

32 mindfulness & compassion relevant abstracts: may '16 newsletter

(Hayes and Hefferon 2015; Balzarotti, Biassoni et al. 2016; Berry and Danquah 2016; Bibeau, Dionne et al. 2016; Cherkin, Sherman et al. 2016; Coronado-Montoya, Levis et al. 2016; Eisendrath, Gillung et al. 2016; Engeser and Baumann 2016; Feliu-Soler, Pascual et al. 2016; Felver, Celis-de Hoyos et al. 2016; Fung, Ho et al. 2016; Giammarco 2016; Gilmartin 2016; Gordon and Chen 2016; Jakubiak and Feeney 2016; Jiang, Fung et al. 2016; Jonason, Icho et al. 2016; Kearns, Shawyer et al. 2016; Kelly and Dupasquier 2016; Lang, Papp et al. 2016; Li, Long et al. 2016; Luecken, Hagan et al. 2016; McIndoo, File et al. 2016; Murray, Theakston et al. 2016; Neff 2016; Ruffman, Wilson et al. 2016; Salerno, Rhind et al. 2016; Schöttke, Flückiger et al. 2016; Sinclair, Fehr et al. 2016; Sourander, Gyllenberg et al. 2016; Spinhoven, Elzinga et al. 2016; Szyner, Tooby et al. 2016)

Balzarotti, S., F. Biassoni, et al. (2016). **"Individual differences in cognitive emotion regulation: Implications for subjective and psychological well-being."** *Journal of Happiness Studies* 17(1): 125-143. <http://dx.doi.org/10.1007/s10902-014-9587-3>

(Free full text available from ResearchGate) Although research has extensively examined the link between cognitive emotion regulation and psychopathological symptoms, scant attention has been given to the relationship between dispositional use of cognitive emotion regulation strategies and individuals' positive functioning. In a cross-sectional study on 470 adults, we examined whether individual differences in the use of nine cognitive strategies were associated with subjective and psychological well-being. Results show that positive reappraisal and refocus on planning are positively related to both subjective and psychological well-being. Rumination, catastrophizing and self-blame are linked to poorer well-being, while positive refocusing, putting into perspective, and acceptance show few significant associations. These results suggest that cognitive emotion regulation strategies may be differently effective in promoting individual's well-being. [Note: "Cognitive Emotion Regulation Questionnaire (CERQ) The CERQ (Garnefski et al. 2001, 2002a, b) is a 36-item scale that evaluates nine cognitive strategies of emotion regulation (four items each). Positive reappraisal refers to the attempt of reinterpreting the event in terms of personal growth (e.g., "I think I can learn something from the situation"). Putting into perspective refers to thoughts emphasizing the relativity of the event when comparing it to other (more serious) situations (e.g., "I tell myself that there are worse things in life"). Positive refocusing refers to the attempt of thinking about pleasant and happy situations instead of thinking about the harmful event (e.g., "I think of something nice instead of what has happened"). Refocus on planning consists in thoughts about what to and how to face the negative event (e.g., "I think about a plan of what I can do best"). Acceptance refers to thoughts of resigning oneself to what has happened (e.g., "I think that I must learn to live with it"). Self-blame and Blaming Others consist in thoughts putting the blame of what has happened on oneself versus others (e.g., "I feel that I am the one to blame for it"). Rumination refers to thinking about the feelings experienced as a consequence of the negative event (e.g., "I dwell upon the feelings the situation has evoked in me"). Catastrophizing consists in the emphasis of the negative aspects of the event (e.g., "I often think that what I have experienced is the worst that can happen to a person"). Respondents are asked to indicate what they generally think when experiencing negative or unpleasant events. The items are rated on a Likert scale ranging from one (almost never) to five (almost always)].

Berry, K. and A. Danquah (2016). **"Attachment-informed therapy for adults: Towards a unifying perspective on practice."** *Psychology and Psychotherapy: Theory, Research and Practice* 89(1): 15-32. <http://dx.doi.org/10.1111/papt.12063>

(Available in free full text) Purpose We aimed to provide an integrated overview of the key goals and strategies of an attachment-informed psychotherapy by summarizing the literature describing the clinical implications of attachment theory for psychological therapy for adults. Method We carried out a narrative thematic review of 58 texts from a diverse range of therapeutic schools, until we agreed that we had reached a saturation of themes. Results We identified six key themes: Changing internal working models; the therapeutic relationship and creating a secure base; formulating and processing relationship experiences; countertransference; separation, termination and boundary issues; and working with different attachment styles or patterns. We discuss empirical evidence in relation to each theme and highlight areas for research. Conclusions Attachment theory provides a useful framework to inform psychological therapy with adults, but there is a pressing need for further research to empirically demonstrate the 'added value' of an attachment perspective. Practitioner points * Attachment theory should be used to inform individual psychological therapy in adulthood. * From the outset of their careers, therapists should receive training and supervision to enhance their awareness of their own and their clients' attachment experiences and how these play out during therapy. * There is a need for greater empirical research to investigate whether the degree to which therapists formulate and meet clients' attachment needs influences outcomes.

Bibeau, M., F. Dionne, et al. (2016). **"Can compassion meditation contribute to the development of psychotherapists' empathy? A review."** *Mindfulness* 7(1): 255-263. <http://dx.doi.org/10.1007/s12671-015-0439-y>

Over the last three decades, a growing number of scientists and clinicians have been investigating the utility of meditative practices as attention and emotion regulation strategies. Many studies have provided evidence that mindfulness meditation can have positive effects on psychotherapists' capacity to offer presence, acceptance and empathy to their clients. More recently, loving-kindness meditation and compassion meditation have become the focus of scientific scrutiny as it has been thought that they could have even more impact on psychotherapists' empathy than mindfulness meditation. This article reviews the scientific literature on loving-kindness and compassion meditation regarding particularly the potential impact of these meditative practices on the development of psychotherapists' empathy. Studies in neuroscience have shown that loving-kindness and compassion meditation actually change the brain in areas associated with positive emotions and empathy. Loving-kindness and compassion meditation training studies have shown positive impacts on a number of empathy-related variables such as altruism, positive regard, prosocial behavior, interpersonal relationships, as well as affective empathy and empathic accuracy. Moreover, loving-kindness and compassion meditation actually reduce negative affects associated to empathy for pain, thus reducing the risk of psychotherapists' burnout and enhancing their self-care. It is concluded that loving-kindness and compassion meditation would constitute an important and useful addition to every counselling or psychotherapy training curriculum.

Cherkin, D. C., K. J. Sherman, et al. (2016). **"Effect of mindfulness-based stress reduction vs cognitive behavioral therapy or usual care on back pain and functional limitations in adults with chronic low back pain: A randomized clinical trial."** *JAMA* 315(12): 1240-1249. <http://dx.doi.org/10.1001/jama.2016.2323>

(Available in free full text) Importance Mindfulness-based stress reduction (MBSR) has not been rigorously evaluated for young and middle-aged adults with chronic low back pain. Objective To evaluate the effectiveness for chronic low back pain of MBSR vs cognitive behavioral therapy (CBT) or usual care. Design, Setting, and Participants Randomized, interviewer-blind,

clinical trial in an integrated health care system in Washington State of 342 adults aged 20 to 70 years with chronic low back pain enrolled between September 2012 and April 2014 and randomly assigned to receive MBSR (n = 116), CBT (n = 113), or usual care (n = 113). Interventions CBT (training to change pain-related thoughts and behaviors) and MBSR (training in mindfulness meditation and yoga) were delivered in 8 weekly 2-hour groups. Usual care included whatever care participants received. Main Outcomes and Measures Coprimary outcomes were the percentages of participants with clinically meaningful ($\geq 30\%$) improvement from baseline in functional limitations (modified Roland Disability Questionnaire [RDQ]; range, 0-23) and in self-reported back pain bothersomeness (scale, 0-10) at 26 weeks. Outcomes were also assessed at 4, 8, and 52 weeks. Results There were 342 randomized participants, the mean (SD) [range] age was 49.3 (12.3) [20-70] years, 224 (65.7%) were women, mean duration of back pain was 7.3 years (range, 3 months-50 years), 123 (53.7%) attended 6 or more of the 8 sessions, 294 (86.0%) completed the study at 26 weeks, and 290 (84.8%) completed the study at 52 weeks. In intent-to-treat analyses at 26 weeks, the percentage of participants with clinically meaningful improvement on the RDQ was higher for those who received MBSR (60.5%) and CBT (57.7%) than for usual care (44.1%) (overall $P = .04$; relative risk [RR] for MBSR vs usual care, 1.37 [95% CI, 1.06-1.77]; RR for MBSR vs CBT, 0.95 [95% CI, 0.77-1.18]; and RR for CBT vs usual care, 1.31 [95% CI, 1.01-1.69]). The percentage of participants with clinically meaningful improvement in pain bothersomeness at 26 weeks was 43.6% in the MBSR group and 44.9% in the CBT group, vs 26.6% in the usual care group (overall $P = .01$; RR for MBSR vs usual care, 1.64 [95% CI, 1.15-2.34]; RR for MBSR vs CBT, 1.03 [95% CI, 0.78-1.36]; and RR for CBT vs usual care, 1.69 [95% CI, 1.18-2.41]). Findings for MBSR persisted with little change at 52 weeks for both primary outcomes. Conclusions and Relevance Among adults with chronic low back pain, treatment with MBSR or CBT, compared with usual care, resulted in greater improvement in back pain and functional limitations at 26 weeks, with no significant differences in outcomes between MBSR and CBT. These findings suggest that MBSR may be an effective treatment option for patients with chronic low back pain.

Coronado-Montoya, S., A. W. Levis, et al. (2016). **"Reporting of positive results in randomized controlled trials of mindfulness-based mental health interventions."** *PLoS ONE* 11(4): e0153220. <http://dx.doi.org/10.1371/journal.pone.0153220>

(Available in free full text) A large proportion of mindfulness-based therapy trials report statistically significant results, even in the context of very low statistical power. The objective of the present study was to characterize the reporting of 'positive' results in randomized controlled trials of mindfulness-based therapy. We also assessed mindfulness-based therapy trial registrations for indications of possible reporting bias and reviewed recent systematic reviews and meta-analyses to determine whether reporting biases were identified. Methods CINAHL, Cochrane CENTRAL, EMBASE, ISI, MEDLINE, PsycInfo, and SCOPUS databases were searched for randomized controlled trials of mindfulness-based therapy. The number of positive trials was described and compared to the number that might be expected if mindfulness-based therapy were similarly effective compared to individual therapy for depression. Trial registries were searched for mindfulness-based therapy registrations. CINAHL, Cochrane CENTRAL, EMBASE, ISI, MEDLINE, PsycInfo, and SCOPUS were also searched for mindfulness-based therapy systematic reviews and meta-analyses. Results 108 (87%) of 124 published trials reported ≥ 1 positive outcome in the abstract, and 109 (88%) concluded that mindfulness-based therapy was effective, 1.6 times greater than the expected number of positive trials based on effect size $d = 0.55$ (expected number positive trials = 65.7). Of 21 trial registrations, 13 (62%) remained unpublished 30 months post-trial completion. No trial registrations adequately specified a single primary outcome measure with time of assessment. None of 36 systematic reviews and meta-analyses concluded that effect estimates were overestimated due to reporting biases. Conclusions The proportion of mindfulness-based therapy trials with statistically significant results may overstate what would occur in practice.

Eisendrath, S. J., E. Gillung, et al. (2016). **"A randomized controlled trial of mindfulness-based cognitive therapy for treatment-resistant depression."** *Psychother Psychosom* 85(2): 99-110. <http://www.karger.com/Article/Abstract/442260>

BACKGROUND: Due to the clinical challenges of treatment-resistant depression (TRD), we evaluated the efficacy of mindfulness-based cognitive therapy (MBCT) relative to a structurally equivalent active comparison condition as adjuncts to treatment-as-usual (TAU) pharmacotherapy in TRD. METHODS: This single-site, randomized controlled trial compared 8-week courses of MBCT and the Health Enhancement Program (HEP), comprising physical fitness, music therapy and nutritional education, as adjuncts to TAU pharmacotherapy for outpatient adults with TRD. The primary outcome was change in depression severity, measured by percent reduction in the total score on the 17-item Hamilton Depression Rating Scale (HAM-D17), with secondary depression indicators of treatment response and remission. RESULTS: We enrolled 173 adults; mean length of a current depressive episode was 6.8 years (SD = 8.9). At the end of 8 weeks of treatment, a multivariate analysis showed that relative to the HEP condition, the MBCT condition was associated with a significantly greater mean percent reduction in the HAM-D17 (36.6 vs. 25.3%; $p = 0.01$) and a significantly higher rate of treatment responders (30.3 vs. 15.3%; $p = 0.03$). Although numerically superior for MBCT than for HEP, the rates of remission did not significantly differ between treatments (22.4 vs. 13.9%; $p = 0.15$). In these models, state anxiety, perceived stress and the presence of personality disorder had adverse effects on outcomes. CONCLUSIONS: MBCT significantly decreased depression severity and improved treatment response rates at 8 weeks but not remission rates. MBCT appears to be a viable adjunct in the management of TRD.

Engeser, S. and N. Baumann (2016). **"Fluctuation of flow and affect in everyday life: A second look at the paradox of work."** *Journal of Happiness Studies* 17(1): 105-124. <http://dx.doi.org/10.1007/s10902-014-9586-4>

Studies with the Experience Sampling Method (ESM) have shown that individuals experience more flow at work than at leisure. This indicates that people enjoy working but paradoxically at the same time leisure activities are preferred ("paradox of work"). We took a second look at the paradox of work by measuring flow directly, including affect measures, and differentiating between active and passive leisure activities. We also adopted a dynamical approach based on the idea that the transitions of experiences has to be taken into account to get the total picture. For the period of 1 week, data of 100 employees with different professions were collected with the ESM (in total 4,504 measurements). In accordance with existing work, we found that flow was high during work. It was slightly (albeit significantly) higher than during active leisure activities and considerably higher than during passive leisure activities. At the same time, negative activation was low during passive and active leisure activities and lower than during work and vice versa for valence (happiness). Thus, leisure activities do have a positive affective quality that could explain why people prefer leisure to work. Regarding the dynamical approach, we tested whether flow during work would lead to higher valence in leisure but could not support this assumption. We discussed the findings and made suggestions for future research. In an additional analysis, we reveal that perceived outcome experience could partially explain why work and leisure experience differed.

Feliu-Soler, A., J. C. Pascual, et al. (2016). **"Fostering self-compassion and loving-kindness in patients with borderline personality disorder: A randomized pilot study."** *Clinical Psychology & Psychotherapy*: n/a/n/a. <http://dx.doi.org/10.1002/cpp.2000>

The aim of this randomized pilot study is to investigate the effects of a short training programme in loving-kindness and compassion meditation (LKM/CM) in patients with borderline personality disorder. Patients were allocated to LKM/CM or mindfulness continuation training (control group). Patients in the LKM/CM group showed greater changes in Acceptance compared with the control group. Remarkable changes in borderline symptomatology, self-criticism and self-kindness were also observed in the LKM/CM group. Mechanistic explanations and therapeutic implications of the findings are discussed. Highlights: * Three weeks of loving-kindness and compassion meditations increased acceptance of the present-moment experience in patients with borderline personality disorder. * Significant improvements in the severity of borderline symptoms, self-criticism, mindfulness, acceptance and self-kindness were observed after the LKM/CM intervention. * LKM/CM is a promising complementary strategy for inclusion in mindfulness-based interventions and Dialectical Behavioural Therapy for treating core symptoms in borderline personality disorder.

Felver, J. C., C. E. Celis-de Hoyos, et al. (2016). **"A systematic review of mindfulness-based interventions for youth in school settings."** *Mindfulness* 7(1): 34-45. <http://dx.doi.org/10.1007/s12671-015-0389-4>

There is a growing interest in the use of mindfulness-based interventions (MBI) on youth, which has recently expanded to include the study of students in school settings. This article systematically reviewed the existing literature of applied studies using MBI with students in school settings in order to identify limitations in the scientific literature and inform future research directions. Twenty-eight studies were selected for review and were coded across multiple domains, including methodologies employed, student characteristics, intervention characteristics, and outcome variables. Results quantitatively summarized the coded variables, and strengths and limitations in the literature were subsequently identified. We conclude with specific recommendations for future interventions scientists wishing to study the utility of MBI in school settings.

Fung, H. H., Y. W. Ho, et al. (2016). **"Age differences in personal values: Universal or cultural specific?"** *Psychol Aging*. <http://www.ncbi.nlm.nih.gov/pubmed/26950224>

Prior studies on value development across adulthood have generally shown that as people age, they espouse communal values more strongly and agentic values less strongly. Two studies investigated whether these age differences in personal values might differ according to cultural values. Study 1 examined whether these age differences in personal values, and their associations with subjective well-being, showed the same pattern across countries that differed in individualism-collectivism. Study 2 compared age differences in personal values in the Canadian culture that emphasized agentic values more and the Chinese culture that emphasized communal values more. Personal and cultural values of each individual were directly measured, and their congruence were calculated and compared across age and cultures. Findings revealed that across cultures, older people had lower endorsement of agentic personal values and higher endorsement of communal personal values than did younger people. These age differences, and their associations with subjective well-being, were generally not influenced by cultural values. (PsycINFO Database Record

Giammarco, E. A. (2016). **"The measurement of individual differences in morality."** *Personality and Individual Differences* 88: 26-34. <http://www.sciencedirect.com/science/article/pii/S0191886915005449>

(Available in free full text) Within psychology many approaches have been taken to investigate morality. Arguably, the most prominent approach has been the use of moral reasoning, which is concerned with how individuals arrive at a decision on how they ought to behave. Kohlberg (1958) championed the empirical investigation of individual differences in moral reasoning and his early efforts continue to influence morality research today. This paper will review Kohlberg's seminal model of moral development and explore the assessments that have been created to measure the six stages of development described in this model. In addition, alternative morality theories and their most prominent assessments will be discussed, including the Neo-Kohlbergian approach, Gilligan's Moral Orientations Theory, and Moral Foundations Theory. In closing, the current state of morality assessments will be reviewed, along with recommendations for future development.

Gilmartin, H. M. (2016). **"Use hand cleaning to prompt mindfulness in clinic."** *BMJ* 352. <http://www.bmj.com/content/bmj/352/bmj.i13.full.pdf>

A regular prompt for reflection could reduce distractionIn the frenzied environment of clinical practice, we often don't notice what we're doing until a problem arises. Shuttling between patients and tasks may feel overwhelming. When we're hurried it's easy to lose focus on the task at hand and to become distracted. When we're not fully engaged in the experience of each step in our day, we may blindly react to events instead of noticing what is occurring and then responding with a focused approach. The act of cleaning hands, a simple yet important task practiced throughout the day, could serve to prompt a time of mindfulness to bring a clinician's awareness back to the present and allow for moments of clarity, insight, and reflection during a work day. The practice of mindfulnessThe modern practice of mindfulness has been described as a process of paying attention on purpose, in the present moment, and non-judgmentally. The practice is grounded in philosophical-religious tradition and is meant to help move a person from simply reacting to an event to intentionally suspending judgment of reactions, observing the moment, and responding thoughtfully. Formal mindfulness training includes interventions such as daily meditation, ... Although formal training and daily meditative practice provides the greatest opportunity for an awakened existence, the act of "mini meditations" during hand hygiene processes may represent a simple method for providers to experience the benefits of mindfulness. A moment of mindfulness: A1.) Focus your attention on your thoughts and emotions. Stay present and accept whatever arises, just as it is, without reacting. A2.) Set an intention—be it listening with intent, choosing your words mindfully, or acting with compassion in your next encounter. A3.) Smile to acknowledge this act of kindness to yourself and to your patient. Alcohol based hand rub: B1.) Pause, take a breath, and notice the sound and feel of hand rub being delivered to your palm. B2.) Be present in the moment and experience the sensation of rubbing the foam/gel into your wrists, hands, and fingers until the product evaporates and leaves you clean. Soap and water: C1.) Pause, take a breath, notice that you are turning on the faucet, and regard the feeling of water flowing from your wrists to your fingers. C2.) Be present in the moment and experience the sensation of rubbing soap into your wrists, hands, and fingers, and then washing it all down the drain.

Gordon, A. M. and S. Chen (2016). **"Do you get where i'm coming from?: Perceived understanding buffers against the negative impact of conflict on relationship satisfaction."** *Journal of Personality and Social Psychology* 110(2): 239-260 <http://psycnet.apa.org/journals/psp/110/2/239/>

Conflict can have damaging effects on relationship health. But is all conflict detrimental? Across 7 studies, we tested the overarching hypothesis that conflict in close relationships is only detrimental when people do not feel their thoughts, feelings, and point of view are understood by their relationship partners. Supporting this, conflict was negatively associated with relationship satisfaction among participants who perceived their romantic partner as less understanding, but not among those who felt more understood by their partners. This was true cross-sectionally (Study 1), experimentally (Studies 2, 3, 6a, and 6b), in daily life (Study 4), and for both members of couples pre- to postconflict conversation in the laboratory (Study 5). The buffering effects of feeling understood could not be explained by people who felt more understood being more understanding themselves, having more general positive perceptions of their partners, fighting about less important or different types of issues,

engaging in more pleasant conflict conversations, or being more satisfied with their relationships before the conflict. Perceived understanding was positively associated with conflict resolution, but this did not explain the benefits of feeling understood. Evidence from Studies 6a and 6b suggests that feeling understood during conflict may buffer against reduced relationship satisfaction in part because it strengthens the relationship and signals that one's partner is invested. Overall, these studies suggest that perceived understanding may be a critical buffer against the potentially detrimental effects of relationship conflict.

Hayes, M. C. and K. Hefferon (2015). **"Not like rose-tinted glasses... like taking a pair of dirty glasses off": A pilot intervention using positive emotions in expressive writing.**" *International Journal of Wellbeing* 5(4): 78-95.
<http://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/435>

(Available in free full text) Studies conducted in various contexts and with varied populations have found expressive writing enhances physical and psychological wellbeing. This pilot intervention study countered the predominantly quantitative evidence by adopting a qualitative methodology, exploring the experience of using positive emotions in expressive writing. Participants (n = 10), who all had previous experience in expressive writing, were asked to select one of ten positive emotion cards (PECs) each day for three days. Participants were then asked to write expressively through the 'lens' of their chosen emotion. Semi-structured interviews were conducted and experiences were evaluated using Thematic Analysis. The results identified two main themes that compared the experience of expressive writing both with and without the PECs. The first theme, Processing (without the PECs) contained three sub-themes: sense of relief, habitual perspective and reactive to experience. The second main theme, Progressing (with the PECs) contained three different sub-themes: sense of direction, changed perspective and interactive with experience. This study found that, for expressive writers, positive emotions may function in three ways: to relate to others or self-expand, to move past challenges cognitively or change unconstructive perspectives, and finally as a way to interactively link or 'bridge' from the written subject matter to constructive action, thus breaking cycles of reactive writing and rumination. Implications of the study on the practice of expressive writing and its potential as a positive psychology intervention (PPI) are discussed.

Jakubiak, B. K. and B. C. Feeney (2016). **"Keep in touch: The effects of imagined touch support on stress and exploration."** *Journal of Experimental Social Psychology*.
<http://www.sciencedirect.com/science/article/pii/S0022103116302013>

Although social support buffers stress and helps individuals to embrace challenges (exploration), individuals often experience stressors when close others are not proximally available to provide support. The current research tested whether imagining supportive touch from a romantic partner promotes exploration and buffers stress better than imagining verbal support or control imagination tasks. Participants completed a 5-min imagined support manipulation prior to experiencing a physical stressor, the cold pressor pain task (Exp. 1) or social/performance stressors, the Trier Social Stress task (Exp. 2). In Experiment 1, participants who imagined touch support experienced pain-buffering benefits compared to participants who imagined verbal support, and women who imagined touch support were more likely than women in other conditions to accept the challenge of a more difficult cold pressor task. In Experiment 2, participants who imagined touch support were more buffered from the stress of the socially-evaluative tasks and viewed these tasks with more enthusiasm than participants in all other imagination conditions. Potential mechanisms and implications are discussed.

Jiang, D., H. H. Fung, et al. (2016). **"Limited time perspective increases the value of calm."** *Emotion* 16(1): 52-62.
<http://www.ncbi.nlm.nih.gov/pubmed/26214569>

Previous findings indirectly suggest that the more people perceive their time in life as limited, the more they value calm. No study, however, has directly tested this hypothesis. To this end, using a combination of survey, experience sampling, and experimental methods, we examined the relationship between future time perspective and the affective states that people ideally want to feel (i.e., their "ideal affect"). In Study 1, the more people reported a limited time perspective, the more they wanted to feel calm and experience other low-arousal positive states. In Study 2, participants were randomly assigned to a limited time or an expanded time condition. Participants in the limited time condition reported valuing calm and other low arousal positive states more than those in the expanded time condition. We discuss the implications of these findings for broadening our understanding of the factors that shape how people ideally want to feel, and their consequences for decision making.

Jonason, P. K., A. Icho, et al. (2016). **"Resources, harshness, and unpredictability: The socioeconomic conditions associated with the dark triad traits."** *Evolutionary Psychology* 14(1).
<http://evp.sagepub.com/content/14/1/1474704915623699.abstract>

(Available in free full text) We sought to test the hypothesis that the Dark Triad traits are condition-dependent responses to a particular set of socioecological conditions in childhood. In three cross-sectional studies (N = 1,403), we examined how the Dark Triad traits were correlated with measures of resource availability, harshness, and unpredictability in one's childhood and adulthood. The Dark Triad traits were correlated with self-reports of an unpredictable childhood when using both the Short Dark Triad and the Dirty Dozen measures. These effects were somewhat stronger in men than in women and were replicable across samples. We also replicated sex differences in the Dark Triad traits but found none for our measures of socioecological conditions. Results are discussed in terms of the recurrent unpredictability in evolutionary history necessitating the sensitivity and responsiveness to such features to enable survival and reproduction. We contend that the Dark Triad traits might be condition-sensitive adaptations to socioecological unpredictability that all people could have if properly motivated.

Kearns, N. P., F. Shawyer, et al. (2016). **"Does rumination mediate the relationship between mindfulness and depressive relapse?"** *Psychology and Psychotherapy: Theory, Research and Practice* 89(1): 33-49.
<http://dx.doi.org/10.1111/papt.12064>

(Available in free full text) Objectives Major depressive disorder is a significant mental illness that is highly likely to recur, particularly after three or more previous episodes. Increased mindfulness and decreased rumination have both been associated with decreased depressive relapse. The aim of this study was to investigate whether rumination mediates the relationship between mindfulness and depressive relapse. Design This prospective design involved a secondary data analysis for identifying causal mechanisms using mediation analysis. Methods This study was embedded in a pragmatic randomized controlled trial of mindfulness-based cognitive therapy (MBCT) in which 203 participants (165 females, 38 males; mean age: 48 years), with a history of at least three previous episodes of depression, completed measures of mindfulness, rumination, and depressive relapse over a 2-year follow-up period. Specific components of mindfulness and rumination, being nonjudging and brooding, respectively, were also explored. Results While higher mindfulness scores predicted reductions in rumination and depressive relapse, the relationship between mindfulness and relapse was not found to be mediated by rumination, although there appeared to be a trend. Conclusions Our results strengthen the argument that mindfulness may be important in preventing relapse but that rumination is not a significant mediator of its effects. The study was adequately powered to detect medium mediation effects, but it is possible that smaller effects were present but not detected. Practitioner points * Mindfulness

may be one of several components of MBCT contributing to prevention of depressive relapse. * Although the original rationale for MBCT rested largely on a model of relapse causally linked to rumination, our findings suggest that the mechanism by which mindfulness impacts relapse is more complex than a simple effect on rumination.

Kelly, A. C. and J. Dupasquier (2016). **"Social safeness mediates the relationship between recalled parental warmth and the capacity for self-compassion and receiving compassion."** *Personality and Individual Differences* 89: 157-161. <http://www.sciencedirect.com/science/article/pii/S0191886915006510>

Researchers have theorized that experiences of emotional warmth in early life influence the development of the soothing system, an affect regulation system thought to underpin individuals' capacity for self-compassion and receiving compassion. The current study tested the theory that feelings of social safeness, also considered an output of the soothing system, might be a key mechanism through which parental warmth and capacities for compassion are linked. One-hundred and fifty-three female college students completed online measures of parental rearing behaviors, social safeness, positive and negative affect, self-compassion, received social support, and fears of compassion. Bootstrapping analyses supported our hypothesized mediational model. Controlling for overprotective and rejecting parenting behaviors, recalled parental warmth was linked to a greater capacity for self-compassion (high self-compassion, low fear of self-compassion) and receiving compassion (high received social support, low fear of receiving compassion) indirectly through affective experiences in general, and feelings of social safeness in particular. These findings suggest that differences in feelings of connectedness, reassurance, and contentment in social relationships might help to explain why children who recall fewer experiences of emotional warmth with parents are less capable and more afraid of self-compassion and receiving compassion. Theoretical and practical implications are discussed.

Lang, A., B. Papp, et al. (2016). **"Dimensions of adult attachment are significantly associated with specific affective temperament constellations in a hungarian university sample."** *Journal of Affective Disorders* 191: 78-81. <http://www.sciencedirect.com/science/article/pii/S0165032715309666>

Abstract Background Related to emotion regulation and mental health, adult attachment and affective temperaments are relevant research topics of contemporary psychiatry and clinical psychology. However, to date, only one study investigated the relationship between these two constructs. Thus, we aimed to further reveal adult attachment's association with affective temperaments. Methods Affective temperament and adult attachment dimensions of 1469 Hungarian university students were assessed with self-report measures (Temperament Evaluation of Memphis, Pisa and San Diego autoquestionnaire and Experiences in Close Relationships Scale, respectively). Age and measured variables were compared between genders with ANOVAs. Associations between attachment dimensions and affective temperaments were examined with Pearson's correlations and partial correlations; the moderation effect of age and gender on these relationships was tested with PROCESS macro. Using Fisher r-to-z transformation, we also compared our results with the findings of the previous study. Cohen's ds were used to report effect size and Cronbach's alphas were computed as indices of internal reliability. Results Significant correlations were found between attachment dimensions and affective temperaments. Correlations were especially robust between attachment anxiety and depressive, cyclothymic and anxious temperaments. Contrasted with the results of the previous study, hyperthymic temperament was negatively related to attachment avoidance and anxious temperament was significantly more strongly correlated with attachment anxiety in our study. Limitations We used a previous version of the adult attachment measure. Our sample differed from the target sample in several ways. Participants were not screened for mental disorders. Conclusions Findings highlight that adult attachment dimensions are significantly associated with affective temperaments.

Li, J., L. Long, et al. (2016). **"Effects of a mindfulness-based intervention on fertility quality of life and pregnancy rates among women subjected to first in vitro fertilization treatment."** *Behaviour Research and Therapy* 77: 96-104. <http://www.sciencedirect.com/science/article/pii/S0005796715300747>

Generally, undergoing an in vitro fertilization (IVF) treatment is an emotional and physical burden for the infertile woman, which may negatively influence the treatment outcome. We conducted a study to investigate the effectiveness of a mindfulness-based intervention (MBI) among women subjected to first IVF treatment at a fertility medical center in China. Among infertile women registered for their first IVF treatment, 58 completed the intervention, and 50 were assigned to a control group using a non-randomized controlled study. Standardized measures of mindfulness, self-compassion, emotion regulation difficulties, infertility-related coping strategies and fertility quality of life (FertiQoL) were endorsed pre- and post-MBI, and measure of pregnancy rates at the sixth months after the intervention. Both groups were shown to be equivalent at baseline. By the end of the intervention, women who attended the intervention revealed a significant increase in mindfulness, self-compassion, meaning-based coping strategies and all FertiQoL domains. Inversely, they presented a significant decrease in emotion regulation difficulties, active- and passive-avoidance coping strategies. Women in the control group did not present significant changes in any of the psychological measures. Moreover, there were statistically significant differences between participants in the pregnancy rates, the experiment group higher than the control group. Being fully aware of the present moment without the lens of judgment, seems to help women relate to their infertility and IVF treatment in new ways. This is beneficial for promoting their self-compassion, adaptive emotion regulation and infertility-related coping strategies, which, in turn, may influence the FertiQoL and pregnancy rates. The brief and nonpharmaceutical nature of this intervention makes it a promising candidate for women' use during first IVF treatment.

Luecken, L. J., M. J. Hagan, et al. (2016). **"A longitudinal study of the effects of child-reported maternal warmth on cortisol stress response 15 years after parental divorce."** *Psychosomatic Medicine* 78(2): 163-170. http://journals.lww.com/psychosomaticmedicine/Fulltext/2016/02000/A_Longitudinal_Study_of_the_Effects_of.6.aspx

Objectives: The experience of parental divorce during childhood is associated with an increased risk of behavioral and physical health problems. Alterations in adrenocortical activity may be a mechanism in this relation. Parent-child relationships have been linked to cortisol regulation in children exposed to adversity, but prospective research is lacking. We examined maternal warmth in adolescence as a predictor of young adults' cortisol stress response 15 years after parental divorce. Methods: Participants included 240 youth from recently divorced families. Mother and child reports of maternal warmth were assessed at 6 time points across childhood, adolescence, and young adulthood. Offspring salivary cortisol was measured in young adulthood before and after a social stress task. Structural equation modeling was used to predict cortisol response from maternal warmth across early and late adolescence. Results: Higher child-reported maternal warmth in early adolescence predicted higher child-reported maternal warmth in late adolescence (standardized regression = 0.45, standard error = 0.065, $p < .01$), which predicted lower cortisol response to a challenging interpersonal task in young adulthood (standardized regression = -0.20, standard error = 0.094, $p = .031$). Neither mother-reported warmth in early adolescence nor late adolescence was significantly related to offspring cortisol response in young adulthood. Conclusions: Results suggest that for children from divorced families, a warm mother-child relationship after divorce and across development, as perceived by the child, may promote efficient biological regulation later in life. Trial Registration: ClinicalTrials.gov Identifier: NCT01407120.

McIndoo, C. C., A. A. File, et al. (2016). **"Mindfulness-based therapy and behavioral activation: A randomized controlled trial with depressed college students."** *Behaviour Research and Therapy* 77: 118-128. <http://www.sciencedirect.com/science/article/pii/S0005796715300760>

Major Depressive Disorder (MDD) manifests in 20–30% of college students, with increased incidence in recent decades. Very limited research has assessed the efficacy of evidence-based interventions for MDD in college students. Mindfulness-Based Therapy (MBT) and Behavioral Activation (BA) are two interventions with significant potential to meet demands of college counseling clinics and effectively treat college students with MDD. This study utilized a randomized controlled research design (n = 50) to examine the efficacy of four-sessions of abbreviated MBT and BA relative to a wait-list control condition with depressed college students. Intent-to-treat data analyses on depression outcome measures suggested both treatments were superior to the control group. There were significant pre-post treatment improvements across measures of depression, rumination, stress, and mindfulness, gains largely maintained at 1-month follow-up. Neither active treatment effectively reduced somatic anxiety. Both treatments generally had moderate-strong effect sizes relative to the control group, and based on depression response and remission criteria, 56–79% of patients exhibited clinically significant improvement. Based on reliable change indices, 75–85% experienced clinically significant reductions in depression. There was strong therapist competence and adherence to treatment protocols and high patient satisfaction with both interventions. Study limitations and implications for the assessment and treatment of depressed college students are discussed.

Murray, J., A. Theakston, et al. (2016). **"Can the attention training technique turn one marshmallow into two? Improving children's ability to delay gratification."** *Behaviour Research and Therapy* 77: 34-39. <http://www.sciencedirect.com/science/article/pii/S0005796715300589>

The seminal Marshmallow Test (Mischel & Ebbesen, 1970) has reliably demonstrated that children who can delay gratification are more likely to be emotionally stable and successful later in life. However, this is not good news for those children who can't delay. Therefore, this study aimed to explore whether a metacognitive therapy technique, Attention Training (ATT: Wells, 1990) can improve young children's ability to delay gratification. One hundred children participated. Classes of 5–6 year olds were randomly allocated to either the ATT or a no-intervention condition and were tested pre and post-intervention on ability to delay gratification, verbal inhibition (executive control), and measures of mood. The ATT intervention significantly increased (2.64 times) delay of gratification compared to the no-intervention condition. After controlling for age and months in school, the ATT intervention and verbal inhibition task performance were significant independent predictors of delay of gratification. These results provide evidence that ATT can improve children's self-regulatory abilities with the implication that this might reduce psychological vulnerability later in life. The findings highlight the potential contribution that the Self-Regulatory Executive Function (S-REF) model could make to designing techniques to enhance children's self-regulatory processes.

Neff, K. D. (2016). **"The self-compassion scale is a valid and theoretically coherent measure of self-compassion."** *Mindfulness* 7(1): 264-274. <http://dx.doi.org/10.1007/s12671-015-0479-3>

Recently, the Self-Compassion Scale (SCS) has been criticized for problems with psychometric validity. Further, the use of an overall self-compassion score that includes items representing the lack of self-compassion has been called into question. I argue that the SCS is consistent with my definition of self-compassion, which I see as a dynamic balance between the compassionate versus uncompassionate ways that individuals emotionally respond to pain and failure (with kindness or judgment), cognitively understand their predicament (as part of the human experience or as isolating), and pay attention to suffering (in a mindful or over-identified manner). A summary of new empirical evidence is provided using a bi-factor analysis, which indicates that at least 90 % of the reliable variance in SCS scores can be explained by an overall self-compassion factor in five different populations, justifying the use of a total scale score. Support for a six-factor structure to the SCS was also found; however, suggesting the scale can be used in a flexible manner depending on the interests of researchers. I also discuss the issue of whether a two-factor model of the SCS—which collapses self-kindness, common humanity, and mindfulness items into a "self-compassion" factor and self-judgment, isolation, and over-identification items into a "self-criticism" factor—makes theoretical sense. Finally, I present new data showing that self-compassion training increases scores on the positive SCS subscales and decreases scores on the negative subscales, supporting the idea that self-compassion represents more compassionate and fewer uncompassionate responses to suffering.

Ruffman, T., M. Wilson, et al. (2016). **"Age differences in right-wing authoritarianism and their relation to emotion recognition."** *Emotion* 16(2): 226-236. <http://www.ncbi.nlm.nih.gov/pubmed/26461245>

This study examined the correlates of right-wing authoritarianism (RWA) in older adults. Participants were given tasks measuring emotion recognition, executive functions and fluid IQ and questionnaires measuring RWA, perceived threat and social dominance orientation. Study 1 established higher age-related RWA across the age span in more than 2,600 New Zealanders. Studies 2 to 4 found that threat, education, social dominance and age all predicted unique variance in older adults' RWA, but the most consistent predictor was emotion recognition, predicting unique variance in older adults' RWA independent of all other variables. We argue that older adults' worse emotion recognition is associated with a more general change in social judgment. Expression of extreme attitudes (right- or left-wing) has the potential to antagonize others, but worse emotion recognition means that subtle signals will not be perceived, making the expression of extreme attitudes more likely. Our findings are consistent with other studies showing that worsening emotion recognition underlies age-related declines in verbosity, understanding of social gaffes, and ability to detect lies. Such results indicate that emotion recognition is a core social insight linked to many aspects of social cognition.

Salerno, L., C. Rhind, et al. (2016). **"An examination of the impact of care giving styles (accommodation and skilful communication and support) on the one year outcome of adolescent anorexia nervosa: Testing the assumptions of the cognitive interpersonal model in anorexia nervosa."** *Journal of Affective Disorders* 191: 230-236. <http://www.sciencedirect.com/science/article/pii/S0165032715308697>

Background The cognitive interpersonal model predicts that parental caregiving style will impact on the rate of improvement of anorexia nervosa symptoms. The study aims to examine whether the absolute levels and the relative congruence between mothers' and fathers' care giving styles influenced the rate of change of their children's symptoms of anorexia nervosa over 12 months. Methods Triads (n=54) consisting of patients with anorexia nervosa and both of their parents were included in the study. Caregivers completed the Caregiver Skills scale and the Accommodation and Enabling Scale at intake. Patients completed the Short Evaluation of Eating Disorders at intake and at monthly intervals for one year. Polynomial Hierarchical Linear Modeling was used for the analysis. Results There is a person/dose dependant relationship between accommodation and patients' outcome, i.e. when both mother and father are highly accommodating outcome is poor, if either is highly accommodating outcome is intermediate and if both parents are low on accommodation outcome is good. Outcome is also good if both parents or mother alone have high levels of carer skills and poor if both have low levels of skills. Limitations Including only a sub-sample of an adolescent clinical population; not considering time spent care giving, and reporting patient's

self-reported outcome data limits the generalisability of the current findings. Conclusion Accommodating and enabling behaviours by family members can serve to maintain eating disorder behaviours. However, skilful behaviours particularly by mothers, can aid recovery. Clinical interventions to optimise care giving skills and to reduce accommodation by both parents may be an important addition to treatment for anorexia nervosa.

Schöttke, H., C. Flückiger, et al. (2016). **"Predicting psychotherapy outcome based on therapist interpersonal skills: A five-year longitudinal study of a therapist assessment protocol."** *Psychother Res.* <http://www.tandfonline.com/doi/abs/10.1080/10503307.2015.1125546?src=recsys>

Objective: In the past decade, variation in outcomes between therapists (i.e., therapist effects) have become increasingly recognized as an important factor in psychotherapy. Less is known, however, about what accounts for differences between therapists. The present study investigates the possibility that therapists' basic therapy-related interpersonal skills may impact outcomes. Method: To examine this, psychotherapy postgraduate trainees completed both an observer- and an expert-rated behavioral assessment: the Therapy-Related Interpersonal Behaviors (TRIB). TRIB scores were used to predict trainees' outcomes over the course of the subsequent five years. Results: Results indicate that trainees' with more positively rated interpersonal behaviors assessed in the observer-rated group format but not in a single expert-rated format showed superior outcomes over the five-year period. This effect remained controlling for therapist characteristics (therapist gender, theoretical orientation [cognitive behavioral or psychodynamic], amount of supervision, patient's order within therapist's caseload), and patient characteristics (patient age, gender, number of comorbid diagnoses, global severity, and personality disorder diagnosis). Conclusions: These findings underscore the importance of therapists' interpersonal skills as a predictor of outcome and source of therapist effects. The potential utility of assessing therapists' and therapists-in-training interpersonal skills are discussed.

Sinclair, L., B. Fehr, et al. (2016). **"The relation between compassionate love and prejudice: The mediating role of inclusion of out-group members in the self."** *Social Psychological and Personality Science* 7(2): 176-183. <http://spp.sagepub.com/content/7/2/176.abstract>

Recently, there has been an increase in prejudice toward some groups such as immigrants. In response, governments and citizens have called for compassion. In four studies, we tested the hypothesis that people who are high in compassionate love would express less prejudice than those who are low. We found that people high in compassionate love had more positive attitudes toward out-groups, including immigrants. The relation between compassionate love and prejudice toward immigrants was mediated by inclusion of out-group members in the self. An experiment provided evidence of a causal link between compassionate love and prejudice toward immigrants. Finally, people high in compassionate love were less likely to discriminate against immigrants in a budget cutting exercise and more likely to volunteer to help them. Empathy did not account for our results. We conclude that compassionate love holds promise as a positive pathway to prejudice reduction.

Sourander, A., D. Gyllenberg, et al. (2016). **"Association of bullying behavior at 8 years of age and use of specialized services for psychiatric disorders by 29 years of age."** *JAMA Psychiatry* 73(2): 159-165. <http://dx.doi.org/10.1001/jamapsychiatry.2015.2419>

Importance Bullying and being exposed to bullying among children is prevalent, especially among children with psychiatric symptoms, and constitutes a major concern worldwide. Whether childhood bullying or exposure to bullying in the absence of childhood psychiatric symptoms is associated with psychiatric outcomes in adulthood remains unclear. Objective To study the associations between bullying behavior at 8 years of age and adult psychiatric outcomes by 29 years of age. Design, Setting, and Participants Nationwide birth cohort study of 5034 Finnish children with complete information about childhood bullying behavior was followed up from 8 to 29 years of age. Follow-up was completed on December 31, 2009, and data were analyzed from January 15, 2013, to February 15, 2015. Main Outcomes and Measures Information about bullying, exposure to bullying, and psychiatric symptoms were obtained from parents, teachers, and child self-reports when children were 8 years of age. Use of specialized services for psychiatric disorders from 16 to 29 years of age was obtained from a nationwide hospital register, including outpatient and inpatient treatment. Results Among the 5034 study participants, 4540 (90.2%) did not engage in bullying behavior; of these, 520 (11.5%) had received a psychiatric diagnosis at follow-up; 33 of 166 (19.9%) who engaged in frequent bullying, 58 of 251 (23.1%) frequently exposed to bullying, and 24 of 77 (31.2%) who both frequently engaged in and were frequently exposed to bullying had received psychiatric diagnoses at follow-up. When analyses were adjusted by sex, family factors, and child psychiatric symptoms at 8 years of age, we found independent associations of treatment of any psychiatric disorder with frequent exposure to bullying (hazard ratio [HR], 1.9; 95% CI, 1.4-2.5) and being a bully and exposed to bullying (HR, 2.1; 95% CI, 1.3-3.4). Exposure to bullying was specifically associated with depression (HR, 1.9; 95% CI, 1.2-2.9). Bullying was associated with psychiatric outcomes only in the presence of psychiatric problems at 8 years of age. Participants who were bullies and exposed to bullying at 8 years of age had a high risk for several psychiatric disorders requiring treatment in adulthood. However, the associations with specific psychiatric disorders did not remain significant after controlling for concurrent psychiatric symptoms. Conclusions and Relevance Exposure to bullying, even in the absence of childhood psychiatric symptoms, is associated with severe adulthood psychiatric outcomes that require treatment in specialized services. Early intervention among those involved in bullying can prevent long-term consequences.

Spinhoven, P., B. M. Elzinga, et al. (2016). **"Childhood maltreatment, maladaptive personality types and level and course of psychological distress: A six-year longitudinal study."** *Journal of Affective Disorders* 191: 100-108. <http://www.sciencedirect.com/science/article/pii/S0165032715304572>

Background Childhood maltreatment and maladaptive personality are both cross-sectionally associated with psychological distress. It is unknown whether childhood maltreatment affects the level and longitudinal course of psychological distress in adults and to what extent this effect is mediated by maladaptive personality. Methods A sample of 2947 adults aged 18-65, consisting of healthy controls, persons with a prior history or current episode of depressive and/or anxiety disorders according to the Composite Interview Diagnostic Instrument were assessed in six waves at baseline (T0) and 1 (T1), 2 (T2), 4 (T4) and 6 years (T6) later. At each wave psychological distress was measured with the Inventory of Depressive Symptomatology, Beck Anxiety Inventory, and Fear Questionnaire. At T0 childhood maltreatment types were measured with a semi-structured interview (Childhood Trauma Interview) and personality traits with the NEO-Five Factor Inventory. Results Using latent variable analyses, we found that severity of childhood maltreatment (emotional neglect and abuse in particular) predicted higher initial levels of psychological distress and that this effect was mediated by maladaptive personality types. Differences in trajectories of distress between persons with varying levels of childhood maltreatment remained significant and stable over time. Limitations Childhood maltreatment was assessed retrospectively and maladaptive personality types and level of psychological distress at study entry were assessed concurrently. Conclusions Routine assessment of maladaptive personality types and possible childhood emotional maltreatment in persons with severe and prolonged psychological distress seems warranted to identify persons who may need a different or more intensive treatment.

Sznycer, D., J. Tooby, et al. (2016). **"Shame closely tracks the threat of devaluation by others, even across cultures."** *Proceedings of the National Academy of Sciences* 113(10): 2625-2630. <http://www.pnas.org/content/113/10/2625.abstract>

We test the theory that shame evolved as a defense against being devalued by others. By hypothesis, shame is a neurocomputational program tailored by selection to orchestrate cognition, motivation, physiology, and behavior in the service of: (i) deterring the individual from making choices where the prospective costs of devaluation exceed the benefits, (ii) preventing negative information about the self from reaching others, and (iii) minimizing the adverse effects of devaluation when it occurs. Because the unnecessary activation of a defense is costly, the shame system should estimate the magnitude of the devaluative threat and use those estimates to cost-effectively calibrate its activation: Traits or actions that elicit more negative evaluations from others should elicit more shame. As predicted, shame closely tracks the threat of devaluation in the United States ($r = .69$), India ($r = .79$), and Israel ($r = .67$). Moreover, shame in each country strongly tracks devaluation in the others, suggesting that shame and devaluation are informed by a common species-wide logic of social valuation. The shame–devaluation link is also specific: Sadness and anxiety—emotions that coactivate with shame—fail to track devaluation. To our knowledge, this constitutes the first empirical demonstration of a close, specific match between shame and devaluation within and across cultures.