interdependence between events—helps to integrate self-protective and cooperative goals, thereby sustaining cooperation when deliberating. Study 1 demonstrated that individual differences in wise reasoning about personal conflicts moderated the impact of naturalistic and experimentally manipulated deliberation time on cooperation. Studies 2 and 3 manipulated an observer perspective, the key aspect of wise reasoning, which eliminated the negative effect of deliberation time on cooperation. Under these circumstances, participants reported being guided by interdependent goals when making their decisions; thus, in these conditions, deliberation sustained cooperation. Combining scholarship on wisdom and behavioural economics, the present insights qualify the relationship between deliberation and prosociality, and highlight conditions under which wisdom promotes prosociality.

Haslam, S. A., C. McMahon, et al. (2018). ***"Social cure, what social cure? The propensity to underestimate the importance of social factors for health."*** Social Science & Medicine 198: 14-21.
http://www.sciencedirect.com/science/article/pii/S0277953617307505
    Rationale Recent meta-analytic research indicates that social support and social integration are highly protective against mortality, and that their importance is comparable to, or exceeds, that of many established behavioural risks such as smoking, high alcohol consumption, lack of exercise, and obesity that are the traditional focus of medical research (Holt-Lunstad et al., 2010). The present study examines perceptions of the contribution of these various factors to life expectancy within the community at large. Method American and British community respondents (N = 502) completed an on-line survey assessing the perceived importance of social and behavioural risk factors for mortality. Results As hypothesized, while respondents' perceptions of the importance of established behavioural risks was positively and highly correlated with their actual importance, social factors were seen to be far less important for health than they actually are. As a result, overall, there was a small but significant negative correlation between the perceived benefits and the actual benefits of different social and behavioural factors. Men, younger participants, and participants with a lower level of education were more likely to underestimate the importance of social factors for health. There was also evidence that underestimation was predicted by a cluster of ideological factors, the most significant of which was respondents' respect for prevailing convention and authorities as captured by Right-Wing Authoritarianism. Conclusion Findings suggest that while people generally underestimate the importance of social factors for health this also varies as a function of demographic and ideological factors. They point to a range of challenges confronting those who seek to promote greater awareness of the importance of social factors for health.

Helliwell, J., R. Layard, et al. (2018). ***World happiness report 2018***. New York, Sustainable Development Solutions Network.
    (Available in free full text) The World Happiness Report is a landmark survey of the state of global happiness. The World Happiness Report 2018, ranks 156 countries by their happiness levels, and 117 countries by the happiness of their immigrants. The main focus of this year's report, in addition to its usual ranking of the levels and changes in happiness around the world, is on migration within and between countries. The overall rankings of country happiness are based on the pooled results from Gallup World Poll surveys from 2015-2017, and show both change and stability. There is a new top ranking country, Finland, but the top ten positions are held by the same countries as in the last two years, although with some swapping of places. Four different countries have held top spot in the four most recent reports- Denmark, Switzerland, Norway and now Finland. All the top countries tend to have high values for all six of the key variables that have been found to support well-being: income, healthy life expectancy, social support, freedom, trust and generosity. Among the top countries, differences are small enough that that year-to-year changes in the rankings are to be expected. The analysis of happiness changes from 2008-2010 to 2015-2015 shows Togo as the biggest gainer, moving up 17 places in the overall rankings from the last place position it held as recently as in the 2015 rankings. The biggest loser is Venezuela, down 2.2 points on the 0 to 10 scale. Five of the report's seven chapters deal primarily with migration, as summarized in Chapter 1. For both domestic and international migrants, the report studies not just the happiness of the migrants and their host communities, but also of those left behind, whether in the countryside or in the source country. The results are generally positive. Perhaps the most striking finding of the whole report is that a ranking of countries according to the happiness of their immigrant populations is almost exactly the same as for the rest of the population. The immigrant happiness rankings are based on the full span of Gallup data from 2005 to 2017, sufficient to have 117 countries with more than 100 immigrant respondents. The ten happiest countries in the overall rankings also ll ten of the top eleven spots in the ranking of immigrant happiness. Finland is at the top of both rankings in this report, with the happiest immigrants, and the happiest population in general. The closeness of the two rankings shows that the happiness of immigrants depends predominantly on the quality of life where they now live, illustrating a general pattern of convergence. Happiness can change, and does change, according to the quality of the society in which people live. Immigrant happiness, like that of the locally born, depends on a range of features of the social fabric, extending far beyond the higher incomes traditionally thought to inspire and reward migration. The countries with the happiest immigrants are not the richest countries, but instead the countries with a more balanced set of social and institutional supports for better lives. While convergence to local happiness levels is quite rapid, it is not complete, as there is a 'footprint' effect based on the happiness in each source country. This effect ranges from 10% to 25%. This footprint effect, explains why immigrant happiness is less than that of the locals in the happiest countries, while being greater in the least happy countries. A very high proportion of the international differences in immigrant happiness (as shown in Chapter 2), and of the happiness gains for individual migrants (as studied in Chapters 3 and 5) are thus explained by local happiness and source country happiness. The explanation becomes even more complete when account is taken of international differences in a new Gallup index of migrant acceptance, based on local attitudes towards immigrants, as detailed in an Annex to the Report. A higher value for migrant acceptance is linked to greater happiness for both immigrants and the native-born, by almost equal amounts. The report studies rural-urban migration as well, principally through the recent Chinese experience, which has been called the greatest mass migration in history. That migration shows some of the same convergence characteristics of the international experience, with the happiness of city-bound migrants moving towards, but still falling below urban averages. The importance of social factors in the happiness of all populations, whether migrant or not, is emphasized in Chapter 6, where the happiness bulge in Latin America is found to depend on the greater warmth of family and other social relationships there, and to the greater importance that people there attach to these relationships. The Report ends on a different tack, with a focus on three emerging health problems that threaten happiness: obesity, the opioid crisis, and depression. Although set in a global context, most of the evidence and discussion are focused on the United States, where the prevalence of all three problems has been growing faster and further than in most other countries.

Hofer, M. K., H. K. Collins, et al. (2018). ***"Olfactory cues from romantic partners and strangers influence women's responses to stress."*** Journal of Personality and Social Psychology 114(1): 1-9. http://dx.doi.org/10.1037/pspa0000110
    The scent of another person can activate memories, trigger emotions, and spark romantic attraction; however, almost nothing is known about whether and how human scents influence responses to stress. In the current study, 96 women were randomly assigned to smell one of three scents (their romantic partner's, a stranger's, or a neutral scent) and exposed to an acute stressor (Trier Social Stress Test). Perceived stress and cortisol were measured continuously throughout the study (5 and

7 times, respectively). Perceived stress was reduced in women who were exposed to their partner's scent. This reduction was observed during stress anticipation and stress recovery. Cortisol levels were elevated in women who were exposed to a stranger's scent. This elevation was observed throughout stress anticipation, peak stress, and stress recovery. The current work speaks to the critical role of human olfactory cues in social communication and reveals that social scents can impact both psychological and physiological reactions to stress.

Keng, S.-L. and H. H. Tan (2018). *"Effects of brief mindfulness and loving-kindness meditation inductions on emotional and behavioral responses to social rejection among individuals with high borderline personality traits."* Behaviour Research and Therapy 100: 44-53. http://www.sciencedirect.com/science/article/pii/S0005796717302358

(Available in free full text) Borderline personality disorder (BPD) is characterized by an enduring pattern of instability across affective, behavioral, cognitive, and interpersonal domains. Individuals with BPD are known to be particularly vulnerable to experiences of social rejection, but little work has examined strategies that may moderate their reactivity to social rejection. Using a laboratory experimental approach, this study investigated the effects of brief mindfulness and loving-kindness meditation (LKM) inductions on emotional and behavioral responses to social rejection in a sample of adults with high BPD traits. One hundred and eighteen participants were randomly assigned to receive 10 min of mindful breathing practice, LKM, or a no-instruction control condition, prior to exposure to a social rejection manipulation. Participants rated their emotions and completed a competitive reaction time task, which provided a proxy measure of aggression. Compared to the control condition, the mindfulness group demonstrated significantly quicker recovery in negative affect and feelings of rejection after social rejection. The mindfulness group also reported significantly quicker recovery in negative affect compared to the LKM group. Whereas baseline trait mindfulness negatively predicted aggressive behaviors across all participants, groups did not differ in immediate emotional reactivity or aggressive behavior following social rejection. The findings suggest that mindfulness training may be a promising strategy in alleviating negative emotional effects of social rejection among individuals with high borderline personality traits, and highlight the limited utility of brief LKM practice in buffering the effects of social rejection.

Kreplin, U., M. Farias, et al. (2018). *"The limited prosocial effects of meditation: A systematic review and meta-analysis."* Scientific Reports 8(1): 2403. https://doi.org/10.1038/s41598-018-20299-z

(Available in free full text) Many individuals believe that meditation has the capacity to not only alleviate mental-illness but to improve prosociality. This article systematically reviewed and meta-analysed the effects of meditation interventions on prosociality in randomized controlled trials of healthy adults. Five types of social behaviours were identified: compassion, empathy, aggression, connectedness and prejudice. Although we found a moderate increase in prosociality following meditation, further analysis indicated that this effect was qualified by two factors: type of prosociality and methodological quality. Meditation interventions had an effect on compassion and empathy, but not on aggression, connectedness or prejudice. We further found that compassion levels only increased under two conditions: when the teacher in the meditation intervention was a co-author in the published study; and when the study employed a passive (waiting list) control group but not an active one. Contrary to popular beliefs that meditation will lead to prosocial changes, the results of this meta-analysis showed that the effects of meditation on prosociality were qualified by the type of prosociality and methodological quality of the study. We conclude by highlighting a number of biases and theoretical problems that need addressing to improve quality of research in this area.

Leuchtmann, L., A. Milek, et al. (2018). *"Role of clarity of other's feelings for dyadic coping."* Personal Relationships 25(1): 38-49. https://onlinelibrary.wiley.com/doi/abs/10.1111/pere.12226

(Available in free full text) Abstract Dyadic coping has repeatedly been associated with positive outcomes in intimate relationships. However, less is known about the prospective predictors of dyadic coping. This study investigates clarity of other's feelings (CoF) as a potential predictor of supportive dyadic coping in a longitudinal study. In a sample of 368 couples, self-reported CoF and supportive dyadic coping perceived by the partner were assessed annually over 3 years. Results revealed that interpersonal differences in men and women's CoF are positively associated with interpersonal differences in supportive dyadic coping. Moreover, interpersonal differences in men's CoF predicted long-term intrapersonal changes in supportive dyadic coping of both partners.

Moisuc, A., M. Brauer, et al. (2018). *"Individual differences in social control: Who 'speaks up' when witnessing uncivil, discriminatory, and immoral behaviours?"* British Journal of Social Psychology 0(0). https://onlinelibrary.wiley.com/doi/abs/10.1111/bjso.12246

This research examined the personality characteristics of individuals who 'speak up' and confront perpetrators of norm transgressions. We tested whether those who intervene tend to be 'bitter complainers' or 'well-adjusted leaders'. In four studies (total N = 1,003), we measured several individual differences that are directly implicated by at least one of the two concepts. We also presented participants with uncivil, discriminatory, and immoral behaviours and asked them how likely they would be to intervene if they were to witness each of these behaviours as a bystander. The results confirmed the well-adjusted leader hypothesis: Participants' self-reported tendency to confront perpetrators correlated positively with altruism, extraversion, social responsibility, acceptance by peers, independent self-construal, emotion regulation, persistence, self-directedness, age, occupation, and monthly salary, but not with aggressiveness or low self-esteem. Individuals who confront prejudice also speak up against other immoral and uncivil behaviours. We discuss the implications of these findings for the perpetuation and change of social norms.

Mund, M., B. F. Jeronimus, et al. (2018). *Personality and social relationships: As thick as thieves*. Your personality makes you ill: Scientific proof or wishful thinking? C. Johansen. San Diego, Elsevier.

This chapter shows that personality traits and social relationships are deeply entwined in a bidirectional way: Individuals select relationships partly based on their personality traits but at the same time develop across the lifespan partly in response to changes in their social environment. Life transitions are an important catalyst of changes in personality-relationship transactions. We argue that personality traits and social relationships are so closely tied that, in our view, the link between personality and health can only be understood against the backdrop of individuals' relationships.

Nichols, S., N. Strohminger, et al. (2018). *"Death and the self."* Cognitive Science: n/a-n/a. http://dx.doi.org/10.1111/cogs.12590

It is an old philosophical idea that if the future self is literally different from the current self, one should be less concerned with the death of the future self (Parfit,). This paper examines the relation between attitudes about death and the self among Hindus, Westerners, and three Buddhist populations (Lay Tibetan, Lay Bhutanese, and monastic Tibetans). Compared with other groups, monastic Tibetans gave particularly strong denials of the continuity of self, across several measures. We predicted that the denial of self would be associated with a lower fear of death and greater generosity toward others. To our surprise, we found the opposite. Monastic Tibetan Buddhists showed significantly greater fear of death than any

other group. The monastics were also less generous than any other group about the prospect of giving up a slightly longer life in order to extend the life of another. [See interesting discussion in BPS Digest - https://digest.bps.org.uk/2018/02/02/is-death-still-frightening-if-you-believe-the-self-is-an-illusion-an-astonishing-study-of-tibetan-buddhists/].

Petrocchi, N., C. Ottaviani, et al. (2017). *"Compassion at the mirror: Exposure to a mirror increases the efficacy of a self-compassion manipulation in enhancing soothing positive affect and heart rate variability."* The Journal of Positive Psychology 12(6): 525-536. https://doi.org/10.1080/17439760.2016.1209544
> We tested whether a mirror could enhance the efficacy of a self-compassion manipulation in increasing soothing positive affect and heart rate variability (HRV). Eighty-six participants generated four phrases they would use to soothe and encourage their best friend. Second, they described an episode where they criticized themselves and were assigned to one of three conditions: (a) repeat the four phrases to themselves while looking at the mirror; (b) repeat the four phrases to themselves without the mirror; (c) look at themselves in the mirror without repeating the phrases. Participants in condition (a) reported higher levels of 'soothing' positive affect and HRV compared to participants in conditions (b) and (c). The effect of the 'phrases at the mirror' manipulation on soothing affect was mediated by increased common humanity. The mirror enhances the efficacy of this self-compassion manipulation in activating the soothing affect system connected with parasympathetic nervous system activity.

Selden, M. and A. S. Goodie (2018). *"Review of the effects of five factor model personality traits on network structures and perceptions of structure."* Social Networks 52: 81-99. http://www.sciencedirect.com/science/article/pii/S0378873316302982
> We review recent research on Five Factor Model personality and social network analysis to assess how structures develop and are perceived. Extraversion and agreeableness relate consistently to personal but not workplace networks. Extraverts are more likely to seek connections, whereas agreeable individuals receive connections from others. Openness predicts network diversity and is marginally related to position when groups pursue collective goals. Conscientiousness is associated with maintaining certain personal relationships, but is strongly related to central positions in workplace networks. Neuroticism has no consistent relationship with network size or composition, and is differentially related to network positions, depending on the context.

Siddaway, A. P., P. J. Taylor, et al. (2018). *"Reconceptualizing anxiety as a continuum that ranges from high calmness to high anxiety: The joint importance of reducing distress and increasing well-being."* Journal of Personality and Social Psychology 114(2): e1-e11. http://psycnet.apa.org/record/2017-09432-001
> We first replicate a study by Vautier and Pohl (2009), who used the State–Trait Anxiety Inventory (STAI) to reexamine the structure of anxiety. Using two large samples (N = 4,138 and 1,824), we also find that state and trait anxiety measure continua that range from high calmness to high anxiety. We then significantly extend previous findings and make the clinical importance of this topic more explicit by characterizing the (linear or nonlinear) form of the relationship between the calmness–anxiety continuum and other psychiatric variables for the first time. This form is critical to understanding anxiety problems, as discontinuities in relationships with other psychological conditions could be used to define a natural boundary of problematic anxiety. Baseline levels on the calmness–anxiety continuum are found to have a near linear relationship with changes in depression, aggression, and substance misuse over time. Taken together, these results indicate the joint importance and usefulness of treating anxiety problems and promoting calmness, as doing so may promote resilience from developing other psychiatric conditions. Psychiatric and psychological interventions that are grounded in this continuum conceptualization would logically be stopped when an individual reports experiencing high levels of calmness. Our results point to the usefulness of early intervention and prevention (when people begin to move away from high calmness) and instilling resilience (by providing interventions to move people toward high calmness).

Sommers-Spijkerman, M. P. J., H. R. Trompetter, et al. (2018). *"Compassion-focused therapy as guided self-help for enhancing public mental health: A randomized controlled trial."* Journal of Consulting and Clinical Psychology 86(2): 101-115. http://psycnet.apa.org/record/2017-56975-001
> Objective: Despite promising results for compassion-focused therapy (CFT) as self-help, larger-scale trials including long-term follow-up data are needed to establish its effectiveness in the context of public mental health. Empirical evidence supporting its effectiveness in improving well-being is lacking. In a randomized controlled trial, the effects of CFT as guided self-help on well-being were evaluated. Method: Adults (mean age = 52.87, SD = 9.99, 74.8% female) with low to moderate levels of well-being were recruited in the Dutch population and randomized to CFT (n = 120) or a waitlist control group (n = 122). Participants completed the Mental Health Continuum–Short Form (well-being), Hospital Anxiety and Depression Scale (depression and anxiety), Perceived Stress Scale (stress), Self-Compassion Scale–Short Form (self-compassion), Forms of Self-Criticizing/Attacking and Reassurance Scale (self-criticism and self-reassurance), Positive and Negative Affect Schedule (positive/negative affect), and Gratitude questionnaire (gratitude) at baseline, postintervention (3 months), 3- and 9-month follow-up. Results: Compared with the waitlist control group, the CFT group showed superior improvement on well-being at postintervention, d = .51, 95% CI [.25, .77], p < .001, and 3-month follow-up, d = .39, 95% CI [.13, .65], p < .001. No significant moderators were found. On all secondary outcome measures but positive affect, the intervention group showed significantly greater improvements up to 3-month follow-up. At 9-month follow-up, improvements on all measures were retained or amplified among CFT participants. Conclusions: CFT as guided self-help shows promise as a public mental health strategy for enhancing well-being and reducing psychological distress.

Sonne, J. W. H. and D. M. Gash (2018). *"Psychopathy to altruism: Neurobiology of the selfish–selfless spectrum."* Frontiers in Psychology 9(575). https://www.frontiersin.org/article/10.3389/fpsyg.2018.00575
> (Available in free full text) The age-old philosophical, biological and social debate over the basic nature of humans as being "universally selfish" or "universally good" continues today highlighting sharply divergent views of natural social order. Here we analyze advances in biology, genetics and neuroscience increasing our understanding of the evolution, features and neurocircuitry of the human brain underlying behavior in the selfish-selfless spectrum. First, we examine evolutionary pressures for selection of altruistic traits in species with protracted periods of dependence on parents and communities for subsistence and acquisition of learned behaviors. Evidence supporting the concept that altruistic potential is a common feature in human populations is developed. To go into greater depth in assessing critical features of the social brain, the two extremes of selfish-selfless behavior, callous unemotional psychopaths and zealous altruists who take extreme measures to help others, are compared on behavioral traits, structural/functional neural features, and the relative contributions of genetic inheritance versus acquired cognitive learning to their mindsets. Evidence from population groups ranging from newborns, adopted children, incarcerated juveniles, twins and mindfulness meditators point to the important role of neuroplasticity and the dopaminergic reward systems in forming and reforming neural circuitry in response to personal experience and cultural influences in determining behavior in the selfish-selfless spectrum. The underlying neural circuitry differs between psychopaths and altruists

with emotional processing being profoundly muted in psychopaths and significantly enhanced in altruists. But both groups are characterized by the reward system of the brain shaping behavior. Instead of rigid assignment of human nature as being "universally selfish" or "universally good", both characterizations are partial truths based on the segments of the selfish-selfless spectrum being examined. In addition, individuals and populations can shift in the behavioral spectrum in response to cognitive therapy and social and cultural experience, and approaches such as mindfulness training for introspection and reward-activating compassion are entering the mainstream of clinical care for managing pain, depression, and stress.

Swami, V., D. Barron, et al. (2018). ***"Exposure to natural environments, and photographs of natural environments, promotes more positive body image."*** Body Image 24: 82-94.
http://www.sciencedirect.com/science/article/pii/S1740144517304321
>Five studies were conducted to understand the impact of nature exposure on body image. In three studies using different designs and outcome measures, British university students were exposed to photographs of natural or built environments. Results indicated that exposure to images of natural, but not built, environments resulted in improved state body image. In Study 4, British community participants went on a walk in a natural or built environment, with results indicating that the walk in a natural environment resulted in significantly higher state body appreciation, whereas the walk in a built environment resulted in significantly lower scores. In Study 5, British participants were recruited as they were entering a designed green space on their own volition. Results indicated that spending time in the green space led to improved state body appreciation. These results indicate that exposure to isomorphic or in-situ natural environments has positive effects on state body image.

Vakrat, A., Y. Apter-Levy, et al. (2017). ***"Fathering moderates the effects of maternal depression on the family process."*** Dev Psychopathol: 1-12. https://www.cambridge.org/core/journals/development-and-psychopathology/article/fathering-moderates-the-effects-of-maternal-depression-on-the-family-process/3E196890F549BF26952553A15D0CDD55
>Maternal depression negatively impacts children's development, yet few studies have focused on fathering and the family process in cases of maternal depression. A community cohort of married/cohabitating women was recruited on the second postbirth day (N = 1,983) and maternal depression repeatedly assessed across the first year and again at 6 years to form two cohorts: mothers chronically depressed from birth to 6 (N = 46) and nondepressed controls (N = 103). At 6 years, mother-child, father-child, and family interactions were observed. In families of depressed mothers, both mother and father exhibited lower sensitivity and higher intrusiveness, and children displayed lower social engagement during interactions with mother and father. Fathering moderated the effects of maternal depression on the family process. When fathers showed low sensitivity, high intrusiveness, and provided little opportunities for child social engagement, the family process was less cohesive, implying a decrease in the family's harmonious, warm, and collaborative style. However, in cases of high father sensitivity, low intrusiveness, and increased child engagement, the family process was unaffected by maternal depression. Findings describe both comparability and compensatory mechanisms in the effects of fathering on family life when maternal care is deficient, highlight the buffering role of fathers, and underscore the importance of father-focused interventions when mothers are depressed.

Watts, R., C. Day, et al. (2017). ***"Patients' accounts of increased "connectedness" and "acceptance" after psilocybin for treatment-resistant depression."*** Journal of Humanistic Psychology 57(5): 520-564.
http://journals.sagepub.com/doi/abs/10.1177/0022167817709585
>Objective: To identify patients' perceptions of the value of psilocybin as a treatment for depression. Method: Twenty patients enrolled in an open-label trial of psilocybin for treatment-resistant depression participated in a semistructured interview at 6-month follow-up. Thematic analysis was used to identify patients' experiences of the treatment and how it compared with previous treatments. Results: Two main change processes were identified in relation to the treatment. The first concerned change from disconnection (from self, others, and world) to connection, and the second concerned change from avoidance (of emotion) to acceptance. A third theme concerned comparison between psilocybin and conventional treatments. Patients reported that medications and some short-term talking therapies tended to reinforce their sense of disconnection and avoidance, whereas treatment with psilocybin encouraged connection and acceptance. Conclusions: These results suggest that psilocybin treatment for depression may work via paradigmatically novel means, antithetical to antidepressant medications, and some short-term talking therapies.

Zsok, F., M. Haucke, et al. (2017). ***"What kind of love is love at first sight? An empirical investigation."*** Personal Relationships 24(4): 869-885. https://onlinelibrary.wiley.com/doi/abs/10.1111/pere.12218
>Abstract Love at first sight (LAFS) is a commonly known phenomenon, but has barely been investigated scientifically. Major psychological theories of love predict that LAFS is marked by high passion. However, it could also be a memory confabulation construed by couples to enhance their relationship. We investigated LAFS empirically by assessing feelings of love at the moment participants met potential partners for the first time. Data were collected from an online study, a laboratory study, and three dating events. Experiences of LAFS were marked neither by high passion, nor by intimacy, nor by commitment. Physical attraction was highly predictive of reporting LAFS. We therefore suggest that LAFS is not a distinct form of love, but rather a strong initial attraction that some label as LAFS, either in the moment of first sight or retrospectively.