

28 positive psychology relevant abstracts **march '17 newsletter**

(Adams and Inesi 2016; Ardeli 2016; Beecher, Eggett et al. 2016; Binder 2016; Boenigk and Mayr 2016; Costa, Oliveira et al. 2016; Datu and King 2016; Davidai and Gilovich 2016; Feng and Astell-Burt 2016; Gadermann, Guhn et al. 2016; Gana, Broc et al. 2016; Griffiths, Johnson et al. 2016; Harzer and Ruch 2016; Howell, Passmore et al. 2016; Hudson and Fraley 2016; Hudson and Fraley 2016; Nagpaul and Pang 2016; Pavani, Le Vigouroux et al. 2016; Ponocny, Weismayer et al. 2016; Richardson, McEwan et al. 2016; Walker, Kumar et al. 2016; Wellenzohn, Proyer et al. 2016; Werner, Milyavskaya et al. 2016; Zaninotto, Wardle et al. 2016; Chopik and Motyl 2017; Debrot, Meuwly et al. 2017; Lathia, Sandstrom et al. 2017; Wilkes, Kydd et al. 2017)

Adams, G. S. and M. E. Inesi (2016). **"Impediments to forgiveness: Victim and transgressor attributions of intent and guilt."** *J Pers Soc Psychol* 111(6): 866-881. <https://www.ncbi.nlm.nih.gov/pubmed/27537273>

We investigate the possibility that victims and transgressors are predictably miscalibrated in their interpretation of a transgression, and that this has important implications for the process of forgiveness. Across 5 studies, we find that victims underestimate how much transgressors desire forgiveness. This is driven by a 2-part mediating mechanism: First, victims are more likely than transgressors to see the transgression as intentional, and second, this causes victims to believe transgressors feel less guilty than transgressors report feeling. Ultimately, this chain of asymmetries stymies the processes of forgiveness because victims tend to withhold forgiveness from those who actually desire it. The predicted effect emerged in the context of scenario studies (Studies 3 and 5), a real transgression that occurred in the lab (Study 4), transgressions from participants' pasts (Study 1), and transgressions from the same day (Study 2). In Study 4, we describe a new procedure in which 1 participant commits a real transgression against another participant, providing an effective means for researchers to study real-time transgressions from the perspective of both parties involved. Furthermore, in Study 5, we found that when victims were encouraged to empathize with the transgressor, the asymmetries were attenuated, suggesting a means of overcoming this impediment to forgiveness.

Ardeli, M. (2016). **"Disentangling the relations between wisdom and different types of well-being in old age: Findings from a short-term longitudinal study."** *Journal of Happiness Studies* 17(5): 1963-1984. <http://dx.doi.org/10.1007/s10902-015-9680-2>

Wisdom has been shown to be positively related to well-being in past cross-sectional research, but it is not clear whether wisdom affects well-being, well-being affects wisdom, or whether the association is reciprocal. This 10-month two-wave longitudinal study attempted to determine the direction of the relations between old age wisdom and physical, psychological (eudaimonic), and subjective (hedonic) well-being, using a sample of 123 older (M = 72 years) residents from a community in Florida, USA. The analyses of cross-lagged autoregressive models showed that baseline wisdom, assessed by cognitive, reflective, and compassionate (affective) dimensions of the three-dimensional wisdom scale (3D-WS), was significantly related to greater subjective well-being, mastery, purpose in life, and physical well-being at Time 2, but only baseline physical well-being was positively related to composite three-dimensional wisdom at Time 2 after controlling for baseline wisdom and well-being scores and significant control variables. The findings corroborate the hypothesis that wisdom in old age can exert a beneficial impact on physical, psychological, and subjective well-being. Helping individuals grow wiser might pay dividends in later life.

Beecher, M. E., D. Eggett, et al. (2016). **"Sunshine on my shoulders: Weather, pollution, and emotional distress."** *Journal of Affective Disorders* 205: 234-238. <http://www.sciencedirect.com/science/article/pii/S0165032716306553>

Background Researchers have examined the relationship between mental health and weather/pollution with mixed results. The current study aimed to examine a range of weather and atmospheric phenomena and their association with time-bound mental health data. Methods Nineteen different weather/pollution variables were examined in connection with an archive of self-reported mental health data for university students participating in mental health treatment (n=16,452) using the Outcome Questionnaire 45.2 (OQ-45). Statistical approach involved randomly selecting 500 subjects from the sample 1000 different times and testing each variable of interest using mixed models analyses. Results Seasonal changes in sun time were found to best account for relationships between weather variables and variability in mental health distress. Increased mental health distress was found during periods of reduced sun time hours. A separate analysis examining subjects' endorsement of a suicidality item, though not statistically significant, demonstrated a similar pattern. Initial results showed a relationship between pollution and changes in mental health distress; however, this was mediated by sun time. Limitations This study examined a relatively homogenous, predominantly European American, and religious sample of college counseling clients from an area that is subject to inversions and is at a high altitude and a latitude where sun time vacillates significantly more than locations closer to the equator. Conclusions Seasonal increases in sun time were associated with decreased mental health distress. This suggests the need for institutions and public health entities to plan for intervention and prevention resources and strategies during periods of reduced sun time.

Binder, M. (2016). **"...do it with joy!" – subjective well-being outcomes of working in non-profit organizations."** *Journal of Economic Psychology* 54: 64-84. <http://www.sciencedirect.com/science/article/pii/S0167487016000404>

Working in non-profit organizations has been shown to be good for individuals' satisfaction with their jobs despite lower incomes. This paper explores the impact of non-profit work on life satisfaction more general for the British Household Panel Survey (BHPS) and finds a significant positive impact the size about more than a fourth of that of getting widowed. This effect is quite uniform across the subjective well-being distribution, and thus exists also for those who are already happy. Shadow prices peg this effect at around 22,000 GBP p.a., the average amount of equivalent net household income in the sample analyzed (which is roughly 27,000 GBP p.a.). The positive effect can be explained by third sector workers enjoying their day-to-day activities more, being (affectively) happier and feeling that they are playing a useful role in their lives. (Note, this paper concludes that someone earning £27,000 per year at a non-profit organisation, would need to earn £49,000 per year at a private company to maintain the same level of life satisfaction).

Boenigk, S. and M. L. Mayr (2016). **"The happiness of giving: Evidence from the german socioeconomic panel that happier people are more generous."** *Journal of Happiness Studies* 17(5): 1825-1846. <http://dx.doi.org/10.1007/s10902-015-9672-2>

This study explores the causal direction between happiness and charitable giving. Through the application of Cohen's path analysis, the main purpose of the study is to find evidence which of the possible causal directions—the one from giving to

happiness or from happiness to giving—is the more dominant one. To that aim the authors use data from the German Socio-Economic Panel 2009/10. In a sample of 6906 donors, the relationships between monetary giving and life satisfaction were assessed. Furthermore, we controlled for different variables such as age, gender, and marital status. Contradictory to the hypotheses development, the results of the Cohen's path analysis indicate that the causal direction from happiness to charitable giving is the more dominant one. Through the study and our initial results we contribute to theory by highlighting the ambiguous causal relationship between the focal constructs and provide a statistical method to investigate such unclear causal relationships. We discuss how happiness, particularly the affective aspect, can be utilized by nonprofit managers to raise fundraising effectiveness and suggest areas for further research.

Chopik, W. J. and M. Motyl (2017). **"Is Virginia for lovers? Geographic variation in adult attachment orientation."** *Journal of Research in Personality* 66: 38-45. [//www.sciencedirect.com/science/article/pii/S0092656616302847](http://www.sciencedirect.com/science/article/pii/S0092656616302847)

(Available in free full text) People often use relationships to characterize and describe places. Yet, little research examines whether people's relationships and relational style vary across geography. The current study examined geographic variation in adult attachment orientation in a sample of 127,070 adults from the 50 United States. The states that were highest in attachment anxiety tended to be in the mid-Atlantic and Northeast region of the United States. The states that were highest in attachment avoidance tended to be in the frontier region of the United States. State-level avoidance was related to state-level indicators of relationship status, social networks, and volunteering behavior. The findings are discussed in the context of the mechanisms that may give rise to regional variation in relational behavior.

Costa, R. M., T. F. Oliveira, et al. (2016). **"Self-transcendence is related to higher female sexual desire."** *Personality and Individual Differences* 96: 191-197. <http://www.sciencedirect.com/science/article/pii/S0191886916301349>

One facet of self-transcendence is creative self-forgetfulness (CSF; tendency to be attentionally absorbed in mind-altering experiences). Proneness to mind-altering attentional absorption and other aspects of self-transcendence were previously related to vaginal intercourse frequency, sexual arousability, and female coital orgasm. Given that sexual responsiveness is enhanced by focused attention, it was tested whether CSF correlates with sexual responsiveness, and if maladaptive defenses, openness to experience, and testosterone explain the hypothesized relationships. One hundred thirty-nine Portuguese (98 women) provided saliva samples for testosterone determination by luminescence immunoassays before and after a romantic movie scene and reported how intensely they felt sexual desire and arousal during the movie. CSF was measured by the Temperament and Character Inventory-Revised, maladaptive defenses by the immature defenses subscale of the Defense Style Questionnaire (DSQ-40), male and female past month desire by the desire dimensions of the International Index of Erectile Function (IIEF), and Female Sexual Function Index (FSFI). Female desire and arousal during the movie were independently predicted by CSF, openness to experience and testosterone, but not by immature defenses. Female past month desire was independently predicted by CSF, testosterone, and less immature defenses. Possible psychobiological processes linking self-transcendence and sexual responsiveness are discussed.

Datu, J. A. D. and R. B. King (2016). **"Prioritizing positivity optimizes positive emotions and life satisfaction: A three-wave longitudinal study."** *Personality and Individual Differences* 96: 111-114. <http://www.sciencedirect.com/science/article/pii/S0191886916301246>

Prioritizing positivity, which reflects the extent to which individuals organize their lives in ways that would maximize their experience of happiness, has been found to be associated with higher levels of well-being via positive emotions. However, previous research on this construct has been cross-sectional in nature which has made the temporal sequence of effects ambiguous. Moreover, previous studies have not explored the reciprocal relations among key constructs. In this study, we addressed these gaps using a three-wave longitudinal study which assessed the extent to which prioritizing positivity relates with positive emotion and life satisfaction among 408 Filipino secondary school students. Cross-lagged analysis indicated that T1 prioritizing positivity positively predicted T2 positive emotions which in turn predicted T3 life satisfaction after controlling for autoregressor effects. Notably, T2 positive emotions mediated the relations between T1 prioritizing positivity and T3 life satisfaction. We also found evidence of reciprocal effects with prior positive emotions predicting subsequent prioritizing positivity. The theoretical and practical implications are discussed.

Davidai, S. and T. Gilovich (2016). **"The headwinds/tailwinds asymmetry: An availability bias in assessments of barriers and blessings."** *J Pers Soc Psychol* 111(6): 835-851. <https://www.ncbi.nlm.nih.gov/pubmed/27869473>

Seven studies provide evidence of an availability bias in people's assessments of the benefits they've enjoyed and the barriers they've faced. Barriers and hindrances command attention because they have to be overcome; benefits and resources can often be simply enjoyed and largely ignored. As a result of this "headwind/tailwind" asymmetry, Democrats and Republicans both claim that the electoral map works against them (Study 1), football fans take disproportionate note of the challenging games on their team's schedules (Study 2), people tend to believe that their parents have been harder on them than their siblings are willing to grant (Study 3), and academics think that they have a harder time with journal reviewers, grant panels, and tenure committees than members of other subdisciplines (Study 7). We show that these effects are the result of the enhanced availability of people's challenges and difficulties (Studies 4 and 5) and are not simply the result of self-serving attribution management (Studies 6 and 7). We also show that the greater salience of a person's headwinds can lead people to believe they have been treated unfairly and, as a consequence, more inclined to endorse morally questionable behavior (Study 7). Our discussion focuses on the implications of the headwind/tailwind asymmetry for a variety of ill-conceived policy decisions.

Debrot, A., N. Meuwly, et al. (2017). **"More than just sex: Affection mediates the association between sexual activity and well-being."** *Personality and Social Psychology Bulletin* 43(3): 287-299. <http://journals.sagepub.com/doi/abs/10.1177/0146167216684124>

Positive interpersonal interactions such as affection are central to well-being. Sex is associated with greater individual well-being, but little is known about why this occurs. We predicted that experienced affection would account for the association between sex and well-being. Cross-sectional results indicated that affection mediated the association between sex and both life satisfaction (Study 1) and positive emotions (however, among men only in Study 2). In Study 3, an experience sampling study with 106 dual-earner couples with children, affection mediated the association between sex and increased positive affect in daily life. Cross-lagged analyses in Study 3 to 4 supported the predicted direction of the associations. Moreover, the strength of the daily association between sex and positive affect predicted both partners' relationship satisfaction 6 months later. Our findings underscore the importance of affection and positive affect for understanding how sex promotes well-being and has long-term relational benefits. The paper starts by quoting Anais Nin - "Only the united beat of sex and heart together can create ecstasy" and goes on in its introductory section to say: "Decades of research indicate that social relationships are a basic human need (Baumeister & Leary, 1995), as they are crucial for health and well-being (e.g., Holt-Lunstad, Smith, Layton, & Brayne, 2010). Most studies linking close relationships to well-being have focused on social support, while neglecting the importance of nonverbal interactions, such as sex or touch (Gallace & Spence, 2010; Impett, Muise, & Peragine, 2014). Sexual activity in

romantic relationships is a nonverbal interaction often experienced as highly intimate (e.g., Muise & Impett, 2016). Moreover, the literature suggests a robust positive association between sexual frequency and well-being (e.g., Blanchflower & Oswald, 2004; Muise, Schimmack, & Impett, 2016). However, little is known about what accounts for this association. Sexuality research has tended to neglect relational aspects of sexuality (Impett et al., 2014). As illustrated by Anaïs Nin's quote, sex should be the most rewarding when coupled with an affectionate connection to the partner. This article aims to merge research on sexuality with research on close relationships (Diamond, 2013) to test the hypothesis that sexual activity is associated with affectionate experiences with the partner, in turn promoting positive emotions and well-being. Sexuality and Well-Being The link between having an active and satisfying sexual life and individual well-being has received strong support. In a large nationally representative U.S. sample, sexual frequency was associated with greater general happiness (Blanchflower & Oswald, 2004). In a large international study, sexual frequency and sexual satisfaction were associated with greater life happiness in older adults (Laumann et al., 2006). In addition, Muise, Schimmack, et al. (2016) underscore the relevance of these basic findings: the size of the difference in well-being for people having sex once a week, compared with those having sex less than once a month, was greater than the size of the difference in well-being for those making US\$75,000 compared with US\$25,000 a year—a US\$50,000 difference." [See too the excellent BPS Digest discussion of this article at <https://digest.bps.org.uk/2017/02/27/its-all-the-cuddling-psychologists-explore-why-people-who-have-more-sex-are-happier/>].

Feng, X. and T. Astell-Burt (2016). **"What types of social interactions reduce the risk of psychological distress? Fixed effects longitudinal analysis of a cohort of 30,271 middle-to-older aged Australians."** *Journal of Affective Disorders* 204: 99-102. <http://www.sciencedirect.com/science/article/pii/S0165032716300441>

Background Research on the impact of social interactions on psychological distress tends to be limited to particular forms of support, cross-sectional designs and by the spectre of omitted variables bias. Method A baseline sample with 3.4±0.95 years follow-up time was extracted from the 45 and Up Study. Change in the risk of psychological distress (Kessler Psychological Distress Scale) was assessed using fixed effects logistic regressions in relation to the number of times in the past week a participant: i) spent time with friends or family they did not live with; ii) talked to friends, relatives or others on the telephone; iii) attended meetings at social clubs or religious groups; and the count of people outside their home, but within one hour travel-time, participants felt close to. Separate models were fitted for men and women, adjusting for age, income, economic and couple status. Results An increase in the number of social interactions was associated with a reduction in the risk of psychological distress, with some gender differences. Interactions with friends or family were important for women (adjusted OR 0.85, 95%CI 0.74, 0.98, p=0.024), whereas telephone calls were effective among men (adjusted OR 0.83, 95%CI 0.72, 0.96, p=0.011). Strong effects for the number of people that can be relied on were observed for men and women, but attendance at clubs and groups was not. No age-specific effects were observed. Limitations No indicator of positive mental health. Conclusions Policies targeting greater social interactions in middle-to-older age may help protect mental health.

Gadermann, A. M., M. Guhn, et al. (2016). **"A population-based study of children's well-being and health: The relative importance of social relationships, health-related activities, and income."** *Journal of Happiness Studies* 17(5): 1847-1872. <http://dx.doi.org/10.1007/s10902-015-9673-1>

This study investigated how various risk and protective factors interface with child health and well-being at the population level. Specifically, we examined the association of income, social-contextual variables, and indicators of health-related habits and activities to children's life satisfaction and perceived overall health. Child data were collected via a self-report survey, the Middle Years Development Instrument, which was administered in three demographically diverse Canadian school districts to 5026 grade 4 students (83 % of the students had complete data and were included in the analyses). Multiple regression and mediation analyses were conducted to examine the joint associations of social relationships with adults and peers, nutrition and sleep habits, and after school sports activities with children's satisfaction with life and perceived health. Results indicate that peer belonging and relationships with adults at home and school were the strongest predictors of life satisfaction. Furthermore, the (small) association between income and life satisfaction was mediated by social relationship variables. Child reports of perceived health were predicted by peer belonging, adult relationships (home, school, neighborhood), after-school team sports, and nutrition habits. The (small) association between income and health was mediated by social relationships and team sports participation. Findings are discussed in light of previous research on social determinants and socio-economic gradients of children's health and life satisfaction.

Gana, K., G. Broc, et al. (2016). **"Subjective wellbeing and longevity: Findings from a 22-year cohort study."** *Journal of Psychosomatic Research* 85: 28-34. <http://www.sciencedirect.com/science/article/pii/S0022399916301921>

Objective The health implications of positive affect (PA) are still a matter of debate. The present study examined the longitudinal relationships between subjective wellbeing (SWB) components (i.e., Life satisfaction, PA and negative affect (NA)) and all-cause mortality in older adults. Methods Discrete-time survival analysis within the structural equation modeling framework was applied to data from the PAQUID Cohort (n = 3777, baseline age 62–101 years) including ten time periods spanning 22 years. Time-invariant (age, gender, baseline life satisfaction, diabetes mellitus and hypercholesterolemia status) and lagged time-varying (PA, NA, dementia, functional status and self-rated health) predictors were included sequentially in the analyses. Results When included together in the model, only PA among the SWB components showed a significant association with longevity, which persisted (OR = .962, 95% CI = .938, .986) even after adjustment for the interaction between PA and NA, and after additional adjustment for prior medical conditions, functional status and self-rated health. Conclusions In congruence with positive psychology, PA proved to be an independent protective factor regardless of variations in NA, which did not seem to be a mortality risk factor.

Griffiths, R. R., M. W. Johnson, et al. (2016). **"Psilocybin produces substantial and sustained decreases in depression and anxiety in patients with life-threatening cancer: A randomized double-blind trial."** *Journal of Psychopharmacology* 30(12): 1181-1197. <http://journals.sagepub.com/doi/abs/10.1177/0269881116675513>

(Available in free full text) Cancer patients often develop chronic, clinically significant symptoms of depression and anxiety. Previous studies suggest that psilocybin may decrease depression and anxiety in cancer patients. The effects of psilocybin were studied in 51 cancer patients with life-threatening diagnoses and symptoms of depression and/or anxiety. This randomized, double-blind, cross-over trial investigated the effects of a very low (placebo-like) dose (1 or 3 mg/70 kg) vs. a high dose (22 or 30 mg/70 kg) of psilocybin administered in counterbalanced sequence with 5 weeks between sessions and a 6-month follow-up. Instructions to participants and staff minimized expectancy effects. Participants, staff, and community observers rated participant moods, attitudes, and behaviors throughout the study. High-dose psilocybin produced large decreases in clinician- and self-rated measures of depressed mood and anxiety, along with increases in quality of life, life meaning, and optimism, and decreases in death anxiety. At 6-month follow-up, these changes were sustained, with about 80% of participants continuing to show clinically significant decreases in depressed mood and anxiety. Participants attributed improvements in attitudes about life/self, mood, relationships, and spirituality to the high-dose experience, with >80%

endorsing moderately or greater increased well-being/life satisfaction. Community observer ratings showed corresponding changes. Mystical-type psilocybin experience on session day mediated the effect of psilocybin dose on therapeutic outcomes.

Harzer, C. and W. Ruch (2016). **"Your strengths are calling: Preliminary results of a web-based strengths intervention to increase calling."** *Journal of Happiness Studies* 17(6): 2237-2256. <http://dx.doi.org/10.1007/s10902-015-9692-y>

Cross-sectional research indicated that the application of signature strengths at work seemed to be crucial for perceiving a job as a calling. The present study aimed at testing this assumed causality in a random-assignment, placebo-controlled web-based intervention study. The intervention group (n = 83) was instructed to use their four highest character strengths more often at work for 4 weeks. Meanwhile the control group (n = 69) reflected about four situations (independent from the current workplace) where they excelled. For the evaluation of the effects of the two conditions, participants completed measures on calling and global life satisfaction before (Pretest), directly after the four-week training period (Posttest 1), and 3 (Posttest 2) and 6 months (Posttest 3) later. Calling significantly increased in the intervention group but not in the control group from Pretest to Posttest 1, and remained constant until Posttest 3. Global life satisfaction significantly increased in the intervention group but not in the control group from Pretest to Posttest 2 and from Posttest 1 to Posttest 3. That indicated that the changes on global life satisfaction were less steep than the changes in calling and lagged, but significant long lasting changes were observed likewise. Results supported the assumption that the application of strengths at work impacts calling and life satisfaction. Limitations as well as implications for research and practice are discussed.

Howell, A. J., H.-A. Passmore, et al. (2016). **"Implicit theories of well-being predict well-being and the endorsement of therapeutic lifestyle changes."** *Journal of Happiness Studies* 17(6): 2347-2363. <http://dx.doi.org/10.1007/s10902-015-9697-6>

The current studies investigated whether beliefs concerning the malleability or immutability of well-being (i.e., incremental and entity implicit theories of well-being, respectively) are predictive of hedonic and eudaimonic well-being and of the endorsement of activities conducive to well-being. Studies 1 and 2 demonstrated that, relative to entity theory endorsement, the endorsement of an incremental theory of well-being predicted greater hedonic and eudaimonic well-being. Moreover, regression analyses showed that these associations remained when including scores on measures of socially desirable responding, implicit theories of ability, and related variables of striving for personal growth, hope, and character strengths usage. Study 3 showed that greater endorsement of an incremental theory of well-being predicted greater perceived utility of well-being activities. Study 4 showed that an experimentally-induced incremental theory of well-being caused greater endorsement of well-being activities than an experimentally-induced entity theory of well-being. These findings suggest that amenability toward, and responsiveness to, existing well-being interventions may be fostered by an incremental theory of well-being. Furthermore, they suggest that cultivating an incremental mindset regarding well-being may facilitate adaptive functioning and, thereby, serve as a well-being intervention.

Hudson, N. W. and R. C. Fraley (2016). **"Changing for the better? Longitudinal associations between volitional personality change and psychological well-being."** *Personality and Social Psychology Bulletin* 42(5): 603-615. <http://psp.sagepub.com/content/42/5/603.abstract>

Recent research has found that a vast majority of people want to change their personality traits—and they may be able to find some degree of success in doing so. However, desires for self-change have been theoretically and empirically linked to reduced well-being. The present study utilized a longitudinal design to better understand the associations between people's desires and attempts to change their personality traits and their psychological well-being. Results indicated that possessing change goals did not necessarily predict growing deficits in well-being over time. In contrast, people who were able to change their personality traits in ways that aligned with their desires tended to experience increases in well-being over time. These findings are consistent with theory that dissatisfaction can precipitate change goals, and successful change can ameliorate dissatisfaction.

Hudson, N. W. and R. C. Fraley (2016). **"Do people's desires to change their personality traits vary with age? An examination of trait change goals across adulthood."** *Social Psychological and Personality Science* 7(8): 847-856. <http://spp.sagepub.com/content/7/8/847.abstract>

Research suggests most people want to change their personality traits. Existing studies have, however, almost exclusively examined college-aged samples. Thus, it remains unclear whether older adults also wish to change their personalities. In the present study, the authors sampled 6,800 adults, aged 18 to 70, and examined the associations between age and change goals. Results indicated change goals were slightly less prevalent among older adults. Moreover, older adults expressed desires for slightly smaller increases in each trait. Nevertheless, these effects were small, and a minimum of 78% of people of any age wanted to increase in each big five dimension. These findings have implications for understanding people's attempts to change their traits—and personality development more broadly—across adulthood.

Lathia, N., G. M. Sandstrom, et al. (2017). **"Happier people live more active lives: Using smartphones to link happiness and physical activity."** *PLOS ONE* 12(1): e0160589. <http://dx.doi.org/10.1371/journal.pone.0160589>

(Available in free full text) Physical activity, both exercise and non-exercise, has far-reaching benefits to physical health. Although exercise has also been linked to psychological health (e.g., happiness), little research has examined physical activity more broadly, taking into account non-exercise activity as well as exercise. We examined the relationship between physical activity (measured broadly) and happiness using a smartphone application. This app has collected self-reports of happiness and physical activity from over ten thousand participants, while passively gathering information about physical activity from the accelerometers on users' phones. The findings reveal that individuals who are more physically active are happier. Further, individuals are happier in the moments when they are more physically active. These results emerged when assessing activity subjectively, via self-report, or objectively, via participants' smartphone accelerometers. Overall, this research suggests that not only exercise but also non-exercise physical activity is related to happiness. This research further demonstrates how smartphones can be used to collect large-scale data to examine psychological, behavioral, and health-related phenomena as they naturally occur in everyday life.

Nagpaul, T. and J. S. Pang (2016). **"Materialism lowers well-being: The mediating role of the need for autonomy – correlational and experimental evidence."** *Asian Journal of Social Psychology*: n/a-n/a. <http://dx.doi.org/10.1111/ajsp.12159>

While there is evidence from the self-determination perspective for the mediation of basic needs satisfaction in the materialism–well-being link, no research to date has attempted to examine the relative contribution of the three needs to the mediating effect. Given that the predictive value of psychological needs on well-being depends upon the match between the need and life domains, in two studies we investigate the differential mediating role of all three needs in the negative relationship between materialism and well-being. In study 1, 231 adult participants self-reported their materialistic attitudes, basic needs

satisfaction and well-being. In study 2 (N = 82 undergraduates), we experimentally activated materialistic thoughts and examined their effects on need satisfaction and state well-being as compared to a neutral control condition. Study 1 furnished cross-sectional evidence that materialism diminishes well-being through lower satisfaction of the psychological need for autonomy only. Study 2 showed that experimental activation of materialism via short-term exposure to pictorial consumer-cues leads to lower satisfaction of the need for autonomy, which in turn produces higher negative affect among participants. The findings point towards the importance of considering the specific role of the psychological need for autonomy in the materialism-well-being link.

Pavani, J.-B., S. Le Vigouroux, et al. (2016). **"Affect and affect regulation strategies reciprocally influence each other in daily life: The case of positive reappraisal, problem-focused coping, appreciation and rumination."** *Journal of Happiness Studies* 17(5): 2077-2095. <http://dx.doi.org/10.1007/s10902-015-9686-9>

Feelings of positive or negative affect are not restricted to temporary states. They can also determine future affective experiences, by influencing the building of an individual's personal resources. The present study was designed to understand the daily fluctuations in positive and negative affect more fully. To this end, we examined the involvement of a variety of affect regulation strategies in these fluctuations. The affect regulation strategies we explored included positive reappraisal, problem-focused coping, appreciation and rumination. We adopted an experience sampling method, consisting of five daily assessments over a 2-week period. As expected, within a few hours of experiencing more positive affect, participants engaged in greater positive reappraisal, problem-focused coping and appreciation. In turn, greater use of each of these three strategies was followed by more intense experiences of positive affect. We observed analogous reciprocal influences between rumination and the experience of negative affect, within the same time interval. Changes in affective experience over several hours were also directly influenced by concurrent use of these strategies. More specifically, greater positive reappraisal, problem-focused coping and appreciation accelerated the rise in positive affect that follows low feelings of positive affect, and slowed the decline in positive affect that follows high feelings. Rumination had an analogous influence on change in negative affect. The clinical implications of these findings are discussed.

Ponocny, I., C. Weismayer, et al. (2016). **"Are most people happy? Exploring the meaning of subjective well-being ratings."** *Journal of Happiness Studies* 17(6): 2635-2653. <http://dx.doi.org/10.1007/s10902-015-9710-0>

(Available in free full text) The claim that most people are happy and satisfied, assuming that high self-ratings on numerical scales indicate good lives, is cross-checked against extensive verbal reports in a large-scale mixed-methods validation study. For a sample of 500 qualitative interviews conducted in Austria, the usual 10-point-scale self-ratings of life satisfaction and happiness were linked to the content of respondents' actual narrations. Additionally, the narrated well-being was classified according to an alternative evaluation scheme by external raters. The results show that many persons report substantial restrictions to their hedonic experience in spite of high or even very high ratings, and that the narrated well-being evaluation is much more critical than the self-rating. Therefore it is argued that a naive interpretation of high self-rating values as top life experience systematically ignores negative aspects of life. The claimed predominance of happiness should be substantially reformulated. In particular, more attention should be drawn to resilient satisfaction in the presence of substantial psychological burden, and to the non-negligible group of highly positive life satisfaction ratings which lack evidence of corresponding hedonic experience in the life narratives.

Richardson, M., K. McEwan, et al. (2016). **"Joy and calm: How an evolutionary functional model of affect regulation informs positive emotions in nature."** *Evolutionary Psychological Science*: 1-13. <http://dx.doi.org/10.1007/s40806-016-0065-5>

(Available in free full text) Key theories of the human need for nature take an evolutionary perspective, and many of the mental well-being benefits of nature relate to positive affect. As affect has a physiological basis, it is important to consider these benefits alongside regulatory processes. However, research into nature and positive affect tends not to consider affect regulation and the neurophysiology of emotion. This brief systematic review and meta-analysis presents evidence to support the use of an existing evolutionary functional model of affect regulation (the three circle model of emotion) that provides a tripartite framework in which to consider the mental well-being benefits of nature and to guide nature-based well-being interventions. The model outlines drive, contentment and threat dimensions of affect regulation based on a review of the emotion regulation literature. The model has been used previously for understanding mental well-being, delivering successful mental health-care interventions and providing directions for future research. Finally, the three circle model is easily understood in the context of our everyday lives, providing an accessible physiological-based narrative to help explain the benefits of nature.

Walker, J., A. Kumar, et al. (2016). **"Cultivating gratitude and giving through experiential consumption."** *Emotion* 16(8): 1126-1136. <https://www.ncbi.nlm.nih.gov/pubmed/27797561>

Gratitude promotes well-being and prompts prosocial behavior. Here, we examine a novel way to cultivate this beneficial emotion. We demonstrate that 2 different types of consumption-material consumption (buying for the sake of having) and experiential consumption (buying for the sake of doing)-differentially foster gratitude and giving. In 6 studies we show that reflecting on experiential purchases (e.g., travel, meals out, tickets to events) inspires more gratitude than reflecting on material purchases (e.g., clothing, jewelry, furniture), and that thinking about experiences leads to more subsequent altruistic behavior than thinking about possessions. In Studies 1-2b, we use within-subject and between-subjects designs to test our main hypothesis: that people are more grateful for what they've done than what they have. Study 3 finds evidence for this effect in the real-world setting of online customer reviews: Consumers are more likely to spontaneously mention feeling grateful for experiences they have bought than for material goods they have bought. In our final 2 studies, we show that experiential consumption also makes people more likely to be generous to others. Participants who contemplated a significant experiential purchase behaved more generously toward anonymous others in an economic game than those who contemplated a significant material purchase. It thus appears that shifting spending toward experiential consumption can improve people's everyday lives as well as the lives of those around them.

Wellenzohn, S., R. T. Proyer, et al. (2016). **"Humor-based online positive psychology interventions: A randomized placebo-controlled long-term trial."** *The Journal of Positive Psychology* 11(6): 584-594. <http://dx.doi.org/10.1080/17439760.2015.1137624>

While correlational evidence exists that humor is positively associated with well-being, only few studies addressed causality. We tested the effects of five humor-based activities on happiness and depression in a placebo-controlled, self-administered online positive psychology intervention study (N = 632 adults). All of the five one-week interventions enhanced happiness, three for up to six months (i.e. three funny things, applying humor, and counting funny things), whereas there were only short-term effects on depression (all were effective directly after the intervention). Additionally, we tested the moderating role of indicators of a person's intervention-fit and identified early changes in well-being and preference (liking of the intervention) as the most potent indicators for changes six months after the intervention. Overall, we were able to replicate

existing work, but also extend knowledge in the field by testing newly developed interventions for the first time. Findings are discussed with respect to the current literature.

Werner, K. M., M. Milyavskaya, et al. (2016). **"Some goals just feel easier: Self-concordance leads to goal progress through subjective ease, not effort."** *Personality and Individual Differences* 96: 237-242.
<http://www.sciencedirect.com/science/article/pii/S0191886916301477>

The objective of the present study was to examine whether subjective ease of goal pursuit would mediate the relation between an individual's motivation for pursuing a goal and their subsequent goal progress. Toward the beginning of a university semester, participants (n = 176) identified three goals they planned to pursue throughout the semester and reported their motivation for pursuing each of them. Participants then indicated, at two monthly follow-ups, how easy and natural it felt to pursue these goals and how much effort they were putting into attaining them. At the end of the semester, participants reported on their goal progress. Within-person analyses indicated that self-concordant goals were perceived as being easier to pursue relative to an individual's other goals. Using multilevel structural equation modeling, results indicated that subjective ease, but not effort, mediated the relation between motivation and goal progress, such that people were more likely to successfully accomplish self-concordant goals because pursuing those goals was perceived as being more effortless, and not because more effort was exerted. Discussion focuses on the implications and future directions for research on subjective effort and goal pursuit.

Wilkes, C., R. Kydd, et al. (2017). **"Upright posture improves affect and fatigue in people with depressive symptoms."** *Journal of Behavior Therapy and Experimental Psychiatry* 54: 143-149.
<http://www.sciencedirect.com/science/article/pii/S0005791616301719>

Abstract Background and objectives Slumped posture is a diagnostic feature of depression. While research shows upright posture improves self-esteem and mood in healthy samples, little research has investigated this in depressed samples. This study aimed to investigate whether changing posture could reduce negative affect and fatigue in people with mild to moderate depression undergoing a stressful task. **Methods** Sixty-one community participants who screened positive for mild to moderate depression were recruited into a study purportedly on the effects of physiotherapy tape on cognitive function. They were randomized to sit with usual posture or upright posture and physiotherapy tape was applied. Participants completed the Trier Social Stress Test speech task. Changes in affect and fatigue were assessed. The words spoken by the participants during their speeches were analysed. **Results** At baseline, all participants had significantly more slumped posture than normative data. The postural manipulation significantly improved posture and increased high arousal positive affect and fatigue compared to usual posture. The upright group spoke significantly more words than the usual posture group, used fewer first person singular personal pronouns, but more sadness words. Upright shoulder angle was associated with lower negative affect and lower anxiety across both groups. **Limitations** The experiment was only brief and a non-clinical sample was used. **Conclusions** This preliminary study suggests that adopting an upright posture may increase positive affect, reduce fatigue, and decrease self-focus in people with mild-to-moderate depression. Future research should investigate postural manipulations over a longer time period and in samples with clinically diagnosed depression.

Zaninotto, P., J. Wardle, et al. (2016). **"Sustained enjoyment of life and mortality at older ages: Analysis of the English longitudinal study of ageing."** *BMJ* 355

Objective To test whether the number of reports of enjoyment of life over a four year period is quantitatively associated with all cause mortality, and with death from cardiovascular disease and from other causes. **Design and setting** Longitudinal observational population study using the English Longitudinal Study of Ageing (ELSA), a nationally representative sample of older men and women living in England. **Participants** 9365 men and women aged 50 years or older (mean 63, standard deviation 9.3) at recruitment. **Main outcome measures** Time to death, based on mortality between the third phase of data collection (wave 3 in 2006) and March 2013 (up to seven years). **Results** Subjective wellbeing with measures of enjoyment of life were assessed in 2002 (wave 1), 2004 (wave 2), and 2006 (wave 3). 2264 (24%) respondents reported no enjoyment of life on any assessment, with 1833 (20%) reporting high enjoyment on one report of high enjoyment of life, 2063 (22%) on two reports, and 3205 (34%) on all three occasions. 1310 deaths were recorded during follow-up. Mortality was inversely associated with the number of occasions on which participants reported high enjoyment of life. Compared with the no high enjoyment group, the hazard ratio for all cause mortality was 0.83 (95% confidence interval 0.70 to 0.99) for two reports of enjoyment of life, and 0.76 (0.64 to 0.89) for three reports, after adjustment for demographic factors, baseline health, mobility impairment, and depressive symptoms. The same association was observed after deaths occurring within two years of the third enjoyment measure were excluded (0.90 (0.85 to 0.95) for every additional report of enjoyment), and in the complete case analysis (0.90 (0.83 to 0.96)). **Conclusions** This is an observational study, so causal conclusions cannot be drawn. Nonetheless, the results add a new dimension to understanding the significance of subjective wellbeing for health outcomes by documenting the importance of sustained wellbeing over time.