

Annual Report 2016

Annual Report 2016 innehåller totalt **279** referenser sorterade efter försteförfattarens efternamn. Under året anställda forskare vid Psykologiska institutionen är markerade med blå färg.

Lite statistik

- Av 279 bidrag är 59 "in press".
- 192 referenser avser artiklar i vetenskapliga tidskrifter (Journal). Av dessa var 41 "in press".
- 31 referenser avser böcker eller bokkapitel (Book (chapter)). Av dessa var 18 "in press".
- 3 referenser avser rapporter (Report).
- 49 referenser avser konferensbidrag (Proceedings).
- 4 referenser avser doktorsavhandlingar (Dissertations) som lagts fram under året.
- 254 av alla bidrag är på engelska, 16 på svenska och 9 på övriga språk (huvudsakligen tyska).

Referens: Aafjes-van Doorn, K., [Liliengren, P.](#), Cooper, A., Macdonald, J., & Falkenström, F. (in press). Patients' Affective Processes within Initial Experiential Dynamic Therapy Sessions. *Psychotherapy*.

Abstract: Research has indicated that patients' in-session experience of previously avoided affects may be important for effective psychotherapy. The aim of this study was to investigate patients' in-session levels of affect experiencing in relation to their corresponding levels of insight, motivation and inhibitory affects in initial Experiential Dynamic Therapy (EDT) sessions. Four hundred and sixty-six 10-minute video segments from 31 initial sessions were rated using the Achievements of Treatment Objectives Scale (ATOS). A series of multilevel growth models, controlling for between-therapist variability, were estimated to predict patients' adaptive affective experiencing (Activating Affects) across session segments. In line with our expectations, higher within-person levels of Insight and Motivation related to higher levels of Activating Affects per segment. Contrary to expectations, however, lower levels of Inhibition were not associated with higher levels of Activating Affects. Further, using a time-lagged model, we did not find that the level of Insight, Motivation or Inhibition during one session segment predicted Activating Affects in the next, possibly indicating that 10-minute segments may be suboptimal for testing temporal relationships in affective processes. Our results suggest that, in order to intensify patients' immediate affective experiencing in initial EDT sessions, therapists should focus on increasing insight into defensive patterns and, in particular, motivation to give them up. Future research should examine the impact of specific inhibitory affects more closely, as well as between-therapist variability in patients' in-session adaptive affect experiencing.

Typ och Nyckelord: Journal experiential, psychodynamic, affect experiencing, insight, motivation, anxiety, guilt, shame, ISSN: 0033-3204

Referens: Abdollahi, A., & [Carlbring, P.](#) (in press). Coping Style as a Moderator of Perfectionism and Suicidal Ideation Among Undergraduate Students. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*.

Abstract: Suicide is a serious and growing public health problem and remains an unnecessary cause of death globally. In Iran, the highest prevalence of acute and chronic suicidal ideation is among young people aged 16–24. This study investigates the relationship between coping style, two types of perfectionism, and suicidal ideation among undergraduates, and examines coping style as a moderator of the relationship between perfectionism and suicidal ideation. Multi-stage cluster random sampling was employed to recruit 547 undergraduate students aged 19–24 years from the Islamic Azad University of Karaj. Structural Equation Modelling indicated that suicidal ideation was negatively associated with adaptive perfectionism and task-focused coping but positively associated with emotion-focused coping, avoidance coping, and maladaptive perfectionism. Coping style (including the three styles of task-focused, emotion-focused, and avoidance coping) was found to moderate the relationship between perfectionism and suicidal ideation. The study advances understanding of the importance of coping style in this context and explains how perfectionism affects suicidal ideation.

Typ och Nyckelord: Journal coping styles, perfectionism, suicidal ideation, undergraduates, Iranian, ISSN: 0894-9085

Referens: Abdollahi, A., [Carlbring, P.](#), Khanbani, M., & Ghahfarokhi, S.A. (2016). Emotional intelligence moderates perceived stress and suicidal ideation among depressed adolescent inpatients. *Personality and Individual Differences*, 102, 223-228.

Abstract: Because it remains one of the third leading causes of death among adolescents around the world, suicide is a major public health concern. This study was designed in response to this concern by examining the relationships among perceived stress, emotional intelligence, and suicidal ideation and to test the moderating role of emotional intelligence in the relationship between perceived stress and suicidal ideation. A sample of depressed adolescents (n = 202) was recruited from five hospitals in Tehran, Iran, and then asked to complete measures of patient health, suicidal ideation, perceived stress, and emotional intelligence. Structural Equation Modeling showed that depressed adolescent in-patients with high levels of perceived stress and low levels of emotional intelligence were more likely to report suicidal ideation. Multi-group analysis indicated that depressed in-patients high in both perceived stress and emotional intelligence had less suicidal ideation than

others. The findings support the notion that perceived stress acts as a vulnerability factor that increase suicidal ideation among depressed inpatients. Suicidal history moderated the relationship between emotional intelligence and suicidal ideation. These findings also highlight the importance of emotional intelligence as a buffer in the relationship between perceived stress and suicidal ideation.

Typ och Nyckelord: Journal emotional intelligence, perceived stress, suicidal ideation, adolescents, ISSN: 0191-8869

Referens: Abdollahi, A., Talib, M. A., [Carlbring, P.](#), Harvey, R., Yaacob, S. N., & Ismail, Z. (in press). Problem-solving skills and perceived stress among undergraduate students: The moderating role of hardiness. *Journal of Health Psychology*.

Abstract: This study was designed to examine the relationships between problem-solving skills, hardiness, and perceived stress and to test the moderating role of hardiness in the relationship between problem-solving skills and perceived stress among 500 undergraduates from Malaysian public universities. The analyses showed that undergraduates with poor problem-solving confidence, external personal control of emotion, and approach-avoidance style were more likely to report perceived stress. Hardiness moderated the relationships between problem-solving skills and perceived stress. These findings reinforce the importance of moderating role of hardiness as an influencing factor that explains how problem-solving skills affect perceived stress among undergraduates.

Typ och Nyckelord: Journal problem-solving skills, perceived stress, hardiness, ISSN: 1359-1053

Referens: Abubakar, A., & [Dimitrova, R.](#) (2016). Social connectedness, life satisfaction and school engagement: moderating role of ethnic minority status on resilience processes of Roma youth. *European Journal of Developmental Psychology*, 13(3), 361-376.

Abstract: We examined the influence of connectedness on school engagement and life satisfaction among Roma (n = 121) and Bulgarian (n = 143) mainstream adolescents (mean age 15.89, SD = 1.18). A set of measures on family, peer, school and neighbourhood connectedness were administered alongside life satisfaction and school engagement scales. Multigroup path analysis indicated that while the relationship between connectedness, life satisfaction and school engagement was largely the same across groups, the strength of such relationship differed among groups. A closer inspection of the model indicated that when it comes to school engagement, there was a salient difference in the role of different forms of connectedness between Roma and mainstream adolescents. For Roma adolescents, familial connectedness was especially salient for school engagement. The practical and theoretical implications of our findings for strengths and adaptive processes among Roma adolescents in Bulgaria are discussed.

Typ och Nyckelord: Journal connectedness, resilience, school engagement, Roma, Bulgaria, ISSN: 1740-5629

Referens: Abubakar, A., van de Vijver, F., Alonso-Arbiol, I., He, J., Adams, B., Aldhafri, S., Aydinli-Karakulak, A., Arasa, J., Boer, D., Celenk, O., [Dimitrova, R.](#), et al. (2016). Measurement Invariance of the Brief Multidimensional Student's Life Satisfaction Scale Among Adolescents and Emerging Adults Across 23 Cultural Contexts. *Journal of Psychoeducational Assessment*, 34(1), 28-38.

Abstract: There is hardly any cross-cultural research on the measurement invariance of the Brief Multidimensional Students' Life Satisfaction Scales (BMSLSS). The current article evaluates the measurement invariance of the BMSLSS across cultural contexts. This cross-sectional study sampled 7,739 adolescents and emerging adults in 23 countries. A multi-group confirmatory factor analysis showed a good fit of configural and partial measurement weights invariance models, indicating similar patterns and strengths in factor loading for both adolescents and emerging adults across various countries. We found insufficient evidence for scalar invariance in both the adolescents' and the emerging adults' samples. A multi-level confirmatory factor analysis indicated configural invariance of the structure at country and individual level. Internal consistency, evaluated by alpha and omega coefficients per country, yielded acceptable results. The translated BMSLSS across different cultural contexts presents good psychometric characteristics similar to what has been reported in the original scale, though scalar invariance remains problematic. Our results indicate that the BMSLSS forms a brief measure of life satisfaction, which has accrued substantial evidence of construct validity, thus suitable for use in cross-cultural surveys with adolescents and emerging adults, although evaluation of degree of invariance must be carried out to ensure its suitability for mean comparisons.

Typ och Nyckelord: Journal confirmatory factor analysis, factor structure, BMLSS, cross-cultural invariance, ISSN: 0734-2829

Referens: Aletta, F., Kang, J., & [Axelsson, Ö.](#) (2016). Soundscape descriptors and a conceptual framework for developing predictive soundscape models. *Landscape and Urban Planning*, 149, 65-74.

Abstract: Soundscape exists through human perception of the acoustic environment. This paper investigates how soundscape currently is assessed and measured. It reviews and analyzes the main soundscape descriptors in the soundscape literature, and provides a conceptual framework for developing predictive models in soundscape studies. A predictive soundscape model provides a means of predicting the value of a soundscape descriptor, and the blueprint for how to design soundscape. It is the key for implementing the soundscape approach in urban planning and design. The challenge is to select the appropriate soundscape descriptor and to identify its predictors. The majority of available soundscape descriptors are converging towards a 2-dimensional soundscape model of perceived affective quality (e.g., Pleasantness-Eventfulness, or Calmness-Vibrancy). A third potential dimension is the appropriateness of a soundscape to a place. This dimensions provides complementary information beyond the perceived affective quality. However, it depends largely on context, and because a soundscape may be appropriate to a place although it is poor, this descriptor must probably not be used on its own. With regards to predictors, or soundscape indicators, perceived properties of the acoustic environment (e.g., perceived sound sources) are winning over established acoustic and psychoacoustic metrics. To move this area forward it is necessary that the international soundscape community comes together and agrees on relevant soundscape descriptors. This includes to agree on numerical scales and assessment procedures, as well as to standardize them.

Typ och Nyckelord: Journal soundscape descriptor, soundscape indicator, sound perception, environmental sound quality, ISSN: 0169-2046

Referens: Andéhn, M., Nordin, F., & [Nilsson, M.E.](#) (2016). Facets of country image and brand equity: Revisiting

the role of product categories in country-of-origin effect research. *Journal of Consumer Behaviour*, 15(3), 225-238.

Abstract: The country-of-origin effect is a topic central to the field of international marketing. Country of origin has been found to exert a particularly potent effect on consumer evaluation in situations where there is a strong link between a country and a particular product category. The present study provides further insight into how this particular effect can be understood. Drawing on a novel conceptualization of how country image and product categories interact, this study tested the relative evaluative relevance of product category with respect to estimates of brand equity across a variety of product categories. The findings suggest that facets of a country's image that are more closely related to the evaluation situation exert a greater influence on the evaluation of brands. This result encourages scholars as well as practitioners to re-evaluate which situations might cause the country of origin effect to hold managerial relevance and paves the way for new paths toward a more comprehensive understanding of the effect.

Typ och Nyckelord: Journal country of origin, country image, brand equity, product category, ISSN: 1472-0817

Referens: Andersson, E., Rück, C., Lavebratt, C., Hedman, E., Schalling, M., Lindefors, N., Eriksson, E., Carlbring, P., Andersson, G., & Furmark, T. (2016). Correction: Genetic Polymorphisms in Monoamine Systems and Outcome of Cognitive Behavior Therapy for Social Anxiety Disorder. *PLoS ONE*, 11(10), e0165249.

Abstract: In the original abstract, the trial number is incorrect. Please see the corrected trial number here: NCT00564967.

Reference:

Andersson, E., Rück, C., Lavebratt, C., Hedman, E., Schalling, M., Lindefors, N., et al. (2013). Genetic Polymorphisms in Monoamine Systems and Outcome of Cognitive Behavior Therapy for Social Anxiety Disorder. *PLoS ONE* 8(11): e79015. doi:10.1371/journal.pone.0079015)

Typ och Nyckelord: Journal correction, trial number, ISSN: 1932-6203

Referens: Andersson, G., & Carlbring, P. (2016). Behandling via internet. In K. Daneback & E. Sorbring (Eds.), *Socialt arbete och internet – att förstå och hantera sociala problem på nya arenor* (pp. 215-225). Stockholm: Liber.

Abstract: Inom det sociala arbetets praktik ser vi en ökad närvaro av internetrelaterade problem. Samtidigt föredrar allt fler människor webbaserad hjälp, samt råd och stöd i relation till mer traditionella behandlings- och preventionsprogram, vilket öppnar för nya möjligheter för det sociala arbetet.

Typ och Nyckelord: Book (chapter) psykologisk behandling, internet, ISBN: 978-91-47-11269-2

Referens: Andersson, G., Carlbring, P., & Lindefors, N. (2016). History and Current Status of ICBT. In N. Lindefors & G. Andersson (Eds.), *Guided Internet-Based Treatments in Psychiatry* (pp. 1-16). Springer International Publishing.

Abstract: We begin this chapter with a discussion of the history of ICBT and its roots in bibliotherapy and computerised CBT. We then provide a brief description of one way of administering guided ICBT, including the role of the therapist and data security issues. This description is followed by examples of conditions that are not covered later in the book, such as specific phobias and addictions. We end this chapter with a discussion of technical developments, cost-effectiveness and implementation.

Typ och Nyckelord: Book (chapter) ICBT, history, status, psychiatry, ISBN: 978-3-319-06082-8

Referens: Aronsson, G. (2016). Gränslöst arbete, resiliens och kompensation. I *Friska arbetsplatser för kvinnor och män i alla åldrar* (s. 22-36). Stockholm: Arbetsmiljöverket.

Abstract:

Typ och Nyckelord: Report gränslöst arbete, stress, resiliens, kompensation, arbetsorganisation, ålder, arbete, ISBN/ISSN: 1650-3171

Referens: Aronsson, G., & Mellner, C. (2016). Illegitima arbetsuppgifter och identitet - en introduktion. *Arbetsmarknad & Arbetsliv*, 22(3/4), 28-46.

Abstract: Stressreaktioners styrka beror inte bara på hur mycket och hur ofta människor arbetar utan hör även samman med ett arbetsuppsdrags sociala innebörd. Forskningen om illegitima arbetsuppgifter och stress inkluderar denna sociala aspekt, vilken antas vara relaterad till individens självuppfattning och identitet. I artikeln introduceras en modell om illegitima uppgifter som identitetsrelevanta stressorer. Dessutom redovisas en empirisk studie av tre yrkesgrupper kring sambandet mellan identitetsrelevanta stressorer och ohälsoreaktioner.

Typ och Nyckelord: Journal illegitima arbetsuppgifter, arbete, arbetsorganisation, stress, skolledare, präster, sjuknärvaro, yrkesidentitet, ISSN: 1400-9692

Referens: Astvik, W., Welander, J., & Isaksson, K. (in press). Sorti, tystnad och lojalitet bland medarbetare och chefer i socialtjänsten. *Arbetsmarknad & Arbetsliv*.

Abstract: Personalsituationen i socialtjänsten framstår som alltmer problematisk med omfattande personalomsättning och rekryteringssvårigheter. Baserat på en nationell enkätstudie undersöks betydelsen av arbetsvillkor och organisatoriska faktorer för handlingsalternativen sorti, tystnad och lojalitet bland medarbetare och chefer inom socialtjänsten. Resultaten visar bland annat att styrningen inom socialtjänsten behöver utvecklas i riktning mot färre motstridiga krav och för en öppenhet som tillåter dialog och kritisk reflektion för att behålla och på sikt attrahera nya medarbetare.

Journal socialtjänsten, arbetsvillkor, personalomsättning, arbetsrelaterade attityder

Typ och Nyckelord:

Referens: Athlin, Å.M., Farrokhnia, N., & von Thiele Schwarz, U. (2016). Teamwork - A way to improve patient perceptions of the quality of care in an emergency department: An intervention study with follow-up. *European Journal for Person Centered Healthcare*, 4(3), 509-519.

Abstract: Rationale, aims and objectives: Targeted interventions are suggested for improving patient perceptions of the emergency care they have received. However, organizational changes are another way of addressing these issues. Structured evaluation of such changes is warranted. The overall aim was to investigate how organizational changes aimed to support multi-professional teamwork in the emergency department (ED) could affect patients' perceptions of the quality of care.

Method: The introduction of multi-professional teamwork in an emergency department at a Swedish university hospital was evaluated using an intervention study design. Weeks with standard procedure were interchanged with and compared to, intervention weeks over a 4-week period and follow-up after 1.5 years. In total, 203 patients completed the questionnaire "Quality from the Patient's Perspective (QPP)".

Results: Of 4 dimensions, 3 (medical-technical, identity-oriented approach and socio-cultural atmosphere) showed increasing improvements from the control phase to follow-up. Seven of 22 items concerning quality of care in the emergency department improved significantly from baseline to intervention and to follow-up. The number of areas in need of improvement was dramatically reduced in the intervention phase compared to the control phase and overall the results were sustained 1.5 years later. Significant differences between the study phases in patient perceptions of waiting time were also noted.

Conclusion: Multi-professional teamwork has previously been related to improved patient safety and lead time efficiency. Findings show that it may also be related to improvements in patients' perceptions of quality of care in the emergency department. Emphasizing this relationship may enhance the patient-centered care approach of emergency departments.

Typ och Nyckelord: Journal communication, complex healthcare environments, decision-making, emergency department, multi-professional teamwork, patient-centered care, patient perceptions, patient satisfaction, person-centered healthcare, quality of care, staff-patient communication, ISSN: 2052-5656

Referens: Axelsson, Ö. (2016). Effects of a low-height sound absorbent street furniture and a fountain on the soundscape in a Stockholm pocket park. In *Proceedings of the Inter-Noise 2016* (pp. 5203-5211), 45th International Congress and Exposition on Noise Control Engineering, Towards a Quieter Future, 21-24 August 2016, Hamburg, Germany. Paper 231.

Abstract: This study investigated the effects of a mock-up version of a low-height sound absorbent street furniture and a fountain on the local soundscape in a pocket park in Stockholm. Binaural recordings were conducted at two distances from the main road (on the sidewalk and in the park). The recordings were conducted with or without the mock-up, and with the local fountain either turned on or off. Thirty-two students (16 women, Mage = 26.6 yrs., SDage = 5.7) participated in a listening experiment, and assessed eight experimental sounds, in context of 12 fill sounds, on how pleasant or eventful they were. ANOVA showed that the mock-up had a stronger effect on pleasantness on the sidewalk than in the park, and the fountain contributed to pleasantness only in the absence of the mock-up. Moreover, the fountain reduced the eventfulness in the park but not on the sidewalk. The results are in line with previous case studies. Taken together, they suggest that it is better to build low-height sound absorbent street furniture than fountains, to improve the urban soundscape.

Typ och Nyckelord: Proceedings soundscape quality, noise barrier, fountain

Referens: Aydinli-Karakulak, A., & Dimitrova, R. (2016). Brief report: When does identity lead to negative affective experiences? A comparison of Turkish-Bulgarian and Turkish-German adolescents. *Journal of Adolescence*, 47, 125-130.

Abstract: We examine relationships between social identity domains (ethnic, national, and religious) and negative affect among Turkish-Bulgarian and Turkish-German youth. Path analysis confirmed a multiple social identities (MSI) factor that has negative relations to experiencing negative affect for Turkish youth in both countries. Beyond this negative relationship, the component of national identity showed a positive relationship to negative affect for Turkish-Bulgarians, but not for Turkish-Germans. Our findings indicate that beyond the generally adaptive effect of MSI on youth development, unique components of social identity may not always be an asset: In an assimilative acculturation context (i.e., Bulgaria), the endorsement of national identity was not adaptive. Our research therefore highlights the need for a contextually differentiated view on "healthy" identity formation among immigrants for research and practice.

Typ och Nyckelord: Journal multiple social identities, Turkish-Bulgarian, Turkish-German, youth, ISSN: 0140-1971

Referens: Beijer, U., Scheffel Birath, C., DeMartinis, V., & af Klinteberg, B. (in press). Facets of Male Violence Against Women With Substance Abuse Problems. Women With a Residence and Homeless Women. *Journal of Interpersonal Violence*.

Abstract: The aims of this study were to investigate the type and extent to which women with substance abuse problems have been exposed to male violence during their lifetime, and to examine possible differences between women with a residence (WR) and homeless women (HW). The total sample included 79 women (WR, n = 35; HW, n = 44; M age = 47.8 years). Of the total sample, 72 women (91%) had experienced different kinds of male violence, 88% from former partners, and 26% from male friends or acquaintances. Of the 72 women, 71% further reported "Countless occasions of violent events," and 36% had been forced to commit criminal acts. Abused women who had been forced to commit criminal acts were significantly more frequently found to be homeless, have reported parental alcohol and/or drug problems, have witnessed domestic violence in childhood, have been victims of sexual violence, have used illicit drugs as a dominant preparation, and have injected illicit drugs. Almost half of the abused women (46%) met criteria for posttraumatic stress disorder (PTSD), where HW showed an almost 4-time higher risk (RR 3.78) than WR. In conclusion there is a particular vulnerability in women with substance abuse to male violence, which has an important impact on their health status. Thus, from a public health perspective, it is suggested that for those women who have experienced male violence, treatment protocols need to include both assessing and addressing the impact of such experience in relation to substance abuse as well as concomitant health concerns.

- Typ och Nyckelord:** Journal substance abuse problems, male violence, homelessness, women with a residence, PTSD, criminal activity, public mental health, ISSN: 0886-2605
- Referens:** Bergman, I., Johansson, K., [Almkvist, O.](#), & Lundberg, C. (2016). Health-adjusted neuropsychological test norms based on 463 older Swedish car drivers. *Scandinavian Journal of Psychology*, 57(2), 93-107.
- Abstract:** There is a need for improved normative information in particular for older persons. The present study provides neuropsychological test norms on seven cognitive tests used in a sample representing the general older driving population, when uncontrolled and controlled for physical health. A group of 463 healthy Swedish car drivers, aged 65 to 84 years, participated in a medical and neuropsychological examination. The latter included tests of visual scanning, mental shifting, visual spatial function, memory, reaction time, selective attention, and simultaneous capacity. Hierarchical regression analyses demonstrated that, when uncontrolled for health, old age was associated with significant impairment on all seven tests. Education was associated with a significant advantage for all tests except most reaction time subtests. Women outperformed men on selective attention. Controlling for health did not consistently change the associations with education, but generally weakened those with age, indicating rises in normative scores of up to 0.36 SD (residual). In terms of variance explained, impaired health predicted on average 2.5%, age 2.9%, education 2.1% and gender 0.1%. It was concluded (1) that individual regression-based predictions of expected values have the advantage of allowing control for the impact of health on normative scores in addition to the adjustment for various demographic and performance-related variables and (2) that health-adjusted norms have the potential to classify functional status more accurately, to the extent that these norms diverge from norms uncontrolled for physical health.
- Typ och Nyckelord:** Journal cognitive aging, fitness to drive, normal adults, normative data, physical health, regression-based norms, ISSN: 0036-5564
- Referens:** [Berntson, E.](#), [Bernhard-Oettel, C.](#), Christensen, M., Clausen, T., & Mauno, S. (2016). The launch of a new Scandinavian journal of work and organizational psychology. *Scandinavian Journal of Work and Organizational Psychology*, 1(1), 1-2.
- Abstract:**
- Typ och Nyckelord:** Journal editorial, work psychology, organizational psychology, Scandinavia, ISSN: 2002-2867
- Referens:** [Berntson, E.](#), [Bernhard-Oettel, C.](#), [Hellgren, J.](#), [Näswall, K.](#), & [Sverke, M.](#) (2016). *Enkätmetodik*. Natur & Kultur.
- Abstract:** Enkätmetodik ger såväl teoretisk som praktisk kunskap om enkätundersökningar från att identifiera ett problem och formulera lämpliga frågor, till att analysera och tolka resultatet. Boken har ett evidensbaserat perspektiv där läsaren får lära sig olika verktyg som bidrar till undersökningens tillförlitlighet.
- Fokus ligger på metodiken, som förklaras och sätts in i sitt sammanhang med hjälp av många exempel, faktarutor och tydliga beskrivningar. Läsaren får således god förståelse för centrala områden såsom mätteori, reliabilitet, validitet och faktoranalys.
- Typ och Nyckelord:** Book (chapter) enkätmetodik, enkätundersökningar, mätteori, reliabilitet, validitet, faktoranalys, ISBN: 9789127137080
- Referens:** Bhatara, A., [Laukka, P.](#), Boll-Avetisyan, N., Granjon, L., Anger Eifenbein, H., & Bänziger, T. (2016). Second Language Ability and Emotional Prosody Perception. *PLoS ONE*, 11(6): e0156855.
- Abstract:** The present study examines the effect of language experience on vocal emotion perception in a second language. Native speakers of French with varying levels of self-reported English ability were asked to identify emotions from vocal expressions produced by American actors in a forced-choice task, and to rate their pleasantness, power, alertness and intensity on continuous scales. Stimuli included emotionally expressive English speech (emotional prosody) and non-linguistic vocalizations (affect bursts), and a baseline condition with Swiss-French pseudo-speech. Results revealed effects of English ability on the recognition of emotions in English speech but not in non-linguistic vocalizations. Specifically, higher English ability was associated with less accurate identification of positive emotions, but not with the interpretation of negative emotions. Moreover, higher English ability was associated with lower ratings of pleasantness and power, again only for emotional prosody. This suggests that second language skills may sometimes interfere with emotion recognition from speech prosody, particularly for positive emotions.
- Typ och Nyckelord:** Journal emotions, second language, speech, prosody perception, ISSN: 1932-6203
- Referens:** Bjaastad, J.F., Haugland, B.S.M., Fjermestad, K.W., Torsheim, T., Havik, O.E., Heiervang, E.R., & [Öst, L.-G.](#) (2016). Competence and Adherence Scale for Cognitive Behavioral Therapy (CAS-CBT) for Anxiety Disorders in Youth: Psychometric Properties. *Psychological Assessment*, 28(8), 908-916.
- Abstract:** The aim of the present study was to evaluate the psychometric properties of the Competence and Adherence Scale for Cognitive Behavioral Therapy (CAS-CBT). The CAS-CBT is an 11-item scale developed to measure adherence and competence in cognitive-behavioral therapy (CBT) for anxiety disorders in youth. A total of 181 videotapes from the treatment sessions in a randomized controlled effectiveness trial (Wergeland et al., 2014) comprising youth (N = 182, M age = 11.5 years, SD = 2.1, range 8-15 years, 53% girls, 90.7% Caucasian) with mixed anxiety disorders were assessed with the CAS-CBT to investigate interitem correlations, internal consistency, and factor structure. Internal consistency was good (Cronbach's alpha = .87). Factor analysis suggested a 2-factor solution with Factor 1 representing CBT structure and session goals (explaining 46.9% of the variance) and Factor 2 representing process and relational skills (explaining 19.7% of the variance). The sum-score for adherence and competence was strongly intercorrelated, $r = .79$, $p < .001$. Novice raters (graduate psychology students) obtained satisfactory accuracy (ICC > .40, n = 10 videotapes) and also good to excellent interrater reliability when compared to expert raters (ICC = .83 for adherence and .64 for competence, n = 26 videotapes). High rater stability was also found (n = 15 videotapes). The findings suggest that the CAS-CBT is a reliable measure of adherence and competence in manualized CBT for anxiety disorders in youth. Further research is needed to investigate the validity of the scale and psychometric properties when

used with other treatment programs, disorders and treatment formats.

Typ och Nyckelord: Journal therapist adherence, therapist competence, cognitive behavior therapy, youth, anxiety, ISSN: 1040-3590

Referens: Bjälkebring, P., Västfjäll, D., [Svenson, O.](#), & Slovic, P. (2016). Regulation of Experienced and Anticipated Regret in Daily Decision Making. *Emotion, 16*(3), 381-386.

Abstract: Decisions were sampled from 108 participants during 8 days using a web-based diary method. Each day participants rated experienced regret for a decision made, as well as forecasted regret for a decision to be made. Participants also indicated to what extent they used different strategies to prevent or regulate regret. Participants regretted 30% of decisions and forecasted regret in 70% of future decisions, indicating both that regret is relatively prevalent in daily decisions but also that experienced regret was less frequent than forecasted regret. In addition, a number of decision-specific regulation and prevention strategies were successfully used by the participants to minimize regret and negative emotions in daily decision making. Overall, these results suggest that regulation and prevention of regret are important strategies in many of our daily decisions.

Typ och Nyckelord: Journal regret, emotion, emotion regulation, decision making, ISSN: 1528-3542

Referens: Björk, B., & [Härenstam, A.](#) (2016). Differences in organizational preconditions for managers in genderised municipal services. *Scandinavian Journal of Management, 32*(4), 209-219.

Abstract: In contrast to much research concerned with differences in male and female managers' leadership strategies, this study focuses on how organizational arrangements vary for managers in differently gendered contexts; it explores the opportunities for frontline managers in municipal services to fulfil their assignment. The organisational preconditions for over 400 managers of municipal health and social care, education and technical services are analysed in a cross-level and comparative research design. The results indicate that managers of feminized care services work in an environment with fewer resources, less organisational support and larger spans of control, than managers in masculinized municipal services. These results shed light on meso-level mechanisms involved in the unequal distribution of health risks among men and women in working life.

Typ och Nyckelord: Journal managers, gendered organizations, public sector, local government, ISSN: 0956-5221

Referens: [Blom, V.](#), [Richter, A.](#), Hallsten, L., & Svedberg, P. (in press). The associations between job insecurity, depressive symptoms and burnout: The role of performance-based self-esteem. *Economic and Industrial Democracy*.

Abstract: Despite agreement on the negative effects of job insecurity, more knowledge needs to be generated on the health effects in terms of burnout and depressive symptoms and for whom job insecurity has these negative effects. The present study aims to investigate the associations between job insecurity and burnout and depressive symptoms respectively, by studying the moderation influences of performance-based self-esteem (PBSE), a form of contingent self-esteem. A population-based sample with 4145 twins was used. The results showed that job insecurity was significantly associated with both burnout and depressive symptoms, and that PBSE acted as a moderator, so that the associations were stronger for individuals with high PBSE than for individuals with low PBSE. The study contributes by including a personality characteristic to gain more knowledge about the mechanisms of job insecurity on mental ill-health, and by illustrating that job insecurity has an impact on severe health outcomes in terms of burnout and depressive symptoms.

Typ och Nyckelord: Journal burnout, contingent self-esteem, depressive symptoms, job insecurity, moderation, performance-based self-esteem, ISSN: 0143-831X

Referens: Boraxbekk, C.J., Hagkvist, F., & [Lindner, P.](#) (2016). Motor and mental training in older people: Transfer, interference, and associated functional neural responses. *Neuropsychologia, 89*, 371-377.

Abstract: Learning new motor skills may become more difficult with advanced age. In the present study, we randomized 56 older individuals, including 30 women (mean age 70.6 years), to 6 weeks of motor training, mental (motor imagery) training, or a combination of motor and mental training of a finger tapping sequence. Performance improvements and post-training functional magnetic resonance imaging (fMRI) were used to investigate performance gains and associated underlying neural processes. Motor only training and a combination of motor and mental training improved performance in the trained task more than mental-only training. The fMRI data showed that motor training was associated with a representation in the premotor cortex and mental training with a representation in the secondary visual cortex. Combining motor and mental training resulted in both premotor and visual cortex representations. During fMRI scanning, reduced performance was observed in the combined motor and mental training group, possibly indicating interference between the two training methods. We concluded that motor and motor imagery training in older individuals is associated with different functional brain responses. Furthermore, adding mental training to motor training did not result in additional performance gains compared to motor-only training and combining training methods may result in interference between representations, reducing performance.

Typ och Nyckelord: Journal older people, lifelong plasticity, motor imagery, brain imaging, motor training, ISSN: 0028-3932

Referens: Bosnes, I., [Almkvist, O.](#), Bosnes, O., Stordal, E., Romild, U., & Nordahl, H.M. (in press). Prevalence and correlates of successful aging in a population-based sample of older adults: the HUNT study. *International Psychogeriatrics*.

Abstract: The factors influencing successful aging (SA) are of great interest in an aging society. The aims of this study were to investigate the prevalence of SA, the relative importance across age of the three components used to define it (absence of disease and disability, high cognitive and physical function, and active engagement with life), and its correlates. Data were extracted from the population-based cross-sectional Nord-Trøndelag Health Study (HUNT3 2006-2008). Individuals aged 70-89 years with complete datasets for the three components were included (N = 5773 of 8,040, 71.8%). Of the respondents, 54.6% were women. Univariate and multivariate regression analyses were used to analyze possible correlates of SA. Overall, 35.6% of the sample met one of the three criteria, 34.1% met combinations, and 14.5% met all of the three criteria. The most

demanding criterion was high function, closely followed by absence of disease, while approximately two-thirds were actively engaged in life. The relative change with age was largest for the high cognitive and physical function component and smallest for active engagement with life. The significant correlates of SA were younger age, female gender, higher education, weekly exercise, more satisfaction with life, non-smoking, and alcohol consumption, whereas marital status was not related to SA. The prevalence of SA in this study (14.5%) is comparable to previous studies. It may be possible to increase the prevalence by intervention directed toward more exercise, non-smoking, and better satisfaction with life.

Typ och Nyckelord: Journal successful aging, components, prevalence, correlates, HUNT, ISSN: 1041-6102

Referens: Bouchard, S., Carlbring, P., Loranger, C., Botella, C., & Botella, C. (2016). Mechanisms underlying the efficacy of exposure in virtual reality for anxiety disorders. Discussion at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 139). Stockholm: EABCT.

Abstract: Many studies have documented the efficacy and effectiveness of using virtual reality to conduct exposure in the treatment of anxiety disorders (Wiederhold & Bouchard, 2014). However, the factors related to treatment outcome remain unclear. In this symposium, four studies will be presented in order to document: (a) the role of presence in the potential of virtual reality (VR) to induce anxiety reactions in people suffering from an anxiety disorder (PTSD); (b) mechanisms of change, including treatment expectations, in the cognitive behavior treatment (CBT) of panic disorder where VR and in vivo techniques were used to conduct exposure; (c) the role of cognitive changes and self-efficacy compared to other predictors of change, such as presence and treatment alliance, in the CBT of social anxiety using VR and in vivo exposure; and (d) expanding these findings on predictors of change to augmented reality exposure for specific phobia. The first study is based on an experimental anxiety induction protocol while the other three use randomized control trials. The findings highlight to contribution of a few factors specific to technology-based exposure and those common to CBT of anxiety disorders. Attendees to the symposium will benefit from a clear understanding of what are the few key factors they need to take into account when conducting exposure with VR and augmented reality.

Typ och Nyckelord: Proceedings symposium discussion, virtual reality, efficacy of exposure, anxiety disorders

Referens: Bujacz, A., Dunne, S., Fink, D., Gatej, A.R., Karlsson, E., Ruberti, V., & Wronska, M.K. (2016). Why do we enjoy creative tasks? Results from a multigroup randomized controlled study. *Thinking Skills and Creativity*, 19, 188-197.

Abstract: Previous studies have linked positive emotions with creativity, but it remains unknown why creative activities may enhance positive emotions. We tested how creative tasks influence autonomous self-expression and task absorption, and whether this in turn increases positive emotions. Data from 478 participants were divided into four language samples (English, German, Italian, and Polish) and analyzed in a series of multigroup structural equation models. The indirect effects were replicated in all samples. Creative tasks enhanced positive emotions through an increase in autonomy. However, participants who solved creative tasks also reported lower task absorption, and this has hindered their experience of positive emotions. In total, a small increase of positive emotions was recorded for creative tasks in comparison to non-creative ones. We suggest that creative activities may support autonomous functioning and enhance positive emotions, given that participants will stay sufficiently focused on the task.

Typ och Nyckelord: Journal creativity, autonomy, positive emotions, divergent thinking, task absorption, ISSN: 1871-1871

Referens: Buzea, C., & Dimitrova, R. (2016). Internal versus External Ethnic Identification of Roma: Implications for Social Inclusion in Romania. *Social Work Review*, 3.

Abstract: The Roma represent the most relevant and sizable ethnic minority across Europe with estimates varying from 10 up to 15 million of people. However, discrepancy in external (ascribed by others) and internal or self-defined ethnic identification of Roma are largely present in Europe and Romania in particular. We set out to explore internal and external ethnic identification of Romanian Roma by investigating Roma communities from 58 Romanian sites (10 cities and 48 villages), based on data collected from local experts (policemen, teachers, social workers, religious leaders). Results showed that: a) external ethnic identification (identification made by others) is three times higher than the official census data and the extreme poverty is the common characteristic of Roma communities; b) according to local experts, main markers to identify Roma refer to geographic proximity, extreme poverty, poor living conditions and enlarged family size. Implications for social inclusion programs at local and European level are discussed along with directions for future research.

Typ och Nyckelord: Journal Roma, ethnic identity, internal identification, ethnic markers, ISSN: 1583-0608

Referens: Cancino-Montecinos, S., Björklund, F., & Lindholm, T. (in press). Dissonance and abstraction: Cognitive conflict leads to higher level of construal. *European Journal of Social Psychology*.

Abstract:

Typ och Nyckelord: Journal dissonance, abstraction, cognitive conflict, construal, ISSN: 0046-2772

Referens: Carlbring, P. (2016). Internet-Delivered CBT: State of the Art and Future Directions. Keynote at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 18). Stockholm: EABCT.

Abstract: Internet-delivered cognitive behavior therapy (ICBT) has a relatively short history, with the first trials being conducted in the late 1990s. Since then well above 120 randomized controlled trials suggest that ICBT can be effective. Effect sizes for ICBT have been well within the range of face-to-face CBT with the exception of unguided programs (e.g., not even minimal therapist contact), which usually, but not always, result in smaller effects. So, the evidence is there but how is it done? In this keynote Carlbring will present recent research findings from efficacy and effectiveness studies, but also share experiences of how to become a true expert internet therapist. It is clear that therapist guidance generally is important for good outcome – but how much, how often and when should you do it? And most importantly, what should you write in your feedback? Based on the Swedish research from analyzing the written content of email messages, sent from both the client and the therapist, suggestions will be shared.

In the keynote short clinical case examples will be provided together with screenshots and demonstration of treatment systems including the Swedish web platform as well as a gamified virtual reality exposure therapy intervention. Furthermore, a recently tested smartphone application will also be briefly presented.

Finally, you will learn about the risk of negative effects of Internet-based cognitive behavior therapy and how to measure the occurrence of symptom deterioration, adverse and unwanted events, and their relationship with long term treatment outcome.

Typ och Nyckelord: Proceedings Internet-delivered cognitive behavior therapy, ICBT, state of the art, future directions, keynote

Referens: [Carlbring, P., & Andersson, G. \(2016\).](#) Internet treatment for anxiety disorders. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 51). Stockholm: EABCT.

Abstract: Scientific background: Internet-delivered cognitive behavior therapy (ICBT) has a relatively short history, with the first trials being conducted in the late 1990s. Since then well above 120 randomized controlled trials suggest that ICBT can be effective. Effect sizes for ICBT have been well within the range of face-to-face CBT with the exception of unguided programs (e.g., not even minimal therapist contact), which usually, but not always, result in smaller effects.

So, the evidence is there but how is it done? In this workshop two pioneers in the field will present some recent research findings, but primarily share their experiences of how to become a true expert internet therapist. It is clear that therapist guidance generally is important for good outcome – but how much, how often and when should you do it? And most importantly, what should you write in your feedback? Based on their own research from analyzing the written content of email messages, sent from both the client and the therapist, clear suggestions will be shared and also practiced during the workshop.

In the workshop clinical case examples will be provided together with screenshots and demonstration of treatment systems including the Swedish web platform as well as a gamified virtual reality exposure therapy intervention. Furthermore, a recently tested smartphone application will also be briefly presented.

Finally, you will learn about the risk of negative effects of Internet-based cognitive behavior therapy and how to measure the occurrence of symptom deterioration, adverse and unwanted events, and their relationship with long term treatment outcome.

Key learning objectives

- Understanding the varieties of Internet treatments and their differential effects
- Getting to know what is needed to set up a service using the Internet (the basics)
- Learning what is required to obtain good outcomes with guided Internet treatment
- Knowing what is required in terms of therapist training and skills.
- Learning about the pros and cons of Internet treatment including tailoring treatment according to patient symptom profile.

Training modalities: Lecture, role play, group discussions.

Key references: Andersson, G. (2014). The internet and CBT: A clinical guide. Boca Raton: CRC Press.
Andersson, G., Cuijpers, P., Carlbring, P., Riper, H., & Hedman, E. (2014). Internet-based vs. face-to-face cognitive behaviour therapy for psychiatric and somatic disorders: a systematic review and meta-analysis. *World Psychiatry, 13*, 288-295. Doi: 10.1002/wps.20151

Workshop leaders: Both professor Per Carlbring and professor Gerhard Andersson are licensed psychologists, licensed psychotherapists and board certified specialists in clinical psychology. They have been active researchers in the internet interventions field since the late 1990s. For more information detailed see their respective web sites: www.carlbring.se and www.gerhardandersson.se

Implications for everyday clinical practice of CBT: After this workshop you will know more about how these alternative methods of CBT support can be integrated within a busy practice and supporting people in innovative ways.

Typ och Nyckelord: Proceedings workshop, internet treatment, anxiety disorders

Referens: [Carlbring, P., Hassmen, P., Nystrom, M., Lindner, P., & Andersson, G. \(2016\).](#) The relative effects of behavioral activation vs. physical exercise in the treatment of mild to moderate depression. Poster presented at the 8th Scientific Meeting of the International Society for Research on Internet Interventions (P1.16), Seattle, USA, 7-9 April 2016.

Abstract: Aim: Despite their potential as low-threshold, low-cost and high-flexibility treatments of depression, behavioral activation and physical exercise have not yet been directly compared. This study has examined the effects of these interventions, administered via the Internet.

Method: In this randomized controlled trial a total of 312 participants meeting the diagnostic criteria for mild to moderate major depression, recruited in multiple cycles and randomized to either a waiting list control group with delayed treatment, or one of the four active treatment groups: (1) physical exercise without a clear psychological treatment rationale; (2) physical exercise with a psychological treatment rationale; (3) behavioral activation a la Lewinsohn; or (4) behavioral activation a la Martel.

Results: A total of 72% were women and the average age of the participants were $M=42.3$ years ($SD=13,5$). More than half (53,9%) had a history of previous psychological treatment. Primary outcome measure was the 9-item Patient Health Questionnaire. Assessments were made on a weekly basis for the full duration of the acute treatment which was 12 weeks.

Conclusion: The preliminary results are in line with previous online studies showing that all active treatment groups were superior to the waitlist (large effect sizes) and that only minor differences could be identified between the four active groups (large within effect sizes). At the time of the conference 6-month follow-up data will be available in addition to the already collected post- assessment data (analyzed according to the intention-to-treat principle).

Typ och Nyckelord: Proceedings behavioral activation, physical exercise, depression

Referens: Carlbring, P., Huppert, J., Koster, E., Watkins, E., Boettcher, J., & Blackwell, S. (2016). What can bias modification training add to CBT? Panel at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 100). Stockholm: EABCT.

Abstract: Bias modification training is a broad but very different form of CBT that is heavily inspired by experimental psychopathology research. Basically this treatment targets mechanisms maintaining psychopathology such as selective attention and memory biases. Some studies have found large effects of bias modification training but there are also negative findings. The panel will discuss the pros and cons of this treatment format including the prospect of combining traditional CBT delivery with bias modification training.

Typ och Nyckelord: Proceedings panel discussion, bias modification training, CBT

Referens: Carlbring, P., Marklund, A., Miloff, A., Sjöblom, K., Delin, L., Lundén, C., Blomdahl, R., Braun, U., Cotter, K., Magnusson, K., & Andersson, G. (2016). Treat your social anxiety disorder with this gamified smartphone app. Poster presented at the 8th Scientific Meeting of the International Society for Research on Internet Interventions (P1.03), Seattle, USA, 7-9 April 2016.

Abstract: Aim: Social anxiety disorder (SAD) is a common debilitating mental illness with large negative effects on quality of life and economic productivity. Modern psychotherapy treatments utilizing cognitive-behavioral theory are increasingly delivered over the Internet and more recently using smartphone applications. The Challenger App written natively for the Apple iPhone was developed at the Stockholm University Department of Psychology for the treatment of SAD and uses a number of advanced features not previously seen in past mental health applications; these include real-time location awareness, notifications, anonymous social interaction between users, a high-degree of personalization and use of gamification techniques.

Method: A total of 209 participants with a primary diagnosis of SAD were randomized to one of three groups: 1) Self-help book, 2) Self-help book + the Challenger app, or 3) waitlist. The treatment period lasted 6 weeks. Primary outcome measure was Liebowitz Social Anxiety Scale self-report (LSAS-SR). Also included were the Quality of Life Inventory, Patient Health Questionnaire, and the Generalized Anxiety Disorder-7 (GAD-7). Outcome was analyzed according to the intention to treat principle.

Results: Both treatment groups were superior to the waitlist. On the main outcome measure (LSAS-SR) the effect size for the waitlist was Cohens $d=0.14$. The group that received the self-help book with the addition of the Challenger app was significantly superior ($d=1.0$) to just reading the self-help book ($d=0.61$). Participants recruited by way of Newspaper advertisement were more likely to reach high end-state functioning ($OR=4.1$) and the same was true for participants without prior psychological treatment history as compared with having a previous experience ($OR=4.4$).

Conclusion: Adding the smartphone app is a cost effective way of improving the outcome when treating SAD with a self-help book.

Typ och Nyckelord: Proceedings social anxiety disorder, SAD, smartphone app, Challenger, gamification

Referens: Carlsson, L.H., Saltvedt, S., Anderlid, B.-M., Westerlund, J., Gillberg, C., Westgren, M., & Fernell, E. (2016). Prenatal ultrasound and childhood autism: long-term follow-up after a randomized controlled trial of first- vs second-trimester ultrasound. *Ultrasound in Obstetrics and Gynecology*, 48(3), 285-288.

Abstract: Objective: To analyze whether the frequency of autism spectrum disorder (ASD) in a cohort of Swedish children differs between those exposed to ultrasound in the 12th week and those exposed to ultrasound in the 18th week of gestation.

Methods: The study cohort consisted of approximately 30 000 children born between 1999 and 2003 to mothers who had been randomized to a prenatal ultrasound examination at either 12 or 18weeks' gestation as part of the framework for a study on nuchal translucency screening. The outcome measure in the present study was the rate of ASD diagnoses among the children. Information on ASD diagnoses was based on data from the Swedish social insurance agency concerning childcare allowance granted for ASD.

Results: Between 1999 and 2003, a total of 14 726 children were born to women who underwent a 12-week ultrasound examination and 14 596 to women who underwent an 18-week ultrasound examination. Of these, 181 (1.2%) and 176 (1.2%) children, respectively, had been diagnosed with ASD. There was no difference in ASD frequency between the early and late ultrasound groups.

Conclusions: Women subjected to at least one prenatal ultrasound examination at either 12 or 18weeks' gestation had children with similar rates of ASD. However, this result reflects routine care 10-15 years ago in Sweden. Today, higher intensity ultrasound scans are performed more frequently, at earlier stages during pregnancy and for non-medical purposes, implying longer exposure time for the fetus. This change in the use of ultrasound necessitates further follow-up study of the possible effects that high exposure to ultrasound during the gestational period has on the developing brain.

Typ och Nyckelord: Journal autism, children, early vs late, outcome, prenatal ultrasound, ISSN: 0960-7692

Referens: Cernvall, M., Carlbring, P., Ljungman, L., Ljungman, G., & von Essen, L. (2016). Internet-based guided self-help for parents of children diagnosed with cancer: Long-term follow-up of a randomized controlled trial. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 470). Stockholm: EABCT.

Abstract: Background: A considerable proportion of parents of children on cancer treatment experience distress such as symptoms of posttraumatic stress (PTSS), depression and anxiety. The purpose was to investigate the long-term efficacy of Internetbased guided self-help for these parents.

Methods: 58 parents of children on cancer treatment (median months since diagnosis = 3) were randomized to receive 10 weeks of guided self-help via the Internet or to wait-list (intervention $n = 31$, wait-list $n = 27$). The

intervention utilized principles from cognitive behavior therapy and included psychoeducation, relaxation training, coping with thoughts and feelings, problem solving, and emotional writing. Weekly support via e-mail was provided. Outcomes included PTSS (PCL-C), depression (BDI-II) and anxiety (BAI) and were assessed at pre and post intervention and at one-year follow-up.

Results: 18 participants completed the intervention. 16 participants in the intervention condition and 16 participants in the wait-list condition participated in the one-year follow-up. Intention-to-treat analyses indicated significant time*group interactions for all three outcomes with reductions favoring the intervention group: PCL-C; $F = 10.9, < .001$, BDI-II; $F = 12.0, < .001$, BAI; $F = 14.6, < .001$. At the one-year follow-up there were large between-group effect sizes for all three outcomes (Cohens d 0.8 to 1.1).

Conclusions: The high drop-out rate warrants caution in interpretation of the findings. However, Internet-based guided self-help may be an accessible alternative for some parents of children on cancer treatment and findings indicate that short-term efficacy can be maintained in the long term.

Typ och Nyckelord: Proceedings internet-based guided self-help, parents, children, cancer, follow-up

Referens: Cernvall, M., Hovén, E., Ljungman, L., Ljungman, G., Carlbring, P., & von Essen, L. (2016). Posttraumatic Stress and Attentional Bias towards Cancer-Related Stimuli in Parents of Children Recently Diagnosed with Cancer. *PLoS ONE*, 11(4), e0152778.

Abstract: Objectives: To investigate whether posttraumatic stress symptoms (PTSS) are related to attentional bias towards cancer-related stimuli among parents of children recently diagnosed with cancer.

Methods: Sixty-two parents completed questionnaires measuring PTSS, depression, and anxiety and the emotional Stroop task via the Internet. The emotional Stroop task included cancer-related words, cardiovascular disease-related words, and neutral words.

Results: Participants were split in two groups based on the median of PTSS: High-PTSS and Low-PTSS. There was a significant interaction between word-type and group and a planned contrast test of this interaction indicated that the High-PTSS group had longer response latencies on cancer-related words compared to the other word-type and group combinations.

Conclusions: Findings suggest that PTSS are related to attentional bias towards cancer-related stimuli among parents of children recently diagnosed with cancer. Implications of this finding for the understanding of PTSS in this population, future research, and clinical practice are discussed.

Typ och Nyckelord: Journal posttraumatic stress, cancer, ISSN: 1932-6203

Referens: Cernvall, M., Skogseid, E., Carlbring, P., Ljungman, L., Ljungman, G., & von Essen, L. (2016). Experiential Avoidance and Rumination in Parents of Children on Cancer Treatment: Relationships with Posttraumatic Stress Symptoms and Symptoms of Depression. *Journal of Clinical Psychology in Medical Settings*, 23(1), 67-76.

Abstract: We conducted a cross-sectional survey study to investigate whether there is a relationship between experiential avoidance (EA), rumination, post-traumatic stress symptoms (PTSS), and symptoms of depression, in parents of children on cancer treatment. Data from 79 parents (55 mothers) of 79 children with a median of three months since their cancer diagnosis were included in cross-sectional analyses. EA and rumination were positively correlated with PTSS and symptoms of depression. EA and rumination did not provide incremental explained variance in PTSS over and above that explained by symptoms of depression, while controlling for symptoms of anxiety and demographic characteristics. However, EA and rumination provided incremental explained variance in symptoms of depression over and above that explained by PTSS, while controlling for symptoms of anxiety and demographic characteristics. Rumination and EA are important constructs in the understanding of PTSS and symptoms of depression in parents of children on cancer treatment. Future research should delineate the temporal relationships between these constructs.

Typ och Nyckelord: Journal avoidance, cancer and oncology, depression, parents, posttraumatic stress, rumination, ISSN: 1068-9583

Referens: Chiotis, K., Saint-Aubert, L., Savitcheva, I., Jelic, V., Andersen, P., Jonasson, M., Eriksson, J., Lubberink, M., Almkvist, O., Wall, A., Antoni, G., & Nordberg, A. (2016). Imaging in-vivo tau pathology in Alzheimer's disease with THK5317 PET in a multimodal paradigm. *European Journal of Nuclear Medicine and Molecular Imaging*, 43(9), 1686-1699.

Abstract: Purpose The aim of this study was to explore the cerebral distribution of the tau-specific PET tracer [F-18]THK5317 (also known as (S)-[F-18]THK5117) retention in different stages of Alzheimer's disease; and study any associations with markers of hypometabolism and amyloid-beta deposition. Methods Thirty-three individuals were enrolled, including nine patients with Alzheimer's disease dementia, thirteen with mild cognitive impairment (MCI), two with non-Alzheimer's disease dementia, and nine healthy controls (five young and four elderly). In a multi-tracer PET design [F-18]THK5317, [C-11] Pittsburgh compound B ([C-11]PIB), and [F-18]FDG were used to assess tau pathology, amyloid-beta deposition and cerebral glucose metabolism, respectively. The MCI patients were further divided into MCI [C-11]PIB-positive (n=11) and MCI [C-11]PIB-negative (n=2) groups. Results Test-retest variability for [F-18]THK5317-PET was very low (1.17-3.81 %), as shown by retesting five patients. The patients with prodromal (MCI [C-11]PIB-positive) and dementia-stage Alzheimer's disease had significantly higher [F-18]THK5317 retention than healthy controls ($p=0.002$ and $p=0.001$, respectively) in areas exceeding limbic regions, and their discrimination from this control group (using the area under the curve) was $>98\%$. Focal negative correlations between [F-18]THK5317 retention and [F-18]FDG uptake were observed mainly in the frontal cortex, and focal positive correlations were found between [F-18]THK5317 and [C-11] PIB retentions isocortically. One patient with corticobasal degeneration syndrome and one with progressive supranuclear palsy showed no [C-11]PIB but high [F-18]THK5317 retentions with a different regional distribution from that in Alzheimer's disease patients. Conclusions The tau-specific PET tracer [F-18]THK5317 images in vivo the expected regional distribution of tau pathology. This distribution contrasts with the different patterns of hypometabolism and amyloid-beta deposition.

Typ och Nyckelord: Journal positron emission tomography, Alzheimer's disease, tau, neurofibrillary tangles, THK5317, other dementia, Non-AD, Amyloid PET, FDG, PIB, ISSN: 1619-7070

- Referens:** Clefberg Liberman, L., & Öst, L.-G. (2016). The relation between fears and anxiety in children with specific phobia and parental fear or anxiety. *Journal of Child and Family Studies*, 25(2), 598-606.
- Abstract:** The purpose of the present study was to investigate if fearfulness and anxiety in children with a specific phobia are related to parental fearfulness and anxiety. Sixty-five 7-18 year-old children that were included in a treatment study completed the State-Trait Anxiety Inventory for Children (STAIC), and the revised version of the Fear Survey Schedule for Children (FSSCR). The parents of the children answered the adult versions of STAI and FSS; rated to what extent they generally expressed fears in the presence of their children, and answered whether they suffered from any emotional or mental disorders. Analyses showed that there were no correlations between parental fearfulness or anxiety and fearfulness or anxiety in the children, or between parents' expressed fears and children's reported fears. However, there was a positive correlation between mothers' expressed fears and level of trait anxiety in the children. Moreover, age and trait anxiety of the children were significant predictors of their fearfulness. Regarding the question about parental emotional or mental disorder, 54 % of the children had at least one parent suffering from an emotional or mental disorder. In 46 % a parent had an anxiety disorder, and in 32 % this was a specific phobia.
- Typ och Nyckelord:** Journal anxiety, fear, parents, phobic children, expression of fear, ISSN: 1062-1024
- Referens:** Corin, L., Berntson, E., & Härenstam, A. (2016). Managers' Turnover in the Public Sector-The Role of Psychosocial Working Conditions. *International Journal of Public Administration*, 39(10), 790-802.
- Abstract:** An important challenge for public organizations is to attract and retain skilled managers. The present study explores how profiles of psychosocial working conditions, assessed by the combination of managerial-specific job demands and job resources, longitudinally predict managers' turnover intentions and actual turnover in Swedish municipalities. Considerable effects of managers' psychosocial working conditions on turnover intentions but not on actual turnover were found. Thus, poor working conditions may result in psychologically detached managers in public organizations, which may have considerable and costly effects on both the organizations and the managers, in terms of decreased commitment, performance, and impaired health.
- Typ och Nyckelord:** Journal cluster analysis, job demands-resources model, public sector managers, turnover, working conditions, ISSN: 0190-0692
- Referens:** Cornell Kärnekull, S., Arshamian, A., Nilsson, M.E., & Larsson, M. (2016). From Perception to Metacognition: Auditory and Olfactory Functions in Early Blind, Late Blind, and Sighted Individuals. *Frontiers in Psychology*, 7, 1450.
- Abstract:** Although evidence is mixed, studies have shown that blind individuals perform better than sighted at specific auditory, tactile, and chemosensory tasks. However, few studies have assessed blind and sighted individuals across different sensory modalities in the same study. We tested early blind ($n = 15$), late blind ($n = 15$), and sighted ($n = 30$) participants with analogous olfactory and auditory tests in absolute threshold, discrimination, identification, episodic recognition, and metacognitive ability. Although the multivariate analysis of variance (MANOVA) showed no overall effect of blindness and no interaction with modality, follow-up between-group contrasts indicated a blind-over-sighted advantage in auditory episodic recognition, that was most pronounced in early blind individuals. In contrast to the auditory modality, there was no empirical support for compensatory effects in any of the olfactory tasks. There was no conclusive evidence for group differences in metacognitive ability to predict episodic recognition performance. Taken together, the results showed no evidence of an overall superior performance in blind relative sighted individuals across olfactory and auditory functions, although early blind individuals excelled in episodic auditory recognition memory. This observation may be related to an experience-induced increase in auditory attentional capacity.
- Typ och Nyckelord:** Journal auditory sense, congenitally blind, compensatory effect, discrimination, episodic odor memory, identification, metacognition, olfaction, ISSN: 1664-1078
- Referens:** Cortes, D.S., Laukka, P., & Fischer, H. (2016). Age differences in judgments of attractiveness, likeability, and trustworthiness of faces. In *Program of SANS 2016* (p. 58). Social & Affective Neuroscience Society Annual Meeting 2016. April 28-30, 2016. New York City, NY, USA.
- Abstract:** People constantly evaluate faces to obtain social information. However, the link between aging and social evaluation of faces is not well understood. Todorov and colleagues introduced a data-driven model defined by valence and dominance as the two main components underlying social judgments of faces. They also created a stimulus set consisting of computer-generated faces which systematically vary along various social dimensions (e.g., Todorov et al., 2013, *Emotion*, 13, 724-38). We utilized a selection of these facial stimuli to investigate age-related differences in judgments of the following dimensions: attractiveness, competence, dominance, extraversion, likeability, threat, and trustworthiness. Participants rated how well the faces represented the intended social dimensions on 9-point scales ranging from not at all to extremely well. Results from 71 younger (YA; mean age = 23.42 years) and 60 older adults (OA; mean age = 69.19 years) showed that OA evaluated untrustworthy faces as more trustworthy, dislikeable faces as more likeable, and unattractive faces as more attractive compared to YA. OA also evaluated attractive faces as more attractive compared to YA, whereas YA did rate likeable and trustworthy faces as more likeable and trustworthy than did OA. In summary, our findings showed that OA evaluated negative social features less negatively compared to YA. This suggests that older and younger persons may use different cues for social evaluation of faces, and is in line with prior research suggesting age-related decline in the ability to recognize negative emotion expressions.
- Typ och Nyckelord:** Proceedings age differences, attractiveness, likeability, trustworthiness, faces
- Referens:** Dahlin, M., Andersson, G., Magnusson, K., Johansson, T., Sjögren, J., Håkansson, A., Pettersson, M., Kadowaki, Å., Cuijpers, P., & Carlbring, P. (2016). Internet-delivered acceptance-based behaviour therapy for generalized anxiety disorder: A randomized controlled trial. *Behaviour Research and Therapy*, 77, 86-95.
- Abstract:** Generalized anxiety disorder (GAD) is a disabling condition which can be treated with cognitive behaviour therapy (CBT). The present study tested the effects of therapist-guided internet-delivered acceptance-based behaviour therapy on symptoms of GAD and quality of life. An audio CD with acceptance and mindfulness exercises and a separate workbook were also included in the treatment. Participants diagnosed with GAD ($N = 103$) were randomly allocated to immediate therapist-guided internet-delivered acceptance-based behaviour therapy or to a waiting-list control condition. A six month follow-up was also included. Results using

hierarchical linear modelling showed moderate to large effects on symptoms of GAD (Cohen's $d = 0.70$ to 0.98), moderate effects on depressive symptoms (Cohen's $d = 0.51$ to 0.56), and no effect on quality of life. Follow-up data showed maintained effects. While there was a 20% dropout rate, sensitivity analyses showed that dropouts did not differ in their degree of change during treatment. To conclude, our study suggests that internet-delivered acceptance-based behaviour therapy can be effective in reducing the symptoms of GAD.

Typ och Nyckelord: Journal internet-delivered, GAD, CBT, ISSN: 0005-7967

Referens: Dahlin, M., Ryberg, M., Vernmark, K., Annas, N., Carlbring, P., & Andersson, G. (2016). Internet-delivered acceptance-based behavior therapy for generalized anxiety disorder: A pilot study. *Internet Interventions*, 6, 16-21.

Abstract: Objective: Internet-delivered cognitive behavior therapy (ICBT) has been developed and tested for treating persons with generalized anxiety disorder (GAD). A new form of CBT focuses on acceptance (of internal experiences or difficult psychological content), mindfulness and valued actions. To date this form of CBT has not been delivered via the internet for persons with GAD. The aim of this study was to describe the functionality of a new internet-delivered acceptance-based behavior therapy for GAD, and to test the effect of the intervention in an open pilot trial.

Methods: Following exclusion of two patients we included 14 patients diagnosed with GAD from two primary care clinics. At 2–3 months follow-up after treatment 10 patients completed the outcome measures. The treatment lasted for an average of 15 weeks and consisted of acceptance-based techniques, behavior therapy components and homework assignments.

Results: A majority of participants completed all modules during the treatment. Findings on the Penn State Worry Questionnaire showed a within-group improvement of Cohen's $d = 2.14$ at posttreatment. At the follow-up results were maintained. Client satisfaction ratings were high.

Conclusions: We conclude that internet-delivered acceptance-based behavior therapy potentially can be a promising new treatment for GAD. A controlled trial of the program has already been completed.

Typ och Nyckelord: Journal generalized anxiety disorder, acceptance, mindfulness, internet-based behavior therapy, ISSN: 2214-7829

Referens: Dang, J., Xiao, S., Liu, Y., Jiang, Y., & Mao, L. (2016). Individual differences in dopamine level modulate the ego depletion effect. *International Journal of Psychophysiology*, 99, 121-124.

Abstract: Initial exertion of self-control impairs subsequent self-regulatory performance, which is referred to as the ego depletion effect. The current study examined how individual differences in dopamine level, as indexed by eye blink rate (EBR), would moderate ego depletion. An inverted-U-shaped relationship between EBR and subsequent self-regulatory performance was found when participants initially engaged in self-control but such relationship was absent in the control condition where there was no initial exertion, suggesting individuals with a medium dopamine level may be protected from the typical ego depletion effect. These findings are consistent with a cognitive explanation which considers ego depletion as a phenomenon similar to "switch costs" that would be neutralized by factors promoting flexible switching.

Typ och Nyckelord: Journal ego depletion, cognitive control, switch costs, dopamine, eye blink rate, ISSN: 0167-8760

Referens: Dang, J., Xiao, S., Zhang, T., Liu, Y., Jiang, B., & Mao, L. (2016). When the poor excel: Poverty facilitates procedural learning. *Scandinavian Journal of Psychology*, 57(4), 288-291.

Abstract: Recent research has shown that poverty directly impeded cognitive functions because the poor could be easily distracted by monetary concerns. We argue that this effect may be limited to functions relying on working memory. For functions that rely on proceduralized processes however, monetary concerns elicited by reminding of financial demands would be conducive rather than harmful. Our results supported this hypothesis by showing that participants with lower income reached the learning criterion of the information-integration categorization task faster than their more affluent counterparts after reminding of financial demands.

Typ och Nyckelord: Journal poverty, cognitive functions, procedural learning, information-integration, ISSN: 0036-5564

Referens: Danielsson, K., Jansson-Fröjmark, M., Broman, J.E., & Markström, A. (2016). Cognitive Behavioral Therapy as an Adjunct Treatment to Light Therapy for Delayed Sleep Phase Disorder in Young Adults: A Randomized Controlled Feasibility Study. *Behavioral Sleep Medicine*, 14(2), 212-232.

Abstract: Delayed sleep phase disorder (DSPD) is common among young people, but there is still no evidence-based treatment available. In the present study, the feasibility of cognitive behavioral therapy (CBT) was evaluated as an additive treatment to light therapy (LT) in DSPD. A randomized controlled trial with participants aged 16 to 26 years received LT for two weeks followed by either four weeks of CBT or no treatment (NT). LT advanced sleep-wake rhythm in both groups. Comparing LTCCBT with LTCNT, no significant group differences were observed in the primary endpoints. Although anxiety and depression scores were low at pretreatment, they decreased significantly more in LTCCBT compared to LTCNT. The results are discussed and some suggestions are given for further studies.

Typ och Nyckelord: Journal delayed sleep phase disorder, CBT, light therapy, ISSN: 1540-2002

Referens: Danielsson, K., Jansson-Fröjmark, M., Broman, J.E., & Markström, A. (in press). Light Therapy With Scheduled Rise Times in Young Adults With Delayed Sleep Phase Disorder: Therapeutic Outcomes and Possible Predictors. *Behavioral Sleep Medicine*.

Abstract: Clinical trials with light therapy (LT) for delayed sleep phase disorder (DSPD) are sparse and little is known about factors that are favorable for improvements. In this study, LT with scheduled rise times was conducted at home for 14 days by 44 participants with DSPD aged 16–26 years. Primary outcomes were sleep onset and sleep offset. Potential predictors were demographic characteristics, chronotype, dim light melatonin onset, the number of days the LT lamp was used, the daily duration of LT, daytime sleepiness, anxiety, depression, worry, and rumination. Significant advances were observed in sleep onset and sleep offset from baseline to the end of

treatment. The number of days of LT predicted earlier sleep onset and sleep offset.

Typ och Nyckelord: Journal light therapy, delayed sleep phase disorder, ISSN: 1540-2002

Referens: Danielsson, K., Markström, A., Broman, J.E., von Knorring, L., & Jansson-Fröjmark, M. (2016). Delayed sleep phase disorder in a Swedish cohort of adolescents and young adults: Prevalence and associated factors. *Chronobiology International*, 33(10), 1331-1339.

Abstract: A delayed sleep-wake and circadian rhythm often occurs during puberty. While some individuals only develop a delayed sleep phase (DSP), others will fulfill the criteria for the diagnosis of delayed sleep phase disorder (DSPD). All previous studies have however not separated DSP from DSPD, and, as a result, the prevalence and associated factors are largely unknown for the two conditions individually. We estimated the prevalence of DSP and DSPD in a Swedish cohort of adolescents and young adults. We also investigated associated factors in the two conditions relative to each other and individuals with no DSP. A questionnaire regarding sleep patterns, demographics, substance use/abuse and symptoms of depression, anxiety, worry and rumination was sent to 1000 randomly selected participants (16–26 years of age) in Uppsala, Sweden (response rate = 68%). DSP was defined as a late sleep onset and a preferred late wake-up time. The DSPD diagnosis was further operationalized according to the Diagnostic and Statistical Manual of Mental Disorders, Edition 5 (DSM-5) criteria including insomnia or excessive sleepiness, distress or dysfunction caused by the DSP and that the sleep problem had been evident for 3 months. DSP occurred at a frequency of 4.6% and DSPD at a frequency of 4% in the investigated cohort. DSP was more common in males and was associated with not attending educational activity or work, having shift work, nicotine and alcohol use and less rumination. DSPD was equally common in males and females and was associated with not attending educational activity or work and with elevated levels of anxiety. Both DSP and DSPD appear to be common in adolescents and young adults in this Swedish cohort. No educational activity or work was associated with both DSP and DSPD. However, there were also apparent differences between the two groups in shift work, substance use and mental health, relative to persons with no DSP. Thus, it seems reasonable to assess DSP and DSPD as distinct entities in future studies.

Typ och Nyckelord: Journal delayed sleep phase, delayed sleep phase disorder, associated factors, occupational status, shift work, substance use/abuse, ISSN: 0742-0528

Referens: De Smedt, S.K., Fonteyne, Y.S., Muragijimana, F., Palmer, K., & Murdoch, I. (2016). Glaucoma Surgery Outcome in Rwanda. *Journal of Glaucoma*, 25(8), 698-703.

Abstract: Purpose: To assess long-term intraocular pressure (IOP) outcome after adult trabeculectomy surgery in Central Africa. Patients and Methods: All adult glaucoma patients who underwent trabeculectomy surgery in the Kabgayi Eye Unit, Rwanda between August 2003 and March 2008 were invited for a follow-up visit. Surgical and clinical data were collected from medical records. At the study visit, best-corrected visual acuity was measured and Goldmann applanation tonometry and biomicroscopy were done. Good IOP outcome was defined as both an IOP < 21 mm Hg and achieving $\geq 30\%$ reduction from the preoperative IOP. Considering first operated eyes, univariate and multivariate logistic regression was used to investigate risk factors for failure. Results: Of 163 individuals operated 3 had died, 118 (74%) participated. Preoperatively, the mean IOP was 31 mm Hg (SD = 11; range, 12 to 60). At the time of the follow-up study visit the mean postoperative IOP was 13 mm Hg (SD = 5; range, 4 to 35). Good IOP outcome was achieved in 132 eyes (84%). Univariate analysis suggested a protective effect against failure of use of anti metabolites [odds ratio (OR) = 0.39; 95% confidence interval (CI), 0.14-1.11; P = 0.07] and a decrease in success with length of follow-up (OR = 3.57; 95% CI, 1.09-12.50; P = 0.03). The latter remained borderline significant with multivariate analysis. Seven eyes went from previously better vision (at least hand movements) down to perception of light or no perception of light after trabeculectomy. Particularly a flat anterior chamber in the first postoperative week (OR = 0.07; 95% CI, 0.01-0.49; P < 0.001) and late hypotony (OR = 0.04; 95% CI, 0.002-0.99; P = 0.004) were significant risk factors for severe visual loss. Conclusions: Trabeculectomy with antimetabolites is one of the best available options for glaucoma management in Africa. However, the IOP control reduced at a follow-up duration beyond 2 years, highlighting the importance of regular long-term follow-up.

Typ och Nyckelord: Journal glaucoma surgery, Africa, outcome, antimetabolites, follow-up, ISSN: 1057-0829

Referens: Del Missier, F., Hansson, P., Coni, V., & Mäntylä, T. (2016). Multiple routes from memory to decision making. Oral presentation at the Sixth International Conference on Memory (ICOM 6), Budapest, Hungary, July 17-22, 2016.

Abstract: We present two individual-differences investigations, carried out with the aim of identifying the memory correlates of decision-making skills. The investigations were carried out on population-based Swedish samples between 25 and 80 years of age (n > 500). Study 1 showed selective relations between memory processes (i.e., semantic, episodic, and working memory) and diverse aspects of decision-making competence as measured with the A-DMC battery. The age-related declines observed in the more cognitively-demanding decision-making tasks were mediated by the age-related differences in working memory or episodic memory. Study 2 confirmed the findings even when controlling for the influence of processing speed and sensory functioning. Overall, the results showed that different memory processes fulfill different functional roles in diverse judgment and decision-making tasks.

Typ och Nyckelord: Proceedings memory, decision making, age

Referens: Del Missier, F., Hansson, P., Parker, A.M., Bruine de Bruin, W., Nilsson, L.-G., & Mäntylä, T. (in press). Unraveling the Aging Skein: Disentangling Sensory and Cognitive Predictors of Age-related Differences in Decision Making. *Journal of Behavioral Decision Making*.

Abstract: Age-related differences in sensory functioning, processing speed, and working memory have been identified as three significant predictors of the age-related performance decline observed in complex cognitive tasks. Yet, the assessment of their relative predictive capacity and interrelations is still an open issue in decision making and cognitive aging research. Indeed, no previous investigation has examined the relationships of all these three predictors with decision making. In an individual-differences study, we therefore disentangled the relative contribution of sensory functioning, processing speed, and working memory to the prediction of the age-related decline in cognitively demanding judgment and decision-making tasks. Structural equation modeling showed that the age-related decline in working memory plays an important predictive role, even when controlling for sensory functioning, processing speed, and education. Implications for research on decision making and cognitive aging are discussed.

Typ och Nyckelord: Journal judgment and decision making, cognitive aging, working memory, processing speed, sensory functioning, ISSN: 0894-3257

Referens: Del Missier, F., Mäntylä, T., Hansson, P., Bruine de Bruin, W., Parker, A.M., & Nilsson, L.-G. (2016). Predictors of Decision Making Across the Adult Life-Span: An Individual-Differences Study. Poster presented at the International Meeting of the Psychonomic Society, Granada, Spain, May 5-8, 2016. In *Abstract Book* (p. 156).

Abstract: Age-related decline in complex cognitive tasks has been explained by changes in sensory functioning, processing speed, and working memory. However, there is still no agreement on the relative importance of these factors, and their relative role in decision making has not been investigated. In an individual-difference study on a population-based Swedish sample of adults (N = 563, age range 30-89), we disentangled the contribution of sensory decline, processing speed, and working memory measures to age-related changes in three cognitively-demanding decision-making tasks of the Adult Decision-Making Competence Battery (Resistance to Framing, Applying Decision Rules, Under/Overconfidence). Structural equation modeling showed that working memory is a significant predictor even when the influence of sensory variables, processing speed, and education (as a control for cohort effects) is taken into account. Moreover, the effects of sensory functioning and processing speed on decision making were mediated by working memory. These findings indicate that the age-related decline in complex decision-making tasks may not be entirely explained by changes in lower-level processes, highlighting the functional role of working memory processes.

Typ och Nyckelord: Proceedings decision making, predictors, adult life-span, individual differences

Referens: Del Missier, F., Ranyard, R., & Bonini, N. (2016). Perceived inflation: The role of product accessibility and attitudes towards inflation. *Journal of Economic Psychology*, 56, 97-106.

Abstract: Little is known about the psychological mechanisms underlying judgments of perceived inflation as empirical evidence is sparse. In two studies, we investigated two factors that are expected to play a significant role in global judgments of perceived inflation: product accessibility and attitudes towards inflation. In Study 1 (N = 253), primed participants retrieved five products whose prices had increased (or decreased) in the past year before expressing a judgment of past inflation (versus non-primed participants with no retrieval task). In Study 2 (N = 101) participants were merely exposed to a series of products, and asked to estimate their frequency of purchase, before judging past inflation. In one condition, the prices of the majority of products had actually increased in the last year, while in another condition they had decreased. In both studies, attitudes towards inflation were also measured. Product priming consistently affected inflation judgments in the direction of an assimilation effect. Also, more negative attitudes towards inflation were associated with higher judgments of perceived inflation. Path analysis confirmed that both product accessibility and attitudes are potential bases for judgments of perceived inflation. These findings suggest that multiple psychological influences may underlie global judgments of perceived inflation.

Typ och Nyckelord: Journal price change, perceived inflation, product accessibility, priming, attitudes, ISSN: 0167-4870

Referens: Deserno, H., & Hau, S. (in press). Traum und Schlaf. Psychoanalytische Auffassungen. In C. Walde, & A. Krovoza (Hg.), *Handbuch Schlaf und Traum*. Stuttgart: Metzler Verlag.

Abstract:

Typ och Nyckelord: Book (chapter) traum, schlaf, psychoanalyse

Referens: Dimitrova, R. (2016). Cohesion, similarity and value in parent-child representations of Albanian and Serbian immigrant and Italian native children. *Psychology. Journal of the Higher School of Economics*, 13(1), 192-213.

Abstract: The study of parent-child representations across cultures is important in order to obtain a proper understanding of the attributes, size and positioning of such figures as indicators of different interaction patterns across cultures. A thorough base of research evidence for the interpretation of children's drawings may facilitate work in multicultural educational settings and enhance our understanding of cultural diversity in schools. Italy provides an ideal context for the study of parent-child representations, as the country has witnessed increasing cultural diversity in recent years with the immigration of various ethnic groups. This study examined the extent to which this context influences children's representations in domains of Cohesion (interpersonal bonding), Similarity (affinity) and Value (spatial relevance) among parent-child figures because these domains inform important representational processes of interpersonal bonding with parents across specific cultures. The Pictorial Assessment of Interpersonal Relationships (PAIR) was used to codify drawings of 326 children with Albanian (n = 59), Serbian (n = 85) and Italian (n = 182) backgrounds. The results showed that in drawings made by Albanian and Serbian children parental figures were drawn similar to and close to the child figure representing their less independent reciprocal stance. The parental figures drawn by Italian children appear bigger and farther apart. Important implications may be derived from the results in facilitating work in multicultural educational settings, by enhancing knowledge regarding cultural diversity in schools.

Typ och Nyckelord: Journal drawings, parent-child representations, Albanian and Serbian immigrant children, Italian children, PAIR, ISSN: 1813-8918

Referens: Dimitrova, R. (2016). Ingredients of good PhD supervision - Evidence from a student survey at Stockholm University. *Utbildning & Lärande*, 10(1), 40-53.

Abstract: Doktorandhandledning är en relevant fråga för en pedagogisk forskarutbildning vid universitetet vilket har betydande implikationer inom rad sammanhang, såväl inom industrin som för grupper av arbetsgivare, studentföreningar och akademiker. Denna studie undersöker centrala aspekter av handledning utifrån doktoranders perspektiv vid Stockholms universitet baserat på en undersökning med 761 forskarstuderande. En konfirmatorisk faktoranalys genomförd med strukturell ekvationsmodellering visade sig ge stöd åt en endimensionell modell för handledning som exemplifieras av givandet av konstruktiv kritik till studenter, handledarens tillgänglighet, tillräckligt med tid för handledning, möjlighet till självständigt arbete och en kreativ miljö för forskarutbildningen. Handledningsindikatorerna var även signifikant och positivt korrelerade. Att studera dessa indikatorer spelar stor roll för riktlinjer inom utbildning och metoder för undervisning i avsikt att kunna förbättra forskarutbildningen. Studenter skulle kunna bli tydligt informerade om viktiga faktorer att

överväga när de väljer samt påbörjar sina studier. Universitetsledning och handledare kan upprätthållas i sin roll att säkerställa en fullgod doktorandupplevelse för deras studenter.

Typ och Nyckelord: Journal doktorandhandledning, forskarutbildning, konfirmatorisk faktoranalys, ISSN: 2001-4554

Referens: [Dimitrova, R., & Aydinli-Karakulak, A. \(2016\). Acculturation orientations mediate the link between religious identity and adjustment of Turkish-Bulgarian and Turkish-German adolescents. *SpringerPlus*, 5:1024.](#)

Abstract: There is a growing recognition of the need to examine religiousness and conduct research on its influence on acculturation and adjustment among ethnic minorities (Güngör et al. in *Int J Behav Dev* 36:367–373, 2012. doi:10.1177/0165025412448357). The present study compares Turkish minority youth in Bulgaria and Germany by examining relationships among religious identity, acculturation orientations (i.e., cultural maintenance and adoption) and acculturation outcomes (i.e., life satisfaction and socio-cultural adjustment to the Turkish and mainstream cultures). Participants were 161 youth in Bulgaria and 155 in Germany who completed measures on religious identity, acculturation orientations and adjustment. Results revealed that religious identity and Turkish culture maintenance are more important for Turkish-German, than for Turkish-Bulgarian youth. A multigroup path model showed that for both samples acculturation orientations partially mediated the link between religious identity and adjustment to the Turkish culture, whereas religious identity was directly related both to adjustment to the mainstream culture and to life satisfaction. Findings highlight the centrality of religious identity and Turkish domains of acculturation for positive adjustment outcomes for Turkish youth in Bulgaria and Germany.

Typ och Nyckelord: Journal religious identity, acculturation orientations, socio-cultural adjustment, Turkish-Bulgarian and Turkish-German youth, ISSN: 2193-1801

Referens: [Dimitrova, R., Chasiotis, A., & van de Vijver, F. \(2016\). Adjustment Outcomes of Immigrant Children and Youth in Europe. A Meta-Analysis. *European Psychologist*, 21, 150-162.](#)

Abstract: Compared to natives, immigrants have been reported to display either more (migration morbidity) or fewer (immigrant paradox) adjustment problems. We examined these two perspectives using a meta-analysis from 51 studies (N = 224,197), reporting internalizing, externalizing, and academic outcomes among immigrant children and youth in Europe. Overall, migration morbidity was better supported than the immigrant paradox. Migration morbidity was supported for (a) externalizing outcomes in Northern Europe and adolescent samples; (b) academic outcomes for low SES and fewer girls across samples; (c) internalizing outcomes in Western Europe and preadolescent samples. Cultural diversity and long-term residence of immigrants are favorable factors for the paradox in externalizing outcomes, whereas immigrant family reunion was predictive for the paradox in internalizing and academic outcomes. Implications for future research and policy are discussed.

Typ och Nyckelord: Journal migration morbidity, immigrant paradox, immigrant children and youth, Europe, meta-analysis, ISSN: 1016-9040

Referens: [Dimitrova, R., Crocetti, E., Buzea, C., Jordanov, V., Kosic, M., Tair, E., Tausova, J., van Cittert, N., & Uka, F. \(2016\). The Utrecht-Management of Identity Commitments Scale \(U-MICS\) Measurement Invariance and Cross-National Comparisons of Youth From Seven European Countries. *European Journal of Psychological Assessment*, 32\(2\), 119-127.](#)

Abstract: The Utrecht-Management of Identity Commitments Scale (U-MICS; Crocetti, Rubini, & Meeus, 2008) is a recently developed measure of identity that has been shown to be a reliable tool for assessing identity processes in adolescents. This study examines psychometric properties of the U-MICS in a large adolescent sample from seven European countries focused on the interplay of commitment, in-depth exploration, and reconsideration of commitment. Participants were 1,007 adolescents from Bulgaria (n = 146), the Czech Republic (n = 142), Italy (n = 144), Kosovo (n = 150), Romania (n = 142), Slovenia (n = 156), and the Netherlands (n = 127). We tested the U-MICS measurement invariance, reliability estimates in each language version, and compared latent identity means across groups. Results showed that the U-MICS has good internal consistency as well as configural, metric, and partial scalar invariance across groups in the sampled countries.

Typ och Nyckelord: Journal U-MICS, identity, Bulgaria, the Czech Republic, Kosovo, the Netherlands, Slovenia, Romania, cross-national comparisons, ISSN: 1015-5759

Referens: [Dimitrova, R., & del Carmen Dominguez Espinosa, A. \(in press\). Factorial Structure and Measurement Invariance of the Four Basic Dimensions of Religiousness Scale Among Mexican Males and Females. *Psychology of Religion and Spirituality*.](#)

Abstract: The Four Basic Dimensions of Religiousness Scale (4-BDRS) is a newly developed instrument based on 4 components of religion: believing (beliefs relative to external transcendence), bonding (rituals and emotions), behaving (adherence to norms and moral arguments), and belonging (community and social group cohesion; Saroglou, 2011). This paper provides empirical evidence to support the factorial structure and measurement invariance assumptions of 4-BDRS among 1,982 adults (mean age of 29.27 years) from Mexico, a country among the top 10 nations in the world for religious involvement. The fit indices indicate similar patterns and strengths in factor loadings, means, and intercepts across males and females. Gender comparisons showed that females score significantly higher on all 4 religiousness dimensions than males. We conclude that the 4-BDRS is a brief and valid measure of religiousness that is suitable for use in Mexican samples.

Typ och Nyckelord: Journal religiousness, 4-BDRS, believing, bonding, behaving, belonging, Mexico, gender, ISSN: 1941-1022

Referens: [Dimitrova, R., & Ferrer-Wreder, L. \(in press\). Resources for positive youth development of Roma ethnic minority across Europe. In N. Cabrera, & B. Leyendecker \(Eds.\), *Handbook of Positive Development of Minority Children and Youth*. New York: Springer.](#)

Abstract:

Typ och Nyckelord: Book (chapter) , ISBN: 978-3-319-43643-2

- Referens:** [Dimitrova, R., & Ferrer-Wreder, L.](#) (in press). Resources for positive youth development of Roma ethnic minority across Europe. In N.J. Cabrera, & B. Leyendecker (Eds.), *Handbook on Positive Development of Minority Children*. New York: Springer.
- Abstract:** About the book:
This Handbook presents current research on children and youth in ethnic minority families. It reflects the development currently taking place in the field of social sciences research to highlight the positive adaptation of minority children and youth. It offers a succinct synthesis of where the field is and where it needs to go. It brings together an international group of leading researchers, and, in view of globalization and increased migration and immigration, it addresses what aspects of children and youth growing in ethnic minority families are universal across contexts and what aspects are more context-specific. The Handbook examines the individual, family, peers, and neighborhood/policy factors that protect children and promote positive adaptation. It examines the factors that support children's social integration, psychosocial adaptation, and external functioning. Finally, it looks at the mechanisms that explain why social adaptation occurs.
- Typ och Nyckelord:** Book (chapter) youth development, Roma, adolescence, ISBN: 978-3-319-43643-2
- Referens:** [Dimitrova, R., & Ferrer-Wreder, L., & Galanti, M.R.](#) (2016). Pedagogical and Social Climate in School Questionnaire: Factorial validity and reliability of the teacher version in Bulgaria. *Journal of Psychoeducational Assessment*, 34,(3), 282-288.
- Abstract:** This study evaluated the factorial structure of the Pedagogical and Social Climate in School (PESOC) questionnaire among 307 teachers in Bulgaria. The teacher edition of PESOC consists of 11 scales (i.e., Expectations for Students, Unity Among Teachers, Approach to Students, Basic Assumptions About Students' Ability to Learn, School-Home Relations, Teacher Cooperation, Teachers' Professional Development, Teaching Activities, Student Valuation, Principal's Pedagogical Leadership, and School Management). A confirmatory factor analysis conducted with structural equation modeling supported a bi-dimensional factor model (Students and Teachers; School Leadership and Management). School climate indicators were also significantly and positively correlated. PESOC is an asset to the literature on assessment of school climate with evidence for factorial validity and reliability in an under researched international context.
- Typ och Nyckelord:** Journal PESOC, school climate, Bulgaria, ISSN: 0734-2829
- Referens:** [Ebert, D.D., Donkin, L., Andersson, G., Andrews, G., Berger, T., Carlbring, P., Rozenenthal, A., ... Cuijpers, P.](#) (2016). Does Internet-based guided-self-help for depression cause harm? An individual participant data meta-analysis on deterioration rates and its moderators in randomized controlled trials. *Psychological Medicine*, 46(13), 2679-2693.
- Abstract:** Almost nothing is known about the potential negative effects of Internet-based psychological treatments for depression. This study aims at investigating deterioration and its moderators within randomized trials on Internet-based guided self-help for adult depression, using an individual patient data meta-analyses (IPDMA) approach.
- Studies were identified through systematic searches (PubMed, PsycINFO, EMBASE, Cochrane Library). Deterioration in participants was defined as a significant symptom increase according to the reliable change index (i.e. 7.68 points in the CES-D; 7.63 points in the BDI). Two-step IPDMA procedures, with a random-effects model were used to pool data.
- A total of 18 studies (21 comparisons, 2079 participants) contributed data to the analysis. The risk for a reliable deterioration from baseline to post-treatment was significantly lower in the intervention v. control conditions (3.36 v. 7.60; relative risk 0.47, 95% confidence interval 0.29-0.75). Education moderated effects on deterioration, with patients with low education displaying a higher risk for deterioration than patients with higher education. Deterioration rates for patients with low education did not differ statistically significantly between intervention and control groups. The benefit-risk ratio for patients with low education indicated that 9.38 patients achieve a treatment response for each patient experiencing a symptom deterioration.
- Internet-based guided self-help is associated with a mean reduced risk for a symptom deterioration compared to controls. Treatment and symptom progress of patients with low education should be closely monitored, as some patients might face an increased risk for symptom deterioration. Future studies should examine predictors of deterioration in patients with low education.
- Typ och Nyckelord:** Journal adverse events, internet-based guided self-help, depression, deterioration effect, negative effects, ISSN: 0033-2917
- Referens:** [Ebner, N.C., Chen, H., Porges, E., Lin, T., Fischer, H., Feifel, D., & Cohen, R.A.](#) (2016). Oxytocin's Effect on Resting-State Functional Connectivity Varies by Age and Sex. *Psychoneuroendocrinology*, 69, 50-59.
- Abstract:** The neuropeptide oxytocin plays a role in social cognition and affective processing. The neural processes underlying these effects are not well understood. Modulation of connectivity strength between subcortical and cortical regions has been suggested as one possible mechanism. The current study investigated effects of intranasal oxytocin administration on resting-state functional connectivity between amygdala and medial prefrontal cortex (mPFC), as two central regions involved in social-cognitive and affective processing. Going beyond previous work that largely examined young male participants, our study comprised young and older men and women to identify age and sex variations in oxytocin's central processes. This approach was based on known hormonal differences among these groups and emerging evidence of sex differences in oxytocin's effects on amygdala reactivity and age-by-sex-modulated effects of oxytocin in affective processing. In a double-blind design, 79 participants were randomly assigned to self-administer either intranasal oxytocin or placebo before undergoing resting-state functional magnetic resonance imaging. Using a targeted region-to-region approach, resting-state functional connectivity strength between bilateral amygdala and mPFC was examined. Participants in the oxytocin compared to the placebo group and men compared to women had overall greater amygdala-mPFC connectivity strength at rest. These main effects were qualified by a significant three-way interaction: while oxytocin compared to placebo administration increased resting-state amygdala-mPFC connectivity for young women, oxytocin did not significantly modulate connectivity in the other age-by-sex subgroups. This study provides novel evidence of age-by-sex differences in how oxytocin modulates resting-state brain connectivity, furthering our understanding of how oxytocin affects brain networks at rest.

Typ och Nyckelord: Journal oxytocin, aging, sex, resting-state functional connectivity, amygdala, medial prefrontal cortex, ISSN: 0306-4530

Referens: Eriksson, K., Strimling, P., Andersson, P.A., & Lindholm, T. (in press). Costly punishment in the ultimatum game evokes moral concern, in particular when framed as payoff reduction. *Journal of Experimental Social Psychology*.

Abstract: The ultimatum game is a common economic experiment in which some participants reject another's unfair offer of how to split some money, even though it leaves them both worse off. This costly behavior can be seen as enforcement of a fairness norm and has been labeled "altruistic punishment", suggesting that it is a moral thing to do. But is this behavior viewed as moral by participants? Is it viewed as punishment? And are the payoff consequences of the behavior sufficient to determine the answers to these questions? To investigate this we framed costly punishment in two different ways: either as rejection of an offer (the standard ultimatum game framing) or as reduction of payoff. In a series of paid and hypothetical experiments we found that moral concerns about costly punishment depended on the framing. Specifically, the reduction frame elicited more moral concern about, and less use of, costly punishment than did the rejection frame. Several implications are discussed.

Typ och Nyckelord: Journal costly punishment, ultimatum game, norm enforcement, motives, framing, moral judgment, ISSN: 0022-1031

Referens: Esaiasson, P., Persson, M., Gilljam, M., & Lindholm, T. (in press). Reconsidering the role of procedures for decision acceptance. *British Journal of Political Science*.

Abstract: Procedural fairness theory posits that the way in which authoritative decisions are made strongly impacts people's willingness to accept them. This article challenges this claim by contending that democratic governments can achieve little in terms of acceptance of policy decisions by the procedural means at their disposal. Instead, outcome favorability is the dominant determinant of decision acceptance. The article explicates that while central parts of procedural fairness theory are true, outcome favorability is still overwhelmingly the strongest determinant of individuals' willingness to accept authoritative decisions. It improves on previous research by locating all key variables into one causal model and testing this model using appropriate data. Findings from a large number of experiments (both vignette and field) reproduce the expected relationships from previous research and support the additional predictions.

Typ och Nyckelord: Journal procedural fairness, decision-making, outcome favorability, ISSN: 0007-1234

Referens: Eyben, F., Scherer, K.R., Shuller, B.W., Sundberg, J., André, E., Busso, C., Devillers, L.Y., Epps, J., Laukka, P., Narayanan, S.S., & Truong, K.P. (2016). The Geneva Minimalistic Acoustic Parameter Set (GeMAPS) for Voice Research and Affective Computing. *IEEE Transactions on Affective Computing*, 7(2), 190-202.

Abstract: Work on voice sciences over recent decades has led to a proliferation of acoustic parameters that are used quite selectively and are not always extracted in a similar fashion. With many independent teams working in different research areas, shared standards become an essential safeguard to ensure compliance with state-of-the-art methods allowing appropriate comparison of results across studies and potential integration and combination of extraction and recognition systems. In this paper we propose a basic standard acoustic parameter set for various areas of automatic voice analysis, such as paralinguistic or clinical speech analysis. In contrast to a large brute-force parameter set, we present a minimalistic set of voice parameters here. These were selected based on a) their potential to index affective physiological changes in voice production, b) their proven value in former studies as well as their automatic extractability, and c) their theoretical significance. The set is intended to provide a common baseline for evaluation of future research and eliminate differences caused by varying parameter sets or even different implementations of the same parameters. Our implementation is publicly available with the openSMILE toolkit. Comparative evaluations of the proposed feature set and large baseline feature sets of INTERSPEECH challenges show a high performance of the proposed set in relation to its size.

Typ och Nyckelord: Journal affective computing, acoustic features, standard, emotion recognition, speech analysis, geneva minimalistic parameter set, ISSN: 1949-3045

Referens: Falkenberg, H. (2016). Social status i arbetslivet: Perspektiv från en forskare inom arbets- och organisationspsykologi. [Social status in the workplace from the perspective of a researcher in work and organizational psychology] In M. Holmqvist (Ed.), *Makt och inflytande i arbetslivet [Research anthology of power and influence in the workplace]* (pp. 220-239). Premiss Förlag.

Abstract: Arbetslivet är till sin karaktär hierarkiskt. Trots det fokuserar arbets- och organisationspsykologin inte på maktfrågor, utan mer på den anställdes möjligheter till kontroll över den egna arbetssituationen. Här ges ett perspektiv på betydelsen av social status i arbetslivet.

Typ och Nyckelord: Book (chapter) social status, arbetsliv, forskning, ISBN: 9789186743536

Referens: Falkenberg, H. (2016). Att arbeta i samma sektor, organisation och yrke: Likheter och skillnader i arbetsklimat och hälsorelaterade besvär bland kvinnor och män som arbetar som läkare. Poster presenterad vid Forte Talks, Stockholm, 8-9 mars 2016.

Abstract: Arbetsmarknaden i Sverige är könssegregerad. Det innebär att kvinnor och män i hög grad arbetar i olika sektorer och har olika yrken, vilket kan påverka både arbetsmiljö och hälsa. Sektor och yrke behöver därför tas i beaktande när arbetsmiljö och hälsa jämförs mellan kvinnor och män. Denna studie utgår från en modell där arbetsmiljö utgörs av fem dimensioner som tillsammans skapar ett arbetsklimat. De fem dimensionerna består av arbetet, arbetsrollen, arbetsgruppen, ledarskapet och organisationen. Syftet med studien är att undersöka likheter och skillnader i arbetsklimat och hälsorelaterade besvär bland kvinnor och män som har en liknande arbetssituation, det vill säga som arbetar i samma sektor, i samma organisation och har samma yrke. Dels jämförs arbetsklimat och hälsobesvär mellan kvinnor och män. Dels prediceras hälsobesvär utifrån arbetsklimatet för kvinnor och män.

Typ och Nyckelord: Proceedings genus, läkare, arbetsmiljö, hälsobesvär

- Referens:** Falkenberg, H., Lindfors, P., Chandola, T., & Head, J. (in press). Do socioeconomic status and gender matter when combining work and family and could control at work and at home help? Results from the Whitehall II study. *Economic and Industrial Democracy*.
- Abstract:** Work and family are sources of both satisfaction and conflicting demands. A challenge is identifying individuals at risk for conflict and factors that potentially reduce conflict. This study investigated how gender and socioeconomic status (SES) were associated with work-family interference (WFI) and family-work interference (FWI) and how control at work and at home related to WFI and FWI. Data from 1991-1993 and 1997-1999 of the Whitehall II study of British Civil servants, including 3484 (827 women and 2657 men) employees in three SES grades, were analyzed. Women reported a higher risk for WFI and FWI. High SES employees reported higher WFI. Less control at home increased risks for WFI and FWI as did low control at work but only for WFI. This suggests that high SES women are especially at risk for conflict and that aspects from both work- and home spheres should be considered in further research and practice.
- Typ och Nyckelord:** Journal work-family conflict, family-work conflict, gender, socioeconomic status, control, ISSN: 0143-831X
- Referens:** Falkenberg, H., Näswall, K., Lindfors, P., & Sverke, M. (2016). Att arbeta i samma sektor, organisation och yrke: Likheter och skillnader i arbetsklimat och hälsobesvär bland kvinnor och män som arbetar som läkare. Muntlig presentation vid den 9:e FALF-konferensen, Östersund, 13-15 juni 2016.
- Abstract:** Arbetsmarknaden i Sverige är könssegregerad. Det innebär att kvinnor och män i hög grad arbetar i olika sektorer och har olika yrken. Det gör att sektor och yrke behöver tas med när hälsoskillnader mellan kvinnor och män ska undersökas. Den här studien undersöker likheter och skillnader i arbetsklimat och hälsobesvär bland kvinnor och män som arbetar i samma sektor, i samma organisation och har samma yrke. Först jämförs arbetsklimat och hälsobesvär mellan kvinnor och män. Sedan undersöks sambanden mellan arbetsklimatet och hälsobesvär för kvinnor och män. Resultaten baseras på självrapporter i enkäter från 95 kvinnor och 105 män som arbetade som läkare på ett och samma akutsjukhus i Stockholm. Resultaten visade inga statistiskt säkerställda skillnader mellan kvinnor och män när det gällde upplevelser av arbetet, arbetsrollen, ledarskapet eller organisationen. Dock rapporterade kvinnorna att de upplevde sammanhållningen och samarbetet i arbetsgruppen som lägre än männen. Kvinnorna rapporterade också mer av både psykiska och fysiska hälsobesvär jämfört med männen. Både sammanhållning och samarbete i arbetsgruppen var relaterade till färre hälsobesvär, men bara för männen. Den här explorativa studien visar att det kan finnas likheter i arbetsklimatet bland kvinnor och män när arbetssituationen är likartad, men tyder också på att en del av de skillnader som finns i den segregerade arbetsmarknaden också tycks vara närvarande för kvinnor och män som arbetar i samma sektor, organisation och yrke.
- Typ och Nyckelord:** Proceedings genus, läkare, arbetsmiljö, hälsobesvär
- Referens:** Falkenberg, H., Näswall, K., Lindfors, P., & Sverke, M. (2016). Working in the same sector, organization and occupation: Similarities and differences in work climate and health complaints among women and men physicians. Poster presented at the yearly meeting of ProWorkNet, Sigtuna, Sweden, August 30 - September 1, 2016.
- Abstract:** The Swedish labor market is gender segregated. This means that gender differences in health can be confounded by factors associated with sector and occupation. Thus, sector and occupation need to be considered when comparing work environment and health between women and men. This study uses the theoretical model of psychological work climate that specifies the work environment in terms of five dimensions. These five dimensions are characteristics of the job, role, workgroup, leadership and organization. The aim of the present study was to explore similarities and differences between women and men who have similar working conditions (working in the same sector, in the same organization, and in the same occupation). Women and men were compared regarding 1) levels of work climate and health complaints and 2) how the work climate related to health complaints.
- Typ och Nyckelord:** Proceedings gender, health care, health complaints, physicians, Sweden, work climate
- Referens:** Falkenberg, H., Näswall, K., Lindfors, P., & Sverke, M. (2016). Working in the same sector, organization and occupation: Similarities and differences in work climate and health complaints among women and men physicians. Poster presented at Stockholm Stress Center Annual Workshop, Stockholm, Sweden, September 7, 2016.
- Abstract:** The Swedish labor market is gender segregated. This means that gender differences in health can be confounded by factors associated with sector and occupation. Thus, sector and occupation need to be considered when comparing work environment and health between women and men. This study uses the theoretical model of psychological work climate that specifies the work environment in terms of five dimensions. These five dimensions are characteristics of the job, role, workgroup, leadership and organization. The aim of the present study was to explore similarities and differences between women and men who have similar working conditions (working in the same sector, in the same organization, and in the same occupation). Women and men were compared regarding 1) levels of work climate and health complaints and 2) how the work climate related to health complaints.
- Typ och Nyckelord:** Proceedings gender, health care, health complaints, physicians, Sweden, work climate
- Referens:** Feingold, D., Hasson-Ohayon, I., Laukka, P., Vishne, T., Dembinsky, Y., & Kravets, S. (2016). Emotion recognition deficits among persons with schizophrenia: Beyond stimulus complexity level and presentation modality. *Psychiatry Research*, 240, 60-65.
- Abstract:** Studies have shown that persons with schizophrenia have lower accuracy in emotion recognition compared to persons without schizophrenia. However, the impact of the complexity level of the stimuli or the modality of presentation has not been extensively addressed. Forty three persons with a diagnosis of schizophrenia and 43 healthy controls, matched for age and gender, were administered tests assessing emotion recognition from stimuli with low and high levels of complexity presented via visual, auditory and semantic channels. For both groups, recognition rates were higher for high-complexity stimuli compared to low-complexity stimuli. Additionally, both groups obtained higher recognition rates for visual and semantic stimuli than for auditory

stimuli, but persons with schizophrenia obtained lower accuracy than persons in the control group for all presentation modalities. Persons diagnosed with schizophrenia did not present a level of complexity specific deficit or modality-specific deficit compared to healthy controls. Results suggest that emotion recognition deficits in schizophrenia are beyond level of complexity of stimuli and modality, and present a global difficulty in cognitive functioning.

Typ och Nyckelord: Journal facial expressions, visual, semantics, prosody, ISSN: 0165-1781

Referens: Ferrer-Wreder, L. (2016). Reflections: Teaching abroad. *International Psychology Bulletin*, 20(1), 32.

Abstract:

Typ och Nyckelord: Report human development, culture, higher education

Referens: Fjermestad, K.W., Lerner, M.D., McLeod, B.D., Wergeland, G.J.H., Heiervang, E.R., Silverman, W.K., Öst, L.-G., De Los Reyes, A., Havik, O.E., & Haugland, B.S.M. (2016). Therapist-youth agreement on alliance change predicts long-term outcome in CBT for anxiety disorders. *Journal of Child Psychology and Psychiatry*, 57(5), 625-632.

Abstract: Background: In individual cognitive behavioral therapy (ICBT) for youth anxiety disorders, it is unclear whether, and from whose perspective, the alliance predicts outcome. We examined whether youth- and therapist-rated alliance, including level of youth-therapist alliance agreement, predicted outcome in a randomized controlled trial.

Methods: Youth (N = 91, M age = 11.4 years (SD = 2.1), 49.5% boys, 86.8% Caucasian) diagnosed with separation anxiety disorder, social phobia, or generalized anxiety disorder drawn from the ICBT condition of an effectiveness trial were treated with an ICBT program. Youth- and therapist-rated alliance ratings, assessed with the Therapeutic Alliance Scale for Children (TASC-C/T), were collected following session 3 (early) and 7 (late). Early alliance, change in alliance from early to late, and level of youth-therapist agreement on early alliance and alliance change were examined, in relation to outcomes collected at posttreatment and 1-year follow-up. Outcome was defined as primary diagnosis loss and reduction in clinicians' severity ratings (CSR; Anxiety Disorders Interview Schedule; ADIS-C/P) based on youth- and parent-report at posttreatment and follow-up, and youth treatment satisfaction collected at posttreatment (Client Satisfaction Scale; CSS).

Results: Early TASC-C scores positively predicted treatment satisfaction at posttreatment. Higher levels of agreement on change in TASC-C and TASC-T scores early to late in treatment predicted diagnosis loss and CSR reduction at follow-up.

Conclusions: Only the level of agreement in alliance change predicted follow-up outcomes in ICBT for youth anxiety disorders. The findings support further examination of the role that youth-therapist alliance discrepancies may play in promoting positive outcomes in ICBT for youth anxiety disorders. Clinical trial number NCT00586586, clinicaltrials.gov.

Typ och Nyckelord: Journal alliance, alliance agreement, CBT, anxiety, youth, ISSN: 0021-9630

Referens: Forero, D.A., Herteleer, L., De Zutter, S., Norrback, K.-F., Nilsson, L.-G., Adolfsson, R., Callaerts, P., & Del-Favero, J. (2016). A network of synaptic genes associated with schizophrenia and bipolar disorder. *Schizophrenia Research*, 172(1-3), 68-74.

Abstract: Identification of novel candidate genes for schizophrenia (SZ) and bipolar disorder (BP), two psychiatric disorders with large epidemiological impacts, is a key research area in neurosciences and psychiatric genetics. Previous evidence from genome-wide studies suggests an important role for genes involved in synaptic plasticity in the risk for SZ and BP. We used a convergent genomics approach, combining different lines of biological evidence, to identify genes involved in the cAMP/PKA/CREB functional pathway that could be novel candidates for BP and SZ: CREB1, CREM, GRIN2C, NPY2R, NF1, PPP3CB and PRKAR1A. These 7 genes were analyzed in a HapMap based association study comprising 48 common SNPs in 486 SZ, 351 BP patients and 514 control individuals recruited from an isolated population in Northern Sweden. Genetic analysis showed significant allelic associations of SNPs in PRKAR1A with SZ and of PPP3CB and PRKAR1A with BP. Our results highlight the feasibility and the importance of convergent genomic data analysis for the identification of candidate genes and our data provide support for the role of common inherited variants in synaptic genes and their involvement in the etiology of BP and SZ.

Typ och Nyckelord: Journal genomics, synaptic genes, psychiatric genetics, neural plasticity, ISSN: 0920-9964

Referens: Forslund, T., Brocki, K.C., Bohlin, G., Granqvist, P., & Eninger, L. (2016). The heterogeneity of attention-deficit/hyperactivity disorder symptoms and conduct problems: Cognitive inhibition, emotion regulation, emotionality, and disorganized attachment. *British Journal of Developmental Psychology*, 34(3), 371-387.

Abstract: This study examined the contributions of several important domains of functioning to attention-deficit/hyperactivity disorder (ADHD) symptoms and conduct problems. Specifically, we investigated whether cognitive inhibition, emotion regulation, emotionality, and disorganized attachment made independent and specific contributions to these externalizing behaviour problems from a multiple pathways perspective. The study included laboratory measures of cognitive inhibition and disorganized attachment in 184 typically developing children (M age = 6 years, 10 months, SD = 1.7). Parental ratings provided measures of emotion regulation, emotionality, and externalizing behaviour problems. Results revealed that cognitive inhibition, regulation of positive emotion, and positive emotionality were independently and specifically related to ADHD symptoms. Disorganized attachment and negative emotionality formed independent and specific relations to conduct problems. Our findings support the multiple pathways perspective on ADHD, with poor regulation of positive emotion and high positive emotionality making distinct contributions to ADHD symptoms. More specifically, our results support the proposal of a temperamentally based pathway to ADHD symptoms. The findings also indicate that disorganized attachment and negative emotionality constitute pathways specific to conduct problems rather than to ADHD symptoms.

Typ och Nyckelord: Journal attention-deficit/hyperactivity disorder, conduct problems, cognitive inhibition, emotion regulation, emotionality, disorganized attachment, ISSN: 0261-510X

- Referens:** Forslund, T., & Granqvist, P. (2016). Psychodynamic Foundations. In Weekes-Shackelford, V., Shackelford, T.K., Weekes-Shackelford, V.A. (Eds.), *Encyclopedia of Evolutionary Psychological Science*.
- Abstract:** Westen (1998) has defined psychodynamic theories with five postulates: (1) much of mental life is unconscious; (2) mental processes operate in parallel so that people can have conflicting feelings that motivate them in opposing ways; (3) stable personality patterns begin to form in childhood, and childhood experiences play an important role in the developing personality, particularly in shaping social relationships; (4) mental representations of the self, others, and relationships guide people's interactions with others and influence psychological symptomatology; and (5) personality development involves learning to regulate sexual and aggressive feelings but also the move from an immature, socially dependent state to a mature, interdependent one. According to this definition, attachment theory is a psychodynamic theory. However, Bowlby explicitly demarcated his attachment theory from the drive principles.
- Typ och Nyckelord:** Book (chapter) psychodynamic foundations, evolution, attachment theory, drive principles, ISBN: 978-3-319-16999-6
- Referens:** Forsström, D., Hesser, H., & Carlbring, P. (2016). Usage of a Responsible Gambling Tool: A Descriptive Analysis and Latent Class Analysis of User Behavior. *Journal of Gambling Studies*, 32(3), 889-904.
- Abstract:** Gambling is a common pastime around the world. Most gamblers can engage in gambling activities without negative consequences, but some run the risk of developing an excessive gambling pattern. Excessive gambling has severe negative economic and psychological consequences, which makes the development of responsible gambling strategies vital to protecting individuals from these risks. One such strategy is responsible gambling (RG) tools. These tools track an individual's gambling history and supplies personalized feedback and might be one way to decrease excessive gambling behavior. However, research is lacking in this area and little is known about the usage of these tools. The aim of this article is to describe user behavior and to investigate if there are different subclasses of users by conducting a latent class analysis. The user behaviour of 9528 online gamblers who voluntarily used a RG tool was analysed. Number of visits to the site, self-tests made, and advice used were the observed variables included in the latent class analysis. Descriptive statistics show that overall the functions of the tool had a high initial usage and a low repeated usage. Latent class analysis yielded five distinct classes of users: self-testers, multi-function users, advice users, site visitors, and non-users. Multinomial regression revealed that classes were associated with different risk levels of excessive gambling. The self-testers and multi-function users used the tool to a higher extent and were found to have a greater risk of excessive gambling than the other classes.
- Typ och Nyckelord:** Journal responsible gambling tool, decrease gambling, user behavior, latent class analysis, initial high usage, low repeated usage, ISSN: 1050-5350
- Referens:** Fransson, M., Granqvist, P., Marciszko, C., Hagekull, B., & Bohlin, G. (2016). Is middle childhood attachment related to social functioning in young adulthood? *Scandinavian Journal of Psychology*, 57(2), 108-116.
- Abstract:** The aim of the present study (N = 69) was to examine whether middle childhood attachment, measured using the Separation Anxiety Test (Slough, Goyette & Greenberg, 1988), predicts aspects of social functioning (social initiative, prosocial orientation, social anxiety, loneliness) in young adulthood. Insecurity-avoidance at age 8.5 years was, as expected, negatively related to social initiative and prosocial orientation, and was also positively related to social anxiety and loneliness at age 21 years. In addition, insecurity-avoidance contributed to developmental change in social anxiety from middle childhood to young adulthood. Contrary to our expectations, the two security scales were generally unrelated to future social functioning. Taken together, these results extend previous research by showing that insecurity-avoidance is related to social functioning also beyond childhood and adolescence, and that it contributes to developmental change in social functioning over time. The scarcity of prospective links for the attachment security scales points to the need for future studies addressing when and why attachment does not contribute to future social functioning.
- Typ och Nyckelord:** Journal attachment, social competence, social anxiety, peers, longitudinal, ISSN: 0036-5564
- Referens:** Fridner, A., Gustafsson Sendén, M., Wall, M., & Schenck-Gustafsson, K. (2016). Why do General Practitioners Self-Diagnose and Self-Prescribe Drugs? In K. Teoh, V. Dediu, N.J. Saade, & J. Hassard, (Eds.), *Book of Proceedings. 12th Conference of the European Academy of Occupational Health Psychology: 'OHP in Times of Change: Society and the workplace'* (p. 203). April 11 - 13, 2016. Athens, Greece. Nottingham, UK: European Academy of Occupational Health Psychology.
- Abstract:** Objective: Physicians tend to demonstrate inappropriate behavior when it comes to taking care of their own health. Self-prescribing or self-treatment seems to be practiced in many countries, and self-treated illnesses are found to be more common among general practitioners. For the physician such behavior is a threat to their own health, and as a consequence their patients might not be able to receive optimal health care. The purpose of this study is to examine the relationship between help seeking behavior, sickness presenteeism, exhaustion, and self-treatment among general practitioners.
- Method: This cross-sectional study was conducted in 2013 among GPs employed in one City Council in Sweden using a questionnaire on health and work factors. The criterion variable "To self-diagnose and self-treat" was measured with a single item from the Physician Career Path Questionnaire (PCPQ; Fridner, 2004). Exhaustion was measured with a scale from the Oldenburg Burnout Inventory, OLBI ($\alpha = .82$; Demerouti et al., 2001, 2003). "Sickness presenteeism" and "Taking vacation due to stress" was measured with single items, also from the PCPQ (Fridner, 2004). For the analyses, we used hierarchical multiple regression.
- Results: Altogether 193 (63,9%) female GPs and 109 (36,1%) male GPs answered the questionnaire, 44% response-rate. Among them 46,2 % stated they had diagnosed and treated themselves for a condition for which they would have referred a patient to a specialist. Our regression analysis model revealed that those physicians who self-treated themselves were also significantly more sickness present at work. Adding to this, exhaustion among the GPs was also included in the model.
- Conclusions: This study shows that self-treatment is not an isolated behavior, but occurs together with

exhaustion and sick-ness presenteeism, indicating a quite severe situation for their health, which would need to be investigated by other doctors than themselves. This needs to be further investigated and taken into account by the National Board of Health and Welfare, County Councils and Medical Associations, and for future physicians our Medical Schools.

Typ och Nyckelord: Proceedings self-treatment, physicians, exhaustion

Referens: Furmark, T., Marteinsdottir, I., Frick, A., Heurling, K., Tillfors, M., Appel, L., Antoni, G., Hartvig, P., Fischer, H., Långström, B., Eriksson, E., & Fredrikson, M. (2016). Serotonin synthesis rate and the tryptophan hydroxylase-2: G-703T polymorphism in social anxiety disorder. *Journal of Psychopharmacology*, 30(10), 1028-1035.

Abstract: It is disputed whether anxiety disorders, like social anxiety disorder, are characterized by serotonin over- or underactivity. Here, we evaluated whether our recent finding of elevated neural serotonin synthesis rate in patients with social anxiety disorder could be reproduced in a separate cohort, and whether allelic variation in the tryptophan hydroxylase-2 (TPH2) G-703T polymorphism relates to differences in serotonin synthesis assessed with positron emission tomography. Eighteen social anxiety disorder patients and six healthy controls were scanned during 60 minutes in a resting state using positron emission tomography and 5-hydroxy-L-[β - ^{11}C]tryptophan, [^{11}C]5-HTP, a substrate of the second enzymatic step in serotonin synthesis. Parametric images were generated, using the reference Patlak method, and analysed using Statistical Parametric Mapping (SPM8). Blood samples for genotyping of the TPH2 G-703T polymorphism were obtained from 16 social anxiety disorder patients (T carriers: n=5, GG carriers: n=11). A significantly elevated [^{11}C]5-HTP accumulation rate, indicative of enhanced decarboxylase activity and thereby serotonin synthesis capacity, was detected in social anxiety disorder patients compared with controls in the hippocampus and basal ganglia nuclei and, at a more lenient (uncorrected) statistical threshold, in the amygdala and anterior cingulate cortex. In patients, the serotonin synthesis rate in the amygdala and anterior cingulate cortex was significantly elevated in TPH2 T carriers in comparison with GG homozygotes. Our results support that social anxiety disorder entails an overactive presynaptic serotonergic system that, in turn, seems functionally influenced by the TPH2 G-703T polymorphism in emotionally relevant brain regions.

Typ och Nyckelord: Journal serotonin synthesis, [^{11}C]5-HTP, brain, anxiety, gene, positron emission tomography, ISSN: 0269-8811

Referens: Galanti, M.R., Hultin, H., Dalman, C., Engström, K., Ferrer-Wreder, L., Forsell, Y., Karlberg, M., Lavebratt, C., Magnusson, C., Sundell, K., Shou, J., Almroth, M., & Rafetti, E. (2016). School environment and mental health in early adolescence - a longitudinal study in Sweden (KUPOL). *BMC Psychiatry*, 16: 243.

Abstract: Background: Longitudinal studies indicate strong associations between school proficiency and indicators of mental health throughout adulthood, but the mechanisms of such associations are not fully elucidated. The Kupol study is a prospective cohort study in Sweden set up in order to: (i) describe the association of school pedagogic and social environment and its specific dimensions with the risk of mental ill-health and psychiatric disorders in adolescence; (ii) evaluate the direct effects of school pedagogic and social environment on mental health and the effects mediated by the individual's academic achievements; and (iii) assess if school pedagogic and social environment are associated with mental ill-health through epigenetic mechanisms, in particular those involving genes regulating the response to stress.

Methods: The Kupol cohort at baseline consists of 3959 children attending the 7th grade of compulsory school (13-14 years old) in 8 regions of central Sweden in the school years 2013-2014 or 2014-2015. Three follow-up surveys in subsequent years are planned. Teachers' and students' perceptions of the culture, climate and ethos of their schools, and students' mental ill-health are assessed at the whole school level by annual questionnaire surveys. In order to conduct epigenetic analyses saliva specimens are collected from a nested sample of students at inception and two years later. Further, class-, family- and child-level information is collected at baseline and during each year of follow-up. Self-reported information is being complemented with register data via record-linkages to national and regional health and administrative registers.

Discussion: The topic being investigated is new, and the sample constitutes the largest adolescent cohort in Sweden involved in an ad hoc study. Epigenetic analyses centered on environmental cues to stress response are a thoroughly new approach. Finally a notable feature is the multi-informant and multi-method data collection, with surveys at the school, class, family, and student level. Collaboration and data access: interested investigators should contact the coordinating centre. Additional information is available on the study's website, kupalstudien.se.

Typ och Nyckelord: Journal school environment, mental health, adolescence, ISSN: 1471-244X

Referens: Gall, K., van Zutven, K., Lindström, J., Bentley, C., Gratwick-Sarll, K., Harrison, C., Lewis, V., & Mond, J. (2016). Obesity and emotional well-being in adolescents: Roles of body dissatisfaction, loss of control eating, and self-rated health. *Obesity*, 24(4), 837-842.

Abstract: Objective: Weak or inconsistent association between obesity and impairment in emotional well-being in population-based samples has led to efforts to identify mediating variables. This study examined the relative importance of body dissatisfaction (BD), loss of control (LOC) eating, and self-rated health (SRH) in mediating the association between obesity and impairment in emotional well-being in a school-based sample of adolescents (boys, n = 437; girls, n = 950). Methods: Moderated mediation analysis was employed to assess the relative importance of the putative mediating variables and moderation of mediation effects by sex following the methods suggested by Hayes and coworkers. Results: BD and SRH, but not LOC eating, were found to mediate the association between obesity and impairment in emotional well-being. Stronger mediation effects were observed for BD than for SRH. None of these results was moderated by sex. Conclusions: The findings suggest that it may be important to target BD in obesity prevention and treatment programs in order to reduce the adverse impact of excess body weight on young people's emotional well-being.

Typ och Nyckelord: Journal obesity, body dissatisfaction, loss of control, eating, self-rated health, ISSN: 1930-7381

Referens: Gerhardsson, A., Åkerstedt, T., Axelsson, J., Fischer, H., Kecklund, G., Lekander, M., Schwarz, J. (2016). The effect of sleep loss on emotional working memory. Abstracts of the 23rd Congress of the European Sleep Research Society, 13-16 September 2016, Bologna, Italy. *Journal of Sleep Research*,

Abstract: Objectives: Emotional stimuli differently affect working memory (WM) performance. As sleep deprivation has a known impact on both emotion and WM our aim was to investigate how one night without sleep affects emotional WM performance. Methods: Healthy subjects (n = 56; age 18–30 years) were randomized to a total sleep deprivation (TSD) or a rested control (RC) condition. Subjects rated their affective state and performed a 1 and a 3-back WM task consisting of neutral, positive and negative pictures at 3 pm or 6 pm (balanced) the day after sleep manipulation. Accuracy (d') and target response time (RT) were used as outcomes. Results: In the TSD condition, subjects rated themselves as less positive (P = 0.006) but not more negative than in the RC condition. In the WM task, TSD had a detrimental effect on accuracy (P = 0.03) regardless of difficulty. Moreover, accuracy was higher in the 1-back than in the 3-back (P < 0.001) and higher for neutral compared to both negative and positive stimuli (Ps < 0.05). RT was faster for positive compared to negative and neutral stimuli (Ps < 0.05). The latter effect was particularly pronounced in the TSD condition as shown by a condition*valence interaction (P < 0.03). Conclusions: One night of total sleep loss impaired emotional WM accuracy. Noticeable, RT was faster for positive stimuli compared to negative and neutral stimuli. This effect was particularly pronounced after sleep loss. This suggests that sleep loss strengthens the opposing effects of positive and negative stimuli on WM performance, possibly due to increased emotion reactivity.

Typ och Nyckelord: Proceedings sleep loss, working memory

Referens: Gingnell, M., Frick, A., Engman, J., Alaie, I., Björkstrand, J., Faria, V., [Carlbring, P.](#), Andersson, G., Reis, M., Larsson, E.-M., Wahlstedt, K., Fredrikson, M., & Furmark, T. (2016). Combining escitalopram and cognitive-behavioural therapy for social anxiety disorder: randomised controlled fMRI trial. *British Journal of Psychiatry*, 209(3), 229-235.

Abstract: Background: Selective serotonin reuptake inhibitors (SSRIs) and cognitive-behavioural therapy (CBT) are often used concomitantly to treat social anxiety disorder (SAD), but few studies have examined the effect of this combination.

Aims: To evaluate whether adding escitalopram to internet-delivered CBT (ICBT) improves clinical outcome and alters brain reactivity and connectivity in SAD.

Method: Double-blind, randomised, placebo-controlled neuroimaging trial of ICBT combined either with escitalopram (n = 24) or placebo (n = 24), including a 15-month clinical follow-up (trial registration: ISRCTN24929928).

Results: Escitalopram+ICBT, relative to placebo+ICBT, resulted in significantly more clinical responders, larger reductions in anticipatory speech state anxiety at post-treatment and larger reductions in social anxiety symptom severity at 15-month follow-up and at a trend-level (P = 0.09) at post-treatment. Right amygdala reactivity to emotional faces also decreased more in the escitalopram+ICBT combination relative to placebo+ICBT, and in treatment responders relative to non-responders.

Conclusions: Adding escitalopram improves the outcome of ICBT for SAD and decreased amygdala reactivity is important for anxiolytic treatment response.

Typ och Nyckelord: Journal escitalopram, ICBT, social anxiety disorder, fMRI, ISSN: 0007-1250

Referens: [Granqvist, P.](#) (2016). Attachment, emotion, and religion. In M. Fuller, D. Evers, A. Runehov, & K.-W. Saether (Eds.), *Issues in Science and Theology. Do Emotions Shape the World?* (pp. 9-26). Springer International Publishing AG.

Abstract: This paper highlights how the development of emotion is intertwined with the development of attachment. I argue, also, that there are certain central emotions and affects associated with particular forms of attachment, which come to define the self in relation to others. Further, this emotion-attachment configuration is expressed in religion, especially in the religious individual's perceived relationship with God. I describe pertinent findings from the scientific literature on the attachment-religion connection indicating that experientially based internal working models of self and other are generalized and lawfully expressed in the context of religion. Thus, attachment-related interactions will affectively color the individual's perceived relationship with God. Yet, God and religion may also provide a source of surrogate attachments, which may aid in repairing negative working models of self and others. Finally, words of caution are offered to prevent misunderstandings of the implications arising from a consideration of how the emotion-attachment configuration is expressed in the context of religion.

Typ och Nyckelord: Book (chapter) attachment, emotion, religion, ISBN: 9783319267678

Referens: [Granqvist, P.](#) (2016). Observations of Disorganized Behaviour Yield No Magic Wand: Response to Shemmings. *Attachment & Human Development*, 18(6), 529- 533.

Abstract:

Typ och Nyckelord: Journal disorganized behaviour, attachment, separate children from their families, ISSN: 1461-6734

Referens: [Granqvist, P.](#), Hesse, E., Fransson, M., Main, M., Hagekull, B., & Bohlin, G. (2016). Prior participation in the strange situation and overstress jointly facilitate disorganized behaviours: implications for theory, research and practice. *Attachment & Human Development*, 18(3), 235-249.

Abstract: We seek to understand why a relatively high percentage (39%; vs the meta-analytic average, 15–18%) of disorganized/disoriented (D) classifications has accrued in the low-risk Uppsala Longitudinal Study (ULS) study, using experienced D coders. Prior research indicates that D behaviours do not always indicate attachment disorganization stemming from a history of frightening caregiving. We examined the role of two other presumed factors: participation in a previous strange situation and overstress. Our findings indicate that both factors were highly prevalent in the ULS sample and that they jointly predicted higher rates of D. First, participation in a previous strange situation was associated with significantly higher distress displays during the second visit than occurred among previously untested children, suggesting that prior participation in the strange situation had a sensitizing effect on child distress during the second visit. Second, unless separations were cut short in lieu of high distress during the second visit, re-tested children were disproportionately likely (ca 60%) to be classified D. We argue that these findings have important implications for theory, research, and

practice. In particular, we conclude that practitioners must refrain from misattributing the appearance of any D behaviors observed to a history of maltreatment.

Typ och Nyckelord: Journal attachment, disorganized/disoriented, strange situation, measurement, equifinality, ISSN: 1461-6734

Referens: [Granqvist, P., & Kirkpatrick, L.A. \(2016\). Attachment and religious representations and behavior. In J. Cassidy, & P.R. Shaver \(Eds.\), *Handbook of attachment: Theory, research, and clinical applications* \(3rd ed.\), pp. 856-878. New York, NY: Guilford.](#)

Abstract: This chapter is divided into five major sections. In the first, we argue that people's perceived relationships with God meet the defining criteria of attachment relationships reasonably well, and hence function psychologically much as other attachments do. We examine in the second section lifespan maturational issues involved in the development of attachment and religion. These first two sections deal with normative/typical aspects of the attachment-religion connection. In the third section, we review empirical connections between religion and individual differences in attachment. This section is subdivided into two subsections—the first focusing on a "compensation" pathway and the second describing a "correspondence" pathway to religion. We address in the fourth major section research findings and implications of the religion-as-attachment model with respect to psychological outcomes. In the final major section, which is new to this edition, we address the current state of theory and research on the attachment-religion connection.

Typ och Nyckelord: Book (chapter) attachment, religious representations, behavior, ISBN: 9781462525294

Referens: [Granqvist, P., & Nkara, F. \(in press\). Nature meets nurture in religious and spiritual development. *British Journal of Developmental Psychology*.](#)

Abstract: We consider nurture's (including culture's) sculpting influences on the evolved psychological predispositions that are expressed in religious and spiritual (R&S) development. An integrated understanding of R&S development requires a move away from the largely one-sided (nature-or-nurture) and additive (nature + nurture) accounts provided in the extant literature. R&S development has been understood as an expression of evolved cognitive modules (nature) on the one hand, and of socialization and social learning (nurture) on the other, or in similar albeit additive terms (e.g., nature produces the brain/mind, culture fills in the details). We argue that humans' evolved psychological predispositions are substantially co-shaped by environmental/cultural input, such as relational experiences and modelling at the microlevel through belief and value systems at the macrolevel. Nurture's sculpting of nature is, then, expressed in R&S development. Finally, for heuristic purposes, we illustrate a fully integrated nature-nurture model with attachment theory and its application to R&S development.

Typ och Nyckelord: Journal evolution, culture, interaction, development, religion, spirituality, attachment, ISSN: 0261-510X

Referens: [Granström, K., Guvå, G., Hau, S., Hylander, I., Näslund, J., & Rosander, M. \(2016\). *Demonstrationer och sporthändelser: En bok om poliser, demonstranter, idrottssupportrar, kravaller och folkfest*. Linköping: Linköping University Electronic Press.](#)

Abstract: När många människor samlas på ett ställe finns en risk att det uppstår konflikter som urartar i våld, även om syftet med samlingen är fredligt. I boken beskrivs vad som kan hända i samband med demonstrationer, gatufester och idrottsevenemang. Bokens första syfte är att ge en överblick över aktuell forskning om masshändelser och kravaller. Ett annat syfte är att ge konkreta exempel på masshändelser som urartat och sådana som avlöst fredligt, samt att förklara varför kravaller uppstår. Det tredje syftet är att ge konkreta beskrivningar av hur polis, myndigheter och arrangörer kan agera för att undvika kravaller. Ökad kunskap om den dynamik som kan utvecklas i samband med masshändelser kan bidra till att öka medvetenheten om den egna gruppens betydelse för händelseutvecklingen och bemötande av andra grupper. Detta är kunskap med relevans också för en mängd vardagliga situationer som kan uppstå på t.ex. arbetsplatser eller i skolklasser.

Boken riktar sig till poliser, polisaspiranter, idrottsföreningar och arrangörer av demonstrationer, men också till lokala myndigheter och politiker. Boken kan med fördel användas i undervisning och forskning inom det beteendevetenskapliga området.

Typ och Nyckelord: Book (chapter) kravaller, masshändelser, bemötande, ISBN: 978-91-7685-814-1

Referens: [Gustafsson Sendén, M., Schenck-Gustafsson, K., & Fridner, A. \(2016\). Gender differences in Reasons for Sickness Presenteeism - a study among GPs in a Swedish health care organization. *Annals of Occupational and Environmental Medicine*, 28:50.](#)

Abstract: Background: It is common that physicians go to work while sick and therefore it is important to understand the reasons behind. Previous research has shown that women and men differ in health and health related behavior. In this study, we examine gender differences among general practitioners who work while sick.

Methods: General practitioners (GP's) working in outpatient care in a Swedish city participated in the study (n = 283; women = 63 %; response rate = 41 %). Data were obtained from a large web-based questionnaire about health and organization within primary care. Two questions about sickness presenteeism (going to work while sick) were included; life-long and during the past 12 months, and five questions about reasons. We controlled for general health, work-family conflict and demographic variables.

Results: Female physicians reported sickness presenteeism more often than male physicians. Work-family conflict mediated the association between gender and sickness presenteeism.

Women reported reasons related with "concern for others" and "workload" more strongly than men. Men reported reasons related with "capacity" and "money" more strongly than women. These differences are likely effects of gender stereotyping and different family-responsibilities.

Conclusions: Gender socialization and gender stereotypes may influence work and health-related behavior. Because sickness presenteeism is related with negative effects both on individuals and at organizational levels, it is important that managers of health organizations understand the reasons for this, and how gender roles may influence the prevalence of sickness presenteeism and the reasons that female and male GPs give for their behavior.

Typ och Nyckelord: Journal sickness presenteeism, gender, gender stereotypes, health at work, ISSN: 2052-4374

Referens: Hasson, H., von Thiele Schwarz, U., Nielsen, K., & Tafvelin, S. (2016). Are We All in the Same Boat? The Role of Perceptual Distance in Organizational Health Interventions. *Stress & Health, 32*(4), 294-303.

Abstract: The study investigates how agreement between leaders' and their team's perceptions influence intervention outcomes in a leadership-training intervention aimed at improving organizational learning. Agreement, i.e. perceptual distance was calculated for the organizational learning dimensions at baseline. Changes in the dimensions from pre-intervention to post-intervention were evaluated using polynomial regression analysis with response surface analysis. The general pattern of the results indicated that the organizational learning improved when leaders and their teams agreed on the level of organizational learning prior to the intervention. The improvement was greatest when the leader's and the team's perceptions at baseline were aligned and high rather than aligned and low. The least beneficial scenario was when the leader's perceptions were higher than the team's perceptions. These results give insights into the importance of comparing leaders' and their team's perceptions in intervention research. Polynomial regression analyses with response surface methodology allow three-dimensional examination of relationship between two predictor variables and an outcome. This contributes with knowledge on how combination of predictor variables may affect outcome and allows studies of potential non-linearity relating to the outcome. Future studies could use these methods in process evaluation of interventions.

Typ och Nyckelord: Journal organizational health, intervention, perceptual distance, ISSN: 1532-3005

Referens: [Hau, S.](#) (in press). Experimentelle Schlaf- und Traumforschung. In C. Walde, & A. Krovoza (Hg.), *Handbuch Schlaf und Traum*. Stuttgart: Metzler Verlag.

Abstract:

Typ och Nyckelord: Book (chapter) schlafforshung, traumforschung

Referens: [Hau, S.](#) (in press). Psychoanalytical and empirical dream research. In M. Elzer, & A. Gerlach (Eds.), *Basic Book of Psychodynamic Psychotherapy*. Beijing: People's Health Press.

Abstract:

Typ och Nyckelord: Book (chapter)

Referens: [Hau, S.](#) (in press). Schlaf, Traum und Erinnerung/Gedächtnis. In C. Walde, & A. Krovoza (Hd.), *Handbuch Schlaf und Traum*. Stuttgart: Metzler Verlag.

Abstract:

Typ och Nyckelord: Book (chapter) schlaf, traum, erinnerung, gedächtnis

Referens: [Hau, S.](#) (in press). Einleitung. In M. Leuzinger-Bohleber, U. Bahrke, T. Fischmann, & S. Hau (Hg.), *Migration, Flucht und Trauma: Die Folgen für die nächste Generation*. Göttingen, Hogrefe.

Abstract:

Typ och Nyckelord: Book (chapter) migration, flucht, trauma, ISBN: 978-3-647-40284-0

Referens: [Hau, S.](#) (in press). Dream-Work. In Virgil Zeigler-Hill & Todd Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences*. New York: Springer.

Abstract:

Typ och Nyckelord: Book (chapter) dream

Referens: [Hau, S.](#) (in press). Day's Residues. In Virgil Zeigler-Hill & Todd Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences*. New York: Springer.

Abstract:

Typ och Nyckelord: Book (chapter) Day's residues

Referens: [Hau, S.](#) (in press). Over-Determination. In Virgil Zeigler-Hill & Todd Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences*. New York: Springer.

Abstract:

Typ och Nyckelord: Book (chapter) over-determination

Referens: [Hau, S.](#) (in press). Wish-fulfillment. In Virgil Zeigler-Hill & Todd Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences*. New York: Springer.

Abstract:

Typ och Nyckelord: Book (chapter) wish-fulfillment

Referens: [Hau, S., & Deserno, H. \(in press\). Traumdeutung. In H. Thomä, & H. Kächele \(Hg.\), *Lehrbuch der psychoanalytischen Therapie, Bd 1*. New York, Heidelberg: Springer.](#)

Abstract:

Typ och Nyckelord: Book (chapter) traumdeutung

Referens: [Haug, T., Nordgreen, T., Öst, L.-G., Tangen, T., Kvale, G., Hovland, O.J., Heiervang, E.R., & Havik, O.E. \(2016\). Working alliance and competence as predictors of outcome in cognitive behavioral therapy for social anxiety and panic disorder in adults. *Behaviour Research and Therapy*, 77, 40-51.](#)

Abstract: Objective: The research on the association between the working alliance and therapist competence/adherence and outcome from cognitive behavioral therapy (CBT) is limited and characterized by inconclusive findings. This study investigates the working alliance and competence/adherence as predictors of outcome of CBT for social anxiety disorder (SAD) and panic disorder (PD).

Method: Eighty-two clinically referred patients (58.5% female; age: M = 33.6 years, SD = 10.3) with PD (n = 31) or SAD (n = 51) were treated with 12 sessions of manualized CBT by 22 clinicians with limited CBT experience in a randomized controlled effectiveness trial. Independent assessors rated the CBT competence/adherence of the therapists using a revised version of the Cognitive Therapy Adherence and Competence Scale, and the patients rated the quality of the working alliance using the Working Alliance Inventory-short form in therapy sessions 3 and 8. The outcome was assessed by independent assessors as well as by patients self-report. A total of 20.7% of the patients (27.5% SAD, 9.7% PD) dropped out during treatment. The association between the alliance, competence/adherence, outcome and dropout was investigated using multiple regression analyses.

Results: Higher therapist' competence/adherence early in the therapy was associated with a better outcome among PD patients, lower competence/adherence was associated with dropout among SAD patients. Higher rating of the alliance late in the therapy was associated with a better outcome, whereas lower alliance rating late in the therapy was associated with dropout.

Conclusion: The findings indicate that the therapist competence/adherence and the working alliance have independent contributions to the outcome from CBT for anxiety disorders, but in different phases of the treatment.

ClinicalTrials.gov Identifier: NCT00619138.

Typ och Nyckelord: Journal therapist competence, working alliance, cognitive behavioral therapy, panic disorder, social anxiety disorder, ISSN: 0005-7967

Referens: [Hedman, A., Nygård, L., Malinowsky, C., Almkvist, O., & Kottorp, A. \(2016\). Changing everyday activities and technology use in mild cognitive impairment. *British Journal of Occupational Therapy*, 79\(2\), 111-119.](#)

Abstract: Introduction: Knowledge of the conditions under which older adults facing cognitive decline engage in everyday activities is of major importance for occupational therapists in designing supportive interventions. This study aimed to investigate perceived activity involvement over time and its longitudinal relationship to perceived ability to use everyday technology in older adults with mild cognitive impairment.

Method: Thirty-seven older adults with mild cognitive impairment at inclusion were assessed over 4 years. Overall and item-specific activity involvement were analyzed using mixed-linear-effect modeling and differential item functioning. Furthermore, overall activity involvement and ability in everyday technology use were correlated.

Results: Overall activity involvement decreased significantly over time. When adjusting for declining ability in the sample, actual differential item functioning indicated descending involvement in seven of 15 activities, while eight activities were stable. All leisure activities descended. The positive correlations between activity involvement and ability in everyday technology use became stronger over time.

Conclusion: Variations across activities and time-points suggest that occupational therapists should repeatedly monitor the increasingly associated aspects of activity involvement and ability to use everyday technology in persons with cognitive decline.

Typ och Nyckelord: Journal longitudinal studies, activities of daily living, leisure activities, occupational therapy, disease progression, dementia, ISSN: 0308-0226

Referens: [Heinrich, S., Rozental, A., Carlbring, P., Andersson, G., Cotter, K., & Weise, C. \(2016\). Treating tinnitus distress via the Internet: A mixed methods approach of what makes patients seek help and stay motivated during Internet-based cognitive behavior therapy. *Internet Interventions*, 4\(2\), 120-130.](#)

Abstract: Background: Internet-based cognitive behavioral therapy (ICBT) has proven to be an effective treatment in improving patients' ability to cope with tinnitus. However, some patients prefer face-to-face therapy to ICBT, and a few studies have shown considerable dropout rates if the treatment is not guided. This renders it important to identify factors that contribute to the commencement and continuation of ICBT programs.

Aims: Because treatment motivation and expectations are important factors in psychological treatment, the aim of our study was to investigate what leads tinnitus patients to seek out ICBT, what helps them to keep up with the treatment, and what (if any) impact these factors have on dropout rates and treatment outcomes.

Method: 112 tinnitus patients taking part in ICBT for tinnitus responded to symptom-related questionnaires at three points in time (pre-treatment, post-treatment, and one-year-follow-up) and to a questionnaire consisting of open-ended questions about their treatment motivation and expectations before beginning treatment. Data were analyzed using qualitative content analysis, and the results were used to divide the participants into groups. The treatment outcomes of these groups were compared using t-tests, χ^2 -tests, and both one-factorial and mixed ANOVAs.

Results: Four main categories emerged as factors conducive to starting treatment: 1) Targets participants wanted to address, 2) circumstances that led to participation, 3) attitudes towards the treatment, and 4) training features. Participants identified six facilitators for continuing the treatment: success, training, individual attitude, hope, evidence, and support. Naming specific tinnitus-associated problems as targets was associated with greater improvement from pre-treatment to 1-year-follow-up. Describing an active involvement in the treatment was related to increased improvement from post-treatment to follow-up.

Conclusion: There are several motivational factors that tinnitus patients consider relevant for beginning and continuing ICBT. Particularly, focusing on specific targets that do not involve the tinnitus itself, and encouraging participants to take an active role in treatment may increase treatment effectiveness. However, further hypothesis-guided research is necessary to confirm our explorative results.

Typ och Nyckelord: Journal tinnitus, ICBT, self-help, mixed methods, motivation, expectations, ISSN: 2214-7829

Referens: Hiort, J., Lindau, M., & Löfgren, M. (in press). Young pain patients' experience in primary care. A qualitative study. *Nordic Psychology*.

Abstract: The purpose was to explore interview data from young adults with long-standing pain about their experience of contacts with caregivers in a primary care setting, in order to synthesize and qualitatively analyse their reports about how they were received. Method: An emergent qualitative design was used. Open thematic research interviews were conducted with 11 young people (1 man, 10 women) (aged 20–31 years) with long-term pain. The interviews were recorded, transcribed verbatim and analysed using inductive thematic content analysis. Result: The analyses resulted in three themes; *distrust experienced from care staffs*, *loneliness* and *hopelessness* forming the main theme *Young adult with long-term pain*. The informants described how they struggled with living with the pain, fighting with the care system and to obtain help. They reportedly felt they were not trusted and that they were not given any explanations or information why the pain spread and worsened. This left them feeling abandoned and alone and without hope concerning their pain, their feelings; and with doubts concerning their prospects. Much concern and doubt were expressed about their future work situation; whether they would be able to do work for which they had trained, and whether they would ever get any career opportunities. Conclusion: Living with long-term pain as a young adult and experiencing mistrust when in care might lead to feelings of loneliness, dependence and hopelessness and an existence marked by suffering and dependence. The experienced mistrust confined the young adult instead of allowing growth towards an adult identity and opportunities.

Typ och Nyckelord: Journal long-term pain, pain rehabilitation, transition to adulthood, interviews, emerging adulthood, ISSN: 1901-2276

Referens: Holding, J.B.C., Laukka, P., Fischer, H., Axelsson, J., & Sundelin, T. (2016). Total sleep deprivation does not impact emotion categorisation in dynamic stimuli. Abstracts of the 23rd Congress of the European Sleep Research Society, 13–16 September 2016, Bologna, Italy. *Journal of Sleep Research*, 25(S1), 152-152.

Abstract: Previous studies have highlighted a deficit in facial emotion recognition after sleep loss. However, while some studies suggest an overall deficit in ability, others have only found effects in individual emotions, or no effect at all. The aim of this study was to investigate this relationship in a large sample and to utilise a dynamic test of emotion recognition in multiple modalities. 145 individuals (91 female, ages 18–45) participated in a sleep-deprivation experiment. Participants were randomised into: one night of total sleep deprivation (TSD) or normal sleep (8–9 h in bed). The following day participants completed a computerised emotional recognition test, consisting of 72 visual, audio, and audio-visual clips, representing 12 different emotions. The stimuli were divided into "easy" and "hard" depending on the intensity of emotional display. A mixed ANOVA revealed significant main effects of modality and difficulty, $P < 0.001$, but no main effect of condition, $P = 0.31$, on emotional recognition accuracy. Additionally, there was no interaction between condition and difficulty, $P = 0.96$, or modality, $P = 0.67$. This study indicates that sleep deprivation does not reduce the ability to recognise emotions. Given that some studies have only found effects on single emotions, it is possible that the effects of sleep loss are more specific than investigated here. However, it is also possible that previous findings relate to the types of static stimuli used. The ability to recognise emotions is key to social perception; this study suggests that this ability is resilient to one night of sleep deprivation.

Typ och Nyckelord: Journal sleep deprivation, emotion categorisation, dynamic stimuli, facial emotion recognition, ISSN: 0962-1105

Referens: Holländare, F., Gustafsson, S.A., Berglind, M., Grape, F., Carlbring, P., Andersson, G., Hadjistavropoulos, H., & Tillfors, M. (2016). Therapist behaviours in internet-based cognitive behaviour therapy (ICBT) for depressive symptoms. *Internet Interventions*, 3(1), 1-7.

Abstract: Internet-based cognitive behaviour therapy (ICBT) is efficacious for treating depression, with therapist guidance identified as important for favourable outcomes. We have limited knowledge, however, about the fundamental components of therapist guidance in ICBT. The purpose of this study was to systematically examine therapist messages sent to patients during the course of ICBT for depressive symptoms in order to identify common "therapist behaviours" and the extent to which these behaviours correlate with completion of modules and improvements in symptoms at post-treatment, one- and two-year follow-up. A total of 664 e-mails from 5 therapists to 42 patients were analysed using qualitative content analysis. The most frequent behaviour was encouraging that accounted for 31.5% of the total number of coded behaviours. This was followed by affirming (25.1%), guiding (22.2%) and urging (9.8%). Less frequently the therapists clarified the internet treatment framework, informed about module content, emphasised the importance of patient responsibility, confronted the patient and made self-disclosures. Six of the nine identified therapist behaviours correlated with module completion. Three behaviours correlated with symptom improvement. Affirming correlated significantly ($r = .42$, $p = .005$) with improvement in depressive symptoms at post-treatment and after two years ($r = .39$, $p = .014$). Encouraging was associated with outcome directly after treatment ($r = .52$, $p = .001$). Self-disclosure was correlated with improvement in depressive symptoms at post-treatment ($r = .44$, $p = .003$). The study contributes to a better understanding of therapist behaviours in ICBT for depressive symptoms. Future directions for research are discussed.

Typ och Nyckelord: Journal therapist behaviour, internet, cognitive behaviour therapy, depression, patient adherence, ISSN: 2214-7829

- Referens:** Hultin, H., Ferrer-Wreder, L., Eichas, K., Karlberg, M., Grosin, L., & Galanti, M.R. (in press). Psychometric properties of an instrument to measure social and pedagogical school climate among teachers (PESOC). *Scandinavian Journal of Educational Research*.
- Abstract:** This study investigated the psychometric properties of a teacher-reported version of a Swedish school climate instrument called the Pedagogical and Social Climate (PESOC), which consists of 95 items covering cultural, structural and social factors. A sample of 348 teachers from 19 Swedish secondary schools was used. Multilevel confirmatory factor analysis conducted within a structural equation modelling framework indicated that the PESOC had a two-factor structure at the teacher level and a one-factor at the school level. The PESOC's convergent validity was supported by the school-level correlations between PESOC and another established instrument (i.e., the Team Climate Inventory). Further validation studies of PESOC are needed with larger, more representative samples, and with information on important outcomes such as student achievement and wellbeing.
- Typ och Nyckelord:** Journal school climate, teachers, psychometric analyses, multilevel confirmatory factor analysis, ISSN: 0031-3831
- Referens:** Höglund Carlsson, L., Westerlund, J., Barnevik Olsson, M., Eriksson, M.A., Hedvall, Å., Gillberg, C., & Fernell E. (2016). Autism spectrum disorders before diagnosis: results from routine developmental surveillance at 18 months. *Acta Paediatrica*, 105(7), 823-828.
- Abstract:** Aim: This study investigated the results from the national, routine 18-month developmental surveillance at Child Healthcare Centres (CHCs) on children later diagnosed with autism spectrum disorder (ASD). Methods: Child Healthcare Centre records of 175 children, diagnosed with ASD before 4.5 years in Stockholm County, Sweden, were reviewed regarding the results of the eight-item neurodevelopmental surveillance. Results were contrasted with normative data from the general child population in Stockholm County. Results: More than one-third of the total ASD group, including half of the group with ASD and intellectual disability (ID), did not pass the required number of items, compared to one in 50 in the general child population. Of those with ASD and ID who had passed, more than one-third experienced developmental regression after 18 months of age. If the CHC surveillance had considered reported regulatory problems - crying, feeding and sleeping - then another 10% of the children with ASD and ID could have been identified during this surveillance. Conclusion: The existing CHC surveillance traced half of the group of children who were later diagnosed with ASD combined with intellectual disability. Adding an item on regulatory problems to the 18-month surveillance would have increased this number by another 10%.
- Typ och Nyckelord:** Journal autism, children, child healthcare centre, surveillance, development, ISSN: 0803-5253
- Referens:** Isaksson, J., Grigorenko, E.L., Orelund, L., af Klinteberg, B., Kuposov, R.A., & Ruchkin, V. (2016). Exploring possible association between DβH genotype (C1021T), early onset of conduct disorder and psychopathic traits in juvenile delinquents. *European Archives of Psychiatry and Clinical Neuroscience*, 266(8), 771-773.
- Abstract:** Early onset of conduct disorder (CD) with callous-unemotional traits has been linked to low levels of dopamine β-hydroxylase (DβH), an enzyme involved in dopamine turnover. The C1021T polymorphism in the DβH gene is a major quantitative-trait locus, regulating the level of DβH. In this study of juvenile delinquents from Northern Russia (n = 180), the polymorphism at -1021 was associated neither with early-onset CD nor with psychopathic traits. Association was found between psychopathic traits and early-onset CD, ADHD and mania.
- Typ och Nyckelord:** Journal DβH, conduct disorder, psychopathy, genetic, ISSN: 0940-1334
- Referens:** Ivanova, E., Lindner, P., Dahlin, M., Vernmark, K., Ly, K.H., Andersson, G., & Carlbring, P. (2016). Guided and unguided transdiagnostic Acceptance and Commitment Therapy for anxiety disorders provided via a computer and a smartphone application: A randomized controlled trial. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 530). Stockholm: EABCT.
- Abstract:** Technology-assisted psychological treatments are becoming well-known in the scientific networks throughout the world and are being implemented into routine health care in a number of countries. The interest in evaluating the potential of different devices is growing. The main objective of the current study was to evaluate the effects of guided and unguided computer and smartphone-based Acceptance and Commitment Therapy (ACT) for social anxiety disorder (SAD) and panic disorder (PD).
- A total of 152 participants were randomized into a guided treatment group, an unguided treatment group and a waiting list control group. Both treatment groups got access to a computer-based ACT-treatment and a smartphone application (app) with corresponding content. The eight modules treatment program covered a number of topics such as the nature of anxiety, functional analyses, acceptance, mindfulness and valued actions. The purpose of the app was to make it easier for the participants to access the key points of the program and to do homework assignments in their everyday life. Automatic messages in the app aimed to give feedback to the participants on their work as well as to prompt them to continue with the program. In addition to that, the participants in the guided group got therapist support via the app. The therapists were encouraged to work with each of their patient 15 min/week during the 10 weeks treatment period and focus on motivating, validating and correcting mistakes. On the whole group level GAD-7 was used as the primary outcome measure. LSAS and PDSS-SR were used for subgroup analyses in SAD and PD participants respectively. The measurements were collected at pre-, mid- and post-treatment and at 12-months follow-up.
- There were no significant differences in adherence between the treatment groups except for significantly higher rates of smartphone usage in the guided group. No significant differences in treatment outcome were found between the treatment groups with moderate within-group effects (Cohen's d = 0.75 for the guided and Cohen's d = 0.66 for the unguided group). The treated participants improved significantly in comparison to the control group both on the whole group level (between group Cohen's d = 0.39) and for the participants suffering primarily from SAD (between group Cohen's d = 0.70). Within group effect sizes were large for the PD-participants (Cohen's d = 1.00) but the study was very underpowered in this part.
- Discussion. The treatment program as it was used in the present study appeared to be effective in treating social anxiety disorder and decreasing general anxiety symptoms, but the effects are smaller than seen in previous studies. The guided treatment was not clearly superior to the unguided one. The study contributes to the growing body of evidence on technology-assisted ACT.

Conclusion. Computer- and smartphone-based ACT can be made into an effective treatment for anxiety disorders. A smartphone application seems to have a clear potential to partly compensate for the absence of therapist support which needs to be studied further.

Typ och Nyckelord: Proceedings ACT, guided, unguided, anxiety disorders, computer, smartphone

Referens: Ivanova, E., Lindner, P., Ly, K.H., Dahlin, M., Vernmark, K., Andersson, G., & Carlbring, P. (2016). Guided and unguided Acceptance and Commitment Therapy for social anxiety disorder and/or panic disorder provided via the Internet and a smartphone application: A randomized controlled trial. *Journal of Anxiety Disorders, 44*, 27–35.

Abstract: Acceptance and Commitment Therapy (ACT) can be effective in treating anxiety disorders, yet there has been no study on Internet-delivered ACT for social anxiety disorder (SAD) and panic disorder (PD), nor any study investigating whether therapist guidance is superior to unguided self-help when supplemented with a smartphone application. In the current trial, $n = 152$ participants diagnosed with SAD and/or PD were randomized to therapist-guided or unguided treatment, or a waiting-list control group. Both treatment groups used an Internet-delivered ACT-based treatment program and a smartphone application. Outcome measures were self-rated general and social anxiety and panic symptoms. Treatment groups saw reduced general ($d = 0.39$) and social anxiety ($d = 0.70$), but not panic symptoms ($d = 0.05$) compared to the waiting-list group, yet no differences in outcomes were observed between guided and unguided interventions. We conclude that Internet-delivered ACT is appropriate for treating SAD and potentially PD. Smartphone applications may partially compensate for lack of therapist support.

Typ och Nyckelord: Journal internet interventions, therapist support, mHealth, ISSN: 0887-6185

Referens: Ivarsson, T., Saavedra, F., Granqvist, P., & Broberg, A.G. (2016). Traumatic and adverse attachment childhood experiences are not characteristic of OCD but with depression in adolescents. *Child Psychiatry and Human Development, 47*(2), 270-280.

Abstract: We investigated whether adverse attachment experience might contribute to the development of obsessive-compulsive disorder (OCD). We interviewed 100 adolescents, 25 each with primary OCD, depressive disorder (DD), OCD plus DD and general population controls (CTRs) using the adult attachment interview to assess attachment experiences (AEs), including traumatic and adverse AE (TAE). Adolescents with OCD, OCD+DD and DD had little evidence of secure base/safe haven parental behaviour and their childhood attachment needs judged to be rejected as compared to the controls. Overprotection was not characteristic of OCD, and parents using the child for their own needs (elevated levels of involving/role reversal) occurred only in DD, with low levels in OCD, OCD+DD and CTR. Traumatic experiences, often multiple, and/or attachment related were reported significantly more often in the DD group, and was less common in OCD+DD, CTR and particularly in the OCD group. In OCD, little TAE was reported and adverse AE were less serious and seem unlikely to contribute directly to OCD aetiology. In DD and to some degree in OCD+DD serious AE/TAE may have some etiological significance for the depressive states.

Typ och Nyckelord: Journal school controls, attachment experience, adult attachment interview, ISSN: 0009-398X

Referens: Jansson-Fröjmark, M., Danielsson, K., Markström, A., & Broman, J.E. (2016). Developing a cognitive behavioral therapy manual for delayed sleep-wake phase disorder. *Cognitive Behaviour Therapy, 45*(6), 518-532.

Abstract: This article reports the development of a treatment protocol, based on cognitive behavioral therapy (CBT) principles, for delayed sleep-wake phase disorder (DSWPD). The protocol consists of psychoeducation, presenting a CBT model for DSWPD, case formulation, motivational interviewing, registering sleep in a diary, strategies to improve the rhythm of sleep and wakefulness, relaxation training, cognitive restructuring, strategies to cope with daytime symptoms, constructing an individualized CBT program, and learning how to deal with relapses. Qualitative data, focusing on how the patients perceived the protocol, were collected within the realm of a trial exploring the efficacy of the protocol. These findings highlighted several advantages but also disadvantages of the therapy. It is our hope that this paper might act as a platform for further clinical work and future research efforts in patients with DSWPD.

Typ och Nyckelord: Journal delayed sleep-wake phase disorder, cognitive behavioral therapy, protocol, manual, ISSN: 1650-6073

Referens: Jansson-Fröjmark, M., & Norell-Clarke, A. (2016). Cognitive Behavioural Therapy for Insomnia in Psychiatric Disorders. *Current Sleep Medicine Reports, 2*(4), 233-240.

Abstract: Insomnia means difficulties in initiating or maintaining sleep and is commonly comorbid with psychiatric disorders. From being considered secondary to primary psychiatric disorders, comorbid insomnia is now considered an independent health issue that warrants treatment in its own right. Cognitive behavioural therapy for insomnia (CBT-I) is an evidence-based treatment for insomnia. The effects from CBT-I on comorbid psychiatric conditions have received increasing interest as insomnia comorbid with psychiatric disorders has been associated with more severe psychiatric symptomologies, and there are studies that indicate effects from CBT-I on both insomnia and psychiatric symptomology. During recent years, the literature on CBT-I for comorbid psychiatric groups has expanded and has advanced methodologically. This article reviews recent studies on the effects from CBT-I on sleep, daytime symptoms and function and psychiatric comorbidities for people with anxiety, depression, bipolar disorder, psychotic disorders and post-traumatic stress disorder. Future strategies for research are suggested.

Typ och Nyckelord: Journal insomnia, CBT, mood disorders, anxiety, PTSD, psychosis, ISSN: 2198-6401

Referens: Jansson-Fröjmark, M., Norell-Clarke, A., & Linton, S.J. (2016). The role of emotion dysregulation in insomnia: Longitudinal findings from a large community sample. *British Journal of Health Psychology, 21*(1), 93-113.

Abstract: Objectives: The purpose of this longitudinal investigation was to examine the association between emotion regulation and future insomnia (incidence and persistence). Design: A longitudinal study in the general

population. Methods: A survey was sent out to 5,000 individuals in the community. To those who returned the baseline questionnaire (n = 2,333), two follow-up surveys, 6 and 18 months later, were sent out and then completed by 1,887 and 1,795 individuals, respectively. The survey contained information about demographic factors, insomnia symptomatology, the Difficulties in Emotion Regulation Scale, anxiety, and depression. Results: The findings suggested that emotion regulation at baseline was not associated with the incidence or persistence of insomnia. Overall, the effect sizes were very small to medium. When examining changes in emotion regulation over time, a different pattern emerged. Partial support was established for the notion that decreases in emotion regulation were related to incident and persistent insomnia, as a decrease in emotion regulation was associated with a higher likelihood of future insomnia. Yet, the effect sizes were very small to small. Conclusion: This study does partly point towards a longitudinal association between emotion dysregulation and insomnia. This might have implications for the conceptualization and management of insomnia as well as for future research.

Typ och Nyckelord: Journal insomnia, sleep, epidemiology, emotion regulation, Difficulties in Emotion Regulation Scale, ISSN: 1359-107X

Referens: Johansson, M., Jansson-Fröjmark, M., Norell-Clarke, A., & Linton, S.J. (2016). The role of psychiatric and somatic conditions in incidence and persistence of insomnia: a longitudinal, community study. *Sleep Health, 2*(3), 229-238.

Abstract: Objective: The objective was to investigate the role of psychiatric and somatic conditions in incident and persistent insomnia.

Design: This was a prospective study with 3 measurement points over 1.5 years.

Setting: The participants were sent a survey to their home addresses.

Participants: A survey was sent out to 5000 random individuals (18-70 years) in 2 Swedish counties. To those who returned the baseline questionnaire (n = 2333), 2 follow-up surveys (6 and 18 months later) were sent out and completed by 1887 and 1795 individuals, respectively.

Measurements: The survey contained questions about sociodemographic factors and insomnia symptomatology, the Hospital Anxiety and Depression Scale, and items assessing 12 forms of somatic conditions (eg, heart disease and headache).

Results: Baseline depression, headache, and number of psychiatric and somatic conditions were found to be independent risk factors for incident insomnia. Also, deterioration in depression and heart disease status and increased number of conditions over time increased the risk for insomnia incidence. Anxiety; depression; pain in neck, back, or shoulders; and headache at baseline were found to significantly discriminate between those with persistent insomnia and those with persistent normal sleep. Those with persistent insomnia also reported a higher number of conditions relative to those with persistent normal sleep. None of the psychiatric or somatic conditions were found to be associated with persistence of insomnia relative to remission of insomnia.

Conclusion: The current study suggests that both psychiatric and somatic conditions are involved in the incidence but not in the persistence of insomnia. Clinical and theoretical implications of the results are discussed.

Typ och Nyckelord: Journal insomnia, psychiatric, somatic, incidence, persistence, risk factors, ISSN: 2352-7218

Referens: Johnson, M. (2016). Relations between explicit and implicit self-esteem measures and self-presentation. *Personality and Individual Differences, 95*, 159-161.

Abstract: Three explicit self-esteem measures with different conceptualization and item content were compared with regard to their association with implicit self-esteem (SE) and positive self-presentation. The results revealed a pattern where affective-experiential basic SE appears to have more similarity with implicit self-esteem than cognitive-evaluative general SE measures. Basic SE was the only explicit SE measure that predicted significantly implicit self-esteem. Most of the self-presentational styles lacked association with implicit SE and basic SE but played a substantial role for the general SE scales. The results suggest the importance of considering self-report measures potential to tap unbiased self-esteem.

Typ och Nyckelord: Journal self-presentation, self-esteem, validity, ISSN: 0191-8869

Referens: Josephson, H., Carlbring, P., Forsberg, L., & Rosendahl, I. (2016). People with gambling disorder and risky alcohol habits benefit more from motivational interviewing than from cognitive behavioral group therapy. *PeerJ, 4*, e1899.

Abstract: Background. Effective psychological treatment, including cognitive behavioral therapy and motivational interviewing (MI), is available for people with problematic gambling behaviors. To advance the development of treatment for gambling disorder, it is critical to further investigate how comorbidity impacts different types of treatments. The purpose of this study was to investigate whether screening for risky alcohol habits can provide guidance on whether people with gambling disorder should be recommended cognitive behavioral group therapy (CBGT) or MI.

Methods. The present study is a secondary analysis of a previous randomized controlled trial that compared the effects of CBGT, MI and a waitlist control group in the treatment of disordered gambling. Assessment and treatment was conducted at an outpatient dependency clinic in Stockholm, Sweden, where 53 trial participants with gambling disorder began treatment. A modified version of the National Opinion Research Centre DSM-IV Screen for gambling problems was used to assess gambling disorder. The Alcohol Use Disorders Identification Test (AUDIT) was used to screen for risky alcohol habits.

Results. The interaction between treatment and alcohol habits was significant and suggests that patients with gambling disorder and risky alcohol habits were better helped by MI, while those without risky alcohol habits were better helped by CBGT.

Conclusions. The results support a screening procedure including the AUDIT prior to starting treatment for gambling disorder because the result of the screening can provide guidance in the choice of treatment. Patients with gambling disorder and risky alcohol habits are likely to be best helped if they are referred to MI, while those without risky alcohol habits are likely to be best helped if they are referred to CBGT.

Typ och Nyckelord: Journal gambling disorder, alcohol, cognitive behavioral group therapy, ISSN: 2167-8359

Referens: Jovic, V., Varvin, S., Rosenbaum, B., Fischmann, T., Opačić, G., & Hau, S. (in press). Sleep and Dream Studies in Serbian Victims of Torture: Analysis of traumatic dreams. In E. Vermetten, T. Neylan, S.R. Pandi-Perumal, & M. Kramer (Eds.), *Sleep and Combat-related Post-Traumatic Stress Disorders*. New York: Springer.

Abstract:

Typ och Nyckelord: Book (chapter)

Referens: Kallioinen, P., Olofsson, J., Nakeva von Mentzer, C., Lindgren, M., Ors, M., Sahlén, B.S., Lyxell, B., Engström, E., & Uhlén, I. (2016). Semantic Processing in Deaf and Hard-of-Hearing Children: Large N400 Mismatch Effects in Brain Responses, Despite Poor Semantic Ability. *Frontiers in Psychology*, 7, 1146.

Abstract: Difficulties in auditory and phonological processing affect semantic processing in speech comprehension for deaf and hard-of-hearing (DHH) children. However, little is known about brain responses related to semantic processing in this group. We investigated event-related potentials (ERPs) in DHH children with cochlear implants (CIs) and/or hearing aids (HAs), and in normally hearing controls (NH). We used a semantic priming task with spoken word primes followed by picture targets. In both DHH children and controls, cortical response differences between matching and mismatching targets revealed a typical N400 effect associated with semantic processing. Children with CI had the largest mismatch response despite poor semantic abilities overall; Children with CI also had the largest ERP differentiation between mismatch types, with small effects in within-category mismatch trials (target from same category as prime) and large effects in between-category mismatch trials (where target is from a different category than prime), compared to matching trials. Children with NH and HA had similar responses to both mismatch types. While the large and differentiated ERP responses in the CI group were unexpected and should be interpreted with caution, the results could reflect less precision in semantic processing among children with CI, or a stronger reliance on predictive processing.

Typ och Nyckelord: Journal children, cochlear implants, hearing aids, semantics, N400 evoked potential, ISSN: 1664-1078

Referens: Karlsson, S., Henningsson, S., Hovey, D., Zettergren, A., Jonsson, L., Cortes, D.S., Melke, J., Laukka, P., Fischer, H., & Westberg, L. (2016). Social memory associated with estrogen receptor polymorphisms in women. *Social Cognitive and Affective Neuroscience*, 11(6), 877-883.

Abstract: The ability to recognize the identity of faces and voices is essential for social relationships. Although the heritability of social memory is high, knowledge about the contributing genes is sparse. Since sex differences and rodent studies support an influence of estrogens and androgens on social memory, polymorphisms in the estrogen and androgen receptor genes (ESR1, ESR2, AR) are candidates for this trait. Recognition of faces and vocal sounds, separately and combined, was investigated in 490 subjects, genotyped for 10 single nucleotide polymorphisms (SNPs) in ESR1, four in ESR2 and one in the AR. Four of the associations survived correction for multiple testing: women carrying rare alleles of the three ESR2 SNPs, rs928554, rs1271572 and rs1256030, in linkage disequilibrium with each other, displayed superior face recognition compared with non-carriers. Furthermore, the uncommon genotype of the ESR1 SNP rs2504063 was associated with better recognition of identity through vocal sounds, also specifically in women. This study demonstrates evidence for associations in women between face recognition and variation in ESR2, and recognition of identity through vocal sounds and variation in ESR1. These results suggest that estrogen receptors may regulate social memory function in humans, in line with what has previously been established in mice.

Typ och Nyckelord: Journal face recognition, social memory, estrogen, ESR1, ESR2, ISSN: 1749-5016

Referens: Kubik, V., Olofsson, J.K., Nilsson, L.-N., & Jönsson, F.U. (2016). Putting action memory to the test: Testing affects subsequent restudy but not long-term forgetting of action events. *Journal of Cognitive Psychology*, 28(2), 209-219.

Abstract: Testing memory typically enhances subsequent re-encoding of information ("indirect" testing effect) and, as compared to restudy, it also benefits later long-term retention ("direct" testing effect). We investigated the effect of testing on subsequent restudy and 1-week retention of action events (e.g. "water the plant"). In addition, we investigated if the type of recall practice (noun-cued vs. verb-cued) moderates these testing benefits. The results showed an indirect testing effect that increased following noun-cued recall of verbs as compared to verb-cued recall of nouns. In contrast, a direct testing effect on the forgetting rate of performed actions was not reliably observed, neither for noun- nor verb-cued recall. Thus, to the extent that this study successfully dissociated direct and indirect testing-based enhancements, they seem to be differentially effective for performed actions, and may rely on partially different mechanisms.

Typ och Nyckelord: Journal memory for actions, recall type, indirect testing effect, direct testing effect, enactment, ISSN: 2044-5911

Referens: Kubik, V., Todorov, I., Del Missier, F., & Mäntylä, T. (2016). Multiple deadlines in metric space: Multitasking reflects selectively coordinate, but not categorical, spatial processing. Poster presented at the Sixth International Conference on Memory (ICOM 6), Budapest, Hungary, July 17-22, 2016.

Abstract: We often need to monitor and coordinate multiple deadlines. One way to handle these temporal demands might be to represent future deadlines as a pattern of spatial relations. More specifically, we tested the hypothesis that multitasking reflects selective effects of coordinate (i.e., metric) relational processing. Participants completed two multitasking sessions under concurrent processing demands of coordinate versus categorical spatial information. We expected and observed that multitasking impairs concurrent coordinate, rather than categorical, spatial processing. In Experiment 1, coordinate-task performance was selectively decreased, while multitasking performance was equal under both load conditions. When emphasizing equal (primary/secondary) task-importance in Experiment 2, it was only multitasking performance that was selectively reduced under the coordinate-load condition. Thus, effective multitasking may partly reflect coordinate-relational processing.

Typ och Nyckelord: Proceedings deadlines, multitasking, spatial processing

Referens: Lantz Friedrich, A., Sjöberg, A., & Friedrich P. (2016). Leaned teamwork fattens workplace innovation: the relationship between task complexity, team learning and team proactivity. *European Journal of Work and Organizational Psychology, 25*(4), 561-569.

Abstract: Our aim is to contribute to research on workplace innovation by identifying tasks within industrial Lean Production Systems (LPS) that can trigger the involvement of teams in workplace innovation. Previous research has shown negative effects of LPS for employees' motivation, learning, and innovation processes. The principles of job design of production tasks, e.g., standardization and routinization, are seemingly opposed to a job design that supports team's engagement in workplace innovation. In this study, we explored relations between task complexity, team learning, and proactivity. Work task analysis was conducted at baseline among 41 teams to capture the complexity of different work tasks. Eight months later, employees completed a questionnaire about team-learning processes, and managers rated each team's proactivity. Three kinds of tasks were identified. The results showed that the main work task and supplementary tasks gave no input to the team's learning process. Mediation analysis showed that additional work tasks, taking little time, have an impact on team proactivity through team learning. A conclusion is that teams within LPS can be engaged in workplace innovation depending on how they take on additional tasks, as these impact team learning. The implications for future research and practice are discussed.

Typ och Nyckelord: Journal teamwork, task complexity, team-learning, workplace innovation, lean production, ISSN: 1359-432X

Referens: Larsson, M., Ekström, I., Sjölund, S., Nordin, S., Nordin Adolfsson, A., Adolfsson, R., Nilsson, L.-G., & Olofsson, J.K. (2016). Loss of Olfactory Function Predicts Mortality Irrespective of Dementia Conversion: 10-year follow-up of an age-varied sample. 17th International Symposium on Olfaction and Taste (ISOT2016), Yokohama, Japan, June 5-9, 2016. *Chemical Senses, 41*(9), E216.

Abstract: The objective of this study was to examine the association between performance in odor identification and future mortality in a community cohort of adults aged between 40 and 90 years. We assessed olfactory performance with a 13-item-version of the Scandinavian Odor Identification Test (SOIT). The results showed that during follow-up (mean=9.4 years, standard deviation=2.23), 411 of 1774 (23.2%) participants died. In a Cox model, the association between higher SOIT score and mortality was highly significant (hazard ratio [HR]=0.74, per point interval, 95% confidence interval [CI]=0.71-0.77, $p < 0.001$). The effect was attenuated, but remained significant after controlling for age, sex, education, and health and cognitive variables that were also associated with an increased risk of mortality (HR=0.92, 95% CI=0.87-0.97, $p = 0.001$). Controlling for dementia conversion prior to death did not attenuate the association between SOIT score and mortality (HR=0.92, 95% CI=0.87-0.97, $p = 0.001$). Similar results were obtained for olfactory sensitivity as assessed by self-report. Overall, the present findings show that poor odor identification performance is associated with an increased likelihood of future mortality in middle-aged and older adults, after controlling for social, cognitive, and medical risk factors. Most importantly, controlling for the development of dementia did not attenuate the association between odor identification and mortality, suggesting that olfactory decline might mark deteriorating health also irrespective of dementia.

Typ och Nyckelord: Proceedings olfactory function, mortality, dementia, follow-up

Referens: Larsson, M., Hedner, M., Papenberg, G., Seubert, J., Bäckman, L., & Laukka, E.J. (2016). Olfactory memory in the old and very old: relations to episodic and semantic memory and APOE genotype. *Neurobiology of Aging, 38*, 118-126.

Abstract: The neuroanatomical organization that underlies olfactory memory is different from that of other memory types. The present work examines olfactory memory in an elderly population-based sample (Swedish National Study on Aging and Care in Kungsholmen) aged 60-100 years ($n = 2280$). We used structural equation modeling to investigate whether olfactory memory in old age is best conceptualized as a distinct category, differentiated from episodic and semantic memory. Further, potential olfactory dedifferentiation and genetic associations (APOE) to olfactory function in late senescence were investigated. Results are in support of a 3-factor solution where olfactory memory, as indexed by episodic odor recognition and odor identification, is modeled separately from episodic and semantic memory for visual and verbal information. Increasing age was associated with poorer olfactory memory performance, and observed age-related deficits were further exacerbated for carriers of the APOE epsilon 4 allele; these effects tended to be larger for olfactory memory compared to episodic and semantic memory pertaining to other sensory systems (vision, auditory). Finally, stronger correlations between olfactory and episodic memory, indicating dedifferentiation, were observed in the older age groups.

Typ och Nyckelord: Journal aging, APOE, dedifferentiation, memory, olfaction, ISSN: 0197-4580

Referens: Laukka, P., Eifenbein, H.A., Thingujam, N.S., Rockstuhl, T., Iraki, F.K., Chui, W., & Althoff, J. (2016). The Expression and Recognition of Emotions in the Voice Across Five Nations: A Lens Model Analysis Based on Acoustic Features. *Journal of Personality and Social Psychology, 111* (5), 686-705.

Abstract: This study extends previous work on emotion communication across cultures with a large-scale investigation of the physical expression cues in vocal tone. In doing so, it provides the first direct test of a key proposition of dialect theory, namely that greater accuracy of detecting emotions from one's own cultural group—known as in-group advantage—results from a match between culturally specific schemas in emotional expression style and culturally specific schemas in emotion recognition. Study 1 used stimuli from 100 professional actors from five English-speaking nations vocally conveying 11 emotional states (anger, contempt, fear, happiness, interest, lust, neutral, pride, relief, sadness, and shame) using standard-content sentences. Detailed acoustic analyses showed many similarities across groups, and yet also systematic group differences. This provides evidence for cultural accents in expressive style at the level of acoustic cues. In Study 2, listeners evaluated these expressions in a 5×5 design balanced across groups. Cross-cultural accuracy was greater than expected by chance. However, there was also in-group advantage, which varied across emotions. A lens model analysis of fundamental acoustic properties examined patterns in emotional expression and perception within and across groups. Acoustic cues were used relatively similarly across groups both to produce and judge emotions, and yet there were also subtle cultural differences. Speakers appear to have a culturally nuanced schema for enacting vocal tones via acoustic cues, and perceivers have a culturally nuanced schema in judging them. Consistent with dialect theory's prediction, in-group judgments showed a greater match between these schemas used for emotional expression and perception.

Typ och Nyckelord: Journal emotion, voice, lens model analysis, cultures, ISSN: 0022-3514

Referens: Leineweber, C., Eib, C., Peristera, P., & Bernhard-Oettel, C. (2016). The influence of and change in procedural justice on self-rated health trajectories: Swedish Longitudinal Occupational Survey of Health results. *Scandinavian Journal of Work, Environment & Health*, 42(4), 320-328.

Abstract: Objectives: Procedural justice perceptions are shown to be associated with minor psychiatric disorders, long sickness absence spells, and poor self-rated health, but previous studies have rarely considered how changes in procedural justice influence changes in health. Methods: Data from four consecutive biennial waves of the Swedish Longitudinal Survey of Health (SLOSH) (N=5854) were used to examine trajectories of self-rated health. Adjusting for age, sex, socioeconomic position, and marital status, we studied the predictive power of change in procedural justice perceptions using individual growth curve models within a multilevel framework. Results: The results show that self-rated health trajectories slowly decline over time. The rate of change was influenced by age and sex, with older people and women showing a slower rate. After adjusting for age, sex, socioeconomic position, and marital status, procedural justice was significantly associated with self-rated health. Also, improvements in procedural justice were associated with improvements in self-rated health. Additionally, a reverse relationship with and change in self-rated health predicting procedural justice was found. Conclusions: Our findings support the idea that procedural justice at work is a crucial aspect of the psychosocial work environment and that changes towards more procedural justice could influence self-rated health positively. The reciprocal association of procedural justice and self-rated health warrants further research.

Typ och Nyckelord: Journal organizational justice, procedural justice, psychosocial work environment, repeated measurement, self-rated health, self-rated health trajectory, Swedish Longitudinal Occupational Survey of Health, ISSN: 0355-3140

Referens: Leineweber, C., & Falkenberg, H. (in press). A review of work and family research in Nordic regions. In Kristen M. Shockley, Winny Shen, & Ryan C. Johnson (Eds.). *The Cambridge Handbook of the Global Work-Family Interface*. Cambridge Industrial-Organizational Psychology Series.

Abstract: A fundamental issue concerning work and family is the extent that women and men work and take care of children. The Nordic countries are characterized by a "dual-worker model" in which a majority of both women and men work, but are also, to some extent, characterized by a "dual-carer model" in which both women and men are actively taking part in the upbringing of their children (Edlund & Öun, 2016). The Nordic countries have a history of family policies being directed toward both mothers and fathers, and state provisions for dual-earner family support and childcare were developed in a political context with women's equality in mind. Still, the challenge of combining work and family domains is under continual debate and development in the Nordic countries. In this chapter we will shortly describe the general trends of women's participation in the labor market in relation to the development of the welfare system. This historical development is crucial for the understanding of how women and men combine work family in the Nordic countries today.

We will then describe some of the work-family research that has been conducted in the Nordic countries. Although work-family research is relatively young in the Nordic countries, the literature is rather extensive and we only touch upon some key findings while trying to give a broad picture of what has been done. First, we concentrate upon research that has investigated the potential work and family have to enhance and enrich each other (i.e. work-family enrichment) and the importance of organizational culture. After that, we will review some of the research investigating possible health outcomes of work-family conflict.

Typ och Nyckelord: Book (chapter) work-family interface, Nordic countries, dual-worker model, dual-carer model

Referens: Leineweber, C., Kecklund, G., Lindfors, P., & Magnusson Hanson, L.L. (2016). Change in Work-Time Control and Work-Home Interference Among Swedish Working Men and Women: Findings from the SLOSH Cohort Study. *International Journal of Behavioral Medicine*, 23(6), 670-678.

Abstract: Purpose: The aim is to study the influence of change in work-time control (WTC) on work-home interference (WHI) while adjusting for other work-related factors, demographics, changes at work and WHI at baseline among women and men. An additional aim was to explore sex differences in the relation between change in WTC and WHI. Methods: The study included working participants of the Swedish Longitudinal Occupational Survey of Health (SLOSH) study of the third (2010) and fourth (2012) waves (n =5440). Based on a seven-item index, four groups of WTC were formed: stable high (40 %), stable low (42 %), increasing (9 %), or decreasing (9 %) WTC over the 2 years. WHI was measured by four items and individuals were categorised in whether suffering or not suffering of WHI. Sex-stratified logistic regression analyses with 95 % confidence intervals (CI) were used to estimate the odds of experiencing WHI by change in WTC. Results: Controlling for demographics and work-related factors, women with stable low (OR= 1.46; 95 % CI 1.14-1.88) and women and men with decreasing WTC (women OR= 1.99; 95 % CI 1.38-2.85; men OR= 1.80; 95 % CI 1.18-2.73) had higher odds of WHI than those with a stable high WTC. Additionally, adjusting for changes at work and WHI at baseline did not alter the results substantially. Interaction analysis did not reveal any significant sex difference in the relation between WTC and WHI. Conclusions: For both women and men decreased and for women only, low control over working hours resulted in WHI also after adjusting for work-related factors and demographics.

Typ och Nyckelord: Journal gender, work-home interference, work-family conflict, work-time control, ISSN: 1070-5503

Referens: Letellier, I. (2016). Du signifiant à l'inconscient comme béance. Lacan contre le structuralisme, vers Merleau-Ponty. *Revue roumaine de philosophie*, 60(1), 39-53.

Abstract: When reading Lacan's text on Merleau-Ponty from 1961, commentators generally conclude that Lacan's critique makes clear the abyss that separates the two thinkers, which is fully supported by Lacan's absence of retraction. However, if one reads this text together with Merleau-Ponty's work, one can't but notice that Lacan's critique actually displays a qui pro quo on the notion of the signifier and its relation to the real. Lacan's reading of Le Visible et l'invisible in 1964 contrasts with this first critique in that it expresses a shift that affects his understanding of the relation between the signifier and the real. This results in a new elaboration of the concept of repetition that relies on the idea that the unconscious works as a gap (béance). Through this shift, Lacan steps away from structuralism and gets closer to Merleau-Ponty. This double move away from Levi-Strauss and towards Merleau-Ponty allows Lacan to get back to the investigation of the dynamic of structure, which goes along with a new reading of the Freudian notion of Spaltung.

Typ och Nyckelord: Journal unconscious, gap, signifier, Spaltung, repetition, structuralism, ontology of the flesh, Lacan, Merleau-Ponty, Levi-Strauss, ISSN: 1220-5400

Referens: Leuzinger-Bohleber, M., Bahrke, U., Fischmann, T., & Hau, S. (Hg.). (in press). *Migration, Flucht und Trauma: Die Folgen für die nächste Generation*. Göttingen: Hogrefe.

Abstract: Die Schicksale antiker Gestalten wie Ödipus, Odysseus, Persephone, Medea erinnern daran, dass Flucht, Migration und Trauma so alt sind wie die Menschheit selbst und sich in unbewussten Phantasien bei Individuen und Gruppen niedergeschlagen haben. Diese Prägungen können einerseits Quellen für Neugier und Interesse an Geflüchteten sein, andererseits aber auch für Fremdenhass, Antisemitismus und Islamophobie. Dies trägt zu den Spaltungsprozessen in vielen europäischen Gesellschaften im Zusammenhang mit der aktuellen Flüchtlingskrise bei. Zudem wecken Bilder von traumatisierten Geflüchteten Assoziationen zu eigenen extremen Erfahrungen, die das Selbst Todesangst, Hilflosigkeit und Ohnmacht aussetzen und derart überfluten, dass das Grundvertrauen in ein helfendes Objekt und ein aktives Selbst zusammenbricht. Dies mobilisiert den Impuls, wegzuschauen, zu verleugnen und die Augen vor dem Unerträglichen zu verschließen. In diesem Band begegnen internationale und interdisziplinäre Experten diesen Impulsen professionell, um sich traumatisierten Flüchtlingen und Migranten empathisch zuzuwenden und dadurch eine transgenerative Weitergabe von Traumatisierungen abzumildern.

Typ och Nyckelord: Book (chapter) migration, flucht, trauma, ISBN: 978-3-647-40284-0

Referens: Leuzinger-Bohleber, M., Bahrke, U., Fischmann, T., & Hau, S. (in press). Vorbemerkung. In M. Leuzinger-Bohleber, U. Bahrke, T. Fischmann, & S. Hau (Hg.), *Migration, Flucht und Trauma: Die Folgen für die nächste Generation*. Göttingen: Hogrefe.

Abstract:

Typ och Nyckelord: Book (chapter) , ISBN: 978-3-647-40284-0

Referens: Li, X., Westman, E., Thordardottir, S., Ståhlbom, A.K., Almkvist, O., Blennow, K., Wahlund, L.-O., & Graff, C. (in press). The Effects of Gene Mutations on Default Mode Network in Familial Alzheimer's Disease. *Journal of Alzheimer's Disease*.

Abstract: Familial Alzheimer's disease (FAD) mutations have very high penetrance but age at onset and rate of disease progression differ. Neuroimaging and cerebrospinal fluid (CSF) examinations in mutation carriers (MCs) may provide an opportunity to identify early biomarkers that can be used to track disease progression from presymptomatic to the dementia stages of disease. The default mode network (DMN) is a resting state neuronal network composed of regions known to associate with amyloid deposition in AD. We hypothesized that functional connectivity in the DMN might change at pre-clinical stages in FAD MCs and correlate with changes in CSF biomarkers as a consequence of AD brain pathology. To test the hypothesis, we compared the functional connectivity in DMN between pre-MCs/MCs and non-carriers (NCs). No significant differences between pre-MCs and NCs were observed. When comparing all MCs with NCs, significant decreased functional connectivity in the right inferior parietal lobule, right precuneus, and left posterior cingulate cortex were found. We also found statistically significant correlations between CSF amyloid- β 42 and tau protein levels and average Z-score, a resting-state functional MRI measurement reflecting the degree of the correlation between a given voxel's time courses and the time courses corresponding to DMN, from the region with statistical difference. The observed disruption of DMN and pathological levels of AD CSF-biomarkers in FAD MCs are similar to the changes described in sporadic AD, which give further support that amyloid and tau pathology impairs neuronal and synaptic function.

Typ och Nyckelord: Journal cerebrospinal fluid biomarkers, default mode network, familial Alzheimer's disease, mutation carrier, resting-state functional MRI, synaptic function, ISSN: 1387-2877

Referens: Lilliengren, P., Johansson, R., Lindqvist, K., Mechler, J., & Andersson, G. (2016). Efficacy of Experiential Dynamic Therapy for Psychiatric Conditions: A Meta-Analysis of Randomized Controlled Trials. *Psychotherapy*, 53(1), 90-104.

Abstract: Experiential dynamic therapy (EDT) is a subgroup of short-term psychodynamic psychotherapy (STPP) that emphasizes patients' in-session affective processing. To evaluate the efficacy of EDT for psychiatric conditions, we conducted a meta-analysis of randomized controlled trials. Twenty-eight studies published between 1978 and 2014 were included, encompassing 1,782 adult patients with mood, anxiety, personality, or mixed disorders. Across targeted outcome domains, medium-size between-groups effects (Cohen's d s ranging from 0.39 to 0.65) favored EDT over inactive controls at posttreatment and in symptom measures at follow-up. We found no differences between EDT and active treatments (e.g., medication, cognitive-behavioral therapy, manualized supportive therapy) at posttreatment, but EDT outperformed supportive therapy at follow-up ($d = 0.75$). In terms of within-group effect sizes, EDT was associated with large improvements in general psychiatric symptoms ($d = 1.11$), depression ($d = 1.33$), and anxiety ($d = 1.09$) and with small to moderate gains in the areas of interpersonal problems ($d = 0.55$) and global functioning ($d = 0.86$). Small but significant effects suggested continued improvement between posttreatment and follow-up. Heterogeneity in pre-post effects was explored in subgroup analyses, which indicated that EDT might be most effective in depressive disorders and that individual EDT had larger effects compared with group treatment. In addition, EDT performed better in higher quality studies. We conclude that EDT is a promising treatment for psychiatric conditions in adults. Further high-quality studies evaluating contemporary versions of EDT in specific psychiatric conditions are warranted.

Typ och Nyckelord: Journal Experiential Dynamic Therapy, EDT, short-term psychodynamic psychotherapy, psychiatric conditions, ISSN: 0033-3204

Referens: Lin, T., Horta, M., Fischer, H., Feifel, D., Cohen, R.A., & Ebner, N.C. (2016). Effects of Intranasal Oxytocin on Perceptions of Trustworthiness in Aging. Poster presented at The Gerontological Society of America's 69th Annual Scientific Meeting, New Orleans, Louisiana, USA. *The Gerontologist*, 56(S3), 361-362.

Abstract: Perceptions of trustworthiness in others influence thought and behavior during social interactions. Growing evidence suggests that intranasal administration of the neuropeptide oxytocin increases perceived trustworthiness of unfamiliar faces, with particularly pronounced effects for in-group compared to out-group faces. To date, prosocial effects of oxytocin have been mostly investigated in young adults, and the majority of studies comprised men. Recent evidence that older adults experience increased difficulty in determining trustworthiness in faces highlights the importance of examining the potentially beneficial role of oxytocin on perceptions of trustworthiness in aging. In the present study, 48 young and 54 older participants evaluated the trustworthiness of young and older male and female unfamiliar faces, while undergoing magnetic resonance imaging. Participants were randomly assigned to either self-administer intranasal oxytocin or a placebo before engagement in the task. Behavioral analysis suggested that female faces were generally rated as more trustworthy than male faces. This effect was particularly pronounced in older participants in the oxytocin group but young participants in the placebo group. Functional connectivity analysis between amygdala and prefrontal cortex is currently underway and will identify the underlying brain mechanism of oxytocin's effect on trustworthiness perceptions. Findings from this study emphasize the importance of considering age and sex of participants and faces when examining effects of oxytocin on perceptions of facial trustworthiness. Results will be discussed in the context of an emerging literature on oxytocin's age-by-sex modulatory role in social and affective information processing.

Typ och Nyckelord: Proceedings age, oxytocin, facial trustworthiness

Referens: [Lindau, M., Almkvist, O., & Mohammed, A. \(2016\). Effects of Stress on Learning and Memory. In G. Fink \(Ed.\), *Stress: Concepts, Cognition, Emotion, and Behavior* \(pp. 153-159\). Handbook of Stress Series, Volume 1. Academic Press.](#)

Abstract:

Typ och Nyckelord: Book (chapter) stress, learning, memory, ISBN: 978-0-12-800951-2

Referens: [Lindberg, L., Fransson, M., Forslund, T., Springer, L., & Granqvist, P. \(in press\). Maternal Sensitivity in Mothers with Mild Intellectual Disabilities is Related to Experiences of Maltreatment and Predictive of Child Attachment: A Matched-Comparison Study. *Journal of Applied Research in Intellectual Disabilities*.](#)

Abstract: Background: Scientific knowledge on the quality of caregiving/maternal sensitivity among mothers with mild intellectual disabilities (ID) is limited and subject to many methodological shortcomings, but seems to suggest that these mothers are less sensitive than mothers without intellectual disabilities.

Methods: In this matched-comparison study ($N = 48$), the present authors observed maternal sensitivity for 20 min in four different laboratory play situations. The study also included semi-structured interviews to assess maternal experiences of maltreatment and child attachment.

Results: The present authors found significantly lower sensitivity among mothers with intellectual disabilities than among a comparison group of mothers without intellectual disabilities. Among mothers with intellectual disabilities, low sensitivity was related to maternal experiences of maltreatment and predictive of disorganized child attachment. In the comparison group, high maternal sensitivity was related to partner presence and social support, and predictive of child intelligence.

Conclusions: The present authors highlight the importance of attending to intellectual disabilities mothers' history of *receiving* care to understand their capacity for *giving* adequate care.

Typ och Nyckelord: Journal maternal sensitivity, intellectual disabilities, maltreatment, child attachment, matched comparison, ISSN: 1360-2322

Referens: [Lindfors, P. \(in press\). Perspektiv på hälsa: omvårdnad utifrån individens styrkor \[Perspectives on health: Basing care on individual strengths\]. I E. Drevenhorn \(Red.\), *Hemsjukvård \[Home care\]* \(2 uppl.\). Lund: Studentlitteratur.](#)

Abstract: Med en vård som inriktar sig på ohälsa och dysfunktion utgör patientens styrkor och positiva erfarenheter en bortglömd resurs i behandlingen. I följande kapitel behandlas olika aspekter av hälsa. Beskrivningen fokuserar på olika typer av styrkor som kan användas som resurser i hemsjukvården för att främja patienters hälsa och välbefinnande.

Typ och Nyckelord: Book (chapter) vård, definitioner, hälsa, hälsofrämjande

Referens: [Lindfors, P. \(2016\). Psychosocial stress, health and cortisol in working women living in high and low status neighbourhoods in Sweden. Proceedings from the Fourth Annual Conference of The European Association of Psychosomatic Medicine, June 16-18, Umeå, Sweden.](#)

Abstract: Background: Contextual factors including neighbourhood status have consistently been associated with health disparities. Focusing on mechanisms, this study investigated linkages between psychosocial stress, health and cortisol in working women ($N=542$) living in high and low status neighbourhoods. Method: Women living with children in objectively defined high and low status neighbourhoods in Stockholm County suburban areas were invited to a questionnaire study and a subsample ($n=88$) also provided salivary samples analysed for cortisol. Results: Results showed that women in high status neighbourhoods had significantly better self-rated health while women in low status neighbourhoods had significantly lower waking cortisol. However, there were no group differences in aggregate cortisol measures. Conclusions The findings follow previous research with cortisol results tentatively suggesting hypocortisolism as a pathway linking neighbourhood status and health disparities, albeit a less consistent finding in this particular sample. This may relate to the Swedish welfare state and its way of fostering of equality, which is an important contextual aspect to factor in also in health psychology research.

Typ och Nyckelord: Proceedings cortisol, social position, women

Referens: [Lindfors, P., Folkesson Hellstadius, L., Östberg, V. \(in press\). Perceived stress, recurrent pain, and](#)

aggregate salivary cortisol measures in mid-adolescent girls and boys. *Scandinavian Journal of Psychology*.

Abstract: Measures of perceived stress have been criticised for theoretical inconsistency. However, the validated pressure activation stress scale has been suggested as a theoretically sound alternative. But it is unclear how pressure and activation stress relate to objective and subjective measures including commonly used aggregate cortisol measures and health complaints respectively. Specifically, this study aimed at investigating how pressure and activation stress were related to aggregate salivary cortisol measures and recurrent pain in mid-adolescent girls and boys. Midadolescents (119 girls and 56 boys) provided self-reports in questionnaires on activation and pressure stress and recurrent pain (headache, stomachache, neck/shoulder and back pain). Additionally, adolescents sampled saliva during an ordinary school day: 1) immediately at awakening, 2) 30 minutes after waking up, 3) 60 minutes after waking up, and 4) at 8 p.m. These samples were analyzed for cortisol. Hierarchical regressions showed no statistically significant associations between activation and pressure stress and cortisol, neither for girls nor for boys. However, activation and pressure stress were significantly associated with recurrent pain but only for girls. The findings may relate to subjective and objective measures reflecting distinct aspects of stress-related functioning. However, the study participants included mid-adolescents whose bodily systems are flexible and still relatively unaffected by the strain of their daily stress perceptions. To conclude, the non-significant relationships between activation and pressure stress and commonly used aggregate measures of cortisol adds to the understanding of how perceived stress may relate to physiological functioning in the daily life of adolescents when using such aggregate measures.

Typ och Nyckelord: Journal activation, cortisol, mid-adolescence, recurrent pain, pressure, ISSN: 1467-9450

Referens: [Lindfors, P., Folkesson Hellstadius, L., & Östberg, V. \(2016\). Perceived stress, recurrent pain and salivary cortisol in mid-adolescent girls and boys. Proceedings from the Fourth Annual Conference of The European Association of Psychosomatic Medicine, June 16-18, Umeå, Sweden.](#)

Abstract: Aim: Measures of perceived stress have been criticised for theoretical inconsistency. However, the validated pressure activation stress scale has been suggested as a theoretically sound alternative. But it is unclear how pressure and activation stress relate to objective and subjective measures including commonly used aggregate cortisol measures and health complaints respectively. Specifically, this study aimed at investigating how pressure and activation stress were related to aggregate salivary cortisol measures and recurrent pain in mid-adolescent girls and boys. Methods: Mid-adolescents (119 girls and 56 boys) provided self-reports in questionnaires on activation and pressure stress and recurrent pain (headache, stomachache, neck/shoulder and back pain). Additionally, adolescents sampled saliva during an ordinary school day: 1) immediately at awakening, 2) 30 minutes after waking up, 3) 60 minutes after waking up, and 4) at 8 p.m. These samples were analysed for cortisol. Results: Hierarchical regressions showed no statistically significant associations between activation and pressure stress and cortisol, neither for girls nor for boys. However, activation and pressure stress were significantly associated with recurrent pain but only for girls. The findings may relate to subjective and objective measures reflecting distinct aspects of stress-related functioning. However, the study participants included mid-adolescents whose bodily systems are flexible and still relatively unaffected by the strain of their daily stress perceptions. Conclusions: To conclude, the non-significant relationships between activation and pressure stress and commonly used aggregate measures of cortisol adds to the understanding of how perceived stress relate to physiological functioning in the daily life of adolescents. Also, the finding suggests that health psychology research on adolescent stress should focus on multiple biomarkers.

Typ och Nyckelord: Proceedings activation, cortisol, mid-adolescence, recurrent pain, pressure

Referens: [Lindner, P., Carlbring, P., Flodman, E., Hebert, A., Poysti, S., Hagkvist, F., ... Andersson, G. \(2016\). Does cognitive flexibility predict treatment gains in Internet-delivered psychological treatment of social anxiety disorder, depression, or tinnitus? *PeerJ*, 4, e1934.](#)

Abstract: Little is known about the individual factors that predict outcomes in Internet-administered psychological treatments. We hypothesized that greater cognitive flexibility (i.e. the ability to simultaneously consider several concepts and tasks and switch effortlessly between them in response to changes in environmental contingencies) would provide a better foundation for learning and employing the cognitive restructuring techniques taught and exercised in therapy, leading to greater treatment gains. Participants in three trials featuring Internet-administered psychological treatments for depression (n = 36), social anxiety disorder (n = 115) and tinnitus (n = 53) completed the 64-card Wisconsin Card Sorting Test (WCST) prior to treatment. We found no significant associations between perseverative errors on the WCST and treatment gains in any group. We also found low accuracy in the classification of treatment responders. We conclude that lower cognitive flexibility, as captured by perseverative errors on the WCST, should not impede successful outcomes in Internet-delivered psychological treatments.

Typ och Nyckelord: Journal perseverance, prediction, wisconsin card sorting test, ISSN: 2167-8359

Referens: [Lindner, P., Frykheden, O., Forsström, D., Andersson, E., Ljótsson, B., Hedman, E., Andersson, G., & Carlbring, P. \(2016\). The Brunnsviken Brief Quality of Life Scale \(BBQ\): Development and Psychometric Evaluation. *Cognitive Behaviour Therapy*, 45\(3\), 182-195.](#)

Abstract: Measurements of subjective quality of life (QoL) are an important complement to symptom ratings in clinical research and practice. Despite there being several established QoL self-rating scales, we identified a need for a freely accessible, easy-to-use inventory, validated for use with both clinical and non-clinical samples, based on the overall life satisfaction conceptualization of QoL. The Brunnsviken Brief Quality of life scale (BBQ) was designed to meet these requirements. Items were selected by performing a factor analysis on a large data-set of QoL ratings collected previously. Six life areas (Leisure time, View on life, Creativity, Learning, Friends and Friendship, and View of self) were identified as important for overall QoL and were included in the BBQ. A psychometric evaluation was performed using two independent samples: healthy undergraduate students (n = 163), and a sample seeking treatment for social anxiety disorder (n = 568). Results suggested a unifactorial structure, with good concurrent and convergent validity, high internal and test-retest reliability, and accurate classification ability. We conclude that the BBQ is a valid and reliable measure of subjective QoL for use in clinical and research settings. The BBQ is presently available in 31 languages and can be freely downloaded from www.bbqscale.com.

Typ och Nyckelord: Journal psychometrics, quality of life, self-rating scale, life satisfaction, ISSN: 1650-6073

- Referens:** Lindner, P., Nordby, K., Rozental, A., Carlbring, P., & Svartdal, F. (2016). Domain-specific quality of life across five European countries : Cross-cultural validation of the Brunnsviken Brief Quality of life (BBQ) scale. Poster at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 590). Stockholm: EABCT.
- Abstract:** The Brunnsviken Brief Quality of life (BBQ) scale is a valid, reliable and accessible self-report measure of subjective quality of life for use with both clinical and non-clinical populations. Although the BBQ has been professionally translated from original Swedish into over thirty languages, psychometric evaluations of other language versions are so far lacking. BBQ data was collected as part of an international study on procrastination in students and employees: n = 749 from Finland, n = 599 from Sweden, n = 542 from Norway, n = 411 from Germany, and n = 315 from Italy. Weighted satisfaction ratings (score range 0-16) for each of the BBQ's six domains (Leisure, View on life, Creativity, Learning, Friends and friendships, and View on self), along with a total sum score and Cronbach's alphas, were calculated and compared. Samples did not differ in BBQ total scores ($F(4,2611) = 1.006, p = .403$). Although there were some differences between samples on specific items, these were small (total difference $M = 0.00, SD = 0.74$) and confidence intervals overlapped, with the exception of the German sample that rated lower Learning than all other samples ($p < .05$, Bonferroni-adjusted). Cronbach's alpha ranged from 0.752 (Finland) to 0.674 (Italy). Convergent validity (as assessed by correlations with scores on the Satisfaction With Life Scale) was high, ranging from $r = .64$ (Finland) to $r = .42$ (Italy). The BBQ is a valid measure of subjective quality of life in the examined languages. There are only minor cross-country differences in the quality of life domains measured by the BBQ.
- Typ och Nyckelord:** Proceedings quality of life, Brunnsviken Brief Quality of life scale, BBQ, Europe
- Referens:** Lindner, P., Rozental, A., Forsström, D., Andersson, G., Furmark, T., & Carlbring, P. (2016). Differential impact of performance and interaction related types of social anxiety symptoms on different quality of life domains. Poster at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 748). Stockholm: EABCT.
- Abstract:** Social anxiety disorder (SAD) is a common disorder associated with impaired quality of life (QoL), that indexes anxious distress and avoidance related to social situations. The DSM-5 features a specifier to delineate those with only performance-related social anxiety, yet little is known whether performance- and interaction-related anxieties have a differential impact on total QoL and on different QoL domains. To investigate this, we pooled screening data from eight intervention studies for SAD (n = 2017). Total sample mean age was 35.28 (SD = 12.26) and 69% were female. SAD symptoms were measured using the self-rated Liebowitz Social Anxiety Scale with items classified as measuring either performance or interaction anxiety. QoL, both total and across four domains, was measured using the Quality of Life Inventory. Data was analyzed using multiple regression models featuring the two anxiety scores as predictors, and by simulating the Performance-only specifier through 2x2 median-split subgrouping and standard ANOVAs. Both interaction and performance anxieties were independently associated with lower QoL in general and across domains. Interaction anxiety had a larger negative impact on Personal Growth- and Achievement-related QoL than performance anxiety. The High-Performance/Low-Interaction-group rated higher Achievement-related QoL compared to the Low-Performance/High-Interaction-group ($p = .012$), yet groups were matched on total QoL and on other domains. Other group differences were in the expected direction. QoL impairments in SAD is primarily driven by number of feared social situations, and only secondarily by types of fear social situations, with interaction anxiety having a larger, negative impact on some QoL domains.
- Typ och Nyckelord:** Proceedings quality of life, social anxiety symptoms
- Referens:** Lindström, A., Berg, H., Nordfält, J., Roggeveen, A.L., & Grewal, D. (2016). Does the presence of a mannequin head change shopping behavior? *Journal of Business Research*, 69(2), 517-524.
- Abstract:** Mannequins are ubiquitous; this research investigates a specific element of mannequin style, namely, the presence or absence of a humanized head. Study 1 demonstrates that in physical stores, the presence of a humanized head enhances purchase intentions for the merchandise displayed on that mannequin. However, in online stores, mannequin styles with and without humanized heads are equally effective. Study 2 confirms the physical store results among customers with less fashion knowledge (novices), but among customers with more fashion knowledge (experts), the results reverse, such that mannequins without humanized heads enhance purchase intentions. Further, accessories are more likely to be viewed by experts when the mannequin is headless. These results are based on experiments whose dependent measures included both survey and eye-tracking data.
- Typ och Nyckelord:** Journal retail atmospherics, mannequin, retail displays, in-store displays, ISSN: 0148-2963
- Referens:** Liuzza, M.T., Lindholm, T., Hawley, C., Gustafsson Sendén, M., Ekström, I., Olsson, M.J., Larsson, M., & Olofsson, J.K. (in press). The Body Odor Disgust Scale (BODS): Development and validation of a novel olfactory disgust assessment. *Chemical Senses*.
- Abstract:** Disgust plays a crucial role in the avoidance of pathogen threats. In many species, body odors provide important information related to health and disease, and body odors are potent elicitors of disgust in humans. With this background, valid assessments of body odor disgust sensitivity are warranted. In the present article we report the development and psychometric validation of the body odor disgust scale (BODS), a measure suited to assess individual differences in disgust reaction to a variety of body odors. Collected data from three studies (total n = 528) show that the scale can be either used as a uni-dimensional scale or as a scale that reflects two hypothesized factors: sensitivity to one's own body odors vs. those of others. Guided by our results, we reduced the scale to 12-items that capture the essence of these two factors. The final version of the BODS shows an excellent internal consistency (Cronbach's alphas $> .9$). The BODS subscales show convergent validity with other general disgust scales, as well as with other olfactory functions measures and with aspects of personality that are related to pathogen avoidance. A fourth study confirmed the construct validity of the BODS and its measurement invariance to gender. Moreover, we found that compared to other general disgust scales the BODS is more strongly related to perceived vulnerability to disease. The BODS is a brief and valid assessment of trait body odor disgust sensitivity.
- Typ och Nyckelord:** Journal behavioral immune system, body odors, disgust, disgust sensitivity, olfaction, pathogen threat, ISSN: 0379-864X

- Referens:** Ljungberg, J.K., Hansson, P., Adolfsson, R., & Nilsson, L.-G. (2016). The effect of language skills on dementia in a Swedish longitudinal cohort. *Linguistic Approaches to Bilingualism*, 6(1-2), 190-204.
- Abstract:** Recent findings indicate that bilingualism delay the onset of dementia. Using data from the Betula longitudinal cohort study on memory, health and aging (www.betula.su.se) the issue of a possible protective effect of bilingualism was addressed. Monolingual (n = 736) and bilingual (n = 82) participants (= 60 years) without dementia at inclusion were followed for incident dementia over a time-period up to 10 years. In total, 112 participants developed dementia. Analyses were performed with Cox proportional hazards regression adjusted for age, sex, and presence/absence of the Apolipoprotein E (APOE) epsilon 4 allele, with dementia outcome as the dependent variable. Results showed no delayed onset of dementia in bilinguals compared to monolinguals. However, because of the findings from a study using participants from the same population showing beneficial longitudinal effects of bilingualism on episodic memory; we argue that our results may depend on the frequency of use of the second language after retirement.
- Typ och Nyckelord:** Journal bilingualism, dementia, longitudinal design, aging, cognitive reserve, ISSN: 1879-9264
- Referens:** Lloyd, C., af Klinteberg, B., & DeMarinis, V. (2016). Emotion regulation and existential meaning-making in young women with mental ill-health concerns. A qualitative study. *International Journal of Psychology and Behavioral Sciences*, 1(1): PBSIJ.MS.ID.555553.
- Abstract:** Increasing rates of psychiatric problems, like anxiety, worry, and anguish among Swedish youth - especially among females, are considered a serious public mental health concern. To explore psychological and existential vulnerability and needs among female youths with mental ill-health concerns, a qualitative in-depth interview study was done with a sample comprised of ten females on the waiting-list at an outpatient psychotherapy clinic. In relation to everyday life, critical events, and ultimate concerns, two areas were explored: Emotion regulation and Existential meaning-making, and their interrelations were examined. Results indicated that these areas appear to be strongly related processes in this sample, possibly due to frequent experiences of relational losses and disruptions. Such experiences, if not repaired, might fuel existential issues like fear of death, loneliness, and alienation, increasing the vulnerability for mental ill-health. Psychotherapeutic implications were discussed.
- Typ och Nyckelord:** Journal emotion regulation, existential meaning-making, moments of meaning, young women, mental health, ISSN: 2163-1948
- Referens:** Lorente, C.C., & Ferrer-Wreder, L. (in press). Actualizing change with Roma youth and their communities: Theoretical and conceptual considerations. In R. Dimitrova, D. Sam, & L. Ferrer-Wreder (Eds.), *Roma minority in a global context: Resources for positive youth development*. Oxford University Press.
- Abstract:**
- Typ och Nyckelord:** Book (chapter) Youth Development, Roma, Adolescence
- Referens:** Lornudd, C., Bergman, D., Sandahl, C., & von Thiele Schwarz, U. (2016). Healthcare managers' leadership profiles in relation to perceptions of work stressors and stress. *Leadership in Health Services*, 29(2), 185 - 200.
- Abstract:** Purpose: The purpose of this study is to investigate the relationship between leadership profiles and differences in managers' own levels of work stress symptoms and perceptions of work stressors causing stress. Design/methodology/approach: Cross-sectional data were used. Healthcare managers (n = 188) rated three dimensions of their leadership behavior and levels of work stressors and stress. Hierarchical cluster analysis was performed to identify leadership profiles based on leadership behaviors. Differences in stress-related outcomes between profiles were assessed using one-way analysis of variance. Findings: Four distinct clusters of leadership profiles were found. They discriminated in perception of work stressors and stress: the profile distinguished by the lowest mean in all behavior dimensions, exhibited a pattern with significantly more negative ratings compared to the other profiles. Practical implications: This paper proposes that leadership profile is an individual factor involved in the stress process, including work stressors and stress, which may inform targeted health promoting interventions for healthcare managers. Originality/value: This is the first study to investigate the relationship between leadership profiles and work stressors and stress in healthcare managers.
- Typ och Nyckelord:** Journal cluster analysis, leadership, stress, managers, healthcare, leadership profile, ISSN: 1751-1879
- Referens:** Lornudd, C., Bergman, D., Sandahl, C., & von Thiele Schwarz, U. (2016). A randomised study of leadership interventions for healthcare managers. *Leadership in Health Services*, 29(4), 358 - 376.
- Abstract:** Purpose: The purpose of this paper was to assess two different leader development interventions by comparing their effects on leadership behaviour and evaluating their combined impact after two years, from the viewpoints of both the participating managers and external raters.
- Design/methodology/approach: The study was a longitudinal randomised controlled trial with a cross-over design. Health care managers (n = 177) were first randomised to either of two 10-month interventions and a year later were switched to the other intervention. Leadership behaviour was rated at pre-test and 12 and 24 months by participating managers and their superiors, colleagues and subordinates using a 360-degree instrument. Analysis of variance and multilevel regression analysis was performed.
- Findings: No difference in effect on leadership behaviour was found between the two interventions. The evaluation of the combined effect of the interventions on leadership behaviour showed inconsistent (i.e. both increased and decreased) ratings by the various rater sources.
- Practical implications: This study provides some evidence that participation in leadership development programmes can improve managers' leadership behaviours, but the results also highlight the interpretive challenges connected with using a 360-degree instrument to evaluate such development.
- Originality/value: The longitudinal randomised controlled design and the large sample comprising both managers and external raters make this study unusually rigorous in the field of leadership development evaluations.

Typ och Nyckelord: Journal evaluation, healthcare, leadership, development, RCT, 360-instrument, ISSN: 1751-1879

Referens: [Lundberg, U., & Aronsson, G. \(2016\).](#) Insatser på arbetsplatsen avgörande för sjukskrivna. I Å. Sandberg (Red.), *På jakt efter framtidens arbete: Utmaningar i arbetets organisering och forskning* (s. 91-93). Stockholm: Tankesmedjan Tiden.

Abstract:

Typ och Nyckelord: Book (chapter) sjukfrånvaro, hälsa, återgång i arbete, ISBN: 978-91-566-3167-2

Referens: [Lundén, P., Axelsson, Ö., & Hurtig, M. \(2016\).](#) On urban soundscape mapping: A computer can predict the outcome of soundscape assessments. In *Proceedings of the Inter-Noise 2016* (pp. 4725-4732), 45th International Congress and Exposition on Noise Control Engineering, Towards a Quieter Future, 21-24 August 2016, Hamburg, Germany. Paper 276.

Abstract: The purpose of this study was to investigate whether or not a computer may predict the outcome of soundscape assessments, based on acoustic data only. It may be argued that this is impossible, because a computer lack life experience. Moreover, if the computer was able to make an accurate prediction, we also wanted to know what information it needed to make this prediction. We recruited 33 students (18 female; Mage = 25.4 yrs., SDage = 3.6) out of which 30 assessed how pleasant and eventful 102 unique soundscape excerpts (30 s) from Stockholm were. Based on the Bag of Frames approach, a Support Vector Regression learning algorithm was used to identify relationships between various acoustic features of the acoustics signals and perceived affective quality. We found that the Mel-Frequency Cepstral Coefficients provided strong predictions for both Pleasantness ($R^2 = 0.74$) and Eventfulness ($R^2 = 0.83$). This model performed better than the average individual in the experiment in terms of internal consistency of individual assessments. Taken together, the results show that a computer can predict the outcome of soundscape assessments, which is promising for future soundscape mapping.

Typ och Nyckelord: Proceedings soundscape mapping, machine learning, urban planning

Referens: [Låstad, L., Hellgren, J., Näswall, K., Richter, A., & Sverke, M. \(2016\).](#) 30 års forskning om anställningsotrygghet: En litteraturoversikt. *Arbetsmarknad & Arbetsliv*, 22(3/4), 8-27.

Abstract: Anställningsotrygghet – en oro för att mot sin vilja förlora jobbet – är något som de flesta anställda idag upplever under sina yrkesliv. Den beteendevetenskapliga forskningen inom detta område har skjutit fart sedan millennieskiftet, vilket motiverar behovet av en uppdaterad litteraturoversikt kring prediktorer och konsekvenser av anställningsotrygghet, samt vilka faktorer som har identifierats som viktiga när det gäller att mildra anställningsotrygghetens konsekvenser.

Typ och Nyckelord: Journal anställningsotrygghet, stress, arbetsliv, ISSN: 1400-9692

Referens: [Låstad, L., Näswall, K., Berntson, E., Seddigh, A., & Sverke, M. \(in press\).](#) The roles of shared perceptions of individual job insecurity and job insecurity climate for work- and health-related outcomes: A multilevel approach. *Economic and Industrial Democracy*.

Abstract: The aim of this study is to examine job insecurity from a multilevel perspective and to investigate the roles of two types of job insecurity – job insecurity climate and individual job insecurity – for work-related attitudes and health outcomes. It further explores the role of the workgroup – as a social context – in shaping job insecurity perceptions. Data were collected from white-collar employees in a Swedish organization, with 126 participants nested in 18 groups. The results show that 19% of the variance in job insecurity climate perceptions, and none of the variance in individual job insecurity perceptions, could be attributed to group membership. Further, compared to other members of their group, those perceiving a stronger job insecurity climate reported lower levels of negative self-rated health and higher burnout scores. These results imply that the workgroup is an important social context for job insecurity climate perceptions.

Typ och Nyckelord: Journal burnout, job insecurity, job insecurity climate, job satisfaction, multilevel analysis, productivity, self-rated health, ISSN: 0143-831X

Referens: [Låstad, L., Vander Elst, T., & De Witte, H. \(2016\).](#) On the reciprocal relationship between individual job insecurity and job insecurity climate. *Career Development International*, 21(3), 246-261.

Abstract: Purpose: The purpose of this paper is to investigate the relationship between individual job insecurity and job insecurity climate over time.

Design/methodology/approach: Data were collected among readers of a Flemish Human Resources magazine. The data collection was repeated three times, resulting in a longitudinal dataset with information from 419 employees working in Flanders. A cross-lagged design was used in which both individual job insecurity and job insecurity climate were modeled at all times and reciprocal relationships between these constructs could be investigated.

Findings: The results showed that perceptions of individual job insecurity were related to perceiving a climate of job insecurity six months later. However, no evidence was found for the effect of job insecurity climate on individual job insecurity. This suggests that job insecurity origins in the individual's perceptions of job insecurity and subsequently expands to include perceptions of a job insecurity climate at the workplace.

Research limitations/implications: First, the data used in this study were collected solely by self-reports, which could have introduced a common method bias to the study. Second, as with all non-experimental studies, the possibility that a third variable could have affected the results cannot categorically be ruled out.

Practical implications: Managers and human resource practitioners who wish to prevent job insecurity in organizations may consider focussing on individual job insecurity perceptions when planning preventive efforts.

Originality/value: By investigating the relationship between individual job insecurity and job insecurity climate over time, this study contributes to the understanding of job insecurity, both as an individual and a social

phenomenon.

Typ och Nyckelord: Journal work stress, cross-lagged, job insecurity, job insecurity climate, ISSN: 1362-0436

Referens: Magnusson Hanson, L.L., Westerlund, H., Chungkham, H.S., Vahtera, J., Sverke, M., & Alexanderson, K. (2016). Purchases of prescription antidepressants in the Swedish population in relation to major workplace downsizing. *Epidemiology*, 27(2), 257-264.

Abstract: Organizational downsizing may be a risk factor for morbidity both among displaced and those who remain in work. However, the knowledge is limited regarding its impact on clinically relevant mental health problems. Our objective was to investigate purchases of prescription antidepressants across five years in relation to workplace downsizing.

We studied all Swedish residents 2004 throughout 2010, 22-54 years of age in 2006, gainfully employed, and with a stable labor market position up to 2006. People primarily employed at a workplace with >18% staff reduction were considered exposed to major downsizing (in 2006-2007, 2007-2008, or 2008-2009). We applied repeated-measures regression analyses through generalized estimating equations, calculating odds of any purchase of prescription antidepressants (inferred from the Prescribed Drug Register) within five 12-month periods from two years before to two years after the period of major downsizing and compared the trends for newly exposed (n=632 500) and unexposed (n=1 021 759) to major downsizing.

This large scale study indicates that downsizing is associated with a slight increase in the odds of purchasing prescription antidepressants among people without previous sickness absence or disability pension.

Typ och Nyckelord: Journal downsizing, antidepressants, ISSN: 1044-3983

Referens: Magnusson, K., Rozental, A., Boettcher, J., Andersson, G., & Carlbring, P. (2016). For better or worse: An individual patient data meta-analysis of deterioration among participants receiving Internet-based cognitive behavior therapy. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 285). Stockholm: EABCT.

Abstract: Objective: Psychological treatments can relieve mental distress and improve well-being, and the dissemination of evidencebased methods is believed to aid patients in gaining access to the right type of help. Meanwhile, Internet-based cognitive behavior therapy (ICBT) has shown promising results for many psychiatric disorders. However, research on the potential for negative effects of psychological treatments has been lacking. Method: An individual patient data meta-analysis of 29 clinical trials of ICBT (N = 2866) was performed using the Reliable Change Index for each of the primary outcome measures to distinguish deterioration rates among patients in treatment and control conditions. Statistical analyses of predictors were subsequently conducted using generalized linear mixed models. Missing data was handled by multiple imputation. Results: Deterioration rates were 122 (5.8%) in treatment and 130 (17.4%) in control conditions, yielding a total of 252 (8.8%). Patients in a control condition had higher odds of deteriorating, Odds Ratios (OR) 3.10, 95% Confidence Interval (CI) [2.21-4.34]. Clinical severity at pre treatment was related to lower odds, OR 0.62, 95% CI [0.50-0.77], and 0.51, 95% CI [0.51-0.80], for treatment and control conditions. In terms of sociodemographic variables, being in a relationship, 0.58, 95% CI [0.35-0.95], having at least a university degree, 0.54, 95% CI [0.33-0.88], and being older, 0.78, 95% CI, [0.62-0.98], were also associated with lower odds of deterioration, but only for patients assigned to treatment. Conclusion: Deterioration among patients receiving ICBT is not uncommon and should be monitored by researchers in order to reverse a negative treatment trend.

Typ och Nyckelord: Proceedings negative effects, internet-based cognitive behavior therapy, deterioration

Referens: Mather, L., Blom, V., Bergström, G., & Svedberg, P. (2016). An Underlying Common Factor, Influenced by Genetics and Unique Environment, Explains the Covariation Between Major Depressive Disorder, Generalized Anxiety Disorder, and Burnout: A Swedish Twin Study. *Twin Research and Human Genetics*, 19(6), 619-627.

Abstract: Depression and anxiety are highly comorbid due to shared genetic risk factors, but less is known about whether burnout shares these risk factors. We aimed to examine whether the covariation between major depressive disorder (MDD), generalized anxiety disorder (GAD), and burnout is explained by common genetic and/or environmental factors. This cross-sectional study included 25,378 Swedish twins responding to a survey in 2005-2006. Structural equation models were used to analyze whether the trait variances and covariances were due to additive genetics, non-additive genetics, shared environment, and unique environment. Univariate analyses tested sex limitation models and multivariate analysis tested Cholesky, independent pathway, and common pathway models. The phenotypic correlations were 0.71 (0.69-0.74) between MDD and GAD, 0.58 (0.56-0.60) between MDD and burnout, and 0.53 (0.50-0.56) between GAD and burnout. Heritabilities were 45% for MDD, 49% for GAD, and 38% for burnout; no statistically significant sex differences were found. A common pathway model was chosen as the final model. The common factor was influenced by genetics (58%) and unique environment (42%), and explained 77% of the variation in MDD, 69% in GAD, and 44% in burnout. GAD and burnout had additive genetic factors unique to the phenotypes (11% each), while MDD did not. Unique environment explained 23% of the variability in MDD, 20% in GAD, and 45% in burnout. In conclusion, the covariation was explained by an underlying common factor, largely influenced by genetics. Burnout was to a large degree influenced by unique environmental factors not shared with MDD and GAD.

Typ och Nyckelord: Journal major depressive disorder, anxiety disorders, psychological stress, twins, behavioral genetics, ISSN: 1832-4274

Referens: Mellner, C. (2016). After-hours availability expectations, work-related smartphone use during leisure, and psychological detachment: The moderating role of boundary control. *International Journal of Workplace Health Management*, 9(2), 146-164.

Abstract: Purpose: Modern working life is characterized by increased expectations for employees to be available to deal with work issues outside regular work hours and by using new communication technology. This implies more individual freedom in organizing work in time and space, but also places increased demands on employees to manage the boundaries between work and personal life. This, in turn, can be expected to be crucial to their ability to mentally detach from work during free time. The present study investigated whether individual perceptions of boundary control moderate the impact of after-hours availability expectations and work-related

smartphone use during off-work hours on psychological detachment.

Design/methodology/approach: The study population comprised 2,876 gainfully employed professionals from four large organizations in both the public and private sector, representing various businesses and occupations. Univariate correlations and multiple, linear hierarchical multiple regression analyses were performed.

Findings: High after-hours availability expectations, high frequency of work-related smartphone use, and low boundary control were associated with poor psychological detachment. Furthermore, boundary control moderated the relationships between both after-hours availability expectations and work-related ICT use, respectively, and psychological detachment. As such, boundary control mitigated the negative effects of both after-hours availability expectations and work-related smartphone use during leisure on psychological detachment.

Practical implications: Modern work organizations would benefit from introducing availability policies and helping employees reduce their work-related smartphone use outside regular work hours, thus helping them achieve successful boundary control and subsequent psychological detachment.

Originality/value: In a working life characterized by boundarylessness, employees' ability to achieve boundary control can be regarded as crucial.

Typ och Nyckelord: Journal after-hours, availability, smartphone, boundary control, ISSN: 1753-8351

Referens: [Miloff, A., Lindner, P., Hamilton, W., Reuterskiöld, L., Andersson, G., & Carlbring, P. \(2016\). Is virtual reality treatment for spider phobia noninferior to traditional one-session treatment? The results of a randomized-controlled trial. Poster at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden \(p. 753\). Stockholm: EABCT.](#)

Abstract: This is the first large randomized-controlled trial to evaluate whether commercially available VR hardware and software can be used for exposure therapy. The aim of this study is to compare gold-standard One Session Treatment (OST) for reduction of spider phobia symptoms and avoidance behaviour using in vivo spiders and a human therapist, to a newly developed single-session gamified Virtual Reality Exposure Therapy (VRET) application with modern, consumer-available VR hardware, virtual spiders, and a virtual therapist. Subjects (N = 100) with spider phobia, diagnosed, and meeting inclusion criteria were recruited from the general population and randomized to 2 treatment arms. In 1-week intervals, pre-measurement, 3-hr treatment and post-measurement were completed with an in-vivo behavioral approach test (BAT) serving as the primary outcome measure for both groups. This study was powered to detect a non-inferiority margin of a 2-point between-group difference on the BAT, with a standard deviation of 4 (at 80% power). 98 patients commenced treatment and 97 patients completed post-measurement. Per protocol analysis indicated VR was not non-inferior to OST. Repeated-measures ANOVA identified a significant main effect of time ($p < .001$) and time x group effect ($p < .05$). Both OST and VR participants experienced large BAT within-group effect sizes ($d = 2.28$ and $d = 1.45$, respectively). OST is the superior treatment option for spider phobia. VRET is an effective alternative if OST cannot be provided, as pure self-help, as the initial intervention in a stepped-care model, or as a possible post-OST booster. Future studies will benefit from evaluating effectiveness of VRET when conducted at home.

Typ och Nyckelord: Proceedings virtual reality, spider phobia, one-session treatment

Referens: [Miloff, A., Lindner, P., Hamilton, W., Reuterskiöld, L., Andersson, G., & Carlbring, P. \(2016\). Single-session gamified virtual reality exposure therapy for spider phobia vs. traditional exposure therapy: Study protocol for a randomized controlled non-inferiority trial. *Trials*, 17\(1\), 60.](#)

Abstract: Background: Traditional one-session exposure therapy (OST) in which a patient is gradually exposed to feared stimuli for up to 3 h in a one-session format has been found effective for the treatment of specific phobias. However, many individuals with specific phobia are reluctant to seek help, and access to care is lacking due to logistic challenges of accessing, collecting, storing, and/or maintaining stimuli. Virtual reality (VR) exposure therapy may improve upon existing techniques by facilitating access, decreasing cost, and increasing acceptability and effectiveness. The aim of this study is to compare traditional OST with in vivo spiders and a human therapist with a newly developed single-session gamified VR exposure therapy application with modern VR hardware, virtual spiders, and a virtual therapist.

Methods/design: Participants with specific phobia to spiders (N = 100) will be recruited from the general public, screened, and randomized to either VR exposure therapy (n = 50) or traditional OST (n = 50). A behavioral approach test using in vivo spiders will serve as the primary outcome measure. Secondary outcome measures will include spider phobia questionnaires and self-reported anxiety, depression, and quality of life. Outcomes will be assessed using a non-inferiority design at baseline and at 1, 12, and 52 weeks after treatment.

Discussion: VR exposure therapy has previously been evaluated as a treatment for specific phobias, but there has been a lack of high-quality randomized controlled trials. A new generation of modern, consumer-ready VR devices is being released that are advancing existing technology and have the potential to improve clinical availability and treatment effectiveness. The VR medium is also particularly suitable for taking advantage of recent phobia treatment research emphasizing engagement and new learning, as opposed to physiological habituation. This study compares a market-ready, gamified VR spider phobia exposure application, delivered using consumer VR hardware, with the current gold standard treatment. Implications are discussed.

Typ och Nyckelord: Journal specific phobia, exposure therapy, spiders, virtual reality, serious games, gamification, ISSN: 1745-6215

Referens: [Miloff, A., Lindner, P., Hamilton, W., Reuterskiöld, L., Andersson, G., & Carlbring, P. \(2016\). Single-session gamified virtual reality exposure therapy for spider phobia vs. traditional exposure therapy: A randomized-controlled trial. Poster presented at the 8th Scientific Meeting of the International Society for Research on Internet Interventions \(P1.04\), Seattle, USA, 7-9 April 2016.](#)

Abstract: Introduction: Traditional one-session therapy (OST) in which a patient is gradually exposed to feared stimuli for up to 3hrs in a one-session format has been found effective for the treatment of specific phobias. However, many suffering from specific phobia are reluctant to seek help and access to care is lacking. Virtual reality (VR) exposure therapy using a smartphone may improve upon existing techniques by facilitating access, lowering cost, and increasing acceptability and effectiveness. The aim of this study was to compare traditional OST with in-vivo spiders and a human therapist to a newly developed single-session gamified VR exposure therapy

application with modern VR headsets, virtual spiders and a virtual therapist.

Method: Participants with specific phobia to spiders (N=100) were recruited from the general public, screened and randomized to either OST (N=50) or VR exposure therapy (N=50) using the smartphone-based Samsung Gear VR system. A behavioral approach test using in-vivo spiders served as the primary outcome measure. Secondary outcome measures included spider phobia questionnaires, and self-reported anxiety, depression and quality of life. Outcomes were assessed 1-week before and after treatment and at follow-up (12 and 52 weeks).

Results: At the time of submitting this abstract all participants have been included and randomized and a large portion has also received the allotted treatment. However, since the study uses strict blinding, results will not be available until March 2016.

Discussion: VR exposure therapy has previously been evaluated as a treatment for specific phobias but there has been a lack of high-quality randomized controlled trials. A new generation of modern VR devices are being released which advance upon existing technology and have the potential to improve clinical availability and treatment effectiveness.

Conclusion: Preliminary clinical observations suggest that single-session gamified virtual reality exposure therapy using a smartphone is effective for the treatment of spider phobia.

Typ och Nyckelord: Proceedings virtual reality, gamified, exposure therapy, spider phobia

Referens: Mosson, R., Hasson, H., Wallin, L., & von Thiele Schwarz, U. (in press). Exploring the Role of Line Managers in Implementing Evidence-Based Practice in Social Services and Older People Care. *British Journal of Social Work*.

Abstract: This qualitative study explored the vital role of line managers, namely the managerial level directly above employees, in effectively implementing evidence-based practice (EBP) from their own perspectives. Interviews were carried out with twenty-eight line managers within social services and older people care in seven Swedish municipalities. Thematic analysis was performed. Findings revealed that managers in social care perceived their role as important in implementing EBP. However, notable differences were observed between the two settings, where social services managers had more knowledge and held more positive attitudes towards working according to EBP, and described a more active role in the implementation process than managers in older people care. Overall, the implementation of EBP was performed ad hoc rather than systematically, and with little consideration to analysis of needs according to the local context and limited focus on follow-up and sustainability. This study highlighted that line managers in social services and older people care have different prerequisites for implementing EBP, and are greatly dependent on organisational strategies and context. Gaining knowledge of line managers' perceptions is essential for making informed decisions regarding the support required to achieve EBP in social care, and thus for providing the best possible care for clients.

Typ och Nyckelord: Journal implementation, line managers, leadership, evidence-based practice, social care, ISSN: 0045-3102

Referens: Månsson, K.N.T., Salami, A., Carlbring, P., Boraxbekk, C.J., Andersson, G., & Furmark, T. (in press). Structural but not functional neuroplasticity one year after effective cognitive behaviour therapy for social anxiety disorder. *Behavioural Brain Research*.

Abstract: Effective psychiatric treatments ameliorate excessive anxiety and induce neuroplasticity immediately after the intervention, indicating that emotional components in the human brain are rapidly adaptable. Still, the interplay between structural and functional neuroplasticity is poorly understood, and studies of treatment-induced long-term neuroplasticity are rare. Functional and structural magnetic resonance imaging (using 3 T MRI) was performed in 13 subjects with social anxiety disorder on 3 occasions over 1 year. All subjects underwent 9 weeks of Internet-delivered cognitive behaviour therapy in a randomized cross-over design and independent assessors used the Clinically Global Impression-Improvement (CGI-I) scale to determine treatment response. Gray matter (GM) volume, assessed with voxel-based morphometry, and functional blood-oxygen level-dependent (BOLD) responsivity to self-referential criticism were compared between treatment responders and non-responders using 2×2 (group \times time; pretreatment to follow-up) ANOVA. At 1-year follow-up, 7 (54%) subjects were classified as CGI-I responders. Left amygdala GM volume was more reduced in responders relative to non-responders from pretreatment to 1-year follow-up ($Z = 3.67$, Family-Wise Error corrected $p = 0.02$). In contrast to previous short-term effects, altered BOLD activations to self-referential criticism did not separate responder groups at follow-up. The structure and function of the amygdala changes immediately after effective psychological treatment of social anxiety disorder, but only reduced amygdala GM volume, and not functional activity, is associated with a clinical response 1 year after CBT.

Typ och Nyckelord: Journal amygdala, neuroplasticity, long-term, social anxiety disorder, cognitive behavior therapy, ISSN: 0166-4328

Referens: Månsson, K.N.T., Salami, A., Frick, A., Carlbring, P., Andersson, G., Furmark, T., & Boraxbekk, C.-J. (2016). Neuroplasticity in response to cognitive behavior therapy for social anxiety disorder. *Translational Psychiatry*, 6, e727.

Abstract: Patients with anxiety disorders exhibit excessive neural reactivity in the amygdala, which can be normalized by effective treatment like cognitive behavior therapy (CBT). Mechanisms underlying the brain's adaptation to anxiolytic treatments are likely related both to structural plasticity and functional response alterations, but multimodal neuroimaging studies addressing structure-function interactions are currently missing. Here, we examined treatment-related changes in brain structure (gray matter (GM) volume) and function (blood-oxygen level dependent, BOLD response to self-referential criticism) in 26 participants with social anxiety disorder randomly assigned either to CBT or an attention bias modification control treatment. Also, 26 matched healthy controls were included. Significant time \times treatment interactions were found in the amygdala with decreases both in GM volume (family-wise error (FWE) corrected $P_{FWE} = 0.02$) and BOLD responsivity ($P_{FWE} = 0.01$) after successful CBT. Before treatment, amygdala GM volume correlated positively with anticipatory speech anxiety ($P_{FWE} = 0.04$), and CBT-induced reduction of amygdala GM volume (pre-post) correlated positively with reduced anticipatory anxiety after treatment (P_{FWE} less than or equal to 0.05). In addition, we observed greater amygdala neural responsivity to self-referential criticism in socially anxious participants, as compared with controls ($P_{FWE} = 0.029$), before but not after CBT. Further analysis indicated that diminished amygdala GM volume mediated the relationship between decreased neural responsivity and reduced social anxiety after treatment ($P = 0.007$). Thus, our results suggest that improvement-related structural plasticity impacts neural

responsiveness within the amygdala, which could be essential for achieving anxiety reduction with CBT.

Typ och Nyckelord: Journal neuroplasticity, CBT, social anxiety disorder, amygdala, BOLD, ISSN: 2158-3188

Referens: Mäntylä, T., Todorov, I., Kubik, V., & Del Missier, F. (2016). Deadlines in Space: Selective Effects of Coordinate Spatial Processing in Multitasking. Paper presented at the International Meeting of the Psychonomic Society, Granada, Spain, May 5-8, 2016. In *Abstract Book* (p. 74-75).

Abstract: Many everyday activities require coordination and monitoring of multiple deadlines. One way to handle these temporal demands might be to represent future goals and deadlines as a pattern of spatial relations. We examined the hypothesis that spatial ability, in addition to executive functioning, contributes to individual differences in multitasking. Participants completed a multitasking session in which they monitored four digital clocks running at different rates. We predicted and found that individual differences in spatial ability and executive functions were independent predictors of multiple-task performance. Individual differences in spatial ability were also selectively related to multiple-task performance, as only coordinate spatial processing, but not categorical, predicted multitasking, even beyond executive functioning and numeracy. Furthermore, males outperformed females in spatial ability and multitasking and these sex differences generalized to a complex simulation of everyday multitasking. Menstrual changes moderated these effects in that sex differences in coordinate spatial processing and multitasking were observed between males and females in the luteal phase of the menstrual cycle, but not between males and females at menses. Overall, these findings suggest that multiple task performance reflects independent contributions of spatial ability and executive functioning. Furthermore, our results support the distinction of categorical vs. coordinate spatial processing, and suggest that these two basic relational processes are selectively affected by female sex hormones and differentially effective in transforming and handling temporal patterns as spatial relations in the context of multitasking.

Typ och Nyckelord: Proceedings deadlines, spatial processing, multitasking

Referens: Mörtberg, E., Reuterskiöld, L., Tillfors, M., Furmark, T., & Öst, L.-G. (in press). Factor solutions of the Social Phobia Scale (SPS) and the Social Interaction Anxiety Scale (SIAS) in a Swedish population. *Cognitive Behaviour Therapy*.

Abstract: Culturally validated rating scales for social anxiety disorder (SAD) are of significant importance when screening for the disorder, as well as for evaluating treatment efficacy. This study examined construct validity and additional psychometric properties of two commonly used scales, the Social Phobia Scale and the Social Interaction Anxiety Scale, in a clinical SAD population (n = 180) and in a normal population (n = 614) in Sweden. Confirmatory factor analyses of previously reported factor solutions were tested but did not reveal acceptable fit. Exploratory factor analyses (EFA) of the joint structure of the scales in the total population yielded a two-factor model (performance anxiety and social interaction anxiety), whereas EFA in the clinical sample revealed a three-factor solution, a social interaction anxiety factor and two performance anxiety factors. The SPS and SIAS showed good to excellent internal consistency, and discriminated well between patients with SAD and a normal population sample. Both scales showed good convergent validity with an established measure of SAD, whereas the discriminant validity of symptoms of social anxiety and depression could not be confirmed. The optimal cut-off score for SPS and SIAS were 18 and 22 points, respectively. It is concluded that the factor structure and the additional psychometric properties of SPS and SIAS support the use of the scales for assessment in a Swedish population.

Typ och Nyckelord: Journal Social Anxiety Disorder (SAD), Social Phobia Scale (SPS), Social interaction Anxiety Scale (SIAS), psychometric properties, factor structure, ISSN: 1650-6073

Referens: Nilsson, G., Tamm, S., Schwarz, J., Almeida, R., Fischer, H., Kecklund, G., Lekander, M., Fransson, P., & Åkerstedt, T. (in press). Intrinsic brain connectivity after partial sleep deprivation in young and older adults: Results from the Stockholm Sleepy Brain study. *BioRxiv*, 073494.

Abstract: Background: Sleep deprivation has been reported to affect intrinsic brain connectivity, notably in the default mode network, but studies to date have shown inconsistent effects and have largely included young participants. Aims: We aimed to investigate effects of partial sleep deprivation on intrinsic brain connectivity in young and older participants. Methods: Participants aged 20-30 (n = 30) and 65-75 (n = 23) years underwent partial sleep deprivation (3 h sleep) in a cross-over design, with two resting state functional magnetic resonance imaging (fMRI) runs in each session. We assessed intrinsic brain connectivity using independent components analysis (ICA) as well as seed-region analyses of functional connectivity, and also analysed global signal variability, regional homogeneity, and the amplitude of low-frequency fluctuations. Results: Sleep deprivation caused increased global signal variability. In contrast to previous smaller studies, sleep deprivation did not cause major changes in investigated resting state networks, nor did it cause changes in regional homogeneity. Younger participants had higher functional connectivity in most examined resting state networks, as well as higher regional homogeneity in brain areas including anterior and posterior cingulate cortex. Conclusion: We show for the first time that partial sleep deprivation caused increased global signal variability. This outcome should be examined as a potential biomarker for sleepiness using independent data.

Typ och Nyckelord: Journal brain connectivity, sleep deprivation, Stockholm Sleepy Brain

Referens: Nilsson, A., Magnusson, K., Carlbring, P., Andersson, G., & Hellner Gumpert, C. (2016). Effects of added involvement from concerned significant others in internet-delivered CBT treatments for problem gambling: Study protocol for a randomised controlled trial. *BMJ Open*, 6(9):e011974.

Abstract: Introduction: Problem gambling is a public health concern affecting ~2.3% of the Swedish population. Problem gambling also severely affects concerned significant others (CSOs). Several studies have investigated the effect of individual treatments based on cognitive-behavioural therapy (CBT), but less is known of the effect of involving CSOs in treatment. This study aims to compare an intervention based on behavioural couples therapy (BCT), involving a CSO, with an individual CBT treatment to determine their relative efficacy. BCT has shown promising results in working with substance abuse, but this is the first time it is used as an intervention for problem gambling. Both interventions will be internet-delivered, and participants will receive written support and telephone support. Methods and analysis: A sample of 120 couples will be randomised to either the BCT condition, involving the gambler and the CSO, or the CBT condition, involving the gambler alone. Measures will be conducted weekly and at 3, 6 and 12 months follow-up. The primary outcome measure is gambling behaviour, as measured by Timeline Followback for Gambling. This article describes the outline of the research methods, interventions and outcome measures used to evaluate gambling behaviour, mechanisms of change

and relationship satisfaction. This study will be the first study on BCT for problem gambling. Ethics and dissemination: This study has been given ethical approval from the regional ethics board of Stockholm, Sweden. It will add to the body of knowledge as to how to treat problem gambling and how to involve CSOs in treatment. The findings of this study will be published in peer-reviewed journals and published at international and national conferences. Trial registration number NCT02543372; Pre-results.

Typ och Nyckelord: Journal internet-delivered CBT, significant others, problem gambling, ISSN: 2044-6055

Referens: Nilsson, J., & Axelsson, Ö. (2016). Visual Aesthetic Perceptions and Preferences in Conserved Objects of Plain Silk: Comparison of Three Conservation Methods. *Perceptual and Motor Skills*, 122(3), 777-798.

Abstract: Three conservation methods were executed on bonnets in plain monochrome silk, to investigate which method is perceived as the most visually aesthetic; 11 bonnets were produced, 10 given identical damages, and 9 were conserved, 3 with each method. The damage was secured onto a support fabric with laid couching, a long stitch fastened with short perpendicular stitches, or brick couching, short stitches placed like brick-work, or covered with crepeline (a semi-transparent silk). The participants were 30 Swedish textile conservators (29 women; ages 29-78 years, $M = 51.9$, $SD = 12.9$), and 30 museum visitors (20 women; ages 15-74 years, $M = 41.1$, $SD = 18.3$). The participants' task was to rate the bonnets on a 100-point continuous preference scale, based on how visually attractive they found each bonnet. Preferences were compared between the two groups of participants and the conservation methods. The bonnets with crepeline were the most preferred, and those with laid couching were the least preferred, among both groups of participants.

Typ och Nyckelord: Journal textile conservation, silk costumes, aesthetic preferences, ISSN: 0031-5125

Referens: Nilsson, M.E., & Schenkman, B.N. (2016). Blind people are more sensitive than sighted people to binaural sound-location cues, particularly inter-aural level differences. *Hearing Research*, 332, 223-232.

Abstract: Blind people use auditory information to locate sound sources and sound-reflecting objects (echolocation). Sound source localization benefits from the hearing system's ability to suppress distracting sound reflections, whereas echolocation would benefit from "unsuppressing" these reflections. To clarify how these potentially conflicting aspects of spatial hearing interact in blind versus sighted listeners, we measured discrimination thresholds for two binaural location cues: inter-aural level differences (ILDs) and inter-aural time differences (ITDs). The ILDs or ITDs were present in single clicks, in the leading component of click pairs, or in the lagging component of click pairs, exploiting processes related to both sound source localization and echolocation. We tested 23 blind (mean age = 54 y), 23 sighted-age-matched (mean age = 54 y), and 42 sighted-young (mean age = 26 y) listeners. The results suggested greater ILD sensitivity for blind than for sighted listeners. The blind group's superiority was particularly evident for ILD-lag-click discrimination, suggesting not only enhanced ILD sensitivity in general but also increased ability to unsuppress lagging clicks. This may be related to the blind person's experience of localizing reflected sounds, for which ILDs may be more efficient than ITDs. On the ITD-discrimination tasks, the blind listeners performed better than the sighted age-matched listeners, but not better than the sighted young listeners. ITD sensitivity declines with age, and the equal performance of the blind listeners compared to a group of substantially younger listeners is consistent with the notion that blind people's experience may offset age-related decline in ITD sensitivity.

Typ och Nyckelord: Journal sound localization, echolocation, precedence effect, blind, age, ISSN: 0378-5955

Referens: Nordgreen, T., Haug, T., Öst, L.-G., Andersson, G., Carlbring, P., Kvale, G., Tangen, T., Heiervang, E., & Havik, O.E. (2016). Stepped Care Versus Direct Face-to-Face Cognitive Behavior Therapy for Social Anxiety Disorder and Panic Disorder: A Randomized Effectiveness Trial. *Behavior Therapy*, 47(2), 166-183.

Abstract: The aim of this study was to assess the effectiveness of a cognitive behavioral therapy (CBT) stepped care model (psychoeducation, guided Internet treatment, and face-to-face CBT) compared with direct face-to-face (FtF) CBT. Patients with panic disorder or social anxiety disorder were randomized to either stepped care ($n = 85$) or direct FtF CBT ($n = 88$). Recovery was defined as meeting two of the following three criteria: loss of diagnosis, below cut-off for self-reported symptoms, and functional improvement. No significant differences in intention-to-treat recovery rates were identified between stepped care (40.0%) and direct FtF CBT (43.2%). The majority of the patients who recovered in the stepped care did so at the less therapist-demanding steps (26/34, 76.5%). Moderate to large within-groups effect sizes were identified at posttreatment and 1-year follow-up. The attrition rates were high: 41.2% in the stepped care condition and 27.3% in the direct FtF CBT condition. These findings indicate that the outcome of a stepped care model for anxiety disorders is comparable to that of direct FtF CBT. The rates of improvement at the two less therapist-demanding steps indicate that stepped care models might be useful for increasing patients' access to evidence-based psychological treatments for anxiety disorders. However, attrition in the stepped care condition was high, and research regarding the factors that can improve adherence should be prioritized.

Typ och Nyckelord: Journal stepped care, effectiveness, social anxiety disorder, panic disorder, ISSN: 0005-7894

Referens: Norell-Clarke, A., Tillfors, M., Wilmenius, L., Jansson-Fröjmark, M., Holländare, F., & Engström, I. (2016). Insomnia severity mediates between cognitive behavioural therapy for insomnia and depression in a sample with insomnia and depression: New possibilities for treatments of comorbid patients. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden (p. 544). Stockholm: EABCT.

Abstract: Clinical trials have shown that cognitive behavioural therapy for insomnia (CBT-I) may have an effect on both insomnia and depression in comorbid samples, but there is a gap in the knowledge on why CBT-I has an impact on depression. Neuropsychological theories suggest that disturbed sleep may work as a transdiagnostic process that maintains psychopathology. The aim was to test whether CBT-I impacts depressive symptoms through improved sleep, in a sample with insomnia comorbid with major depression and subthreshold depressive symptoms. 64 participants were recruited through advertisements and randomised to receive either CBT-I or an active control (relaxation training: RT) in groups during four bi-weekly sessions. Insomnia (ISI) and depressive severity (BDI-II) were measured pre-, mid- and post-treatment. Mediation analyses were conducted. Insomnia and depressive severity lowered over the course of treatments. CBT-I was superior in reducing insomnia. The main treatment outcomes have been published elsewhere (Norell-Clarke et al, 2015).

The relationship between CBT-I and post-treatment depressive severity was mediated by mid-treatment insomnia severity, which indicates that the effect of CBT-I on depression goes through improved sleep ($b = -4.87$, BCa CI = $-9.21, -1.97$). The results were maintained when pre-treatment insomnia and depressive severity were controlled for ($b = -3.36$, BCa CI = $-8.86, -0.45$). Testing for reciprocity, we found that mid-treatment depressive severity did not mediate between CBT-I and post-treatment insomnia severity. The results support the perpetuating role of insomnia in depression. This may have implications for other psychiatric patient groups with comorbid insomnia. Also, the results indicate that CBT for comorbid patient groups may need to target sleep specifically.

Typ och Nyckelord: Proceedings insomnia, depression, cbt

Referens: Nylén, E.C., Göransson, S., Ishäll, L., Kylin, C., Aronsson, G., Lindfors, P., & Sverke, M. (in press). A pilot-study of a worksite based participatory intervention program: Its feasibility and short-term effects on work climate and attitudes in human service employees. *WORK: A Journal of Prevention, Assessment, and Rehabilitation*.

Abstract: BACKGROUND: Psychosocial factors, including job demands and poor resources, have been linked to stress, health problems, and negative job attitudes. However, worksite based interventions and programs targeting psychosocial factors may change employees' perceptions of their work climate and work attitudes. OBJECTIVE: This pilot study describes a newly developed worksite based participatory organizational intervention program that was tested in the social service sector. It is evaluated using participants' perceptions of the intervention to investigate its acceptability as a feature of feasibility and its short-term effects on work climate factors (job demands and resources) and work-related attitudes. METHODS: Forty employees of a Swedish social service unit provided self-reports before and after the intervention. RESULTS: As for effects, quantitative role overload and social support decreased while turnover intention increased. Responses to an open-ended question showed that participants considered the intervention program valuable for addressing issues relating to the psychosocial work climate. CONCLUSIONS: Although the findings are preliminary, it was possible to carry out this worksite based participatory organizational program in this particular setting. Also, the preliminary findings underscore the challenges associated with designing and implementing this type of intervention program, thus adding to the methodological discussion on implementation and evaluation.

Typ och Nyckelord: Journal job demands, job resources, psychosocial factors, prevention, ISSN: 1051-9815

Referens: Obermeyer, S., Kubik, V., Schaich, A., Kolling, T., & Knopf, M. (in press). Learning to recognize younger faces at an older age. *Aging Clinical and Experimental Research*.

Abstract: Objectives: Processing of horizontal face cues has been shown to be an important element in face recognition of adults aged up to 30 years. In contrast, horizontally aligned facial features do not appear to contribute to older adults' (60–75 years) recognition in a similar way. To this end, we investigated potential learning effects on the ability to recognize faces based on horizontal features. Previous research suggests face recognition based on all face information experiences an accelerated decline after the age of 70. However, recognition based only on horizontal face information has not yet been studied in old age (75+ years of age). Thus, we investigated whether older adults (aged up to as well as starting at 75 years) can learn to recognize faces based on horizontal face cues alone. Method: One younger and two older adult groups (20–30, 60–75, and 75+ years) were familiarized with a high and a low amount of previously unfamiliar faces—some containing all face cues and others containing only horizontal face cues (reduced information). Subsequently, all groups received a recognition test. Results: Repeated learning increased natural face recognition for all three age groups when all face cues were available. However, increases in face recognition were only observed for younger adults when horizontal face cues were only available. Discussion: The importance of horizontally aligned spatial frequencies for recognizing human faces is lessened before the age of 60 (and plateaus thereon), whereas recognition of stimuli containing all face cues is still capable of improvement.

Typ och Nyckelord: Journal face recognition, aging, development, memory, ISSN: 1720-8319

Referens: Olofsson, J.K., Josefsson, M., Ekström, I., Wilson, D., Nyberg, L., Nordin, S., Nordin Adolfsson, A., Adolfsson, R., Nilsson, L.-G., & Larsson, M. (2016). Long-term episodic memory decline is associated with olfactory deficits only in carriers of ApoE-ε4. *Neuropsychologia*, 85, May 2016, 1-9.

Abstract: The ε4 allele of the Apolipoprotein E gene is a genetic risk factor for late-onset dementia of the Alzheimers' type (DAT), which is characterized by loss of both episodic memory and olfactory functions. Little is known about the possible role of ε4 in the association between ongoing episodic memory decline and olfactory deficits in the general population, but such information is relevant in determining the relevance of olfaction as a marker of DAT risk. The present study was based on a large, population-based sample ($n=1087$, aged 45–90 years, of which 324 were ε4-carriers). Episodic memory change rates were established using data collected every 5 years for a 10–20 year interval leading up to an olfactory assessment using the Scandinavian Odor Identification Test at the last wave of data collection. Participants were classified according to whether or not their episodic memory ability declined more rapidly than the age-typical norm (by $>1SD$). Our main result is that only in ε4-carriers was episodic memory decline associated with odor identification impairment. In individuals without ε4, odor identification was unrelated to episodic memory decline status. Follow-up analyses indicated that this moderation by ε4 was due to the olfactory nature of the identification test, and that the effect was not caused by 63 individuals with dementia. Our results suggest that the ε4 determines the functional association between ongoing episodic memory decline and olfaction. These findings are consistent with the notion that ε4-carriers with DAT, compared to non-carriers, display a cortical atrophy pattern that is more focused on mediotemporal lobe regions supporting olfactory and episodic memory functions. Olfactory and memory assessments might provide complementary information on mediotemporal atrophy prior to clinical dementia onset, but the ε4 should be considered when using olfactory assessment as an early-stage indicator.

Typ och Nyckelord: Journal dementia, Alzheimer disease, olfactory perception, memory, aging, mild cognitive impairment, ISSN: 0028-3932

Referens: Olsson, M.B., Lundström, S., Westerlund, J., Giacobini, M.B., Gillberg, C., & Fernell, E. (2016). Preschool to School in Autism: Neuropsychiatric Problems 8 Years After Diagnosis at 3 Years of Age. *Journal of Autism and Developmental Disorders*, 46(8), 2749-2755.

Abstract: The study presents neuropsychiatric profiles of children aged 11 with autism spectrum disorder, assessed before 4.5 years, and after interventions. The original group comprised a community sample of 208 children with ASD. Parents of 128 participated-34 with average intellectual function, 36 with borderline intellectual function and 58 with intellectual disability. They were interviewed using the Autism-Tics, AD/HD and other Comorbidities interview. Criteria for a clinical/subclinical proxy of ASD were met by 71, 89 and 95 %, respectively. Criteria for at least one of ASD, AD/HD, Learning disorder or Developmental Coordination Disorder were met by 82, 94 and 97 %. More than 90 % of children with a preschool diagnosis of ASD have remaining neuropsychiatric problems at 11, despite early intervention.

Typ och Nyckelord: Journal A-TAC interview, autism spectrum disorder, ASD, AD/HD, intellectual disability, learning disorder, oppositional defiant disorder, developmental coordination disorder, outcome, follow-up, ISSN: 0162-3257

Referens: Papp, M.E., Lindfors, P., Nygren-Bonnier, M., Gullstrand, L., & Wändell, P.E. (2016). Effects of High-Intensity Hatha Yoga on Cardiovascular Fitness, Adipocytokines, and Apolipoproteins in Healthy Students: A Randomized Controlled Study. *The Journal of Alternative and Complementary Medicine*, 22(1), 81-87.

Abstract: Background: Yoga exercises are often used as a form of body and mind exercise to increase performance. However, knowledge about the physiologic effects of performing high-intensity Hatha yoga exercises over a longer time period remains limited.

Objective: To investigate the effects of high-intensity yoga (HIY) on cardiovascular fitness (maximal oxygen consumption, estimated from the Cooper running test), ratings of perceived exertion (RPE), heart rate (HR), heart rate recovery (HRR), blood pressure (BP), adipocytokines, apolipoprotein A1 (ApoA1), apolipoprotein B (ApoB), and glycosylated hemoglobin (HbA1c) in healthy students.

Methods: The 44 participants (38 women and 6 men; median age, 25 years [range, 20–39 years]) were randomly assigned to an HIY or a control group. The HIY program was held for 6 weeks (60 minutes once a week). Cardiovascular fitness, RPE, HR, HRR, BP, adipocytokines, HbA1c, ApoA1, and ApoB were measured at baseline and after 6 weeks in both groups.

Results: HIY had no significant effects on cardiovascular fitness (mean dose: 390 minutes [range, 210–800 minutes]), HR, HRR, BP, or any of the blood parameters. However, ApoA1 (1.47 ± 0.17 to 1.55 ± 0.16 g/L; $p = 0.03$) and adiponectin (8.32 ± 3.32 to 9.68 ± 3.83 mg/L; $p = 0.003$) levels increased significantly in the HIY group after 6 weeks.

Conclusions: Six weeks of HIY did not significantly improve cardiovascular fitness. However, ApoA1 and adiponectin levels increased significantly in the HIY group. This finding suggests that HIY may have positive effects on blood lipids and an anti-inflammatory effect.

Typ och Nyckelord: Journal Hatha yoga, cardiovascular fitness, adipocytokines, apolipoproteins, anti-inflammatory, ISSN: 1075-5535

Referens: Papp, M.E., Lindfors, P., Wandell, P.E., & Nygren-Bonnier, M. (in press). Effects of yogic exercises on functional capacity, lung function and quality of life in participants with obstructive pulmonary disease: A randomized controlled study. *European Journal of Physical and Rehabilitation Medicine*.

Abstract: BACKGROUND: Knowledge of hatha yogic exercises, the most used yoga style, for increasing functional capacity in patients with obstructive pulmonary diseases remains limited. AIM: The aim was to evaluate the effects and feasibility of hatha yoga (HY) compared to a conventional training program (CTP) on functional capacity, lung function and quality of life in patients with obstructive pulmonary diseases. DESIGN: RCT (randomized clinical trial). SETTING: The study was performed at the Karolinska University Hospital, Stockholm, Sweden among outpatients. POPULATION: Thirty-six patients with obstructive pulmonary disease. METHODS: Forty patients were randomized with 36 (24 women, median age=64, age range: 40-84 yrs) participating in HY (n=19) or CTP (n=17). Both HY and CTP involved a 12-week program with a 6-month follow-up. Functional capacity (using the 6-minute walk test, 6MWT), lung function (spirometry), respiratory muscle strength (respiratory pressure meter), oxygen saturation (SpO2), breathlessness (Borg), respiratory rate (f) and disease-specific quality of life (CRQ) were measured at baseline, at 12 weeks and at a 6-month follow-up. RESULTS: Testing for interactions (group x time) with ANOVAs showed significant effects on the CRQ fatigue ($p=0.04$) and emotional ($p=0.02$) domains, with improvements in the CTP group after the 12-week intervention ($p=0.02$ and 0.01 , respectively) but not in the HY group. Within each group, significant improvements emerged for the 6MWD after 12-week intervention (HY: mean difference 32.6 m; CI 10.1-55.1, $p=0.014$; CTP: mean difference 42.4 m; CI 17.9-67.0, $p=0.006$). Within-group improvements in CRQ appeared in both groups. Within the HY group, the respiratory rate (f) decreased and SpO2 increased. Improved effects after follow-up emerged only for the CTP group for 6MWD ($p=0.04$), diastolic blood pressure ($p=0.05$) and CRQ emotional domain ($p=0.01$). CONCLUSIONS: After 12 weeks, 6MWD improved significantly within both groups. Within the HY group, improvements in the CRQ mastery domain, f and SpO2 emerged. Within the CTP group, there were improvements in lung function parameter forced vital capacity (FVC), respiratory muscle strength and all CRQ-domains. The CTP also exhibited effects on CRQ after the 6months follow-up. CLINICAL REHABILITATION IMPACT: Similar effects of HY and CTP show that HY seems feasible and safe as a form of physical exercise for pulmonary disease patients. As part of the rehabilitation, HY may constitute an alternative to other physical training activities and may be a useful addition to formal rehabilitation programs.

Typ och Nyckelord: Journal asthma, pulmonary disease, chronic obstructive, meditative movement, yoga, ISSN: 1973-9087

Referens: Papp, M.E., Wändell, P.E., Lindfors, P., & Nygren-Bonnier, M. (2016). Effects of yogic exercises on physical capacity and health in patients with obstructive pulmonary disease. Proceedings from the Fourth Annual Conference of The European Association of Psychosomatic Medicine, June 16-18, Umeå, Sweden.

Abstract: Background: Yogic exercises have been shown to increase functional capacity and decrease symptoms in patients with obstructive pulmonary diseases. However, the knowledge regarding physiological and mental effects of hatha yogic exercises and breathing exercises over longer time periods in patients with obstructive pulmonary diseases remains limited. The aim of this study was to investigate the effects of hatha yoga (HY) compared to an individual program of strength and endurance training (IT) on functional capacity, pulmonary function, perceived exertion, disease specific symptoms and oxygen saturation in patients with obstructive pulmonary diseases. Method: 36 patients (23 women, median age = 64, age range: 40–84 yrs) were

randomized into HY (n = 19) or IT (n = 17). Both HY and IT involved a 12-week program. Functional capacity (estimated from a 6 minute walk test (6MWT), spirometry, oxygen saturation, perceived exertion and a disease specific chronic respiratory questionnaire (CRQ) were measured at baseline, at 12 weeks and at 6 months. Results: Significant improvements emerged within each group on 6MWT (HY, baseline: 593.5±116.4, after 12 weeks: 626.2±111.6, p = 0.014; IT, baseline 502.3±136.3, after 12 weeks: 544.8±138.5, p=0.002). For IT but not HY, these improvements sustained at 6 months. CRQ showed significant improvement in the domain mastery for the HY group and in all domains in the IT group. Conclusion: Twelve weeks of HY and IT improved functional capacity in both groups with no significance between group effects. However, at the 6-month follow-up effects sustained in the IT but not in the HY group. The IT group, showed self-reported disease-specific improvements across all domains while HY group showed improvements in the mastery domain only. This suggests that both IT and HY have positive short-term effects while IT has long-term effects on functional capacity.

Typ och Nyckelord: Proceedings yoga, physiotherapy, prevention

Referens: Papp, M.E., Wändell, P.E., Lindfors, P., & Nygren-Bonnier, M. (2016). Effects of yogic exercises on physical capacity and health in patients with obstructive pulmonary disease. Abstract Book WONCA Europe Copenhagen 2016. June 15-18 2016, Copenhagen, Denmark.

Abstract: Background and Aim: Yogic exercises have been shown to increase functional capacity and decrease symptoms in patients with obstructive pulmonary diseases. However, the knowledge regarding physiological and mental effects of hatha yogic exercises and breathing exercises over longer time periods in patients with obstructive pulmonary diseases remains limited. The aim of this study was to investigate the effects of hatha yoga (HY) compared to an individual program of strength and endurance training (IT) on functional capacity, pulmonary function, perceived exertion, disease specific symptoms and oxygen saturation in patients with obstructive pulmonary diseases. Methods: 36 patients (23 women, median age = 64, age range: 40–84 yrs) were randomized into HY (n = 19) or IT (n = 17). Both HY and IT involved a 12-week program. Functional capacity (estimated from a 6 minute walk test (6MWT), spirometry, oxygen saturation, perceived exertion and a disease specific chronic respiratory questionnaire (CRQ) were measured at baseline, at 12 weeks and at 6 months. Results: Significant improvements emerged within each group on 6MWT (HY, baseline: 593.5±116.4, after 12 weeks: 626.2±111.6, p = 0.014; IT, baseline 502.3±136.3, after 12 weeks: 544.8±138.5, p= 0.002). for IT but not HY, these improvements sustained at 6 months. CRQ showed significant improvement in the domain mastery for the HY group and in all domains in the IT group. Conclusions: Twelve weeks of HY and IT improved functional capacity in both groups with no significant between group effects. However, at the 6-month follow-up effects sustained in the IT but not in the HY group. The IT group, showed self-reported disease-specific improvements across all domains while HY group showed improvements in the mastery domain only. This suggests that both IT and HY have positive short-term effects while IT has long-term effects on functional capacity.

Typ och Nyckelord: Proceedings yoga, physiotherapy, prevention

Referens: Peira, N., Ziaei, M., & Persson, J. (2016). Age differences in brain systems supporting transient and sustained processes involved in prospective memory and working memory. *NeuroImage*, 125, 745-755.

Abstract: In prospective memory (PM), an intention to act in response to an external event is formed, retained, and at a later stage, when the event occurs, the relevant action is performed. PM typically shows a decline in late adulthood, which might affect functions of daily living. The neural correlates of this decline are not well understood. Here, 15 young (6 female; age range = 23–30 years) and 16 older adults (5 female; age range = 64–74 years) were scanned with fMRI to examine age-related differences in brain activation associated with event-based PM using a task that facilitated the separation of transient and sustained components of PM. We show that older adults had reduced performance in conditions with high demands on prospective and working memory, while no age-difference was observed in low-demanding tasks. Across age groups, PM task performance activated separate sets of brain regions for transient and sustained responses. Age-differences in transient activation were found in fronto-striatal and MTL regions, with young adults showing more activation than older adults. Increased activation in young, compared to older adults, was also found for sustained PM activation in the IFG. These results provide new evidence that PM relies on dissociable transient and sustained cognitive processes, and that age-related deficits in PM can be explained by an inability to recruit PM-related brain networks in old age.

Typ och Nyckelord: Journal fMRI, aging, working memory, prospective memory, ISSN: 1053-8119

Referens: Persson, N., Ebner, N.C., Lin, T., & Fischer, H. (2016). Functional Correlates of Personality and Emotional Faces in Young and Older Adults. In 2016 Annual Meeting Program (p. 79). 23rd Annual Meeting of the Cognitive Neuroscience Society, April 2-5, 2016, New York, USA.

Abstract: Individual differences in personality may affect perceptions of emotional states in others. Studies investigating the link between personality and blood-oxygen-level dependent (BOLD) activation to facial expressions of emotion are scarce. We assessed the influence of personality on peak BOLD activation from functional magnetic resonance imaging (fMRI) in the middle frontal (MFG), inferior frontal (IFG), and insula (IN) gyri to happy and angry faces contrasted with a low-level baseline, in young (n= 30, 20-31 years) and older (n=30, 65-74 years) adults, using a facial emotion identification paradigm. Self-reported information about neuroticism, extraversion, and openness was included (NEO-PI). Latent difference score models gauged the influence of personality on BOLD activation. Individuals with higher levels of neuroticism had decreased BOLD in left IN and right IFG and in the MFG to angry faces, after accounting for age. Greater openness predicted activation of IN, controlling for the influence of age. Age magnified the effect of openness and extraversion on BOLD response to angry facial expressions, to greater activation in older adults. Inter-individual differences in personality did not explain BOLD activation to happy faces. Our findings suggest that the personality trait neuroticism is associated with increased neuronal response to negative (angry) cues in key structures associated with emotional processing, IFG, MFG and IN. Greater IN activation in more extraverted and open older compared to young individuals may be of importance for age-specific differences in emotional processing.

Typ och Nyckelord: Proceedings personality, emotional faces, adults, BOLD, fMRI

Referens: Persson, N., Ghisletta, P., Dahle, C.L., Bender, A.R., Yang, Y., Yuan, P., Daugherty, A.M., & Raz, N. (2016). Regional brain shrinkage and change in cognitive performance over two years: The

bidirectional influences of the brain and cognitive reserve factors. *NeuroImage*, 126, 15-26.

Abstract:

We examined relationships between regional brain shrinkage and changes in cognitive performance, while taking into account the influence of age, vascular risk, Apolipoprotein E variant and socioeconomic status. Regional brain volumes and cognitive performance were assessed in 167 healthy adults (age 19–79 at baseline), 90 of whom returned for the follow-up after two years. Brain volumes were measured in six regions of interest (ROIs): lateral prefrontal cortex (LPFC), prefrontal white matter (PFw), hippocampus (Hc), parahippocampal gyrus (PhG), cerebellar hemispheres (CbH), and primary visual cortex (VC), and cognitive performance was evaluated in three domains: episodic memory (EM), fluid intelligence (Gf), and vocabulary (V). Average volume loss was observed in Hc, PhG and CbH, but reliable individual differences were noted in all examined ROIs. Average positive change was observed in EM and V performance but not in Gf scores, yet only the last evidenced individual differences in change. We observed reciprocal influences among neuroanatomical and cognitive variables. Larger brain volumes at baseline predicted greater individual gains in Gf, but differences in LPFC volume change were in part explained by baseline level of cognitive performance. In one region (PFw), individual change in volume was coupled with change in Gf. Larger initial brain volumes did not predict slower shrinkage. The results underscore the complex role of brain maintenance and cognitive reserve in adult development.

Typ och Nyckelord: Journal memory, fluid abilities, volume, longitudinal, MRI, prefrontal cortex, white matter, ISSN: 1053-8119

Referens:

Persson, N., Lavebratt, C., Sundström, A., & Fischer, H. (2016). Pulse Pressure magnifies the effect of COMT Val158Met on 15 Year Episodic Memory Trajectories. *Frontiers in Aging Neuroscience*, 8, 34.

Abstract:

We investigated whether a physiological marker of cardiovascular health, pulse pressure (PP), and age magnified the effect of the functional COMT Val158Met (rs4680) polymorphism on 15-years cognitive trajectories [episodic memory (EM), visuospatial ability, and semantic memory] using data from 1585 non-demented adults from the Betula study. A multiple-group latent growth curve model was specified to gauge individual differences in change, and average trends therein. The allelic variants showed negligible differences across the cognitive markers in average trends. The older portion of the sample selectively age-magnified the effects of Val158Met on EM changes, resulting in greater decline in Val compared to homozygote Met carriers. This effect was attenuated by statistical control for PP. Further, PP moderated the effects of COMT on 15-years EM trajectories, resulting in greater decline in Val carriers, even after accounting for the confounding effects of sex, education, cardiovascular diseases (diabetes, stroke, and hypertension), and chronological age, controlled for practice gains. The effect was still present after excluding individuals with a history of cardiovascular diseases. The effects of cognitive change were not moderated by any other covariates. This report underscores the importance of addressing synergistic effects in normal cognitive aging, as the addition thereof may place healthy individuals at greater risk for memory decline.

Typ och Nyckelord: Journal cognition, aging, COMT, hypertension, longitudinal, single nucleotide polymorphism, SNP, ISSN: 1663-4365

Referens:

Persson, N., Persson, J., & Fischer, H. (2016). Effects of the gene coding for DARPP-32 (PPP1R1B) on the prefrontal cortex and declarative memory. Poster presented at 22nd Annual Meeting of the Organization for Human Brain Mapping, June 26-30, 2016, Geneva, Switzerland. Poster 3728.

Abstract:

Introduction: Both glutamate and dopamine can influence the prefrontal cortex and formation of memories through long-term potentiation (1). The frontal cortex itself is rich in glutamatergic and dopaminergic cells (2) and has been identified as an important site for the mediation of the behavioral effects of glutamatergic and dopaminergic agents (3–5). The PPP1R1B gene influences DARPP-32 availability in the frontal lobes. A allelic carriers (rs879606), have higher enzyme activity of DARPP-32, than G carriers (6). DARPP-32 integrates dopaminergic and glutaminergic transmission (7), and DARPP-32 concentrations can further influence cortical gray matter integrity (8). The individuals' age may enhance, or attenuate the influence of genetic variation on the brain and cognitive functions, due to additional impact from neuronal processes, relating to brain maturation in younger age and brain reduction in older age. We therefore wanted to investigate the effects of the gene coding for DARPP-32 (rs879606, in PPP1R1B) on frontal cortical volumes and declarative memory (episodic recall and semantic memory).

Methods: Data was used from 61 younger and older adults (°, 54%), from the following regions of interest (ROIs): orbito-frontal cortex (OFC), inferior prefrontal cortex (iPFC), medial prefrontal cortex (mPFC), the superior prefrontal cortex (sPFC), and the visual cortex (VC) (the calcarine fissure; cuneus), applying Freesurfer image analysis suite. Gray matter volumes were derived from gradient echo T1-weighted images acquired by a 3-Tesla scanner (Siemens Magnetom Tim Trio), using a 32-channel head coil. A series of structural equation models with latent variables were performed to assess: (1) simple genetic effects on regional brain volumes and memory. (2) We further investigated if the individuals' age could magnify the genetic effects on brain volumes and memory performance. (3) Last, we assessed if size of regional brain volumes could mediate the relationship between the rs879606 polymorphism and declarative memory.

Results: We found that the major allelic variant (G) in the single nucleotide polymorphism (SNP): rs879606 in the PPP1R1B gene influenced both frontal gray matter volume and episodic memory (EM). Homozygous carriers of the low activity G allele had larger frontal volumes and more accurate recall of episodic information. The effect sizes were moderate for mPFC (19.1% explained variance), and OFC (14.9%) and smaller for iPFC (9.4%), and EM (5%) (moderate: >10%(9)). The gene-related difference in mPFC was moderated by age, so that younger GG carriers had larger volumes in this region, than A carriers. Regional brain volumes in the mPFC, OFC, and iPFC mediated the relationship between rs879606 and EM. No effects were present for semantic memory, the superior part of the PFC and the VC.

Conclusions: The present study replicates previous associations between cognitive performance and rs879606 (10), and shed light on the potential influence of rs879606 on structural integrity of the frontal lobes. The influence of younger age on the relationship between rs879606 and the mPFC region may reflect gene-related variation in post adolescence brain maturation. The medial part of the frontal lobes is subject to dynamic changes through young adulthood (11) and DARPP-32 can influence dendritogenesis, through glutamatergic pathways (12). The mediated effect of the frontal lobes on EM recall may reflect a pathway by which genomic differences lead to variations at cellular levels of the frontal lobes that result in change in cognition. The findings reported herein need further replication from experimental reports including direct measures of glutamate and dopamine integration to determine the specific directions of causality.

Typ och Nyckelord: Proceedings aging, dopamine, glutamate, morphometrics, normal human structural MRI

- Referens:** Powers, M.B., & [Carlbring, P.](#) (2016). Technology: Bridging the Gap from Research to Practice. *Cognitive Behaviour Therapy*, 45(1), 1-4.
- Abstract:** Anxiety disorders are the most common mental disorders and they account for approximately one-third of all mental health care costs. Fortunately, meta-analyses show exposure-based therapy is effective for most patients with anxiety disorders. Based on such findings, international treatment guidelines recommend exposure therapy for anxiety disorders as the gold standard. For example, the Institute of Medicine stated "the evidence is sufficient to conclude the efficacy of exposure therapies in the treatment of PTSD" (p. 97) but they did not find sufficient evidence for any other psychotherapy or pharmacotherapy. Following these guidelines should be uncomplicated, but in general therapists seem to prefer to use their clinical experience rather than research findings to improve their practice.
- Although well supported for over 50 years, most people with anxiety disorders still do not receive exposure therapy. In fact, most people with emotional disorders do not receive any treatment. This gap in what is known and what is available to patients is frustrating. Examination of obstacles to dissemination reveals how recent advances in technology may help bridge the gap. Below we briefly review some of the proposed obstacles to successful dissemination and potential technological solutions for each.
- Typ och Nyckelord:** Journal anxiety disorders, exposure-based therapy, technological solutions, VR, ISSN: 1650-6073
- Referens:** Preis, A., Hafke-Dys, H., [Szychowska, M.](#), Kocinski, J., & Felcyn, J. (2016). Audio-visual interaction of environmental noise. *Noise Control Engineering Journal*, 64(1), 34-43.
- Abstract:** Currently research into the psychological evaluation of noise in daily life is carried out without taking into account the sense of sight. The human senses interact with each other; thus some information coming from one sense can be skipped or ignored in favor of information coming from another sense, leading to completely different reactions or behavior. The aim of this paper is to verify, on the basis of psychophysical experiments, how a human being processes audio-visual information coming from the different environmental noises which can be encountered in daily life. The experiment was divided into three parts: auditory, visual, and audio-visual. In each part of the experiment, the ICBEN scale (0-10) was used to rate the presented stimuli. In the first part only audio stimuli were presented, and subjects were asked to rate their annoyance with the sound. In the second part of the experiment, the participants were asked to rate how pleasant the presented video clips were. Finally, in the last part of the experiment, participants were presented with a compatible and incompatible mix of audio and visual stimuli and asked to rate their annoyance. We found that several audio stimuli were assessed differently, to a significant extent, by listeners after video clips were added to them. © 2016 Institute of Noise Control Engineering.
- Typ och Nyckelord:** Journal audio-visual interaction, environment, noise, ISSN: 0736-2501
- Referens:** Price, R.B., Wallace, M., Kuckertz, J.M., Amir, N., Graur, S., Cummings, L., Popa, P., [Carlbring, P.](#), & Bar-Haim, Y. (2016). Pooled patient-level meta-analysis of children and adults completing a computer-based anxiety intervention targeting attentional bias. *Clinical Psychology Review*, 50, 37-49.
- Abstract:** Computer-based approaches, such as Attention Bias Modification (ABM), could help improve access to care for anxiety. Study-level meta-analyses of ABM have produced conflicting findings and leave critical questions unresolved regarding ABM's mechanisms of action and clinical potential. We pooled patient-level datasets from randomized controlled trials of children and adults with high-anxiety. Attentional bias (AB) towards threat, the target mechanism of ABM, was tested as an outcome and a mechanistic mediator and moderator of anxiety reduction. Diagnostic remission and Liebowitz Social Anxiety Scale (LSAS) were clinical outcomes available in enough studies to enable pooling. Per-patient data were obtained on at least one outcome from 13/16 eligible studies [86% of eligible participants; n = 778]. Significant main effects of ABM on diagnostic remission (ABM—22.6%, control—10.8%; OR = 2.57; p = 0.006) and AB (β^* (95%CI) = - 0.63 (- 0.83, - 0.42); p < 0.00005) were observed. There was no main effect of ABM on LSAS. However, moderator analyses suggested ABM was effective for patients who were younger (≤ 37 y), trained in the lab, and/or assessed by clinicians. Under the same conditions where ABM was effective, mechanistic links between AB and anxiety reduction were supported. Under these specific circumstances, ABM reduces anxiety and acts through its target mechanism, supporting ABM's theoretical basis while simultaneously suggesting clinical indications and refinements to improve its currently limited clinical potential.
- Typ och Nyckelord:** Journal attentional bias, attention bias modification, attention training, anxiety, patient-level meta-analysis, ISSN: 0272-7358
- Referens:** [Ramnerö, J.](#), Folke, F., & Kanter, J.W. (2016). A learning theory account of depression. *Scandinavian Journal of Psychology*, 57(1), 73-82.
- Abstract:** Learning theory provides a foundation for understanding and deriving treatment principles for impacting a spectrum of functional processes relevant to the construct of depression. While behavioral interventions have been commonplace in the cognitive behavioral tradition, most often conceptualized within a cognitive theoretical framework, recent years have seen renewed interest in more purely behavioral models. These modern learning theory accounts of depression focus on the interchange between behavior and the environment, mainly in terms of lack of reinforcement, extinction of instrumental behavior, and excesses of aversive control, and include a conceptualization of relevant cognitive and emotional variables. These positions, drawn from extensive basic and applied research, cohere with biological theories on reduced reward learning and reward responsiveness and views of depression as a heterogeneous, complex set of disorders. Treatment techniques based on learning theory, often labeled Behavioral Activation (BA) focus on activating the individual in directions that increase contact with potential reinforcers, as defined ideographically with the client. BA is considered an empirically well-established treatment that generalizes well across diverse contexts and populations. The learning theory account is discussed in terms of being a parsimonious model and ground for treatments highly suitable for large scale dissemination.
- Typ och Nyckelord:** Journal depression, learning theory, behavioral principles, behavior activation, ISSN: 0036-5564
- Referens:** [Ramnerö, J.](#), & Jansson, B. (2016). The stability of treatment goals, as assessed by a Swedish version of the Bern Inventory of Treatment Goals. *Nordic Psychology*, 68(1), 30-39.

Abstract: Formulating treatment goals has been shown to be an area of vital concern for both outcome and treatment processes. However, it is not as yet an area of structured routine assessment, either in clinical practice or in research. One possible explanation for this is the lack of validated and readily available goal assessment procedures. The present study investigated the test-retest stability of a Swedish translation of the checklist version of the Bern Inventory of Treatment Goals (BIT-C) among 30 patients in primary care. We calculated the consistency of the endorsement of the different therapeutic goal categories over a 2-week period prior to treatment. There were no changes in symptoms or quality-of-life-related measures between the two assessment points. Overall, the goal category items in BIT-C were found to demonstrate moderate to substantial reliability. In conclusion, even though our study was small, it provided initial psychometric support for the Swedish version of BIT-C as a clinically useful tool for the assessment of treatment goals.

Typ och Nyckelord: Journal treatment goals, BIT-C, goal assessment, goal stability, ISSN: 1901-2276

Referens: [Ramnerö, J., & Jansson, B. \(2016\). Treatment goals and their attainment: a structured approach to assessment and evaluation. *Cognitive Behaviour Therapist*, 9, e2.](#)

Abstract: Treatment goals are considered a vital part of therapeutic work, and their role is often emphasized in cognitive behavioural therapy (CBT). However, the attainment of goals is rarely accounted for in terms of treatment outcome. In this study, we set out to investigate a structured format for goal assessment and goal attainment in CBT delivered as routine care. We were especially interested in the sensitivity to change in perceived goal attainment. Patients completed a self-administered version of the Bern Inventory of Treatment Goals (BIT-C) and rated their perceived attainment on a maximum of five prioritized goals before and after 12 weeks of treatment, along with measures on anxiety, depression and health-related quality of life. The results indicated that the prioritized goals only partially correspond to disorder-specific concerns, and that perceived proximity to treatment goals is clearly associated with improvements following treatment. The results are discussed in terms of the BIT-C being a promising tool for use in clinical settings in assessing treatment goals as well as in evaluating the attainment of these goals.

Typ och Nyckelord: Journal Bern Inventory of Treatment Goals, goal assessment, goal attainment, treatment goals, ISSN: 0965-5794

Referens: [Razumiejczyk, E., Pereyra Girardi, C., del Carme Crivello, M., Fioramontia, M., Macbeth, G., & Marmolejo-Ramos, F. \(in press\). Crossmodal interference between language and flavour. *Revista Latinoamericana de Psicología*.](#)

Abstract: This work describes crossmodal Stroop interference in flavoural, visual, and auditory representations. A mixed design was used with two randomized groups. As a between-subjects factor, words were presented in visual (group 1) or auditory (group 2) forms. Stimulus congruency (congruent, incongruent, and control) was defined as a within-subjects factor. Reaction times and the number of correct answers were recorded. The results showed a minor crossmodal Stroop interference in conditions of congruency. In contrast, with incongruent and control stimuli, reaction times increased and accuracy rates diminished in both experimental groups. Data from the two groups were compared, and it was concluded that the interference was greater when the distractor was written than when it was spoken. These results are discussed in terms of the difficulty of visual linguistic representation and in relation to previous studies.

Typ och Nyckelord: Journal stroop, flavour, vision, hearing, crossmodality, ISSN: 0120-0534

Referens: [Richter, A., von Thiele Schwarz, U., Lornudd, C., Lundmark, R., Mosson, R., & Hasson, H. \(2016\). iLead - a transformational leadership intervention to train healthcare managers' implementation leadership. *Implementation Science*, 11:108.](#)

Abstract: Background: Leadership is a key feature in implementation efforts, which is highlighted in most implementation frameworks. However, in studying leadership and implementation, only few studies rely on established leadership theory, which makes it difficult to draw conclusions regarding what kinds of leadership managers should perform and under what circumstances. In industrial and organizational psychology, transformational leadership and contingent reward have been identified as effective leadership styles for facilitating change processes, and these styles map well onto the behaviors identified in implementation research. However, it has been questioned whether these general leadership styles are sufficient to foster specific results; it has therefore been suggested that the leadership should be specific to the domain of interest, e.g., implementation. To this end, an intervention specifically involving leadership, which we call implementation leadership, is developed and tested in this project. The aim of the intervention is to increase healthcare managers' generic implementation leadership skills, which they can use for any implementation efforts in the future.

Methods/design: The intervention is conducted in healthcare in Stockholm County, Sweden, where first- and second-line managers were invited to participate. Two intervention groups are included, including 52 managers. Intervention group 1 consists of individual managers, and group 2 of managers from one division. A control group of 39 managers is additionally included. The intervention consists of five half-day workshops aiming at increasing the managers' implementation leadership, which is the primary outcome of this intervention. The intervention will be evaluated through a mixed-methods approach. A pre- and post-design applying questionnaires at three time points (pre-, directly after the intervention, and 6 months post-intervention) will be used, in addition to process evaluation questionnaires related to each workshop. In addition, interviews will be conducted over time to evaluate the intervention.

Discussion: The proposed intervention represents a novel contribution to the implementation literature, being the first to focus on strengthening healthcare managers' generic skills in implementation leadership.

Typ och Nyckelord: Journal leadership training, full range leadership model, intervention, change management, ISSN: 1748-5908

Referens: [Riise, E.N., Kvale, G., Öst, L.-G., Skjold, S.H., Hansen, H., & Hansen, B. \(2016\). Concentrated ERP for adolescents with obsessive-compulsive disorder: An effectiveness study. *Journal of Obsessive-Compulsive and Related Disorders*, 11, 13-21.](#)

Abstract: This study evaluated the effectiveness of a concentrated exposure and response prevention (ERP) treatment for adolescents with obsessive-compulsive disorder (OCD). Twenty-two adolescents with OCD (range 11 - 17 years) received therapist-assisted ERP during four consecutive days, followed by a three week period of self-

administered ERP. Treatment was delivered to 2-3 patients and their parents simultaneously at an outpatient clinic for child and adolescent psychiatry as part of standard health care. OCD-symptoms were assessed at pre-treatment, post-treatment, 3- and 6-month follow-up. The results demonstrated that patients had significant reduction in OCD-symptoms from pre- to post-treatment and the gains were maintained at follow-up. 91% (n=20) were classified as responders at post-treatment, and 77% (n=17) at six-month follow-up. Remission rates were 73% (n=16) at post-treatment and 68% (n=15) at six-month follow-up. OCD-related impairment and symptoms of anxiety and depression were significantly reduced at post-treatment and follow-up. The results suggest that concentrated ERP is a promising treatment for adolescents with OCD.

Typ och Nyckelord: Journal children, obsessive-compulsive disorder, exposure and response prevention, cognitive-behavioral therapy, intensive, ISSN: 2211-3649

Referens: [Risholm Mothander, P.](#) (2016). Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:0-5): Implementation considerations and clinical remarks. *Infant Mental Health Journal*, 37(5), 523-524.

Abstract: The Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC: 0-3) gave infant mental health specialists a tool to describe behavioral symptoms during infancy, earlier often ignored as minor or transient baby problems. In a new form, called the DC: 0-5, the tool now aims to describe mental health problems during the first 6 years of life. In my commentary, I discuss some implications of the proposed changes.

Typ och Nyckelord: Journal commentary, DC: 0-3, DC: 0-5, diagnostic classification, infants, early childhood, ISSN: 0163-9641

Referens: Ritterband, L., Riper, H., Mohr, D., Palermo, T., Kay-Lambkin, F., Christensen, H., [Carlbring, P.](#), Munoz, R., & Van de ven, P. (2016). Challenges, controversies, and the future of developing, evaluating, and implementing Internet interventions. Panel presented at the 8th Scientific Meeting of the International Society for Research on Internet Interventions (PN.02), Seattle, USA, 7-9 April 2016.

Abstract: Internet intervention research has been well established in the literature over the past two decades. The hundreds, if not thousands, of high quality research trials that have been conducted and published have convincingly demonstrated feasibility, efficacy and even effectiveness. The next decade will be a critical one for the field with numerous obstacles, barriers, disputes and debates to overcome. This talk will highlight many of the known challenges and controversies as well as key areas that will need to be part of future research. Furthermore, each of these areas overlap, resulting in additional topics of needed focus. Challenges include funding, recruitment, and conflict of interests to manage; controversies include best practices for iterative development, the relationship between usage and outcome, and public concerns of technology replacing jobs; issues that intersect with both challenges and controversies include how best to address the digital divide, the use of social networking, and how to determine the best control and comparison groups in ehealth research; future issues include a need to focus on deconstruction and dissemination trials, internationalization of interventions, and a greater emphasis on cost effectiveness; issues that traverse challenges and the future include a need for greater scientific underpinnings to interventions, improving the taxonomy and overall definitions used to define applications, and how best to maintain and sustain programs; controversies/future issues include the problem of so many programs continuing to be developed and made available with little to no scientific validity; and finally, issues that cross challenges, controversies and the future include the ongoing discussions of support, meta-analyses, and stepped care. Although not comprehensive, this list will provide a useful start for discussion and help guide research for the coming years.

Typ och Nyckelord: Proceedings internet interventions

Referens: Rodriguez-Vieitez, E., Carter, S.F., Chiotis, K., Saint-Aubert, L., Leuzy, A., Scholl, M., [Almkvist, O.](#), Wall, A., Langström, B., & Nordberg, A. (2016). Comparison of Early-Phase C-11-Deuterium-L-Deprenyl and C-11-Pittsburgh Compound B PET for Assessing Brain Perfusion in Alzheimer Disease. *Journal of Nuclear Medicine*, 57(7), 1071-1077.

Abstract: The PET tracer C-11-deuterium-L-deprenyl (C-11-DED) has been used to visualize activated astrocytes in vivo in patients with Alzheimer disease (AD). In this multitracer PET study, early-phase C-11-DED and C-11-Pittsburgh compound B (C-11-PiB) (eDED and ePiB, respectively) were compared as surrogate markers of brain perfusion, and the extent to which C-11-DED binding is influenced by brain perfusion was investigated. METHODS: C-11-DED, C-11-PiB, and F-18-FDG dynamic PET scans were obtained in age-matched groups comprising AD patients (n = 8), patients with mild cognitive impairment (n = 17), and healthy controls (n = 16). A modified reference Patlak model was used to quantify C-11-DED binding. A simplified reference tissue model was applied to both C-11-DED and C-11-PiB to measure brain perfusion relative to the cerebellar gray matter (R-1) and binding potentials. C-11-PiB retention and F-18-FDG uptake were also quantified as target-to-pons SUV ratios in 12 regions of interest (ROIs). RESULTS: The strongest within-subject correlations with the corresponding R-1 values (R-1,R-DED and R-1,R-PiB, respectively) and with F-18-FDG uptake were obtained when the eDED and ePiB PET data were measured 1-4 min after injection. The optimum eDED/ePiB intervals also showed strong, significant ROI-based intersubject Pearson correlations with R-1,R-DED/R-1,R-PiB and with F-18-FDG uptake, whereas C-11-DED binding was largely independent of brain perfusion, as measured by eDED. Corresponding voxelwise correlations confirmed the ROI-based results. Temporoparietal eDED or ePiB brain perfusion measurements were highly discriminative between patient and control groups, with discriminative ability statistically comparable to that of temporoparietal F-18-FDG glucose metabolism. Hypometabolism extended over wider regions than hypoperfusion in patient groups compared with controls. CONCLUSION: The 1- to 4-min early-frame intervals of C-11-DED or C-11-PiB are suitable surrogate measures for brain perfusion. C-11-DED binding is independent of brain perfusion, and thus C-11-DED PET can provide information on both functional (brain perfusion) and pathologic (astrocytosis) aspects from a single PET scan. In comparison with glucose metabolism, early-phase C-11-DED and C-11-PiB perfusion appear to provide complementary rather than redundant information.

Typ och Nyckelord: Journal amyloid, astrocytosis, brain perfusion, early-phase PET, ISSN: 0161-5505

Referens: Rodriguez-Vieitez, E., Saint-Aubert, L., Carter, S.F., [Almkvist, O.](#), Farid, K., Schöll, M., Chiotis, K., Thordardottir, S., Graff, C., Wall, A., Långström, B., & Nordberg, A. (2016). Diverging longitudinal changes in astrocytosis and amyloid PET in autosomal dominant Alzheimer's disease. *Brain*, 139, 922-936.

Abstract:

The relationships between pathophysiological processes in Alzheimer's disease remain largely unclear. In a longitudinal, multitracer PET study, Rodriguez-Vieitez et al. reveal that progression of autosomal dominant Alzheimer's disease is accompanied by prominent early and then declining astrocytosis, increasing amyloid plaque deposition and decreasing glucose metabolism. Astrocyte activation may initiate Alzheimer pathology. See Schott and Fox (doi: 10.1093/brain/awv405) for a scientific commentary on this article. The relationships between pathophysiological processes in Alzheimer's disease remain largely unclear. In a longitudinal, multitracer PET study, Rodriguez-Vieitez et al. reveal that progression of autosomal dominant Alzheimer's disease is accompanied by prominent early and then declining astrocytosis, increasing amyloid plaque deposition and decreasing glucose metabolism. Astrocyte activation may initiate Alzheimer pathology. Alzheimer's disease is a multifactorial dementia disorder characterized by early amyloid-beta, tau deposition, glial activation and neurodegeneration, where the interrelationships between the different pathophysiological events are not yet well characterized. In this study, longitudinal multitracer positron emission tomography imaging of individuals with autosomal dominant or sporadic Alzheimer's disease was used to quantify the changes in regional distribution of brain astrocytosis (tracer C-11-deuterium-L-deprenyl), fibrillar amyloid-beta plaque deposition (C-11-Pittsburgh compound B), and glucose metabolism (F-18-fluorodeoxyglucose) from early presymptomatic stages over an extended period to clinical symptoms. The 52 baseline participants comprised autosomal dominant Alzheimer's disease mutation carriers (n = 11; 49.6 +/- 10.3 years old) and non-carriers (n = 16; 51.1 +/- 14.2 years old; 10 male), and patients with sporadic mild cognitive impairment (n = 17; 61.9 +/- 6.4 years old; nine male) and sporadic Alzheimer's disease (n = 8; 63.0 +/- 6.5 years old; five male); for confidentiality reasons, the gender of mutation carriers is not revealed. The autosomal dominant Alzheimer's disease participants belonged to families with known mutations in either presenilin 1 (PSEN1) or amyloid precursor protein (APP^{swe} or APP^{parc}) genes. Sporadic mild cognitive impairment patients were further divided into C-11-Pittsburgh compound B-positive (n = 13; 62.0 +/- 6.4; seven male) and C-11-Pittsburgh compound B-negative (n = 4; 61.8 +/- 7.5 years old; two male) groups using a neocortical standardized uptake value ratio cut-off value of 1.41, which was calculated with respect to the cerebellar grey matter. All baseline participants underwent multitracer positron emission tomography scans, cerebrospinal fluid biomarker analysis and neuropsychological assessment. Twenty-six of the participants underwent clinical and imaging follow-up examinations after 2.8 +/- 0.6 years. By using linear mixed-effects models, fibrillar amyloid-beta plaque deposition was first observed in the striatum of presymptomatic autosomal dominant Alzheimer's disease carriers from 17 years before expected symptom onset; at about the same time, astrocytosis was significantly elevated and then steadily declined. Diverging from the astrocytosis pattern, amyloid-beta plaque deposition increased with disease progression. Glucose metabolism steadily declined from 10 years after initial amyloid-beta plaque deposition. Patients with sporadic mild cognitive impairment who were C-11-Pittsburgh compound B-positive at baseline showed increasing amyloid-beta plaque deposition and decreasing glucose metabolism but, in contrast to autosomal dominant Alzheimer's disease carriers, there was no significant longitudinal decline in astrocytosis over time. The prominent initially high and then declining astrocytosis in autosomal dominant Alzheimer's disease carriers, contrasting with the increasing amyloid-beta plaque load during disease progression, suggests astrocyte activation is implicated in the early stages of Alzheimer's disease pathology.

Typ och Nyckelord: Journal astrocytosis, autosomal dominant Alzheimer's disease, C-11-deuterium-L-deprenyl, F-18-fluorodeoxyglucose, C-11-Pittsburgh compound B, ISSN: 0006-8950

Referens:

Rozental, A. (2016). *Negative effects of Internet-based cognitive behavior therapy: Monitoring and reporting deterioration and adverse and unwanted events*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract:

Internet-based cognitive behavior therapy (ICBT) has the potential of providing many patients with an effective form of psychological treatment. However, despite helping to improve mental health and well-being, far from everyone seem to benefit. In some cases, negative effects may also emerge. The overall aim of the present thesis was to establish the occurrence and characteristics of such incidents in ICBT using a combination of quantitative and qualitative methods.

Study I determined deterioration, non-response, and adverse and unwanted events in a sample of 133 patients undergoing ICBT for social anxiety disorder. The results indicated that up to 6.8% fared worse during the treatment period, depending on the self-report measure and time point, as determined using the Reliable Change Index (RCI), while the non-response rate was between 29.3 to 86.5% at post treatment assessment, and 12.9% experienced other negative effects.

Study II investigated the responses to open-ended questions on adverse and unwanted events among 556 patients in four separate clinical trials of ICBT; social anxiety disorder, panic disorder, major depressive disorder, and procrastination. In total, 9.3% reported negative effects, with a qualitative content analysis revealing two categories and four subcategories; patient-related, i.e., gaining insight and experiencing new symptoms, and treatment-related, i.e., difficulties applying the treatment interventions and problems related to the treatment format.

Study III explored the number of patients achieving reliable deterioration, as determined using the RCI on the individual raw scores of 2866 patients from 29 clinical trials of ICBT. The results showed that the deterioration rate was higher among patients in a control condition, 17.4%, in comparison to treatment, 5.8%. Predictors were related to decreased odds of deterioration for patients receiving treatment; clinical severity at pre treatment assessment, being in a relationship, having a university degree, and being older. As for the control condition, only clinical severity at pre treatment assessment was associated with decreased odds of deterioration.

Study IV examined a newly developed self-report measure for monitoring and reporting adverse and unwanted events, the Negative Effects Questionnaire. The results suggested a six-factor solution with 32 items; symptoms, quality, dependency, stigma, hopelessness, and failure. One-third of the patients reported experiencing unpleasant memories, stress, and anxiety, with novel symptoms and a lack of quality in the treatment and therapeutic relationship having the greatest negative impact.

The general finding of the present thesis is that negative effects do occur in ICBT and that they are characterized by deterioration, non-response, and adverse and unwanted events, similar to psychological treatments delivered face-to-face. Researchers and clinicians in ICBT are recommended to monitor and report negative effects to prevent a negative treatment trend and further the understanding of what might contribute to their incidents. Future research should investigate the relationship between negative effects and treatment outcome, especially at follow-up, to examine if they are transient or enduring. Also, interviews could be conducted with those achieving reliable deterioration to explore if and how it is experienced by the patients and to see if it is attributed to the treatment interventions or other circumstances.

Typ och Nyckelord: Dissertation negative effects, internet-based cognitive behavior therapy, deterioration, non-response, adverse

Referens: [Rozental, A., Forsell, E., Svensson, A., Andersson, G., & Carlbring, P. \(2016\). Overcoming procrastination: One-year follow-up and predictors of change in a randomized controlled trial of Internet-based cognitive behavior therapy. Paper presented at the 8th World Congress of Behavioural and Cognitive Therapies, Melbourne, Australia, 22-25 June 2016.](#)

Abstract: Aim: Procrastination refers to the purposeful delay of an intended course of action and can become a persistent behavioral pattern associated with reduced mood, increased stress, and poorer performance. One-fifth of the adult population and half of the student population experience significant difficulties due to procrastination, but has received little attention in clinical research. Meanwhile, Internet-based cognitive behavior therapy (ICBT) has been found promising for several conditions, but has not yet been used in relation to procrastination. The current study thus aimed to examine the efficacy of ICBT for procrastination at post treatment and one-year follow-up, as well as to investigate predictors of change.

Method: Participants (N = 150) were randomized to a ten-week treatment programme; guided self-help, unguided self-help, and wait-list control (receiving unguided self-help after the first treatment period). Outcome measures were administered at screening, post treatment, one-year follow-up, or weekly, consisting of the Pure Procrastination Scale (PPS), the Irrational Procrastination Scale (IPS), the Susceptibility to Temptation Scale, the Montgomery Åsberg Depression Rating Scale, the Generalized Anxiety Disorder Assessment, and the Quality of Life Inventory. Intention-to-treat was used for all statistical analyses, with mixed-effects models to assess the effect of time and group.

Results: Moderate to large effect sizes were obtained at post treatment comparing guided and unguided self-help with wait-list control, the PPS, Cohen's $d = 0.70$, 95% confidence interval (CI) [0.29, 1.10], and $d = 0.50$, 95% CI [0.10, 0.90], and the IPS, $d = 0.81$ 95% CI [0.40, 1.22], and $d = 0.69$ 95% CI [0.29, 1.09]. Clinically significant change was achieved among 31.3–40.0% for guided self-help, compared with 24.0–36.0% for unguided self-help. Neither of the treatment conditions was found to be superior on any of the outcome measures, $F_s(98, 65.17-72.55) < 1.70, p > .19$. One-year follow-up data has just been collected and the results of will be available at the time of the conference, including predictors of change.

Conclusion: ICBT could be useful for managing self-reported problems of procrastination, with results at one-year follow-up and predictors of change revealing the long-term benefit and possible variables responsible for a successful treatment outcome.

Typ och Nyckelord: Proceedings procrastination, internet-based cognitive behavior therapy, follow-up

Referens: [Rozental, A., Forsell, E., Svensson, A., Andersson, G., & Carlbring, P. \(2016\). Overcoming procrastination: One-year follow-up and predictors of change in a randomized controlled trial of Internet-based cognitive behavior therapy. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden \(p. 542\). Stockholm: EABCT.](#)

Abstract: Introduction: Procrastination is defined as the voluntary delay of an intended course of action despite resulting in negative consequences. Procrastination can become a persistent behavioral pattern associated with reduced mood, increased stress, and poorer performance. Approximately one-fifth of the adult population and more than half of the student population experience significant difficulties due to procrastination. However, despite its prevalence, it has received little attention in clinical research. Meanwhile, Internet-based cognitive behavior therapy (ICBT) has been found promising for several psychiatric conditions, but has not yet been used in relation to procrastination. The current study thus aimed to examine the efficacy of ICBT for procrastination at post treatment and one-year follow-up. Furthermore, predictors of change were investigated in order to distinguish variables that might predict at positive treatment outcome.

Method: Self-recruited participants (N = 150) with severe and chronic procrastination were randomized to a ten-week treatment program administered via the Internet; guided self-help, unguided self-help, and wait-list control (receiving unguided self-help after the first treatment period). Outcome measures were administered at screening, post treatment, one-year follow-up, or weekly; the Pure Procrastination Scale (PPS), the Irrational Procrastination Scale (IPS), the Susceptibility to Temptation Scale, the Montgomery Åsberg Depression Rating Scale, the Generalized Anxiety Disorder - 7 Items, and the Quality of Life Inventory. The intention-to-treat principle was used for all statistical analyses.

Results: Moderate to large effect sizes were obtained at post treatment comparing guided and unguided self-help with wait-list control, the PPS, Cohen's $d = 0.70$, 95% confidence interval (CI) [0.29, 1.10], and $d = 0.50$, 95% CI [0.10, 0.90], and the IPS, $d = 0.81$ 95% CI [0.40, 1.22], and $d = 0.69$ 95% CI [0.29, 1.09]. Clinically significant change was achieved among 31.3–40.0% for guided self-help, compared with 24.0–36.0% for unguided self-help. Neither of the treatment conditions were found to be superior on any of the outcome measures, $F_s(98, 65.17-72.55) < 1.70, p > .19$. In terms of the outcome at the one-year follow-up, the results will be available at the time of the conference, including the analyses of predictors of change.

Conclusion: ICBT could be useful for managing self-reported problems of procrastination, with results from post treatment revealing that both guided self-help and unguided self-help can be of great aid. Findings from the one-year follow-up and analyses of predictors of change will help to determine the long-term benefit and the possible variables responsible for a successful treatment outcome.

Typ och Nyckelord: Proceedings procrastination, internet-based cognitive behavior therapy, follow-up, predictors

Referens: [Rozental, A., Forsell, E., Svensson, A., Andersson, G., & Carlbring, P. \(2016\). Overcoming procrastination: One-year follow-up and predictors of change in a randomized controlled trial of Internet-based cognitive behavior therapy. Poster presented at the 8th Scientific Meeting of the International Society for Research on Internet Interventions \(P1.30\), Seattle, USA, 7-9 April 2016.](#)

Abstract: Procrastination; the purposeful delay of an intended course of action is, for many, a persistent behavior associated with reduced mood, increased stress, and poorer performance. 20 % of adults and 50 % of students experience significant difficulties with procrastination. Internet-based cognitive behavior therapy (ICBT) shows promise for several conditions, but has never been applied to procrastination. The current study examined the efficacy of ICBT for procrastination at post treatment and one-year follow-up, and investigated predictors of

change.

Method: Participants (N = 150) were randomized to 10 weeks of either guided self-help, unguided self-help, or wait-list control (receiving unguided self-help after the first treatment period). Outcome measures were the Pure Procrastination Scale (PPS), the Irrational Procrastination Scale (IPS), the Susceptibility to Temptation Scale, the Montgomery Åsberg Depression Rating Scale, the Generalized Anxiety Disorder Assessment, and the Quality of Life Inventory. Intention-to-treat was used for all statistical analyses, with mixed-effects models to assess the effect of time and group.

Results: Moderate to large effect sizes were obtained post treatment comparing guided and unguided self-help with wait-list control, the PPS, Cohen's $d = 0.70$, 95% confidence interval (CI) [0.29, 1.10], and $d = 0.50$, 95% CI [0.10, 0.90], and the IPS, $d = 0.81$ 95% CI [0.40, 1.22], and $d = 0.69$ 95% CI [0.29, 1.09]. Clinically significant change was achieved among 31.3–40.0% for guided self-help and 24.0–36.0% for unguided self-help. Neither treatment condition was superior on any outcome measure, $F_s(98, 65.17-72.55) < 1.70$, $p > .19$. One-year follow-up data has been collected and the results will be available at the time of the conference, including predictors of change.

Conclusion: ICBT could be useful for self-reported problems of procrastination, with results at one-year follow-up and predictors of change revealing the long-term benefit and variables associated with successful treatment outcome.

Typ och Nyckelord: Proceedings procrastination, Internet-based cognitive behavior therapy

Referens: [Rozental, A., Forsell, E., Svensson, A., Andersson, G., & Carlbring, P. \(in press\). Overcoming procrastination: one-year follow-up and predictors of change in a randomized controlled trial of Internet-based cognitive behavior therapy. *Cognitive Behaviour Therapy*.](#)

Abstract: Procrastination is a common self-regulatory failure that can have a negative impact on well-being and performance. However, few clinical trials have been conducted, and no follow-up has ever been performed. The current study therefore aimed to provide evidence for the long-term benefits and investigate predictors of a positive treatment outcome among patients receiving Internet-based cognitive behavior therapy (ICBT). A total of 150 self-recruited participants were randomized to guided or unguided ICBT. Self-report measures of procrastination, depression, anxiety, and quality of life were distributed at pre-treatment assessment, post-treatment assessment, and one-year follow-up. Mixed effects models were used to investigate the long-term gains, and multiple linear regression for predictors of a positive treatment outcome, using the change score on the Irrational Procrastination Scale as the dependent variable. Intention-to-treat was implemented for all statistical analyses. Large within-group effect sizes for guided and unguided ICBT, Cohen's $d = .97-1.64$, were found for self-report measures of procrastination, together with $d = .56-.66$ for depression and anxiety. Gains were maintained, and, in some cases, improved at follow-up. Guided and unguided ICBT did not differ from each other, mean differences $-.31-1.17$, 95% CIs $[-2.59-3.22]$, and none of the predictors were associated with a better result, $b_s -1.45-1.61$, 95% CIs $[-3.14-4.26]$. In sum, ICBT could be useful and beneficial in relation to managing procrastination, yielding great benefits up to one year after the treatment period has ended, with comparable results between guided and unguided ICBT.

Typ och Nyckelord: Journal internet-based cognitive behavior therapy, randomized controlled trial, procrastination, follow-up, predictors, ISSN: 1650-6073

Referens: [Rozental, A., Kottorp, A., Boettcher, J., Andersson, G., & Carlbring, P. \(2016\). Negative Effects of Psychological Treatments: An Exploratory Factor Analysis of the Negative Effects Questionnaire for Monitoring and Reporting Adverse and Unwanted Events. *PLoS ONE*, 11\(6\), e0157503.](#)

Abstract: Research conducted during the last decades has provided increasing evidence for the use of psychological treatments for a number of psychiatric disorders and somatic complaints. However, by focusing only on the positive outcomes, less attention has been given to the potential of negative effects. Despite indications of deterioration and other adverse and unwanted events during treatment, little is known about their occurrence and characteristics. Hence, in order to facilitate research of negative effects, a new instrument for monitoring and reporting their incidence and impact was developed using a consensus among researchers, self-reports by patients, and a literature review: the Negative Effects Questionnaire. Participants were recruited via a smartphone-delivered self-help treatment for social anxiety disorder and through the media (N = 653). An exploratory factor analysis was performed, resulting in a six-factor solution with 32 items, accounting for 57.64% of the variance. The derived factors were: symptoms, quality, dependency, stigma, hopelessness, and failure. Items related to unpleasant memories, stress, and anxiety were experienced by more than one-third of the participants. Further, increased or novel symptoms, as well as lack of quality in the treatment and therapeutic relationship rendered the highest self-reported negative impact. In addition, the findings were discussed in relation to prior research and other similar instruments of adverse and unwanted events, giving credence to the items that are included. The instrument is presently available in eleven different languages and can be freely downloaded and used from www.neqscales.com.

Typ och Nyckelord: Journal negative effects, negative effects questionnaire, exploratory factor analysis, ISSN: 1932-6203

Referens: [Rozental, A., Kottorp, A., Boettcher, J., Andersson, G., & Carlbring, P. \(2016\). Negative effects of psychological treatments: An exploratory factor analysis of the Negative Effects Questionnaire for monitoring and reporting adverse and unwanted events. Presentation at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden \(p. 284\). Stockholm: EABCT.](#)

Abstract: Research conducted during the last decades has provided increasing evidence for the use of psychological treatments for a number of psychiatric disorders and somatic complaints. However, by focusing only on the positive outcomes, less attention has been given to the potential of negative effects. Despite indications of deterioration and other adverse and unwanted events during treatment, little is known about their occurrence and characteristics. Hence, in order to facilitate research of negative effects, a new instrument for monitoring and reporting their incidence and impact was developed using a consensus among researchers, self-reports by patients, and a literature review: the Negative Effects Questionnaire. Participants were recruited via a smartphone-delivered self-help treatment for social anxiety disorder and through the media (N = 653). An exploratory factor analysis was performed, resulting in a six-factor solution with 32 items, accounting for 57.64% of the variance. The derived factors were: symptoms, quality, dependency, stigma, hopelessness, and failure. Items related to unpleasant memories, stress, and anxiety were experienced by more than one-third of the participants. Further, increased or novel symptoms, as well as lack of quality in the treatment and

therapeutic relationship rendered the highest self-reported negative impact. In addition, the findings were discussed in relation to prior research and other similar instruments of adverse and unwanted events, giving credence to the items that are included. The instrument is presently available in eleven different languages and can be freely downloaded and used.

Typ och Nyckelord: Proceedings negative effects, psychological treatment, NEQ, smartphone-delivered

Referens: [Rozental, A.](#), Magnusson, K., Boettcher, J., Andersson, G., & [Carlbring, P.](#) (2016). For better or worse: An individual patient data meta-analysis of deterioration among participants receiving Internet-based cognitive behavior therapy. Paper presented at the 8th World Congress of Behavioural and Cognitive Therapies, Melbourne, Australia, 22-25 June 2016.

Abstract: Aim: During the last couple of decades research on the efficacy and effectiveness of psychological treatments has provided evidence for its use in alleviating mental distress and enhancing well-being. Meanwhile, novel ways of delivering evidence-based methods, such as, via the Internet or smartphone applications, have received increasing support, with the potential of becoming an important and widely used addition to the health care system. Internet-based cognitive behavior therapy (ICBT) has for instance been shown to be beneficial in relation to a number of psychiatric and somatic disorders. However, research has almost solely focused on the positive results, neglecting the fact that psychological treatments also might have negative effects. Investigations from face-to-face settings have found that 5-10% of all patients deteriorate, but whether this is true for ICBT has been unclear. Hence, in order to examine deterioration in cognitive behavior therapy delivered via the Internet, an individual patient data meta-analysis was performed.

Method: Patient-level data from 29 clinical trials of ICBT for depression, anxiety disorders, and other problems, e.g., pathological gambling and erectile dysfunction, were aggregated, totaling 2866 participants receiving either a treatment or control condition. Deterioration was assessed using the Reliable Change Index on each of the primary outcome measures. Participants identified as having deteriorated were subsequently analyzed using logistic regression to find potential predictors of a negative treatment outcome.

Results: Using only available data, a total of 89 participants (3.1%) were recognized as having reliably deteriorated from pre to post treatment assessment, with an additional 17 participants (0.6%) from pre treatment to follow-up assessment. In general, more participants (N = 56) diagnosed with an anxiety disorder deteriorated, compared to depression (N = 16), and other problems (N = 30). Results using imputed values for missing data and an exploration of predictors of deterioration will be available at the time of the conference.

Conclusion: Preliminary evidence indicates that deterioration among participants receiving ICBT afflicts approximately 3.1%, with higher rates for anxiety disorders than depression and other problems. A closer inspection could reveal potential predictors for deterioration, which, in turn, might be used to prevent or reverse a negative treatment outcome.

Typ och Nyckelord: Proceedings deterioration, internet-based cognitive behavior therapy, individual patient data meta-analysis

Referens: [Rozental, A.](#), Magnusson, K., Boettcher, J., Andersson, G., & [Carlbring, P.](#) (in press). For Better or Worse: An Individual Patient Data Meta-Analysis of Deterioration Among Participants Receiving Internet-Based Cognitive Behavior Therapy. *Journal of Consulting and Clinical Psychology*.

Abstract: Objective: Psychological treatments can relieve mental distress and improve well-being, and the dissemination of evidence-based methods can help patients gain access to the right type of aid. Meanwhile, Internet-based cognitive-behavioral therapy (ICBT) has shown promising results for many psychiatric disorders. However, research on the potential for negative effects of psychological treatments has been lacking. Method: An individual patient data meta-analysis of 29 clinical trials of ICBT (N = 2,866) was performed using the Reliable Change Index for each primary outcome measures to distinguish deterioration rates among patients in treatment and control conditions. Statistical analyses of predictors were conducted using generalized linear mixed models. Missing data was handled by multiple imputation. Results: Deterioration rates were 122 (5.8%) in treatment and 130 (17.4%) in control conditions. Relative to receiving treatment, patients in a control condition had higher odds of deteriorating, odds ratios (ORs) = 3.10, 95% confidence interval (CI) [2.21, 4.34]. Clinical severity at pretreatment was related to lower odds, OR = 0.62, 95% CI [0.50, 0.77], and OR = 0.51, 95% CI [0.51, 0.80], for treatment and control conditions. In terms of sociodemographic variables, being in a relationship, OR = 0.58, 95% CI [0.35, 0.95], having at least a university degree, OR = 0.54, 95% CI [0.33, 0.88], and being older, OR = 0.78, 95% CI, [0.62, 0.98], were also associated with lower odds of deterioration, but only for patients assigned to a treatment condition. Conclusion: Deterioration among patients receiving ICBT or being in a control condition can occur and should be monitored by researchers to reverse and prevent a negative treatment trend.

Typ och Nyckelord: Journal Internet-based cognitive behavior therapy, individual patient data meta-analysis, negative effects, deterioration, predictors, ISSN: 0022-006X

Referens: [Rozental, A.](#), Magnusson, K., Boettcher, J., Andersson, G., & [Carlbring, P.](#) (2016). For better or worse: An individual patient data meta-analysis of deterioration among participants receiving Internet-based cognitive behavior therapy. Paper presented at the 8th Scientific Meeting of the Swedish Society for Research on Internet Interventions, Stockholm, Sweden, 11 November 2016.

Abstract: Internet-based cognitive behavior therapy (ICBT) has shown promising results in relation to treating many psychiatric disorders. However, research on the potential for negative effects of their use has been lacking. An individual patient data meta-analysis of 29 clinical trials of ICBT (N = 2866) was thus performed using the Reliable Change Index for each primary outcome measures to distinguish deterioration rates among patients in treatment and control conditions. Statistical analyses of predictors were conducted using generalized linear mixed models and binomial logistic regression. Missing data was handled by multiple imputation. Deterioration rates were 122 (5.8%) in treatment and 130 (17.4%) in control conditions. Relative to receiving treatment, patients in a control condition had higher odds of deteriorating, Odds Ratios (OR) 3.10, 95% Confidence Interval (CI) [2.21, 4.34]. Clinical severity at pre treatment was related to lower odds, OR 0.62, 95% CI [0.50, 0.77], and 0.51, 95% CI [0.51, 0.80], for treatment and control conditions. In terms of sociodemographic variables, being in a relationship, 0.58, 95% CI [0.35, 0.95], having at least a university degree, 0.54, 95% CI [0.33, 0.88], and being older, 0.78, 95% CI, [0.62, 0.98], were also associated with lower odds of deterioration, but only for patients in a treatment condition. In sum, deterioration among patients receiving ICBT or being in a control condition can occur and should be monitored by researchers in order to reverse and prevent a negative treatment trend.

Typ och Nyckelord: Proceedings deterioration, individual patient meta-analysis, Internet-based cognitive behaviour therapy

Referens: Saint-Aubert, L., Almkvist, O., Chiotis, K., Almeida, R., Wall, A., & Nordberg, A. (2016). Regional tau deposition measured by [F-18]THK5317 positron emission tomography is associated to cognition via glucose metabolism in Alzheimer's disease. *Alzheimer's Research & Therapy*, 8, 38.

Abstract: Background: The recent development of tau-specific positron emission tomography (PET) tracers has allowed in vivo quantification of regional tau deposition and offers the opportunity to monitor the progression of tau pathology along with cognitive impairment. In this study, we investigated the relationships of cerebral tau deposition ([F-18]THK5317-PET) and metabolism ([F-18]FDG-PET) with concomitant cognitive function in patients with probable Alzheimer's disease (AD). Methods: Nine patients diagnosed with AD dementia and 11 with prodromal AD (mild cognitive impairment, amyloid-positive on [C-11]PiB-PET) were included in this study. All patients underwent PET scans using each tracer, as well as episodic memory and global cognition assessment. Linear models were used to investigate the association of regional [F-18]THK5317 retention and [F-18]FDG uptake with cognition. The possible mediating effect of local metabolism on the relationship between tau deposition and cognitive performance was investigated using mediation analyses. Results: Significant negative associations were found between [F-18]THK5317 regional retention, mainly in temporal regions, and both episodic memory and global cognition. Significant positive associations were found between [F-18]FDG regional uptake and cognition. The association of [F-18]FDG with global cognition was regionally more extensive than that of [F-18]THK5317, while the opposite was observed with episodic memory, suggesting that [F-18]THK5317 retention might be more sensitive than [F-18]FDG regional uptake to early cognitive impairment. Finally, [F-18]FDG uptake had a mediating effect on the relationship between [F-18]THK5317 retention in temporal regions and global cognition. Conclusions: These findings suggest a mediating role for local glucose metabolism in the observed association between in vivo tau deposition and concomitant cognitive impairment in AD.

Typ och Nyckelord: Journal Tau imaging, positron emission tomography (PET), cognition, memory, metabolism, ISSN: 0065-6755

Referens: Salgado-Montejo, A., Marmolejo-Ramos, F., Alvarado, J.A., Arboleda, J.C., Suarez, D.R., & Spence, C. (2016). Drawing sounds: representing tones and chords spatially. *Experimental Brain Research*, 234(12), 3509-3522.

Abstract: Research on the crossmodal correspondences has revealed that seemingly unrelated perceptual information can be matched across the senses in a manner that is consistent across individuals. An interesting extension of this line of research is to study how sensory information biases action. In the present study, we investigated whether different sounds (i.e. tones and piano chords) would bias participants' hand movements in a free movement task. Right-handed participants were instructed to move a computer mouse in order to represent three tones and two chords. They also had to rate each sound in terms of three visual analogue scales (slow-fast, unpleasant-pleasant, and weak-strong). The results demonstrate that tones and chords influence hand movements, with higher-(lower-)pitched sounds giving rise to a significant bias towards upper (lower) locations in space. These results are discussed in terms of the literature on forward models, embodied cognition, crossmodal correspondences, and mental imagery. Potential applications sports and rehabilitation are discussed briefly.

Typ och Nyckelord: Journal sound, space, mouse-tracking, movement, valence, embodied cognition, cross-modal correspondences, ISSN: 0014-4819

Referens: Sand, A. (2016). Reversed Priming Effects May Be Driven by Misperception Rather than Subliminal Processing. *Frontiers in Psychology*, 7:198.

Abstract: A new paradigm for investigating whether a cognitive process is independent of perception was recently suggested. In the paradigm, primes are shown at an intermediate signal strength that leads to trial-to-trial and inter-individual variability in prime perception. Here, I used this paradigm and an objective measure of perception to assess the influence of prime identification responses on Stroop priming. I found that sensory states producing correct and incorrect prime identification responses were also associated with qualitatively different priming effects. Incorrect prime identification responses were associated with reversed priming effects but in contrast to previous studies, I interpret this to result from the (mis-)perception of primes rather than from a subliminal process. Furthermore, the intermediate signal strength also produced inter-individual variability in prime perception that strongly influenced priming effects: only participants who on average perceived the primes were Stroop primed. I discuss how this new paradigm, with a wide range of d' values, is more appropriate when regression analysis on inter-individual identification performance is used to investigate perception-dependent processing. The results of this study, in line with previous results, suggest that drawing conclusions about subliminal processes based on data averaged over individuals may be unwarranted.

Typ och Nyckelord: Journal subliminal priming, unconscious processing, perception, stimulus strength, signal detection theory, trial-based analysis, ISSN: 1664-1078

Referens: Sand, A. (2016). *Subliminal or not? An appraisal of semantic processing in the near absence of visual awareness*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: Stimuli that cannot be perceived (i.e., that are *subliminal*) can still elicit neural responses in an observer, but can such stimuli influence behavior and higher-order cognition? Empirical evidence for such effects has periodically been accepted and rejected over the last six decades. Today, many psychologists seem to consider such effects well-established and recent studies have extended the power of subliminal processing to new limits. In this thesis, I examine whether this shift in zeitgeist is matched by a shift in evidential strength for the phenomenon.

This thesis consists of three empirical studies involving more than 250 participants, a simulation study, and a quantitative review. The conclusion based on these efforts is that several methodological, statistical, and theoretical issues remain in studies of subliminal processing. These issues mean that claimed subliminal effects might be caused by occasional or weak percepts (given the experimenters' own definitions of perception) and that it is still unclear what evidence there is for the cognitive processing of subliminal stimuli. New data are presented suggesting that even in conditions traditionally claimed as "subliminal", occasional or weak percepts may in fact influence cognitive processing more strongly than do the physical stimuli, possibly leading to *reversed* priming effects. I also summarize and provide methodological, statistical, and theoretical recommendations that could benefit future research aspiring to provide solid evidence for subliminal cognitive

processing.

Typ och Nyckelord: Dissertation subliminal priming, signal detection theory, Bayesian statistics, visual masking, consciousness, awareness, unconscious processing, semantic priming, ISBN: 978-91-7649-454-7

Referens: Sand, A., & Nilsson, M.E. (2016). Subliminal or not? Comparing null-hypothesis and Bayesian methods for testing subliminal priming. *Consciousness and Cognition*, 44, 29-40.

Abstract: A difficulty for reports of subliminal priming is demonstrating that participants who actually perceived the prime are not driving the priming effects. There are two conventional methods for testing this. One is to test whether a direct measure of stimulus perception is not significantly above chance on a group level. The other is to use regression to test if an indirect measure of stimulus processing is significantly above zero when the direct measure is at chance. Here we simulated samples in which we assumed that only participants who perceived the primes were primed by it. Conventional analyses applied to these samples had a very large error rate of falsely supporting subliminal priming. Calculating a Bayes factor for the samples very seldom falsely supported subliminal priming. We conclude that conventional tests are not reliable diagnostics of subliminal priming. Instead, we recommend that experimenters calculate a Bayes factor when investigating subliminal priming.

Typ och Nyckelord: Journal subliminal priming, Bayes factor, signal detection theory, null-hypothesis significance testing, ISSN: 1053-8100

Referens: Schenkman, B.N., Nilsson, M.E., & Grbic, N. (2016). Human echolocation: Acoustic gaze for burst trains and continuous noise. *Applied Acoustics*, 106, 77-86.

Abstract: This study explored the ability of blind and sighted listeners to detect reflections, echoes, of burst trains or continuous noise. Echo detection was compared by presenting 5 ms bursts, rates from 1 to 64 bursts, with a continuous white noise, all during 500 ms. Sounds were recorded in an ordinary room through an artificial binaural head, the loudspeaker 1 m behind it. The reflecting object was an aluminum disk, diameter 0.5 m, placed at 1 m. The sounds were presented to 12 blind and 26 sighted participants in a laboratory using a 2-Alternative-Forced-Choice methodology. The task was to detect which of two sounds contained an echo. In Experiment 2, 1.5 m distance sounds were presented to the blind only. At 1 m, detection for the blind increased up to 64 bursts/500 ms, but for the sighted up to 32 bursts. At 1.5 m, the peak performance for the blind was at 32 bursts. At the 1 m, but not at the 1.5 m distance, the blind performed best with continuous white noise. The overlap in time of signal and echo at 1 m for 64 bursts was 60%, but at 1.5 m 82%. Avoiding an overlap between emitted bursts and returning echoes seems important for echolocation, indicating that an acoustic gaze, analogous to in echolocating animals, may also exist in humans.

Typ och Nyckelord: Journal blind, echolocation, bursts, noise, orientation, ISSN: 0003-682X

Referens: Schwarz, J.F.A., Geisler, P., Hajak, G., Zulley, J., Rupperecht, R., Wetter, T.C., & Popp, R.F.J. (2016). The effect of partial sleep deprivation on computer-based measures of fitness to drive. *Sleep and Breathing*, 20(1), 285-292.

Abstract: Purpose: Using a partial sleep deprivation paradigm, the aim of the study was to investigate the sensitivity of a computer-based test battery of fitness to drive to detect impairments related to sleepiness.

Methods: Forty-seven healthy subjects (34 females, mean age 26.0 ± 6.8 years) participated in a counterbalanced within-subject design of two conditions: (i) normal night sleep and (ii) partial sleep deprivation (PSD) with 4 h time in bed. For the assessment of fitness to drive, we used a validated traffic psychological test battery. Moreover, well-established measures of sleepiness highly responsive to sleep deprivation were applied: the Karolinska Sleepiness Scale (KSS), pupillography (Pupil Unrest Index (PUI) as physiological sleepiness indicator) and two sustained attention tasks (psychomotor Vigilance Task and Mackworth Clock Test).

Results: Subjective and physiological sleepiness were significantly increased after PSD, accompanied by large ($d > 1.50$ for KSS) and medium ($d = 0.55$ for PUI) effect sizes. Sleepiness-related performance decrements were found in both sustained attention tasks ($d = 0.59-0.77$). Assessing driving-related ability, PSD induced decrements only in the test domain Reaction Time (reaction time $d = 0.54$ and motor time $d = 0.45$). All other subtests-as well as the overall judgement of fitness to drive-were not significantly affected by PSD.

Conclusion: In contrast to established tests of sustained attention and subjective sleepiness, computer-based test batteries of fitness to drive might lack sensitivity to core aspects of sleepiness as they mainly consist of short and stimulating subtests. Therefore, tasks that require sustained attention should be an essential part of traffic psychological test batteries when sleepiness is a potential issue.

Typ och Nyckelord: Journal daytime sleepiness, partial sleep deprivation, fitness to drive, sustained attention, ISSN: 1520-9512

Referens: Schwarz, J., Gerhardsson, A., Van Leeuwen, W., Fischer, H., Lekander, M., Kecklund, G., Axelsson, J., Åkerstedt, T. (2016). The effect of sleep loss on the response to acute psychosocial stress in young and elderly. Abstracts of the 23rd Congress of the European Sleep Research Society, 13-16 September 2016, Bologna, Italy. *Journal of Sleep Research*, 25(S1), 48-48.

Abstract: Both sleep loss and social stress are risk factors for health and performance ability. It is assumed that sleep and stress are bidirectional linked, but most of the previous research has focused on studying sleep problems as consequence of stress. We believe that it is important to improve our understanding of the reverse connection, which is less studied. This presentation will cover recent experimental human studies that have investigated how sleep loss affects stress responses and whether it makes individuals more vulnerable to psychosocial stress. A study by Minkel et al. (Health Psychology, 2014) reported that the cortisol response to an acute stress situation was increased after sleep deprivation compared with a control condition indicating a more pronounced activation of the hypothalamic-pituitary-adrenal stress axis. I will also present recently collected data from young (18-30 years) and older (60-72 years) subjects that participated in four conditions (between subject design):

- (i) normal night sleep.
- (ii) normal night sleep & acute stress (Trier Social Stress Test).
- (iii) total sleep deprivation.
- (iv) total sleep deprivation & acute stress.

The presentation thus provides state of the art knowledge of the link between sleep loss and vulnerability to

stress.

Typ och Nyckelord: Proceedings sleep loss, psychosocial stress, young, elderly

Referens: Seddigh, A., [Berntson, E.](#), Platts, L.G., & Westerlund, H. (2016). Does Personality Have a Different Impact on Self-Rated Distraction, Job Satisfaction, and Job Performance in Different Office Types? *PLoS ONE*, *11*(5): e0155295.

Abstract: This study investigates the joint effect of office type (cell, shared room, open-plan, and flex) and personality, measured by the Big Five personality traits, on self-rated measures of distraction, job satisfaction, and job performance (measured by professional efficacy). Regression analyses with interactions between personality and office type were conducted on 1205 participants working in 5 organizations from both the private and public sectors. While few interactions were observed in the cases of professional efficacy and job satisfaction, several were observed between personality traits and office type on the level of distraction reported. Specifically, more emotionally stable participants reported lower distraction, particularly those working in flex offices. Both agreeableness and openness to experience were associated with higher levels of distraction among participants in open-plan compared to cell offices.

Typ och Nyckelord: Journal personality, distraction, job satisfaction, job performance, office types, ISSN: 1932-6203

Referens: Shahnavaz, S., Hedman, E., Grindefjord, M., [Reuterskiöld, L.](#), & Dahllöf, G. (2016). Cognitive Behavioral Therapy for Children with Dental Anxiety. A Randomized Controlled Trial. *JDR Clinical & Translational Research*, *1*(3), 234-243.

Abstract: Dental anxiety affects approximately 9% of children and is associated with poor oral health, pain, and psychosocial problems. The objective of this study was to investigate the efficacy of cognitive behavioral therapy (CBT) for children with dental anxiety in specialist pediatric dentistry. The study used a parallel-group superiority randomized controlled trial design. The primary outcome measure was the behavioral avoidance test; assessors were blind to treatment allocation. Participants were 8 boys and 22 girls 7 to 18 y old (mean \pm SD, 10 ± 3.1). Children fulfilling the diagnostic criteria for dental anxiety were randomized to CBT ($n = 13$) or treatment as usual ($n = 17$), such as various sedation methods. Psychologists provided 10 h of CBT based on a treatment manual. Treatments were conducted in a naturalistic real-world clinical setting. Assessments were conducted before the treatment, 3 mo after the start of treatment, and at 1-y follow-up. The analyses of the primary outcome measure by repeated-measures analysis of variance and independent t test showed that children receiving CBT made superior, statistically significant improvements at follow-up (16.8 ± 2.4) compared with treatment as usual (11.4 ± 3.1 , $P < 0.01$). A large between-group effect size (Cohen's $d = 1.9$) was found. Following treatment, 73% of those in the CBT group managed all stages of the dental procedures included in the behavioral avoidance test compared with 13% in the treatment-as-usual group. Furthermore, 91% in the CBT group compared with 25% in the treatment-as-usual group no longer met the diagnostic criteria for dental anxiety at the 1-y follow-up according to the secondary outcome measure. Measures of dental anxiety and self-efficacy showed larger improvements in the CBT group compared with controls. We conclude that CBT is an efficacious treatment for children and adolescents with dental anxiety and should be made accessible in pediatric dentistry (ClinicalTrials.gov: NCT01798355).

Typ och Nyckelord: Journal pediatric dentistry, clinical psychology, self-efficacy, evidence-based dentistry, dental fear, behavioral problem, ISSN: 2380-0844

Referens: Sommer, D., Marklund A., Zagorscak, P., [Carlbring, P.](#), Knaevelsrud, C., Boettcher, J. (2016). Challenger accepted?! Ergebnisse der Pilotierung einer App für Menschen mit sozialen Ängsten. [Challenger accepted?! Results of piloting an app for people with social anxiety.] Poster, 34. Symposium der Fachgruppe Klinische Psychologie und Psychotherapie der Deutschen Gesellschaft für Psychologie, Bielefeld, 04. - 07.05.2016.

Abstract: Hintergrund: Die Behandlung der sozialen Angststörung (SAS) durch internetbasierte kognitive Verhaltenstherapie (iKVT) verfügt bereits über breite Evidenz. Angesichts zunehmender Fokussierung auf internetfähige mobile Endgeräte für psychologische Interventionen überrascht es daher, dass bislang keine wissenschaftlich evaluierte Smartphone-Anwendung (App) für SAS in App-Stores erhältlich ist. Wir präsentieren Ergebnisse einer ersten randomisiert-kontrollierten Evaluierung der deutschen Version von „Challenger“ – einer speziell für Menschen mit sozialen Ängsten konzipierten, frei zugänglichen App. Ergänzend zu KVT- und Achtsamkeitselementen, generiert Challenger auf User zugeschnittene „Challenges“ – Expositionsübungen, Gedanken- und Verhaltensexperimente sowie Psychoedukation. Interaktive (peer-support) und innovative (Echtzeitanpassung an User-Umwelt mittels GPS) Elemente werden durch ein auf „Gamification“-Prinzipien beruhendes Konzept miteinander verknüpft. Methode: 77 sozial ängstliche Studierende wurden zwei Gruppen (6-wöchiger Zugang zur App oder Warteliste) randomisiert zugeteilt. Daten zu Nutzungsverhalten sowie Benutzerfreundlichkeit wurden erhoben. Soziale Ängstlichkeit wurde mit dem Social Phobia Inventory gemessen, sekundäre Maße umfassten allgemeine Ängstlichkeit, depressive und globale Symptombelastung. Ergebnisse: Die Auswertung der Nutzungsdaten ergab eine klare Präferenz für nicht-konfrontative Challenges, die ohne Beteiligung Dritter absolviert werden konnten. Zufriedenheits- und Benutzerfreundlichkeitsratings der App fielen gemischt aus. Analysen der Completer-Stichprobe zeigten eine signifikante Reduktion sozialer Ängste (Effektstärke PRÄ-POST innerhalb der Interventionsgruppe: $d = -0.94$; zwischen Gruppen: $d = 0.61$), jedoch nicht-signifikante Verbesserungen auf sekundären Ergebnissen. Analysen nach Multipler Imputation fehlender Werte ergaben keine signifikanten Unterschiede. Diskussion: Zukünftige Herausforderungen in der Weiterentwicklung der App bestehen in einer Erhöhung der Nutzungsintensität wirksamer Elemente. Aufgrund des hohen Dropouts und Besonderheiten von Studiendesign und Stichprobe, erscheinen endgültige Schlüsse hinsichtlich der Wirksamkeit von Challenger verfrüht.

Typ och Nyckelord: Proceedings Challenger, app, social anxiety

Referens: [Sousa-Ribeiro, M.](#), [Sverke, M.](#), Coimbra, J.L., & De Witte, H. (in press). Intentions to participate in training among older unemployed people: A serial mediator model. *Journal of Career Development*.

Abstract: While a considerable number of studies have focused on factors driving employees to voluntarily participate in training programs, much less is known on this topic with regard to the unemployed population, in particular the older unemployed, who often are in a vulnerable labor market position due to educational deficits and skills obsolescence. This study proposes and investigates a serial mediator model of older unemployed individuals'

training intentions grounded in propositions from social cognitive theory and the theory of planned behavior as well as prior models of employee involvement in training. The results, based on cross-sectional questionnaire data from 176 unemployed Portuguese individuals aged 40+, suggest that age, education, and proactivity have an indirect effect on training intentions via learning self-efficacy and training-related outcome expectations. Age was also directly related to stronger training intentions. These results may be useful for interventions aiming to encourage older unemployed individuals' participation in training.

Typ och Nyckelord: Journal older unemployed, training intentions, self-efficacy, mediational models

Referens: [Stengård, J., Bernhard-Oettel, C., Berntson, E., Leineweber, C., & Aronsson, G. \(2016\). Stuck in a job: Being "locked-in" or at risk of becoming locked-in at the workplace and well-being over time. *Work & Stress, 30*\(2\), 152-172.](#)

Abstract: In this study, being "locked-in" at the workplace is conceptualized as being in a non-preferred workplace while at the same time perceiving low employability. The aim of the study was to investigate how being locked-in or at risk of becoming locked-in (being in a non-preferred workplace yet currently satisfied, combined with perceiving low employability) relates to well-being (subjective health and depressive symptoms). The hypotheses were tested in a Swedish longitudinal sample (T1 in 2010 and T2 in 2012) of permanent employees (N = 3491). The results showed that stability with regard to locked-in-related status (being non-locked-in, at risk of becoming locked-in, or locked-in at both T1 and T2) was related to significant and stable differences in well-being. The non-locked-in status was associated with better well-being than being at risk of becoming locked-in. Moreover, those at risk of becoming locked-in showed better well-being than those with stable locked-in status. Changes towards non-locked-in were accompanied by significant improvements in well-being, and changes towards locked-in were associated with impairments in well-being. The relationships that were found could not be attributed to differences in demographic variables and occupational preference. The findings indicate that being locked-in is detrimental to well-being. This has implications for preventative interventions.

Typ och Nyckelord: Journal locked-in, involuntary non-mobility, employability, non-preferred workplace, well-being, career change, ISSN: 0267-8373

Referens: [Stenlund, T., Jönsson, F.U., & Jonsson, B. \(in press\). Group discussions and test-enhanced learning: individual learning outcomes and personality characteristics. *Educational Psychology: An International Journal of Experimental Educational Psychology*.](#)

Abstract: This paper focuses on the factors that are likely to play a role in individual learning outcomes from group discussions, and it includes a comparison featuring test-enhanced learning. A between-groups design (N = 98) was used to examine the learning effects of feedback if provided to discussion groups, and to examine whether group discussions benefit learning when compared to test-enhanced learning over time. The results showed that feedback does not seem to have any effect if provided to a discussion group, and that test-enhanced learning leads to better learning than the discussion groups, independent of retention interval. Moreover, we examined whether memory and learning might be influenced by the participants' need for cognition (NFC). The results showed that those scoring high on NFC remembered more than those who scored low. To conclude, testing trumps discussion groups from a learning perspective, and the discussion groups were also the least beneficial learning context for those scoring low on NFC.

Typ och Nyckelord: Journal learning, testing effect, cooperative learning, need for cognition, ISSN: 0144-3410

Referens: [Stomby, A., Boraxbekk, C.-J., Lundquist, A., Nordin, A., Nilsson, L.-G., Adolfsson, R., Nyberg, L., & Olsson, T. \(2016\). Higher diurnal salivary cortisol levels are related to smaller prefrontal cortex surface area in elderly men and women. *European Journal of Endocrinology, 175*\(2\), 117-126.](#)

Abstract: Objective: Elevated cortisol levels with aging have been associated with atrophy of the hippocampus and prefrontal cortex (PFC), as well as with impaired cognitive functions in men. However, coexisting diseases have confounded many studies examining these relationships. Studies in women are lacking. Our objective was to test whether salivary cortisol levels were related to morphology of the hippocampus and the PFC, and to cognitive performance.

Design: A cross-sectional study including 200 elderly (55-80 years old) men and women.

Method: We used magnetic resonance imaging, tests of episodic-, semantic-, and working memory, visuospatial ability, and cortisol levels in four saliva samples collected during 1 day.

Results: Area under the curve (AUC) for cortisol levels was negatively related to cortical surface area of the left anterior cingulate gyrus (caudal $P < 0.001$; rostral $P = 0.006$), right lateral orbitofrontal cortex ($P = 0.004$), and right rostral middle frontal gyrus ($P = 0.003$). In women, there was also a negative relationship with cortical surface area in the left rostral middle frontal gyrus ($P = 0.006$). No relationship was found between cortisol levels and hippocampal volume.

Conclusion: This study suggests that the structure of the medial PFC is related to cortisol levels in both elderly women and men.

Typ och Nyckelord: Journal cortisol levels, aging, morphology of the hippocampus, prefrontal cortex, cognitive performance, ISSN: 0804-4643

Referens: [Strandhäll, A., Wieselgren, I.-M., Westerholm, B., Rück, C., Carlbring, P., & Andersson, G. \(2016\) Vård av psykisk ohälsa i Sverige – aktuell situation och framtida utmaningar. Panel at the 46th European Association of Behavioural and Cognitive Therapies congress, August 31 - September 3, Stockholm, Sweden \(p. 98\). Stockholm: EABCT.](#)

Abstract: Psykisk ohälsa utgör ett växande samhällsproblem som kommer att kräva bättre samordning och nya sätt att möta behovet av effektiva behandlingsmetoder. Kognitiv beteendeterapi rekommenderas idag vid ett flertal psykiatriska diagnoser, men bristande tillgänglighet och problem med implementering innebär att inte alla får tillgång till rätt hjälp. Hur kan hälso- och sjukvården tillgodose en ökad efterfrågan på bästa möjliga vård? Bör bredd av behandlingsmetoder erbjudas istället för de mest starkast forskningsstöd? Vilken roll kan kognitiv beteendeterapi spela, och vilka risker finns det med dagens oreglerade marknad vad gäller behandlare och utbildningsaktörer inom området psykologisk behandling? I paneldebatten diskuterar några av landets främsta

forskare, politiker och myndighetsutövare dagens situation och kommande utmaningar.

Typ och Nyckelord: Proceedings paneldiskussion, vård av psykisk ohälsa i Sverige, nuläge, framtida utmaningar

Referens: Ström, L., & Carlbring, P. (2016). *Handbok för oglada - Vetenskapligt förankrade metoder för ökad glädje och livskvalitet* (2:a upplagan). Västerås: KBT-akademien Sverige AB.

Abstract: Är du deprimerad, nedstämd eller bara oglad i största allmänhet? Då är du långt ifrån ensam! Idag räknar man med att uppemot 25 procent av kvinnorna och 10 procent av männen någon gång kommer att vara kliniskt deprimerade. Till det kommer ett mycket stort antal människor som "bara" är nedstämda eller oglada! Även om det är skrämmande siffror kan man samtidigt konstatera att det inte behöver vara på det viset! Idag finns nämligen en mängd verktyg som effektivt påverkar ens mående på ett positivt sätt. I denna bok får du tillgång till en lång rad av dessa metoder och strategier. De flesta har sin utgångspunkt i kognitiv beteendeterapi (KBT), och alla är sådana som i forskning har visat sig ge en tydlig effekt för att minska nedstämdhet och depression – och skapa ökad livsglädje! Boken är förhoppningsvis även användbar för dig som arbetar med vård av människor, och den innehåller både förklaringsmodeller och arbetsformular som kan användas i den egna verksamheten. Alla bokens formulär kan också laddas ner från www.kbtakademien.se och användas fritt.

Typ och Nyckelord: Book (chapter) handbok, oglada, glädje, livskvalitet, även som talbok, ISBN: 9789198151114

Referens: Sundling, C. (2016). *Overall Accessibility of Public Transport for Older Adults*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: This thesis is based on four studies that explore accessibility for older adults during whole trips by public transport. The overall goal was to gain knowledge of the interrelationships among key variables and to develop a conceptual model of the overall accessibility of public transport. More specifically, the research goals were: (a) to explore links among the key variables postulated to be involved in overall accessibility and to explore the links between these variables and railway accessibility; (b) to gain a deeper understanding of links between critical incidents in traveling and travel behavior decisions; and (c) to develop a conceptual model of overall accessibility. The key variables contributing to overall accessibility are functional ability (depending partly on the person's functional limitation or disease), travel behavior, and barriers encountered during whole-trip traveling involving train. Respondents with more than one functional limitation or disease reported lower functional ability than did those with only one such limitation and respondents with low functional ability were less frequent travelers than were those with high functional ability. Frequent travelers reported railway accessibility to be better than did those who traveled less frequently. The main barriers were ticket cost and poor punctuality, but respondents with the lowest functional ability attributed the barriers encountered to their own health. The critical incidents most frequently reported were found in the categories "physical environment onboard vehicles" and "physical environment at stations or stops", as well as in the "pricing and planning during ticketing" phase of the trip. Five themes of reactions to critical incidents were identified that had resulted in behavior change: firm restrictions, unpredictability, unfair treatment, complicated trips, and earlier adverse experiences. A conceptual model of overall accessibility was developed, grounded in the empirical research results. This model is summarized in the following propositions: Overall accessibility is a reciprocal relationship among the barriers/facilitators encountered, functional ability, and travel behavior. Accessibility emerges in the person-environment interaction. To understand accessibility, past experiences and future expectations should both be considered, because both will guide travel decisions.

Typ och Nyckelord: Dissertation older persons, critical incidents, critical reactions, travel behavior, accessibility, functional limitation, functional ability, barrier, facilitator, public transport, railway travel, ISBN: 978-91-7649-327-4

Referens: Sundling, C., Nilsson, M.E., Hellqvist, S., Pendrill, L.R., Emardson, R., & Berglund, B. (2016). Travel behaviour change in old age: the role of critical incidents in public transport. *European Journal of Ageing*, 13(1), 75-83.

Abstract: Older people's travel behaviour is affected by negative or positive critical incidents in the public transport environment. With the objective of identifying such incidents during whole trips and examining how travel behaviour had changed, we have conducted in-depth interviews with 30 participants aged 65-91 years in the County of Stockholm, Sweden. Out of 469 incidents identified, 77 were reported to have resulted in travel behaviour change, 67 of them in a negative way. Most critical incidents were encountered in the physical environment on-board vehicles and at stations/stops as well as in pricing/ticketing. The findings show that more personal assistance, better driving behaviour, and swift maintenance of elevators and escalators are key facilitators that would improve predictability in travelling and enhance vulnerable older travellers' feeling of security. The results demonstrate the benefit of involving different groups of end users in future planning and design, such that transport systems would meet the various needs of its end users.

Typ och Nyckelord: Journal older people, travel behaviour, public transport, critical incidents, qualitative research, ISSN: 1613-9372

Referens: Sundqvist, K. (2016). *Beyond Recreational Gambling: a Psychological Perspective on Risk- and Problem Gambling*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: The general aim of this thesis was to examine risk gambling in the general population from a psychological perspective. This was done in three studies targeting personality, risky alcohol habits and gambling motives, respectively. Initially, 19 530 randomly assigned Swedish citizens were screened for problem gambling via telephone using the two questions in the Lie/Bet questionnaire. This sample constitutes the basis for one of the studies in the thesis. For the other studies, individuals answering yes to one of the questions in the Lie/Bet questionnaire and agreeing to participate further were sent a postal questionnaire. The questionnaire included questions about gambling, personality and gambling motives.

Some of the main results showed that:

Negative consequences of gambling were associated with higher levels of impulsivity and negative affectivity. Risk gamblers reported lower levels of negative affectivity compared to the general population. Compared to non-risk gamblers, twice as many of the risk gamblers reported weekly binge drinking during the past 12 months. This association, however, seemed to be explained by shared demographic characteristics, rather than by the risk gambling causing binge drinking. High risk gamblers more often reported that they gambled for the challenge and for coping reasons, compared to low risk gamblers.

High risk gamblers had overall stronger motives for gambling. The results also indicated that the level of risk gambling was highly intertwined with gambling motives and could explain some differences in gambling motives between, for example, women/men and younger/older gamblers.

One of the focal points in the discussion was that higher levels of negative affectivity may be a cause of elevated problems rather than a cause of risk gambling. Another issue discussed was that the level of risk/problem gambling may be important to consider when comparing gambling motives across subgroups of gamblers.

Typ och Nyckelord: Dissertation risk gambling, problem gambling, gambling motives, personality, ISBN: 978-91-7649-539-1

Referens: [Sundqvist, K., Jonsson, J., & Wennberg, P. \(2016\). Gambling Motives in a Representative Swedish Sample of Risk Gamblers. *Journal of Gambling Studies*, 32\(4\), 1231-1241.](#)

Abstract: Motives for gambling have been shown to be associated with gambling involvement, and hence important in the understanding of the etiology of problem gambling. The aim of this study was to describe differences in gambling motives in different subgroups of lifetime risk gamblers, categorized by: age, gender, alcohol- and drug habits and type of game preferred, when considering the level of risk gambling. A random Swedish sample (n = 19,530) was screened for risk gambling, using the Lie/Bet questionnaire. The study sample (n = 257) consisted of the respondents screening positive on Lie/Bet and completing a postal questionnaire about gambling and motives for gambling (measured with the NODS-PERC and the RGQ respectively). When considering the level of risk gambling, motives for gambling were not associated with gender, whereas younger persons gambled for the challenge more often than did older participants. Card/Casino and Sport gamblers played to a greater extent for social and challenge reasons than did Lotto/Bingo-gamblers. EGM-gamblers played more for coping reasons than did Lotto/Bingo gamblers. However, this association turned non-significant when considering the level of risk gambling. Moderate risk gamblers played for the challenge and coping reasons to a greater extent than low risk gamblers motives for gambling differ across subgroups of preferred game and between gamblers with low and moderate risk. The level of risk gambling is intertwined with motives for gambling and should be considered when examining gambling reasons.

Typ och Nyckelord: Journal gambling, risk gambling, problem gambling, motives for gambling, gambling motives, ISSN: 1050-5350

Referens: [Sundström, C., Gajecki, M., Johansson, M., Blankers, M., Sinadinovic, K., Stenlund-Gens, E., & Berman, A.H. \(2016\). Guided and Unguided Internet-Based Treatment for Problematic Alcohol Use - A Randomized Controlled Pilot Trial. *PLoS ONE*, 11\(7\), e0157817.](#)

Abstract: Background: The Internet has increasingly been studied as mode of delivery for interventions targeting problematic alcohol use. Most interventions have been fully automated, but some research suggests that adding counselor guidance may improve alcohol consumption outcomes. Methods: An eight-module Internet-based self-help program based on cognitive behavioral therapy (CBT) was tested among Internet help-seekers. Eighty participants with problematic alcohol use according to the Alcohol Use Disorders Identification Test (AUDIT; scores of ≥ 6 for women and ≥ 8 for men) were recruited online from an open access website and randomized into three different groups. All groups were offered the same self-help program, but participants in two of the three groups received Internet-based counselor guidance in addition to the self-help program. One of the guidance groups was given a choice between guidance via asynchronous text messages or synchronous text-based chat, while the other guidance group received counselor guidance via asynchronous text messages only. Results: In the choice group, 65% (13 of 20 participants) chose guidance via asynchronous text messages. At the 10-week post-treatment follow-up, an intention-to-treat (ITT) analysis showed that participants in the two guidance groups (choice and messages) reported significantly lower past week alcohol consumption compared to the group without guidance; 10.8 (SD = 12.1) versus 22.6 (SD = 18.4); $p = 0.001$; Cohen's $d = 0.77$. Participants in both guidance groups reported significantly lower scores on the AUDIT at follow-up compared to the group without guidance, with a mean score of 14.4 (SD = 5.2) versus 18.2 (SD = 5.9); $p = 0.003$; Cohen's $d = 0.68$. A higher proportion of participants in the guidance groups said that they would recommend the program compared to the group without guidance (81% for choice; 93% for messages versus 47% for self-help). Conclusion: Self-help programs for problematic alcohol use can be more effective in reducing alcohol consumption over a 10-week period when counselor guidance is added.

Typ och Nyckelord: Journal alcohol, intervention, counselor guidance, ISSN: 1932-6203

Referens: [Svardtal, F., Pfuhl, G., Nordby, K., Foschi, G., Klingsieck, K., Rozental, A., Carlbring, P., Lindblom, S., & Rebkowska, K. \(2016\). On the measurement of procrastination: Comparing two scales in six European countries. *Frontiers in Psychology*, 7:1307.](#)

Abstract: Procrastination is a common problem, but defining and measuring it has been subject to some debate. This paper summarizes results from students and employees (N = 2893) in Finland, Germany, Italy, Norway, Poland and Sweden using the Pure Procrastination Scale (PPS) and the Irrational Procrastination Scale (IPS) (Steel, 2010), both assumed to measure unidimensional and closely related constructs. Confirmatory factor analyses (CFA) indicated inadequate configural fit for the suggested one-factor model for PPS; however, acceptable fit was observed for a three-factor model corresponding to the three different scales the PPS is based on. Testing measurement invariance over countries and students-employees revealed configural but not strong or strict invariance, indicating that both instruments are somewhat sensitive to cultural differences. We conclude that the PPS and IPS are valid measures of procrastination, and that the PPS may be particularly useful in assessing cultural differences in unnecessary delay.

Typ och Nyckelord: Journal procrastination, scale, validation, measurement, cross-cultural, ISSN: 1664-1078

Referens: [Svenson, O. \(2016\). Towards a framework for human judgements of quantitative information: The numerical judgement process, NJP model. *Journal of Cognitive Psychology*, 28\(7\), 884-898.](#)

Abstract: This contribution presents a theoretical process framework for human unaided intuitive numerical judgments that are based on numerical information, The Numerical Judgment Process, NJP model. The model is descriptive and provides a structure in which other theories can be located. The NJP model includes measurement theoretical set representations of objective and subjective numbers, relations and operations and a judgment process that includes one or several of the following stages (1) problem readings (2) recognitions,

(3) associations, (4) similarity assessments, (5) problem interpretations, (6) computations, (7) marker nominations, (8) start value selections and (9) adjustments. When making a judgment, three main types of strategies are used separately, in sequence or simultaneously with others in and across stages: (i) Associative strategies, in which e.g., an answer is retrieved immediately, (ii) Computational strategies, in which, different algorithms are applied to the information and (iii) Analogue strategies, in which, the most prominent strategy involves identification of a marker (e.g., the most important attribute) that provides a start value (e.g., the response value corresponding to the value on the most important attribute) for an anchoring and adjustment process strategy. The paper concludes that a generic model of intuitive judgments will inspire further studies of the psychological processes activated when a judge makes an intuitive numerical judgment.

Typ och Nyckelord: Journal numerical judgment, cognitive processes, analogue processes, anchoring, adjustment, ISSN: 2044-5911

Referens: [Sverke, M., Falkenberg, H., Kecklund, G., Magnusson Hanson, L., & Lindfors, P. \(2016\). Kvinnors och mäns arbetsvillkor: betydelsen av organisatoriska faktorer och psykosocial arbetsmiljö för arbets- och hälsorelaterade utfall. Kunskaps-sammanställning 2016:2. Arbetsmiljöverket.](#)

Abstract: Den här kunskaps-sammanställningen utgår från ett uppdrag från Arbetsmiljöverket med syfte att utifrån befintlig forskning klargöra vilka samband som finns mellan organisatoriska och psykosociala faktorer i arbetet i förhållande till olika arbets- och hälsorelaterade utfall bland yrkesarbetande kvinnor och män. Ytterligare ett syfte består i att beskriva hur vanligt förekommande olika organisatoriska och psykosociala faktorer är bland yrkesarbetande kvinnor och män. För att kunna hantera ett sådant omfattande uppdrag behövs en strukturerad ansats. För att klargöra om och hur olika faktorer i arbetet hänger samman med olika utfall identifierades relevanta systematiska översiktsstudier, inklusive metaanalyser och systematiska litteratursammanställningar, genom litteratursökning i databaser som samlar internationell och nationell forskningslitteratur. Olika söktermer användes för att identifiera sådan forskningslitteratur samt systematiska litteraturoversikter från svenska myndigheter som undersöker samband mellan olika organisatoriska och psykosociala faktorer i förhållande till olika utfall. Tidsperioden för litteratursökningen begränsades till de senaste tio åren.

Utifrån litteratursökningen identifierades 27 olika arbetsmiljöfaktorer. Med utgångspunkt i etablerade teorier och modeller inom forskningsområdet kategoriserades dessa faktorer som organisatoriska eller psykosociala. Sammantaget identifierades 8 organisatoriska faktorer och 19 olika psykosociala faktorer. Återigen användes befintlig forskning för att definiera och kategorisera de psykosociala faktorerna som krav eller resurser. Kategoriseringen av krav och resurser resulterade i 13 krav och 6 resurser. Bland de organisatoriska faktorerna ingick exempelvis skiftarbete, typ av anställning, ledarskap och organisationsförändring. De psykosociala faktorerna inkluderade bland annat krav i form av spånt arbete och anställningstrygghet medan resurser exempelvis inkluderade kontroll och socialt stöd.

För att klargöra hur vanligt förekommande de identifierade organisatoriska och psykosociala faktorerna är bland kvinnor och män användes nationellt representativ statistik. Sammanställningen av underlaget visar på vissa skillnader mellan yrkesarbetande kvinnor och män i Sverige. Exempelvis är det en större andel kvinnor än män som arbetar deltid, har skiftarbete och anger höga krav och lägre resurser. Jämfört med kvinnor är det exempelvis en större andel män som har långa arbetstider. För övriga organisatoriska och psykosociala faktorer är dock andelen kvinnor och män överlag relativt jämförbar.

I de systematiska översiktsstudier som utgör grund för den här kunskaps-sammanställningen finns olika samband. Vi kodade de samband som anger hur olika organisatoriska och psykosociala faktorer är kopplade till olika utfall. Den här kodningen resulterade i att vi identifierade 23 olika utfall. De här utfallen delades in i två övergripande kategorier, nämligen arbets- och hälsorelaterade utfall. Arbetsrelaterade utfall omfattar tre underkategorier: arbetsrelaterade attityder, arbetsrelaterade beteenden och andra arbetsrelaterade utfall. Den andra övergripande kategorin, som inkluderar hälsorelaterade utfall, delades in i psykisk respektive fysisk hälsa. Sammantaget resulterade det här i ett stort antal möjliga samband att undersöka.

De övergripande samband som framkom visar vad som är känt från tidigare systematiska översiktsstudier, nämligen att en rad olika organisatoriska och psykosociala faktorer har betydelse för olika arbets- och hälsorelaterade utfall. När det gäller kvinnor och män mer specifikt, eller yrken och sektorer där kvinnor eller män är i majoritet, är kunskapsläget mer oklart. Den slutsatsen gäller med utgångspunkt i vad som framgår av systematiska litteraturoversikter och metaanalyser. De samband som ändå finns rapporterade för kvinnor respektive män tyder dock på att betydelsen av olika organisatoriska och psykosociala faktorer för olika utfall är jämförbar för kvinnor och män. Det relativt sett oklara kunskapsläget kan hänga samman med att separata analyser av samband för kvinnor respektive män försvåras av att enskilda studier inte alltid analyserar samband separat för kvinnor och män.

Med tanke på att det finns vissa variationer i förekomsten av olika organisatoriska och psykosociala faktorer mellan kvinnor och män kan det möjligen framstå som något förvånande att resultaten på en övergripande nivå visar att betydelsen av organisatoriska och psykosociala faktorer för olika arbets- och hälsorelaterade utfall är jämförbar för kvinnor och män. Det är dock viktigt att beakta att variationer i förekomst av organisatoriska och psykosociala faktorer mellan kvinnor och män bara ger en del av en komplex bild. Befintlig offentlig statistik avseende organisatoriska och psykosociala faktorer skulle kunna länkas till olika utfall för att klargöra och följa utvecklingen av sambanden mellan arbetsmiljöfaktorer och relevanta utfall över tid. Sådana analyser skulle kunna bidra till bättre förståelse av skillnader och likheter mellan kvinnor och män, liksom mellan kvinnor och män i kvinno- respektive mansdominerade yrken och sektorer.

Sådana analyser skulle, tillsammans med forskning som belyser arbetsmiljön och dess konsekvenser i olika organisatoriska kontexter, ge värdefulla bidrag för att bättre förstå kvinnors och mäns arbetsvillkor. Sådana underlag skulle också underlätta för arbetsgivare att följa lagstiftning och regelverk kring arbetsmiljö och även underlätta Arbetsmiljöverkets inspektionsarbete för att främja ett hälsosamt och hållbart arbetsliv för olika grupper av anställda. De samband som dokumenteras i den här kunskaps-sammanställningen visar att alltför höga krav och begränsade resurser i arbetet generellt sett hänger samman med lägre arbetstrivsel, en ökad vilja att säga upp sin anställning samt sämre psykisk och fysisk hälsa. Resultaten visar också att det finns en gedigen kunskap om vilka organisatoriska och psykosociala faktorer som kan bidra till positiva arbets- och hälsorelaterade utfall. Det visar på vikten av att främja en generellt god arbetsmiljö, för kvinnor såväl som för män, för olika yrken och för arbetsmarknadens olika sektorer.

Typ och Nyckelord: Report systematisk översikt, arbete, organisation, utfall, kön, ISBN/ISSN: 1650-3171

Referens: [Szychowska, M., Eklund, R., Nilsson, M.E., & Wiens, S. \(in press\). Effects of sound pressure level and visual perceptual load on the auditory mismatch negativity. *Neuroscience Letters*.](#)

Abstract: Auditory change detection has been studied extensively with mismatch negativity (MMN), an event-related potential. Because it is unresolved if the duration MMN depends on sound pressure level (SPL), we studied effects of different SPLs (56, 66, and 76 dB) on the duration MMN. Further, previous research suggests that the MMN is reduced by a concurrent visual task. Because a recent behavioral study found that high visual perceptual load strongly reduced detection sensitivity to irrelevant sounds, we studied if the duration MMN is reduced by load, and if this reduction is stronger at low SPLs. Although a duration MMN was observed for all SPLs, the MMN was apparently not moderated strongly by SPL, perceptual load, or their interaction, because all 95% CIs overlapped zero. In a contrast analysis of the MMN (across loads) between the 56-dB and 76-dB groups, evidence (BF = 0.31) favored the null hypothesis that duration MMN is unaffected by a 20-dB increase in SPL. Similarly, evidence (BF = 0.19) favored the null hypothesis that effects of perceptual load on the duration MMN do not change with a 20-dB increase in SPL. However, evidence (BF = 3.12) favored the alternative hypothesis that the effect of perceptual load in the present study resembled the overall effect in a recent meta-analysis. When the present findings were combined with the meta-analysis, the effect of load (low minus high) was $-0.43 \mu\text{V}$, 95% CI $[-0.64, -0.22]$ suggesting that the duration MMN decreases with load. These findings provide support for a sensitive monitoring system of the auditory environment.

Typ och Nyckelord: Journal event-related potential, mismatch negativity, perceptual load, sound pressure level, ISSN: 0304-3940

Referens: Szymkowicz, S.M., Persson, J., Lin, T., Fischer, H., & Ebner, N. (2016). Hippocampal brain volume is associated with faster facial emotion identification in older adults: preliminary results. *Frontiers in Aging Neuroscience*, 8: 203.

Abstract: Fast correct identification of facial emotions is highly relevant for successful social interactions. Research suggests that older, compared to young, adults experience increased difficulty with face and emotion processing skills. While functional neuroimaging studies suggest age differences in neural processing of faces and emotions, evidence about age-associated structural brain changes and their involvement in face and emotion processing is scarce. Using structural magnetic resonance imaging, this study investigated the extent to which volumes of frontal and temporal brain structures were related to reaction time in accurate identification of facial emotions in 30 young and 30 older adults. Volumetric segmentation was performed using FreeSurfer and gray matter volumes from frontal and temporal regions were extracted. Analyses of covariance models with response time as the dependent variable and age group and regional volume, and their interaction, as independent variables were conducted, controlling for total intracranial volume. Results indicated that, in older adults, larger hippocampal volumes were associated with faster correct facial emotion identification. These preliminary observations suggest that greater volume in brain regions associated with face and emotion processing contributes to improved facial emotion identification performance in aging.

Typ och Nyckelord: Journal Hippocampus, brain volume, faces, emotion identification, structural MRI, ISSN: 1663-4365

Referens: Sörman, K., Nilsson, G., Howner, K., Tamm, S., Caman, S., Wang, H.-X., Ingvar, M., Edens, J.F., Gustavsson, P., Lilienfeld, S.O., Petrovic, P., Fischer, H., & Kristiansson, M. (2016). Reliability and Construct Validity of the Psychopathic Personality Inventory-Revised in a Swedish Non-Criminal Sample – A Multimethod Approach including Psychophysiological Correlates of Empathy for Pain. *PLoS ONE* 11(6): e0156570.

Abstract: Cross-cultural investigation of psychopathy measures is important for clarifying the nomological network surrounding the psychopathy construct. The Psychopathic Personality Inventory-Revised (PPI-R) is one of the most extensively researched self-report measures of psychopathic traits in adults. To date however, it has been examined primarily in North American criminal or student samples. To address this gap in the literature, we examined PPI-R's reliability, construct validity and factor structure in non-criminal individuals (N = 227) in Sweden, using a multimethod approach including psychophysiological correlates of empathy for pain. PPI-R construct validity was investigated in subgroups of participants by exploring its degree of overlap with (i) the Psychopathy Checklist: Screening Version (PCL:SV), (ii) self-rated empathy and behavioral and physiological responses in an experiment on empathy for pain, and (iii) additional self-report measures of alexithymia and trait anxiety. The PPI-R total score was significantly associated with PCL:SV total and factor scores. The PPI-R Coldheartedness scale demonstrated significant negative associations with all empathy subscales and with rated unpleasantness and skin conductance responses in the empathy experiment. The PPI-R higher order Self-Centered Impulsivity and Fearless Dominance dimensions were associated with trait anxiety in opposite directions (positively and negatively, respectively). Overall, the results demonstrated solid reliability (test-retest and internal consistency) and promising but somewhat mixed construct validity for the Swedish translation of the PPI-R.

Typ och Nyckelord: Journal anxiety, behavior, personality, fear, factor analysis, scanning electron microscopy, cross-cultural studies, ISSN: 1932-6203

Referens: Talamas, S.N., Mavor, K.I., Axelsson, J., Sundelin, T., & Perrett, D.I. (2016). Eyelid-Openness and Mouth Curvature Influence Perceived Intelligence Beyond Attractiveness. *Journal of Experimental Psychology*, 145(5), 603-620.

Abstract: Impression formation is profoundly influenced by facial attractiveness, but the existence of facial cues which affect judgments beyond such an attractiveness halo may be underestimated. Because depression and tiredness adversely affect cognitive capacity, we reasoned that facial cues to mood (mouth curvature) and alertness (eyelid-openness) affect impressions of intellectual capacity. Over 4 studies we investigated the influence of these malleable facial cues on first impressions of intelligence. In Studies 1 and 2 we scrutinize the perceived intelligence and attractiveness ratings of images of 100 adults (aged 18-33) and 90 school-age children (aged 5-17), respectively. Intelligence impression was partially mediated by attractiveness, but independent effects of eyelid-openness and subtle smiling were found that enhanced intelligence ratings independent of attractiveness. In Study 3 we digitally manipulated stimuli to have altered eyelid-openness or mouth curvature and found that each independent manipulation had an influence on perceptions of intelligence. In a final set of stimuli (Study 4) we explored changes in these cues before and after sleep restriction, to examine whether natural variations in these cues according to sleep condition can influence perceptions. In Studies 3 and 4 variations with increased eyelid-openness and mouth curvature were found to relate positively to intelligence ratings. These findings suggest potential overgeneralizations based on subtle facial cues that indicate mood and tiredness, both of which alter cognitive ability. These findings also have important implications for students who are directly influenced by expectations of ability and teachers who may form expectations based on initial perceptions of intelligence.

Journal eyelid openness, mouth curvature, intelligence perception, attractive, sleep restriction, ISSN: 0096-

Referens: Tamm, S., Nilsson, G., Schwarz, J., Lamm, C., Kecklund, G., Petrovic, P., Fischer, H., Åkerstedt, T., & Lekander, M. (2016). It hurts me too – an fMRI study of the effects of sleep restriction and age on empathy for pain. Poster presented at 22nd Annual Meeting of the Organization for Human Brain Mapping, June 26-30, 2016, Geneva, Switzerland. Poster 4341.

Abstract: Introduction: Many emotional processes are affected by sleep restriction (Beattie et al. 2015). Whether this is likewise true for social emotions, such as empathy, is not known. Empathy for pain has previously been studied using paradigms where subjects are presented with pain in others or pictures of pain in others. These paradigms consistently activated areas in the anterior cingulate cortex and anterior insula. Aging affects both sleep (Vitiello 2012) and emotional functions (Mather 2012), but whether the role of sleep in emotional functioning is stable across age is not known. This study aims to investigate how neural and behavioral responses to pain in others are affected by sleep restriction and age, and whether age modulates the role of sleep in responses to pain in others.

Methods: In a randomized cross-over experimental design, 47 healthy younger (age: 20-30) and 39 older (age: 65-75) volunteers underwent fMRI twice, after either normal sleep or sleep restricted to 3 hours. In an event-related fMRI task, participants viewed pictures of needles pricking a hand (pain condition) or Q-tips touching a hand (control condition), and reported their vicarious unpleasantness. Preprocessing and analyses were performed in SPM12 and included slice time correction, realignment, DARTEL normalization and smoothing with an 8x8x8 FWHM kernel. First level analyses included fixed effects for events, motion parameters and button presses. At second level a full factorial design was applied. Additional region of interest analyses were performed in anterior insula and anterior cingulate cortex.

Results: The contrast pain > control robustly activated anterior cingulate cortex and anterior insula (FWE $p < 0.05$, fig 1) as well as other areas previously proposed as the core empathy for pain network (Lamm et al. 2011). Older participants generally experienced more unpleasantness in response to pictures of pain compared to younger participants ($p < 0.001$), and this was accompanied by higher activity in bilateral angular gyrus (FWE $p < 0.05$). Age and sleep interacted so that sleep restriction caused decreased unpleasantness in young and increased unpleasantness in old to pain stimuli ($p < 0.01$), even though there was no significant simple main effect of sleep restriction in any age group. In clusters in bilateral insula, old participants showed more activity and young less activity in response to pain after sleep restriction ($p < 0.001$ uncorrected).

Conclusions: Compared to younger participants, older subjects generally responded more to pain in others, shown as subjective experience as well as brain responses. With sleep restriction, empathic responses in young and old changed in opposite directions, so that empathic responses increased in older and decreased in younger participants. Given that empathy is crucial in effective interaction with others, our findings imply possible age-related changes in prosocial behavior, amplified by short sleep.

Typ och Nyckelord: Proceedings aging, emotions, pain, sleep, social interactions, other-empathy

Referens: Tempel, T., & Kubik, V. (in press). Test-potentiated learning of motor sequences. *Memory*.

Abstract: We investigated effects of retrieving body movements from memory on subsequent re-encoding of these movements (i.e., test-potentiated learning). In Experiment 1, participants first learned to perform 12 sequential finger movements as responses to letter stimuli. Eight of these movements then had to be recalled in response to their stimuli (initial test). Subsequently, learning trials were repeated for four of the previously to-be-retrieved movements as well as the previously not-to-be-retrieved movements. Restudy benefited from prior retrieval. In a final test, again requiring motoric recall in response to letter stimuli, performance was better for restudied items that were previously cued for retrieval as compared to items that had been restudied without prior retrieval. However, no such indirect testing benefit occurred when initial and final testing formats were incongruent, that is, when participants had to recall the stimuli in response to movements as cues at the final test. In Experiment 2, we replicated the finding of test-potentiated learning with a different design, manipulating initial-testing status between participants.

Typ och Nyckelord: Journal body movement, test-potentiated learning, retrieval, testing effect, learning transfer, ISSN: 0965-8211

Referens: Todorov, I., Kubik, V., Del Missier, F., & Mäntylä, T. (2016). Disrupting the pattern: Further testing of the spatiotemporal hypothesis of multitasking. Poster presented at the Sixth International Conference on Memory (ICOM 6), Budapest, Hungary, July 17-22, 2016.

Abstract: We tested the spatiotemporal hypothesis of multitasking, which posits that under high temporal load, individuals with better spatial abilities are better at multitasking. A computerized multitasking simulation was administered under three different conditions, one ordinary and two conditions with additional concurrent spatial load. Participants were assigned to one of three groups, luteal females, menstrual females and males. Based on the literature, these groups differ in spatial abilities because of hormonal fluctuations linked to the menstrual cycle. Across all three versions of the multitasking simulation, the performance of the luteal group was lowest, while the menstrual and the male group did not differ significantly from each other. The results support the notion that participants with better spatial ability are better multitaskers.

Typ och Nyckelord: Proceedings multitasking, spatial ability, simulation

Referens: Toivanen, S., Harter Griep, R., Mellner, C., Nordenmark, M., Vinberg, S., & Eloranta, S. (2016). Hospitalization due to stroke or myocardial infarction – are there any differences between self-employed individuals and employees? Health of small business owners & entrepreneurs - 1st international workshop. Montpellier, France, 29 September 2016.

Abstract: The aim was to examine hospitalization due to stroke and acute myocardial infarction, respectively, and to analyze differences between the self-employed and paid employees in the same industries. Data and methods: Data from Statistics Sweden's population register (2003) was linked to National Board of Health and Welfare's hospital admission register and cause of death register (2004-2008). More than 4.7 million people (7% self-employed) were included in the analyses. Individuals were classified on the basis of their occupational status as self-employed persons or employees. The self-employed were further classified as sole proprietors or limited

liability company owners according to the legal form of self-employment. Based on the Swedish Standard Industrial Classification (SNI 2002) eight industries were distinguished. Diagnoses of hospitalization were classified as stroke (intracerebral hemorrhage I61, cerebral infarction I63, and unspecified acute cerebrovascular disease I64) and acute myocardial infarction (I21) based on the international classification of diseases (ICD-10). Stroke and Myocardial Infarction (MI) hospitalization incidence rate ratios (IRR) and 95% confidence intervals (CI) were estimated using negative binomial regression models adjusted for pre-specified potential confounding covariates. Effect modification by occupational status, industrial sector, and gender was investigated with two and three-way interaction terms.

Typ och Nyckelord: Proceedings hospitalization, stroke, myocardial infarction, self-employed, employee

Referens: Toivanen, S., Härter Griep, R., Mellner, C., Vinberg, S., & Eloranta, S. (2016). Mortality differences between self-employed and paid employees: A 5-year follow-up study of the working population in Sweden. *Occupational & Environmental Medicine, 73*, 627-636.

Abstract: Objectives: Analyse mortality differences between self-employed and paid employees with a focus on industrial sector, educational level and gender using Swedish register data.

Methods: A cohort of the total working population (4 776 135 individuals; 7.2% self-employed; 18–100 years of age at baseline 2003) in Sweden with a 5-year follow-up (2004–2008) for all-cause and cause-specific mortality (57 743 deaths). Self-employed individuals were categorised as sole proprietors or limited liability company (LLC) owners according to their enterprise's legal form. Cox proportional hazards models were applied to compare mortality rates between sole proprietors, LLC owners and paid employees, adjusted for sociodemographic confounders.

Results: Mortality from cardiovascular diseases was 16% lower and from suicide 26% lower among LLC owners than among paid employees, adjusted for confounders. Within the industrial category, all-cause mortality was 13–15% lower among sole proprietors and LLC owners compared with employees in manufacturing and mining (MM) as well as personal and cultural services (PCS), and 11–20% higher in sole proprietors in trade, transport and communication and the welfare industry (W). A significant three-way interaction indicated 17–23% lower all-cause mortality among male LLC owners in MM and female sole proprietors in PCS, and 50% higher mortality in female sole proprietors in W than in employees in the same industries.

Conclusions: Mortality differences between self-employed individuals and paid employees vary by the legal form of self-employment, across industries, and by gender. Differences in work environment exposures and working conditions, varying market competition across industries and gender segregation in the labour market are potential mechanisms underlying these findings.

Typ och Nyckelord: Journal mortality differences, self-employed, paid employees, follow-up, Sweden, ISSN: 1351-0711

Referens: van der Schans, S., & Dimitrova, R. (2016). Parent-Child Representations in Children's Family Drawings in Bulgaria, Italy and the Netherlands. *International Psychology Bulletin, 20*(2), 34-39.

Abstract: We investigated cultural variations in parent-child representations of Dutch (n = 112), Italian (n = 82), and Bulgarian (n = 121) children's family drawings. The drawings were selected to represent highly individualistic (Dutch), individualistic (Italian), and collectivistic (Bulgarian) cultures. Using the Pictorial Assessment of Interpersonal Relationships (PAIR, Bombi, Pinto, & Cannoni, 2007), all drawings were coded with regard to Cohesion, Distancing, Similarity, and Value in parent-child representations. Dutch children scored higher on Distancing and lower on Cohesion, compared to the Italian and Bulgarian children, whereas Bulgarian children scored higher on Cohesion and lower on Distancing compared to the other two samples. We conclude that children's drawings represent individualistic and collectivistic traits in the relationship between self and parental figures.

Typ och Nyckelord: Journal children's drawings, parent-child representation, Bulgaria, Italy, the Netherlands

Referens: Vander Elst, T., Näswall, K., Bernhard-Oettel, C., De Witte, H., & Sverke, M. (2016). The effect of job insecurity on employee health complaints: A within-person analysis of the explanatory role of threats to the manifest and latent benefits of work. *Journal of Occupational Health Psychology, 21*(1), 65-71.

Abstract: The current study contributes to the literature on job insecurity by highlighting threat to the benefits of work as an explanation of the effect of job insecurity on health complaints. Building on the latent deprivation model, we predicted that threats to both manifest (i.e., financial income) and latent benefits of work (i.e., collective purpose, social contacts, status, time structure, activity) mediate the relationships from job insecurity to subsequent mental and physical health complaints. In addition, in line with the conservation of resources theory, we proposed that financial resources buffer the indirect effect of job insecurity on health complaints through threat to the manifest benefit. Hypotheses were tested using a multilevel design, in which 3 measurements (time lag of 6 months between subsequent measurements) were clustered within 1,994 employees (in Flanders, Belgium). This allowed for the investigation of within-person processes, while controlling for variance at the between-person level. The results demonstrate that job insecurity was related to subsequent threats to both manifest and latent benefits, and that these threats in turn were related to subsequent health complaints (with an exception for threat to the manifest benefit that did not predict mental health complaints). Three significant indirect effects were found: threat to the latent benefits mediated the relationships between job insecurity and both mental and physical health complaints, and threat to the manifest benefit mediated the relationship between job insecurity and physical health complaints. Unexpectedly, the latter indirect effect was exacerbated by financial resources.

Typ och Nyckelord: Journal job insecurity, latent benefits, health, ISSN: 1076-8998

Referens: Welander, J., Astvik, W., & Hellgren, J. (in press). Stressrelaterad ohälsa och arbetstrivsel hos medarbetare och chefer i socialtjänsten. *Arbetsmarknad & Arbetsliv*.

Abstract: Situationen inom svensk socialtjänst framstår som särskilt problematisk med våra arbetsvillkor, stressrelaterad ohälsa och höga ohälsotal. Baserat på en nationell enkätstudie med myndighetsutövande medarbetare och chefer i socialtjänsten undersöks betydelsen av arbetsvillkor och organisatoriska faktorer för ohälsa och arbetstrivsel. Resultaten visar bland annat att rimliga arbetskrav, i synnerhet kvantitativa krav, samt organisationens öppenhet har stor betydelse för ohälsa och arbetstrivsel hos både medarbetare och chefer inom socialtjänsten.

Typ och Nyckelord: Journal socialtjänsten, stress, arbetsvillkor

Referens: Welander, J., Astvik, W., & Isaksson, K. (in press). Corrosion of trust: Violation of psychological contracts as a reason for turnover amongst social workers. *Nordic Social Work Research*.

Abstract: Staff shortage in the social sector is a serious problem in several countries and the high turnover rate of professional social workers presents a major challenge to the professional field. Social workers distinguish themselves as a particularly exposed occupational group, reporting higher workloads and more difficult demands in comparison with other human service workers. Inspired by psychological contract theory, the objective of this study was to describe social workers' turnover processes that lead to a decision to quit after a perceived violation of a psychological contract. Thirty-one interviews were conducted with former statutory social workers who had voluntarily resigned from their jobs during the preceding year. The analysis identified four themes in the turnover processes stemming from perceptions of organisational failure to fulfil promises concerning the provision of: (1) a balance between demands and resources at work, (2) a balance between efforts and rewards, (3) organisational professional ethics, and (4) responsible human resource practices. The results highlight how organisational responses to work-related dissatisfactions by social workers seem to enhance their conviction of psychological contract breaches and perceptions of contract violations, resulting in turnover. An important conclusion is that public sector employers need to reconsider their personnel strategies and practices in order to start rebuilding trust and creating a more positive work climate.

Typ och Nyckelord: Journal social workers, turnover, psychological contract violation, work conditions, ISSN: 2156-857X

Referens: Werbart, A. (2016). Die Kunst der Freiheit: Sieben psychoanalytische Thesen zu Kreativität und Grenzen. In R. Müller-Herwig & M. Vogel (Hrsg.), *Subjektivität und Verstehen: Psychoanalyse und Sozialwissenschaften im Dialog. Jörg Frommer zum 60. Geburtstag* (S. 133–144). Giessen: Psychosozial-Verlag.

Abstract:

Typ och Nyckelord: Book (chapter) Psychoanalyse, Kreativität, Grenzen, ISBN: 978-3-8379-2578-4

Referens: Werbart, A., Brusell, L., Iggedal, R., Lavfors, K., & Widholm, A. (2016). Changes in Self-Representations Following Psychoanalytic Psychotherapy for Young Adults. A Comparative Typology. *Journal of the American Psychoanalytic Association*, 64(5), 917-958.

Abstract: Changes in dynamic psychological structures are often a treatment goal in psychotherapy. The present study aimed at creating a typology of self-representations among young women and men in psychoanalytic psychotherapy, to study longitudinal changes in self-representations, and to compare self-representations in the clinical sample with those of a nonclinical group. Twenty-five women and sixteen men were interviewed according to Blatt's Object Relations Inventory pretreatment, at termination, and at a 1.5-year follow-up. In the comparison group, eleven women and nine men were interviewed at baseline, 1.5 years, and three years later. Typologies of the 123 self-descriptions in the clinical group and 60 in the nonclinical group were constructed by means of ideal-type analysis for men and women separately. Clusters of self-representations could be depicted on a two-dimensional matrix with the axes Relatedness-Self-definition and Integration-Nonintegration. In most cases, the self-descriptions changed over time in terms of belonging to different ideal-type clusters. In the clinical group, there was a movement toward increased integration in self-representations, but above all toward a better balance between relatedness and self-definition. The changes continued after termination, paralleled by reduced symptoms, improved functioning, and higher developmental levels of representations. No corresponding tendency could be observed in the nonclinical group.

Typ och Nyckelord: Journal self-representations, young adults, ideal-type analysis, psychoanalytic psychotherapy, long-term follow-up, maturational process, ISSN: 0003-0651

Referens: Werbart, A., & Levander, S. (2016). Fostering change in personality configurations: Anaclitic and introjective patients in psychoanalysis. *Psychoanalytic Psychology*, 33(2), 217-242.

Abstract: Treatment goals in psychoanalysis often include changes in underlying psychological structures. Different patterns of change have been demonstrated in anaclitic and introjective patients. In a series of 14 cases we took a further step and examined changes in the anaclitic-introjective personality configurations following psychoanalysis, as well as patients' experiences of these changes. Clinical case formulations were based on repeated interviews and the application of prototype-matching methodology. Patients' experiences were explored by applying inductive thematic analysis. We found a development towards more mature levels of differentiation and individuation in the anaclitic group, whereas relatedness and intimacy remained problematic in some introjective cases. Patients described their experienced changes in terms of complementary personality configuration, but the introjective group described more benefits from psychoanalysis. Several patients expressed their ambivalence towards these changes and a feeling of loss of their former selves. The patients' view of their analysts and the analytic method were congruent with the patients' primary personality configuration. In order to reactivate developmental processes, the psychoanalytic technique has to be adjusted to the anaclitic and introjective patients' different needs and defenses.

Typ och Nyckelord: Journal personality configurations, relatedness and self-definition, psychoanalysis, prototype-matching, patient perspective, ISSN: 0736-9735

Referens: Wergeland, G.J.H., Fjermestad, K.W., Marin, C.E., Bjelland, I., Storm Mowatt Haugland, B., Silverman, W.K., Öst, L.-G., Fauskanger Bjaastad, J., Oeding, K., Havik, O.E., & Heiervang, E.R. (2016). Predictors of treatment outcome in an effectiveness trial of cognitive behavioral therapy for children with anxiety disorders. *Behaviour Research and Therapy*, 76, 1-12.

Abstract: A substantial number of children with anxiety disorders do not improve following cognitive behavioral therapy (CBT). Recent effectiveness studies have found poorer outcome for CBT programs than what is typically found in efficacy studies. The present study examined predictors of treatment outcome among 181 children (aged 8–15 years), with separation anxiety, social phobia, or generalized anxiety disorder, who participated in a randomized, controlled effectiveness trial of a 10-session CBT program in community clinics. Potential

predictors included baseline demographic, child, and parent factors. Outcomes were as follows: a) remission from all inclusion anxiety disorders; b) remission from the primary anxiety disorder; and c) child- and parent-rated reduction of anxiety symptoms at post-treatment and at 1-year follow-up. The most consistent findings across outcome measures and informants were that child-rated anxiety symptoms, functional impairment, a primary diagnosis of social phobia or separation anxiety disorder, and parent internalizing symptoms predicted poorer outcome at post-treatment. Child-rated anxiety symptoms, lower family social class, lower pretreatment child motivation, and parent internalizing symptoms predicted poorer outcome at 1-year follow-up. These results suggest that anxious children with more severe problems, and children of parents with elevated internalizing symptom levels, may be in need of modified, additional, or alternative interventions to achieve a positive treatment outcome.

Typ och Nyckelord: Journal anxiety, predictors, effectiveness, cognitive behavior therapy, children, ISSN: 0005-7967

Referens: Westberg, L., Henningsson, S., Zettergren, A., Svärd, J., Hovey, D., Lin, T., Ebner, N.C., & Fischer, H. (2016). Variation in the Oxytocin Receptor Gene Is Associated with Face Recognition and its Neural Correlates. *Frontiers in Behavioral Neuroscience*, 10:178.

Abstract: The ability to recognize faces is crucial for daily social interactions. Recent studies suggest that intranasal oxytocin administration improves social recognition in humans. Oxytocin signaling in the amygdala plays an essential role for social recognition in mice, and oxytocin administration has been shown to influence amygdala activity in humans. It is therefore possible that the effects of oxytocin on human social recognition depend on mechanisms that take place in the amygdala—a central region for memory processing also in humans. Variation in the gene encoding the oxytocin receptor (OXTR) has been associated with several aspects of social behavior. The present study examined the potential associations between nine OXTR polymorphisms, distributed across the gene, and the ability to recognize faces, as well as face-elicited amygdala activity measured by functional magnetic resonance imaging (fMRI) during incidental encoding of faces. The OXTR 3' polymorphism rs7632287, previously related to social bonding behavior and autism risk, was associated with participants' ability to recognize faces. Carriers of the GA genotype, associated with enhanced memory, displayed higher amygdala activity during face encoding compared to carriers of the GG genotype. In line with work in rodents, these findings suggest that, in humans, naturally occurring endogenous modulation of OXTR function affects social recognition through an amygdala-dependent mechanism. These findings contribute to the understanding of how oxytocin regulates human social behaviors.

Typ och Nyckelord: Journal oxytocin, social cognition, face recognition, polymorphism, OXTR, ISSN: 1662-5153

Referens: Wiens, S., & Nilsson, M.E. (in press). Performing Contrast Analysis in Factorial Designs. From NHST to Confidence Intervals and Beyond. *Educational and Psychological Measurement*.

Abstract: Because of the continuing debates about statistics, many researchers may feel confused about how to analyze and interpret data. Current guidelines in psychology advocate the use of effect sizes and confidence intervals (CIs). However, researchers may be unsure about how to extract effect sizes from factorial designs. Contrast analysis is helpful because it can be used to test specific questions of central interest in studies with factorial designs. It weighs several means and combines them into one or two sets that can be tested with t tests. The effect size produced by a contrast analysis is simply the difference between means. The CI of the effect size informs directly about direction, hypothesis exclusion, and the relevance of the effects of interest. However, any interpretation in terms of precision or likelihood requires the use of likelihood intervals or credible intervals (Bayesian). These various intervals and even a Bayesian t test can be obtained easily with free software. This tutorial reviews these methods to guide researchers in answering the following questions: When I analyze mean differences in factorial designs, where can I find the effects of central interest, and what can I learn about their effect sizes?

Typ och Nyckelord: Journal analysis of variance, contrast analysis, confidence interval, null hypothesis significance testing, Bayesian analysis, ISSN: 0013-1644

Referens: Wiens, S., Szychowska, M., & Nilsson, M.E. (2016). Visual Task Demands and the Auditory Mismatch Negativity: An Empirical Study and a Meta-Analysis. *PLoS ONE*, 11(1): e0146567.

Abstract: Because the auditory system is particularly useful in monitoring the environment, previous research has examined whether task-irrelevant, auditory distracters are processed even if subjects focus their attention on visual stimuli. This research suggests that attentionally demanding visual tasks decrease the auditory mismatch negativity (MMN) to simultaneously presented auditory distractors. Because a recent behavioral study found that high visual perceptual load decreased detection sensitivity of simultaneous tones, we used a similar task (n = 28) to determine if high visual perceptual load would reduce the auditory MMN. Results suggested that perceptual load did not decrease the MMN. At face value, these nonsignificant findings may suggest that effects of perceptual load on the MMN are smaller than those of other demanding visual tasks. If so, effect sizes should differ systematically between the present and previous studies. We conducted a selective meta-analysis of published studies in which the MMN was derived from the EEG, the visual task demands were continuous and varied between high and low within the same task, and the task-irrelevant tones were presented in a typical oddball paradigm simultaneously with the visual stimuli. Because the meta-analysis suggested that the present (null) findings did not differ systematically from previous findings, the available evidence was combined. Results of this meta-analysis confirmed that demanding visual tasks reduce the MMN to auditory distracters. However, because the meta-analysis was based on small studies and because of the risk for publication biases, future studies should be preregistered with large samples (n > 150) to provide confirmatory evidence for the results of the present meta-analysis. These future studies should also use control conditions that reduce confounding effects of neural adaptation, and use load manipulations that are defined independently from their effects on the MMN.

Typ och Nyckelord: Journal visual, auditory, perceptual load, mismatch negativity, ISSN: 1932-6203

Referens: Vigerland, S., Ljótsson, B., Thulin, U., Öst, L.-G., Andersson, G., & Serlachius, E. (2016). Internet-delivered cognitive behavioural therapy for children with anxiety disorders: A randomised controlled trial. *Behaviour Research and Therapy*, 76, 47-56.

Abstract: Background: Cognitive behaviour therapy (CBT) has been shown to be an effective treatment for anxiety disorders in children, but few affected seek or receive treatment. Internet-delivered CBT (ICBT) could be a way to increase the availability of empirically supported treatments.

Aims: A randomised controlled trial was conducted to evaluate ICBT for children with anxiety disorders.

Method: Families (N = 93) with a child aged 8-12 years with a principal diagnosis of generalised anxiety disorder, panic disorder, separation anxiety, social phobia or specific phobia were recruited through media advertisement. Participants were randomised to 10 weeks of ICBT with therapist support, or to a waitlist control condition. The primary outcome measure was the Clinician Severity Rating (CSR) and secondary measures included child- and parent-reported anxiety. Assessments were made at pre-treatment, post-treatment and at three-month follow-up.

Results: At post-treatment, there were significant reductions on CSR in the treatment group, with a large between-group effect size (Cohen's $d = 1.66$). Twenty per cent of children in the treatment group no longer met criteria for their principal diagnosis at post-treatment and at follow-up this number had increased to 50%. Parent-reported child anxiety was significantly lower in the treatment group than in the waitlist group at post-treatment, with a small between-group effect size (Cohen's $d = 0.45$). There were no significant differences between the groups regarding child-ratings of anxiety at post-treatment. Improvements were maintained at three-month follow-up, although this should be interpreted cautiously due to missing data.

Conclusions: Within the limitations of this study, results suggest that ICBT with therapist support for children with anxiety disorders can reduce clinician- and parent-rated anxiety symptoms.

Trial registration: Clinicaltrials.gov; NCT01533402.

Typ och Nyckelord: Journal internet-delivered treatment, CBT, children, anxiety disorders, ISSN: 0005-7967

Referens: Vlaescu, G., Alasjö, A., Miloff, A., Carlbring, P., & Andersson, G. (2016). Features and functionality of the Iterapi platform for internet-based psychological treatment. *Internet Interventions*, 6, 107-114.

Abstract: The purpose of this article is to describe an internet-based platform for improving symptoms and quality of life for people with psychological and behavioural health problems such as depression, anxiety, phobia, psychological trauma, hearing loss and tinnitus. The online platform, called Iterapi, was developed at the Department of Behavioural Sciences and Learning at Linköping University, Sweden and has been running for nearly two decades and used in many randomized controlled trials and outpatient treatments.

The intention of this article is to share our experience with developing such a treatment solution and the process flow and elements of running internet-based psychological interventions. This will likely be of use to developers building similar services, therapists considering integrating such approaches in their practices and institutions, as well as researchers curious about the functions included on the platform and methodology used for running studies.

We describe the security aspects of the platform, central concepts underlying its development, how the platform can be used in a study or treatment and the main features and functions the platform offers. We comment on practical considerations regarding blending of methods within the platform, such as self-help treatments with asynchronous communication and real-time text chat and video conversations. We also point out the advantages of using Internet-assisted treatments, the challenges that we have faced and future planned upgrades.

Due to continuous development of the platform, its user-friendliness, accessibility across devices and numerous features, many research colleagues from Sweden as well as other countries such as Germany, United Kingdom, Romania and Israel have chosen to implement their own studies on the platform.

Typ och Nyckelord: Journal internet-based platform, iterapi, psychological problems, behavioural health problems, platform development, ISSN: 2214-7829

Referens: von Thiele Schwarz, U. (2016). Co-care: Producing better health outcome through interactions between patients, care providers and information and communication technology. *Health Services Management Research*, 29(1-2), 10-15.

Abstract: The demands on healthcare are shifting, from caring for patients with acute conditions managed in a single-care episode to caring for patients with chronic and often complex conditions. With this shift comes a recognition that healthcare requires an interaction between patients and care providers, and of the interdependencies between these actors for achieving a positive outcome – that the results are co-produced. This paper introduces co-care, which stresses that the role of healthcare providers is to complement people's own resources for managing their health so that patients' and healthcare providers' resources combined leads to the best possible outcome. This is done using tools and artifacts such as information and communication technology that enable knowledge to be created, shaped, shared and applied across the actors. Thus, in co-care, knowledge is not attributed to a single entity but distributed between them in line with the theory of distributed cognition. To put co-care into practice, several challenges must be addressed. This includes moving from profession-centeredness to patient-centeredness and from approaching care as a transformation of input to products to viewing care as linking needs and knowledge, as well as a substantial attitude and behavior change across healthcare stakeholders.

Typ och Nyckelord: Journal co-creation, coproduction, health information technologies (HIT), informatics, information and communication technology, management, patient-centeredness, ISSN: 0951-4848

Referens: von Thiele Schwarz, U., Hasson, H., & Tafvelin, S. (2016). Leadership training as an occupational health intervention: Improved safety and sustained productivity. *Safety Science*, 81, 35-45.

Abstract: The safety climate in an organization is determined by how managers balance the relative importance of safety and productivity. This gives leaders a central role in safety in an organization, and from this follows that leadership training may improve safety. Transformational leadership may be one important component but may need to be combined with positive control leadership behaviors. Leadership training that combines transformational leadership and applied behavior analysis may be a way to achieve this.

Purpose: The study evaluates changes in safety climate and productivity among employees whose leaders (n = 76) took part in a leadership training program combining transformational leadership and applied behavior analysis. Changes in managers' ratings of transformational leadership, contingent rewards, Management-by-

Exceptions Active (MBEA) and safety self-efficacy were evaluated. Moreover, we compare whether the training has differentiated effects on safety depending on managers' specific focus on improvements in: (1) safety, (2) productivity or (3) general leadership.

Result: Safety climate improved over time, while self-rated productivity remained unchanged. As hypothesized, transformational leadership, contingent rewards and safety self-efficacy as proxies for positive control behaviors increased while MBEA, a negative control behavior, decreased. Managers focusing on general leadership skills showed greater improvement in safety climate expectations.

Conclusions: Training leaders in both transformational leadership and applied behavior analysis is related to improvements in leadership and safety. There is no added benefit of focusing specifically on safety or productivity.

Typ och Nyckelord: Journal applied behavior analysis, safety climate, safety self-efficacy, transformational leadership, transactional leadership, ISSN: 0925-7535

Referens: von Thiele Schwarz, U., Lundmark, R., & Hasson, H. (2016). The Dynamic Integrated Evaluation Model (DIEM): Achieving Sustainability in Organizational Intervention through a Participatory Evaluation Approach. *Stress & Health, 32*(4), 285-293.

Abstract: Recently, there have been calls to develop ways of using a participatory approach when conducting interventions, including evaluating the process and context to improve and adapt the intervention as it evolves over time. The need to integrate interventions into daily organizational practices, thereby increasing the likelihood of successful implementation and sustainable changes, has also been highlighted. We propose an evaluation model—the Dynamic Integrated Evaluation Model (DIEM)—that takes this into consideration. In the model, evaluation is fitted into a co-created iterative intervention process, in which the intervention activities can be continuously adapted based on collected data. By explicitly integrating process and context factors, DIEM also considers the dynamic sustainability of the intervention over time. It emphasizes the practical value of these evaluations for organizations, as well as the importance of their rigorously for research purposes.

Typ och Nyckelord: Journal DIEM, organizational intervention, participatory evaluation approach, ISSN: 1532-3005

Referens: von Thiele Schwarz, U., Nielsen, K.M., Stenfors-Hayes, T., & Hasson, H. (in press). Using kaizen to improve employee well-being: Results from two organizational intervention studies. *Human Relations*.

Abstract: Participatory intervention approaches that are embedded in existing organizational structures may improve the efficiency and effectiveness of organizational interventions, but concrete tools are lacking. In the present article, we use a realist evaluation approach to explore the role of kaizen, a lean tool for participatory continuous improvement, in improving employee well-being in two cluster-randomized, controlled participatory intervention studies. Case 1 is from the Danish Postal Service, where kaizen boards were used to implement action plans. The results of multi-group structural equation modeling showed that kaizen served as a mechanism that increased the level of awareness of and capacity to manage psychosocial issues, which, in turn, predicted increased job satisfaction and mental health. Case 2 is from a regional hospital in Sweden that integrated occupational health processes with a pre-existing kaizen system. Multi-group structural equation modeling revealed that, in the intervention group, kaizen work predicted better integration of organizational and employee objectives after 12 months, which, in turn, predicted increased job satisfaction and decreased discomfort at 24 months. The findings suggest that participatory and structured problem-solving approaches that are familiar and visual to employees can facilitate organizational interventions.

Typ och Nyckelord: Journal distributed cognitions, lean, mental health, participatory interventions, psychosocial risk management, work environment, ISSN: 0018-7267

Referens: Väfors Fritz, M., Eklund, J.M., Liljeberg, J., & af Klinteberg, B. (2016). Quality of life in different male offender groups – possible underlying effects of intelligence and psychopathic tendencies. *Journal of Offense Science & Criminology, 4*(2), 202.

Abstract: The role of psychopathic tendencies and intelligence on Quality of life (QoL) ratings in different male offender groups was explored. Participants were 199 Swedish males with a history of criminality at age 11-14 and matched controls from the longitudinal project Young Lawbreakers as Adults. Based on registered crimes prior to 15 years and up to 34 years of age, four criminal groups were yielded: non-criminals (NC); adolescence-limited (AL); persistent (P); and adult-onset (AO). The QoL construct consists of the following dimensions: Self-perception, Psychological health, Family, Children, Education, Work, and Finances, all self-rated at age 38-41 when also psychopathic tendencies were clinically assessed using the Psychopathy Check List (PCL). The P group reported lower QoL in all dimensions compared to the NC and AL groups and lower QoL regarding Family and Education than the AO group. When controlling for psychopathic tendencies, the group differences in QoL regarding Self-perception and Children was no longer significant. Generally, individuals with higher IQ scores rated higher QoL than individuals with lower IQ scores. IQ however did not explain the divergence in QoL between offender groups. Psychopathic tendencies are suggested to overtake the importance of group belonging regarding the QoL dimensions of Self-perception and Children.

Typ och Nyckelord: Journal criminality, family, intelligence, offender groups, psychopathy, quality of life, self-perception, ISSN: 2348-9804

Referens: Ziaei, M., & Fischer, H. (2016). Emotion and Aging: The impact of emotion on attention, memory, and face recognition in late adulthood (Chapter 13). In J.R. Absher, & J. Cloutier (Eds.), *Neuroimaging Personality, Social Cognition, and Character*. Academic Press.

Abstract: It has been estimated that by 2050, 1.5 billion people will be aged 65 or older, representing 16 per cent of the world's population. Hence, understanding the full picture of aging could provide a new lens for thinking about long-term planning for health, work policies, and opportunities for engaging and collaborating with older adults. Although aging is associated with cognitive deficit and the associated costs of losing cognitive functions, these do not provide a complete picture of aging. Increasing evidence in emotional aging literature offers a different perspective on how we age. Recent discoveries in functional neuroimaging also provide important insights into how the brain functions during various cognitive and emotional tasks as we age, granting a more comprehensive view of the aging brain. Therefore, the primary focus of this chapter is to provide

multidisciplinary evidence from both behavioural and neuroimaging studies in the emotional aging literature. The chapter is organized based on the impact of emotion on three main categories of cognitive function as a function of age: attention, memory, and face recognition. Before discussing the main findings from each of these categories, some of the major discoveries and dominant models in the cognitive aging domain will be discussed briefly. Throughout this chapter, several questions are revisited: what are the underlying cognitive and neural mechanisms of the attentional biases toward positive items in aging? Do older adults have difficulties in processing negative emotions or do they process positive emotions differently than younger adults? How are the attention and memory process of emotional items linked? What factors influence the processing of emotional facial expressions in late adulthood? Do the temporal features of stimuli help older adults overcome difficulties in recognizing emotions? Are there any age differences in processing the six main emotions expressed by the face?

Typ och Nyckelord: Book (chapter) attentional bias, cognitive aging, emotion recognition, emotional memory, positivity effect, ISBN: 9780128009352

Referens: Åkerstedt, T., Lekander, M., Nilsson, G., Fischer, H., Kecklund, G., d'Onofrio, P., Gruber, G., Schwarz, J. (2016). Women sleep better and have a stronger response to late night curtailed sleep than men, particularly in older individuals-effects on polysomnographical sleep. Abstracts of the 23rd Congress of the European Sleep Research Society, 13-16 September 2016, Bologna, Italy. *Journal of Sleep Research*, 25(S1), 156-156.

Abstract: Objectives: Higher age is associated with poorer sleep and women report more sleep problems than men, despite indications of better physiological sleep. The purpose of the present study was to investigate whether a common daily life sleep problem, late night curtailed sleep, would have different effects depending on gender and age. Methods: 60 healthy individuals (equal groups of gender and age (20-30 and 65-75 years)) participated in an experiment with a full night's sleep and one night with reduced sleep between 0400 h and 0700 h, in a balanced design. Sleep was recorded through standard polysomnography (PSG) at home. Results: The results showed the expected main effect of sleep loss. Older participants had a lower TST, N3%, sleep efficiency, but more N1%, longer N3 latency, and fewer awakenings. Women had more N3%, more REM%, more N3%, and shorter N3 latency compared with men. The curtailed late night sleep caused a stronger increase in N3%, and more pronounced reductions in REM%, a stronger reduction in N1%, and N3 latency in women than men. In the higher age group the N3% response in men was strongly attenuated compared to that of women. Conclusions: The results show that women, apart from getting more N3% and less N1% even in the normal sleep condition, have a stronger response to late night sleep, particularly in higher age groups.

Typ och Nyckelord: Proceedings gender, curtailed sleep, polysomnographical sleep, age

Referens: Öhrstedt, M., & Lindfors, P. (2016). Students' adoption of course-specific approaches to learning in two parallel courses. *European Journal of Psychology of Education*, 31(2), 209-223.

Abstract: Research on students' adoption of course-specific approaches to learning in parallel courses is limited and inconsistent. This study investigated second-semester psychology students' levels of deep, surface and strategic approaches in two courses running in parallel within a real-life university setting. The results showed significant differences in coursespecific adoption regardless of approach. However, the strategic approach seemed more stable. Sub-groups of students exhibited substantial variation: more than half of the students adopted similar approaches in both courses while large minorities showed great variability. Students scoring low on the surface approach, high on the deep approach or high on the strategic approach to learning were flexible in adopting different parallel approaches. However, students scoring high on the surface approach, low on the deep approach or low on the strategic approach seemed stable across contexts. This suggests that even smaller variations in teaching and learning environments can influence students' approaches to learning.

Typ och Nyckelord: Journal approaches to learning, student variation, Swedish psychology students, higher education, ISSN: 0256-2928

Referens: Öhrstedt, M., & Lindfors, P. (in press). Linkages between approaches to learning, perceived stress and expected and actual academic outcomes among first-semester psychology students. *Journal of Further and Higher Education*.

Abstract: Previous research indicates that higher educational students' perceptions of stress are in part related to the teaching and learning context, and influence academic outcomes. This study intends to deepen our understanding of these processes by examining the linkages between approaches to learning, perceived stress and expected and actual academic outcomes within a specific educational setting. First-semester psychology students (N = 191) completed a questionnaire, including short versions of ASSIST and PSS, and estimated their course grade before a written examination. Later, actual grades were added. The results suggest that surface approach to learning is positively associated with high levels of perceived stress, and reflected in lower levels of expected grades. The relationships between deep and strategic approaches to learning and perceived stress seem to be more ambivalent, despite positive associations with expected grades. Coping and motivational aspects of the concepts of surface and strategic approaches to learning seem to be crucial to understanding the linkages between the examined factors. Also, the significance of a strategic approach in relation to actual academic outcomes is highlighted.

Typ och Nyckelord: Journal approaches to learning, stress, academic outcome, higher education, psychology students, ISSN: 1469-9486

Referens: Öst, L.-G., Riise, E.N., Wergeland, G.J., Hansen, B., & Kvale, G. (2016). Cognitive behavioral and pharmacological treatments of OCD in children: A systematic review and meta-analysis. *Journal of Anxiety Disorders*, 43, 58-69.

Abstract: Obsessive-compulsive disorder (OCD) is ranked by the World Health Organization (WHO) among the 10 most debilitating disorders. The treatments which have been found effective are cognitive behavior therapy (CBT) and serotonin reuptake inhibitors (SRI). This meta-analysis includes all RCTs of CBT (25) and SRI (9) for OCD in youth using the Children's Yale-Brown Obsessive Compulsive Scale (C-YBOCS). CBT yielded significantly lower attrition (12.7%) than SRI (23.5%) and placebo (24.7%). The effect sizes for comparisons of CBT with waiting-list (1.53), placebo (0.93), and SRI with placebo (0.51) were significant, whereas CBT vs. SRI (0.22) and Combo (CBT + SRI) vs. CBT (0.14) were not. Regarding response rate CBT (70%) and Combo (66%) were significantly higher than SRI (49%), which was higher than placebo (29%) and WLC (13%). As for remission

CBT (53%) and Combo (49%) were significantly higher than SRI (24%), placebo (15%), and WLC (10%), which did not differ from each other. Combo was not more effective than CBT alone irrespective of initial severity of the samples. The randomized controlled trials (RCTs) have a number of methodological problems and recommendations for improving research methodology are discussed as well as clinical implications of the findings.

Typ och Nyckelord: Journal children, obsessive-compulsive disorder, exposure and response prevention, cognitive therapy, meta-analysis, systematic review, ISSN: 0887-6185