# 20 mindfulness & compassion abstracts october '14 newsletter

(Beute and de Kort 2014; Boettcher, Åström et al. 2014; Burklund, Creswell et al. 2014; Callan, Kay et al. 2014; Chien and Thompson 2014; Diedrich, Grant et al. 2014; Gold, Hilsenroth et al. 2014; Goyal, Singh et al. 2014; Graham and Crown 2014; Grossmann and Kross 2014; Henke and Chur-Hansen 2014; Hill and Turiano 2014; Lee, Talwar et al. 2014; Lilienfeld, Latzman et al. 2014; Owen, Duncan et al. 2014; Peterson-Post, Rhoades et al. 2014; Ravitz and Watson 2014; Shafer, Jensen et al. 2014; Stolarski, Matthews et al. 2014; Ybema and van Dam 2014)

### Beute, F. and Y. A. W. de Kort (2014). "Salutogenic effects of the environment: Review of health protective effects of nature and daylight." <u>Applied Psychology: Health and Well-Being</u> 6(1): 67-95. <u>http://dx.doi.org/10.1111/aphw.12019</u>

Both nature and daylight have been found to positively influence health. These findings were, however, found in two separate research domains. This paper presents an overview of effects found for daylight and nature on health and the health-related concepts stress, mood, and executive functioning and self-regulation. Because of the overlap in effects found and the co-occurrence of both phenomena, the paper points to the need to consider daylight factors when investigating effects of nature and vice versa. Furthermore, the existence of possibly shared underlying mechanisms is discussed and the need to unify the research paradigms and dependent variables used between the two research fields. Last, in view of the beneficial effects of both phenomena on health, our objective is to raise awareness amongst the general public, designers, and health practitioners to use these naturally available phenomena to their full potential.

### Boettcher, J., V. Åström, et al. (2014). "Internet-based mindfulness treatment for anxiety disorders: A randomized controlled trial." <u>Behavior Therapy</u> 45(2): 241-253. <u>http://www.sciencedirect.com/science/article/pii/S0005789413001044</u>

(Free full text available) Mindfulness-based interventions have proven effective for the transdiagnostic treatment of heterogeneous anxiety disorders. So far, no study has investigated the potential of mindfulness-based treatments when delivered remotely via the Internet. The current trial aims at evaluating the efficacy of a stand-alone, unguided, Internet-based mindfulness treatment program for anxiety. Ninety-one participants diagnosed with social anxiety disorder, generalized anxiety disorder, panic disorder, or anxiety disorder not otherwise specified were randomly assigned to a mindfulness treatment group (MTG) or to an online discussion forum control group (CG). Mindfulness treatment consisted of 96 audio files with instructions for various mindfulness meditation exercises. Primary and secondary outcome measures were assessed at pre-, posttreatment, and at 6-months follow-up. Participants of the MTG showed a larger decrease of symptoms of anxiety, depression, and insomnia from pre- to postassessment than participants of the CG (Cohen's dbetween = 0.36-0.99). Within effect sizes were large in the MTG (d = 0.82-1.58) and small to moderate in the CG (d = 0.45-0.76). In contrast to participants of the CG, participants of the MTG also achieved a moderate improvement in their quality of life. The study provided encouraging results for an Internet-based mindfulness protocol in the treatment of primary anxiety disorders. Future replications of these results will show whether Webbased mindfulness meditation can constitute a valid alternative to existing, evidence-based cognitive-behavioural Internet treatments.

### Burklund, L. J., J. D. Creswell, et al. (2014). "The common and distinct neural bases of affect labeling and reappraisal in healthy adults." Front Psychol 5: 221. http://www.ncbi.nlm.nih.gov/pubmed/24715880

Emotion regulation is commonly characterized as involving conscious and intentional attempts to change felt emotions, such as, for example, through reappraisal whereby one intentionally decreases the intensity of one's emotional response to a particular stimulus or situation by reinterpreting it in a less threatening way. However, there is growing evidence and appreciation that some types of emotion regulation are unintentional or incidental, meaning that affective modulation is a consequence but not an explicit goal. For example, affect labeling involves simply verbally labeling the emotional content of an external stimulus or one's own affective responses without an intentional goal of altering emotional responses, yet has been associated with reduced affective responses at the neural and experiential levels. Although both intentional and incidental emotional regulation strategies have been associated with diminished limbic responses and self-reported distress, little previous research has directly compared their underlying neural mechanisms. In this study, we examined the extent to which incidental and intentional emotion regulation, namely, affect labeling and reappraisal, produced common and divergent neural and selfreport responses to aversive images relative to an observe-only control condition in a sample of healthy older adults (N = 39). Affect labeling and reappraisal produced common activations in several prefrontal regulatory regions, with affect labeling producing stronger responses in direct comparisons. Affect labeling and reappraisal were also associated with similar decreases in amygdala activity. Finally, affect labeling and reappraisal were associated with correlated reductions in self-reported distress. Together these results point to common neurocognitive mechanisms involved in affect labeling and reappraisal, supporting the idea that intentional and incidental emotion regulation may utilize overlapping neural processes.

### Callan, M. J., A. C. Kay, et al. (2014). "Making sense of misfortune: Deservingness, self-esteem, and patterns of selfdefeat." Journal of Personality and Social Psychology 107(1): 142-162. http://psycnet.apa.org/journals/psp/107/1/142.html

(Free full text available) Drawing on theorizing and research suggesting that people are motivated to view their world as an orderly and predictable place in which people get what they deserve, the authors proposed that (a) random and uncontrollable bad outcomes will lower self-esteem and (b) this, in turn, will lead to the adoption of self-defeating beliefs and behaviors. Four experiments demonstrated that participants who experienced or recalled bad (vs. good) breaks devalued their self-esteem (Studies 1a and 1b), and that decrements in self-esteem (whether arrived at through misfortune or failure experience) increase beliefs about deserving bad outcomes (Studies 1a, 1b, 2a, 2b). Five studies (Studies 3–7) extended these findings by showing that this, in turn, can engender a wide array of self-defeating beliefs and behaviors, including claimed selfhandicapping ahead of an ability test (Study 3), the preference for others to view the self less favorably (Studies 4–5), chronic self-handicapping and thoughts of physical self-harm (Study 6), and choosing to receive negative feedback during an ability test (Study 7). The current findings highlight the important role that concerns about deservingness play in the link between lower self-esteem and patterns of self-defeating beliefs and behaviors. The theoretical and practical implications of these findings are discussed.

# Chien, W. T. and D. R. Thompson (2014). "Effects of a mindfulness-based psychoeducation programme for chinese patients with schizophrenia: 2-year follow-up." The British Journal of Psychiatry 205(1): 52-59. http://bjp.rcpsych.org/content/205/1/52.abstract

Psychoeducation programmes for people with schizophrenia are shown to reduce relapses but few studies have indicated significant improvements in patients' illness awareness and insight, functioning, symptom severity or rates of

readmission to hospital. Aims To examine the effects of a mindfulness-based psychoeducation programme for Chinese people with schizophrenia. Method A multisite randomised controlled trial was conducted with 107 out-patients with schizophrenia: 36 and 35 received a 6-month mindfulness-based psychoeducation and a conventional psychoeducation programme, respectively, and 35 received routine care alone. Patient outcome measures were psychiatric symptom severity, psychosocial functioning, social support, insight into illness/treatment, and frequency and duration of readmissions to hospital (ClinicalTrials.gov: trial registration NCT01667601). Results The mindfulness-based psychoeducation group reported significantly greater improvements in psychiatric symptoms, psychosocial functioning, insight into illness/treatment and duration of readmissions to hospital over 24 months when compared with the other two groups. Conclusions Mindfulness-based psychoeducation appears to be a promising approach to treatment for Chinese patients with schizophrenia.

# Diedrich, A., M. Grant, et al. (2014). "Self-compassion as an emotion regulation strategy in major depressive disorder." <u>Behaviour Research and Therapy</u> 58(0): 43-51.

#### http://www.sciencedirect.com/science/article/pii/S0005796714000758

Cognitive reappraisal and acceptance are two presumably adaptive emotion regulation strategies in depression. More recently, self-compassion has been discussed as another potentially effective strategy for coping with depression. In the present study, we compared the effectiveness of self-compassion with a waiting condition, reappraisal, and acceptance in a clinically depressed sample, and tested the hypothesis that the intensity of depressed mood would moderate the differential efficacy of these strategies. In an experimental design, we induced depressed mood at four points in time in 48 participants meeting criteria for major depressive disorder. After each mood induction, participants were instructed to wait, reappraise the situation, accept their negative emotions, or employ self-compassion to regulate their depressed mood. Self-ratings of depressed mood were assessed before and after each mood induction and regulation phase. Results showed that the reduction of depressed mood was significantly greater in the self-compassion condition than in the waiting condition. No significant differences were observed between the self-compassion and the reappraisal condition, and between the self-compassion and the acceptance condition in patients' mood ratings. However, the intensity of self-rated depressed mood at baseline was found to moderate the comparative effectiveness of self-compassion and reappraisal with a trend of self-compassion as another adaptive emotion regulation strategy for patients with major depressive disorder, especially for those suffering from high levels of depressed mood.

#### Gold, S. H., M. J. Hilsenroth, et al. (2014). "Therapeutic alliance in the personal therapy of graduate clinicians: *Relationship to the alliance and outcomes of their patients.*" <u>Clin Psychol Psychother</u>. <u>http://www.ncbi.nlm.nih.gov/pubmed/24549582</u>

This is the first study to explore the relationship between aspects of a therapists' personal therapy and the subsequent psychotherapy process and outcome they perform. The participants were 14 graduate clinicians with various experiences in personal therapy, who treated 54 outpatients engaged in short-term psychodynamic psychotherapy at a university-based community clinic. Results demonstrated non-significant relationships between the duration of personal therapy as well as a graduate clinician's overall alliance in their personal therapy with alliance ratings made by themselves as therapists and their patients, as well as the number of psychotherapy sessions attended by patients. However, the clinician's personal therapy alliance was significant and positively related to their patients' rating of outcome. Additionally, a significant negative correlation was observed between the degree of perceived helpfulness in their personal therapy and how these clinicians rated alliances, as the therapist, with their patients. The current findings suggest a relationship between a clinician's personal therapy alliance and the outcome of treatments they conduct. Implications for clinical training and practice as well as future research are discussed. KEY PRACTITIONER MESSAGE: While graduate clinician's personal therapy alliance was not significantly related to their patients' ratings of alliance, it was related to their patients' ratings of outcome. Trainee satisfaction with or quality of their personal therapy may be a more relevant than the amount or duration of their treatment in regard to the process and outcomes of their patients. The findings from retrospective clinician surveys on the helpfulness of their personal therapy may not be entirely consistent with empirical examination of these issues. The relation of personal therapy and outcome may work through improving the therapist's level of adaptive functioning (i.e., psychological-relational-emotional health) and future research should examine this simpler, more parsimonious, explanation for our findings.

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

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

# Graham, C. and S. Crown (2014). "*Religion and well-being around the world: Social purpose, social time, or social insurance?*" <u>International Journal Of Wellbeing</u> 4(1): 1-27.

http://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/258

A number of studies find that religious people are happier than non-religious ones. Yet a number of fundamental questions about that relationship remain unanswered. A critical one is the direction of causality: does religion make people happier or are happier people more likely to have faith in something that is beyond their control? We posit that the relationship

between religion and wellbeing is mediated by factors ranging from intrinsic purpose, to its social aspects, to its role as an insurance mechanism for people who face great adversity. We explore a number of related questions, using world-wide data from the Gallup World Poll. As these data are cross-section data, we cannot establish causality; we do, however, explore: how or if the relationship between religion and wellbeing varies across the two distinct wellbeing dimensions (hedonic and evaluative); how social externalities mediate the relationship; how the relationship changes as countries and people within them become more prosperous and acquire greater means and agency; and how the relationship between religion and wellbeing varies depending on where respondents are in the wellbeing distribution. We find that the positive relation between religion and evaluative wellbeing is more important for respondents with lower levels of agency, while the positive relation with hedonic wellbeing holds across the board. The social dimension of religion is most important for the least social respondents, while the religiosity component of religion is most important for the happiest respondents, regardless of religious affiliation or service attendance. As such, it seems that the happiest are most likely to seek social purpose in religion, the poorest are most likely to seek social insurance in religion, and the least social are the most likely to seek social time in religion.

#### Grossmann, I. and E. Kross (2014). "Exploring Solomon's paradox: Self-distancing eliminates the self-other asymmetry in wise reasoning about close relationships in younger and older adults." Psychological Science 25(8): 1571-1580. http://pss.sagepub.com/content/25/8/1571.abstract

Are people wiser when reflecting on other people's problems compared with their own? If so, does self-distancing eliminate this asymmetry in wise reasoning? In three experiments (N = 693), participants displayed wiser reasoning (i.e., recognizing the limits of their knowledge and the importance of compromise and future change, considering other people's perspectives) about another person's problems compared with their own. Across Studies 2 and 3, instructing individuals to selfdistance (rather than self-immerse) eliminated this asymmetry. Study 3 demonstrated that each of these effects was comparable for younger (20-40 years) and older (60-80 years) adults. Thus, contrary to the adage "with age comes wisdom," our findings suggest that there are no age differences in wise reasoning about personal conflicts, and that the effects of selfdistancing generalize across age cohorts. These findings highlight the role that self-distancing plays in allowing people to overcome a pervasive asymmetry that characterizes wise reasoning.

#### Henke, M. and A. Chur-Hansen (2014). "The effectiveness of mindfulness-based programs on physical symptoms and psychological distress in patients with fibromyalgia: A systematic review." International Journal Of Wellbeing 4(1): 28-45. http://www.internationaljournalofwellbeing.org/index.php/ijow/article/view/264

Objective: Research into and the clinical use of mindfulness as a therapeutic intervention have increased in recent years and the results have been promising in a range of illness populations. One area in which mindfulness has been trialled is fibromyalgia, a chronic pain condition currently with poor treatment outcomes. The aim of this systematic review was to examine the effectiveness of mindfulness-based interventions on physical symptoms and psychological distress in patients with fibromyalgia. Methods: Systematic review: PubMed, PsycINFO, Embase and Scopus were searched for randomised controlled trials and prospective and retrospective studies. A quality assessment and synthesis of the quantitative data (based on guidelines from the Joanna Briggs Institute) was completed on studies using a mindfulness-based intervention with patients with fibromyalgia on outcomes related to physical symptoms and psychological distress and wellbeing. Results: Ten studies met the inclusion criteria. All included studies used a mindfulness-based group program design. Although outcome measures and data presentation varied, making statistical pooling impossible, the narrative synthesis resulted in overall positive evidence for the efficacy of mindfulness-based interventions for patients with fibromyalgia on a range of physical symptom and psychological distress outcome measures. Conclusion: Mindfulness is a favourable treatment option for patients with fibromyalgia. Whilst demonstrated efficacy was generally positive, the number of studies addressing this topic is small and there was wide variation in outcome measures and data presentation. More research is needed, particularly large-scale randomised controlled trials with consistent methodology, outcome measures and sufficient follow-up time periods.

#### Hill, P. L. and N. A. Turiano (2014). "Purpose in life as a predictor of mortality across adulthood." Psychological Science 25(7): 1482-1486. http://pss.sagepub.com/content/25/7/1482.abstract

Having a purpose in life has been cited consistently as an indicator of healthy aging for several reasons, including its potential for reducing mortality risk. In the current study, we sought to extend previous findings by examining whether purpose in life promotes longevity across the adult years, using data from the longitudinal Midlife in the United States (MIDUS) sample. Proportional-hazards models demonstrated that purposeful individuals lived longer than their counterparts did during the 14 years after the baseline assessment, even when controlling for other markers of psychological and affective well-being. Moreover, these longevity benefits did not appear to be conditional on the participants' age, how long they lived during the follow-up period, or whether they had retired from the workforce. In other words, having a purpose in life appears to widely buffer against mortality risk across the adult years.

#### Lee, K., V. Talwar, et al. (2014). "Can classic moral stories promote honesty in children?" Psychological Science 25(8): 1630-1636. http://pss.sagepub.com/content/25/8/1630.abstract

The classic moral stories have been used extensively to teach children about the consequences of lying and the virtue of honesty. Despite their widespread use, there is no evidence whether these stories actually promote honesty in children. This study compared the effectiveness of four classic moral stories in promoting honesty in 3- to 7-year-olds. Surprisingly, the stories of "Pinocchio" and "The Boy Who Cried Wolf" failed to reduce lying in children. In contrast, the apocryphal story of "George Washington and the Cherry Tree" significantly increased truth telling. Further results suggest that the reason for the difference in honesty-promoting effectiveness between the "George Washington" story and the other stories was that the former emphasizes the positive consequences of honesty, whereas the latter focus on the negative consequences of dishonesty. When the "George Washington" story was altered to focus on the negative consequences of dishonesty, it too failed to promote honesty in children.

### Lilienfeld, S. O., R. D. Latzman, et al. (2014). "Correlates of psychopathic personality traits in everyday life: Results from a large community survey." Frontiers in Psychology 5. http://www.frontiersin.org/Journal/Abstract.aspx?s=854&name=personality\_and\_social\_psychology&ART\_DOI=10.3389/fpsyg.2

014.00740

(Free full text available) Although the traits of psychopathic personality (psychopathy) have received extensive attention from researchers in forensic psychology, psychopathology, and personality psychology, the relations of these traits to aspects of everyday functioning are poorly understood. Using a large internet survey of members of the general population (N =3388), we examined the association between psychopathic traits, as measured by a brief but well-validated self-report measure, and occupational choice, political orientation, religious affiliation, and geographical residence. Psychopathic traits, especially those linked to fearless dominance, were positively and moderately associated with holding leadership and management positions, as well as high-risk occupations. In addition, psychopathic traits were positively associated with political conservatism,

lack of belief in God, and living in Europe as opposed to the United States, although the magnitudes of these statistical effects were generally small in magnitude. Our findings offer preliminary evidence that psychopathic personality traits display meaningful response penetration into daily functioning, and raise provocative questions for future research.

### Owen, J., B. Duncan, et al. (2014). "Accounting for therapist variability in couple therapy outcomes: What really matters?" J Sex Marital Ther 40(6): 488-502. http://www.ncbi.nlm.nih.gov/pubmed/24965052

This study examined whether therapist gender, professional discipline, experience conducting couple therapy, and average second-session alliance score would account for the variance in outcomes attributed to the therapist. The authors investigated therapist variability in couple therapy with 158 couples randomly assigned to and treated by 18 therapists in a naturalistic setting. Consistent with previous studies in individual therapy, in this study therapists accounted for 8.0% of the variance in client outcomes and 10% of the variance in client alliance scores. Therapist average alliance score and experience conducting couple therapy were salient predictors of client outcomes attributed to therapist. In contrast, therapist gender and discipline did not significantly account for the variance in client outcomes attributed to therapists. Tests of incremental validity demonstrated that therapist average alliance score and therapist experience uniquely accounted for the variance in outcomes attributed to the therapist. Emphasis on improving therapist alliance quality and specificity of therapist experience in couple therapy are discussed.

### Peterson-Post, K. M., G. K. Rhoades, et al. (2014). "*Perceived criticism and marital adjustment predict depressive symptoms in a community sample.*" <u>Behavior Therapy</u> 45(4): 564-575. <u>http://www.sciencedirect.com/science/article/pii/S0005789414000513</u>

Depressive symptoms are related to a host of negative individual and family outcomes; therefore, it is important to establish risk factors for depressive symptoms to design prevention efforts. Following studies in the marital and psychiatric literatures regarding marital factors associated with depression, we tested two potential predictors of depressive symptoms: marital adjustment and perceived spousal criticism. We assessed 249 spouses from 132 married couples from the community during their first year of marriage and at three time points over the next 10 years. Initial marital adjustment significantly predicted depressive symptoms for husbands and wives at all follow-ups. Further, perceived criticism significantly predicted depressive symptoms at the 5- and 10-year follow-ups. However, at the 1-year follow-up, this association was significant for men but not for women. Finally, a model where the contributions of marital adjustment and perceived criticism were tested together suggested that both play independent roles in predicting future depressive symptoms. These findings highlight the potential importance of increasing marital adjustment and reducing perceived criticism at the outset of marriage as a way to reduce depressive symptoms during the course of marriage.

### Ravitz, P. and P. Watson (2014). "Interpersonal psychotherapy: Healing with a relational focus." <u>FOCUS</u> 12: 275-284. <u>http://focus.psychiatryonline.org/article.aspx?articleid=1892874</u>

Interpersonal psychotherapy (IPT) is a time-limited psychotherapy that focuses on relationship stressors and ways to adaptively engage with social supports. Since the first controlled IPT depression study 40 years ago, new applications of the model have emerged, informed by research and public health needs. Evidence for its effectiveness has led to its inclusion in expert consensus treatment guidelines for the treatment of depression, eating disorders, and bipolar disorder. This paper provides a clinical synthesis of IPT, reviewing adaptations that include: IPT-A, for use with adolescents with depression; interpersonal social rhythm therapy (IPSRT), for patients with bipolar disorder; IPT, for patients with eating disorders; and IPT, for patients with depression in culturally diverse settings. With its clear clinical guidelines, therapist- and patient-friendly approach, and data supporting its effectiveness, IPT is easily integrated into mental health care to help patients with mood or eating disorders and interpersonal problems.

### Shafer, K., T. M. Jensen, et al. (2014). "*Relationship effort, satisfaction, and stability: Differences across union type.*" Journal of Marital and Family Therapy 40(2): 212-232. <u>http://dx.doi.org/10.1111/jmft.12007</u>

(Free full text available) Relationship satisfaction and stability are two commonly studied outcomes in marriage and family research. Majority of studies address socio demographic variability and differences across union type in these outcomes. We extend this literature by addressing how the amount of effort one puts into their relationship is associated with stability and satisfaction. Specifically, we focus on how effort impacts these measures of quality in four union types: premarital cohabitation, first marriage, post-divorce cohabitation, and second marriage following divorce. Furthermore, we make union type comparisons in the strength of effort's association with satisfaction and stability. Using data from 8,006 respondents in the Relationship Evaluation Survey, our results show that effort was strongly and positively associated with satisfaction and stability in all four unions. Although effort is more strongly associated with satisfaction in first marriage than cohabiting relationships, no union type differences in the role of effort on stability were observed. Clinical and research implications of these findings are discussed.

### Stolarski, M., G. Matthews, et al. (2014). "How we feel is a matter of time: Relationships between time perspectives and mood." Journal of Happiness Studies 15(4): 809-827. http://dx.doi.org/10.1007/s10902-013-9450-y

Both personality and emotional experiences may be influenced by people's time perspectives. The Zimbardo time perspective inventory measures five trait dimensions related to past, present and future perspectives. Two studies were conducted to investigate how these time perspective dimensions related to mood. The first study (n = 260) confirmed that ZTPI scales predicted moods including energetic arousal, tense arousal and Hedonic Tone, revealing that past negative and Present Hedonistic time perspectives are the most robust predictors of current emotional states. Moreover, future time perspective proved to predict energetic arousal, but the effect was suppressed by present hedonism. The second study (n = 65) measured mood twice in a 4-week period, and focused on relationships between the ZTPI and recalled and anticipated mood. Analyses conducted using DBTP, an index of temporal harmony based on the ZTPI scores, proved that balanced time perspective was related to more positive mood states in both studies. Findings confirmed that time perspective appears to influence both recall and anticipation of mood. For example, past negative time perspective is associated with anticipation of negative moods, and Past Positive perspective relates to both recall and anticipation of energy. Time perspective may structure the individual's affective experience.

#### Ybema, J. F. and K. van Dam (2014). "The importance of emotional display rules for employee well-being: A multigroup comparison." The Journal of Positive Psychology 9(4): 366-376. <u>http://dx.doi.org/10.1080/17439760.2014.898319</u>

"Serving with a smile" has generally been associated with negative effects for employee well-being. The present study investigated whether emotional display rules also relate to positive outcomes by distinguishing demands to suppress negative emotional response (negative display rules) from demands to express positive emotions (positive display rules). In line with the job demands-resources model, outcomes involved emotional exhaustion and work engagement. Participants were employees in three occupational groups in the human service profession: sales (N?=?480), healthcare (N?=?399), and education (N?=?220). The outcomes of a multi-group analysis in LISREL revealed for all three occupational groups that negative display rules were

related to emotional exhaustion while positive display rules were associated with work engagement. Together, these findings suggest that ?serving with a smile? can enhance employee well-being, when the emphasis is on showing positive affects instead of suppressing negative affects.