

Annual Report 2004

Annual Report 2004 innehåller totalt **248** referenser sorterade efter försteförfattarens efternamn. Under året anställda forskare vid Psykologiska institutionen är markerade med blå färg.

Lite statistik

- Av 248 bidrag är 69 "in press".
- 112 referenser avser artiklar i vetenskapliga tidskrifter (Journal). Av dessa var 43 st "in press".
- 70 referenser avser böcker eller bokkapitel (Book (chapter)). Av dessa var 25 "in press".
- 11 referenser avser rapporter (Report).
- 70 referenser avser konferensbidrag (Proceedings). Av dessa var 3 "in press".
- 8 referenser avser doktorsavhandlingar (Dissertations) som lagts fram under året.
- 224 av alla bidrag är på engelska, 21 på svenska och 3 på övriga språk (tyska och nederländska).

Referens: Abel, E., Andersson, J., Dawidowicz, N., Christophersen, E., Hanssen, S.O., Lindén, A.L., [Lindvall, T.](#), & Pasanen, A.L. (2004). *The Healthy Building. Stage 2 – Research results achieved during the second four-year period 2001-2004*. Working paper 2:2004 Stockholm: Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (Formas).

Abstract: The key action "The Healthy Building Stage 2" has involved research in more than forty projects and has been focused on understanding the as yet unexplained causes behind buildings with indoor environment problems. Nordic researchers from different disciplines have participated and a Nordic Group of Experts has monitored the key action. The research has made essential contributions for i.a. - Better understanding of the possible mechanisms for asthma and allergy by means of identification of potential causative microbial and chemical agents. - Exposure assessments of new potential causative microbial and chemical agents. - Characterization of SBS predictors and of effects of low frequency noise. - The importance of perceptual, sociological, demographic and socio-economic factors in the recognition of problem buildings. - New information on earlier poorly known potential loads on the indoor environment, demonstrated interactions and outdoor/indoor relationships in terms of physical factors, damp, ultra-fine particles, SVOC, short-lived reactive compounds, and heated dust emissions. - The impact of inadequate ventilation on the indoor environment with respect to the perception of indoor environments and detectable pollutants.

Typ och Nyckelord: Report healthy building, indoor environment, pollutants

Referens: [af Klinteberg, B.](#) (2004). Presentation 'Impulsivity – the key indicator of adolescent alcohol abuse?' *The European Conference of Adolescence, Alcohol and Drugs (ECAAD)*, in Stockholm, Sweden, 17-19 June.

Abstract: Early onset alcoholics have been found to display increased scores in impulsivity and sensation seeking related personality traits and low conformity, as well as low levels of the psychobiological correlate of high impulsivity - platelet MAO activity. Low platelet MAO activity is considered a biological marker of vulnerability for disinhibition and psychosocial deviances, and repeatedly shown to be strongly associated with high impulsivity. Impulsivity, in turn, is found to be stable over time and constitute a major predictor of adult antisocial, delinquent behaviour as demonstrated in a series of prospective studies. The psychobiological basis of impulsivity is very well evidenced, not only in groups of patients and criminals, but also in groups of 'normal' individuals. The connection between impulsivity and biological indicators in 'normal' adolescents and adults confirms the hypothesis that a biological vulnerability can be present in an individual, without the developing of any kind of psychosocial disturbance, *if* there are protecting resources in the individual or in his/her family or environment.

Typ och Nyckelord: Proceedings impulsivity, biological vulnerability, monoamine oxidase (MAO), disinhibition

Referens: [af Klinteberg, B.](#) (2004). Invited presentation 'Impulsivity: Relationships to personality and development' within the symposium 'Current perspectives on mechanisms and treatment of impulsivity'. *The XXIVth Collegium Internationale Neuro-Psychopharmacologicum (CINP) Congress*, Paris, France, June 20-24, 2004.

Abstract: Objective: The focus concerns the significance of psychological, social and psychobiological factors of impulsivity in the development of psychosocial disturbances. Within two longitudinal projects, childhood vulnerability indicators and normbreaking behavior in adolescence were related to forms of adult disinhibitory psychosocial disturbances, psychobiological measures, and self-rated personality. Of special relevance to this presentation are some longitudinal findings of early hyperactive behavior and normbreaking behaviors being connected to adult high impulsivity and other psychopathy-related traits. Hyperactive behavior was also evidenced to be significantly related to subsequent alcohol problems and violent offending, as well as significantly associated with psychobiological measures. Relevant to an interactionistic theoretical approach, there is a growing recognition of personality dimensions as moderators of stressful situations over the life span. In the development of psychosocial disorders this recognition highlights the importance of individual

differences in the accentuation of vulnerable personality patterns of experienced/perceived stress at difficult or possibly traumatic events. Thus, some longitudinal findings of the outcome of environmental influences, such as neglect and abuse, and of early attachment and behavior characteristics on adult psychopathy related traits and violence will be discussed.

Typ och Nyckelord: Proceedings childhood and adolescent disorders, psychopharmacology, impulsivity, stress, violence

Referens: af Klinteberg, B. (2004). Invited presentation 'Psychosocial disturbances: Vulnerability and development'. The Swedish Neuropsychological Society, Umeå, Sweden, November 11-12. *Den emotionella hjärnan* [The emotional brain].

Abstract: Objective: The focus concerns the significance of psychological, social and psychobiological factors of impulsivity in the development of psychosocial disturbances. Within two longitudinal projects, childhood vulnerability indicators and normbreaking behavior in adolescence were related to forms of adult disinhibitory psychosocial disturbances, psychobiological measures, and self-rated personality. Of special relevance to this presentation are some longitudinal findings of early hyperactive behavior and normbreaking behaviors being connected to adult high impulsivity and other psychopathy-related traits. Hyperactive behavior was also evidenced to be significantly related to subsequent alcohol problems and violent offending, as well as significantly associated with psychobiological measures. Relevant to an interactionistic theoretical approach, there is a growing recognition of personality dimensions as moderators of stressful situations over the life span. In the development of psychosocial disorders this recognition highlights the importance of individual differences in the accentuation of vulnerable personality patterns of experienced/perceived stress at difficult or possibly traumatic events. Thus, some longitudinal findings of the outcome of environmental influences, such as neglect and abuse, and of early attachment and behavior characteristics on adult psychopathy related traits and violence will be discussed.

Typ och Nyckelord: Proceedings childhood and adolescent disorders, psychopharmacology, impulsivity, stress, violence

Referens: af Klinteberg, B. (2004). Invited presentation 'Hur kan omgivningen/föräldrar förebygga? Om missbruk, kriminalitet och våld. [How could parents and friends prevent adolescent abuse, criminal behavior, and violence?] *Den Nationella Folkhälsostämman 'En samling för folkhälsan - den nya folkhälsopolitikens aktörer. Vilka insatser behövs för att uppnå en mer jämlik folkhälsa?'*, Stockholm, October 11-13.

Abstract: A child exhibiting deficient impulse control needs a well structured environment. The focus is on the connection found between impulsivity and biological indicators in normal adolescents as well as in normal groups of adults. This confirms the hypothesis that a biological vulnerability can be present in an individual, without the developing of any kind of psychosocial disturbance, such as alcohol abuse, criminality and violence, in case of protecting resources in the individual or in his/her family or environment. The outcome of environmental influences, such as cold and uncaring emotional home climate on adult psychopathy related traits and violence will be discussed. It is of utmost importance that parents, friends, leaders and teachers understand and are aware of the underlying factors of impulse control disturbances - in that preventing work will be successful.

Typ och Nyckelord: Proceedings prevention, alcohol, violent behavior, gender

Referens: af Klinteberg, B., Lang, S., Freidenfelt, J., & Alm, P.O. (2004). Risk indicators and stress situations as related to pursuant disinhibitory psychosocial disturbances. In J. Strelau (Ed.), *Personality and extreme stress* (pp. 83-99). Warsaw: The Gdansk Psychology Publishing Company.

Abstract: Within a longitudinal project, the relationships between early behaviour and forms of adult disinhibitory psychosocial disturbances were analyzed. In a first phase of the investigation, Psychopathy Check List (PCL) scores and violent offending were studied in a sample of males (n= 199) with a history of childhood neglect and/or abuse. The subjects were grouped on the variable victimization yielding high (n=89) and low victimization (n=110) groups. The high victimization subjects exerted significantly more violence, as did also subjects with high PCL scores. To elucidate a possible co-morbidity of all three problems in the same persons, a combined dimensional and categorical approach was applied. There were two significant patterns found, indicating that (1) 'high' victimization in childhood is closely linked to later 'extensive' violence and 'high' PCL scores at adult age; and (2) 'low' victimization in childhood is closely linked to 'none or minor' later indications of violence and 'low' adult PCL scores at adult age in the same individuals. These results point to possible underlying mechanisms associated with all three problems characterizing the affected subjects. In a second phase, the connections between childhood hyperactive and non-hyperactive behaviour versus adult psychopathic traits were studied in the same sample of males (n= 199). A variable approach was applied and results indicated that hyperactive individuals, characterised by poor peer relations and a display of aggression affect, showed psychopathic traits in adulthood. Non-hyperactive individuals, on the other hand, displaying psychopathic traits at adult age, were found to have been brought up in poor emotional home climates and to be characterised by attention problems and profound adjustment difficulties. The present results highlight the influence of environmental stress on various individual risk patterns in the development of psychosocial disturbances.

Supported by: The Swedish Council for Research in the Humanities and Social Sciences, the National Institute of Public Health, the National Council for Crime Prevention, and the Ministry of Health and Social Affairs, Sweden.

Typ och Nyckelord: Book (chapter) victimization, vulnerability, psychopathy, violence

Referens: af Klinteberg, B., & Rydelius, P.-A. (2004). *Missbruk, kriminalitet och våld - vad döljer sig bakom rubrikerna? Om vad forskningen visar. [Abuse, criminal behavior and violence - What is concealed behind the headlines? On what the reseach tells us.]* Alkoholkommittén och CHESS. Stockholm: Edita.

Abstract: The research on risk factors in the development of alcohol problems and criminal behavior rely in Sweden on unique prerequisites and a tradition of longitudinal projects. The present picture is focused on recent research results concerning personality, behavior, and possible underlying mechanisms in the development of abuse, criminality and violence.

Supported by: The Ministry of Health and Social Affairs, Sweden.

Typ och Nyckelord: Report underlying mechanisms, monoamine oxidase (MAO), alcohol abuse, criminal behavior, violence

Referens: af Klinteberg, B., von Knorring, L., & Oreland, L. (2004). On the psychobiology of impulsivity. In R. Stelmack (Ed.) *On the Psychobiology of Personality: Essays in Honor of Marvin Zuckerman* (pp. 429-451). New York: Elsevier Science.

Abstract: Impulsivity seems to be a very basic personality trait, both in psychiatric syndromes and personality disorders, with a high genetic component. Impulsive personality/behavior has therefore become an interesting area for both geneticists and researchers within the psychological field. There are strong support that genetic factors interact with the environment in influencing and contributing to the development of impulsive personality/behavior, which in turn indicate an enhanced risk to develop different forms of psychosocial disturbances. Some perspectives on the complexity of psychosocial and psychogenetic associations with impulsivity will be illustrated, as well as the possible nature of some biological factors underlying personality/behavior.

Supported by: The Ministry of Health and Social Affairs, Sweden, the Alcohol Research Council of the Swedish Alcohol Retailing Monopoly, the Mobilizing against Drugs Committee, Sweden, the Swedish Science Foundation, and the Söderström-König Foundation.

Typ och Nyckelord: Book (chapter) personality disorders, behavior disturbances, impulsivity, genetic influence

Referens: Ahrén-Moonga, J., Holmgren, S., & af Klinteberg, B. (2004). Neuropsykologisk funktion och personlighetsdrag hos patienter med ätstörningar. [Neuropsychological function and personality traits in patients with eating disorders.] *Läkarestämman*, 24-26 november 2004, Göteborg, Sverige.

Abstract: Ätstörningar avser främst anorexia nervosa och bulimia nervosa. Båda sjukdomarna kännetecknas av ett avvikande beteende vad gäller mat och ätande, men inbegriper även en rad andra symtom och störningar. Ett flertal studier har identifierat personlighetsdrag som ofta finns representerade hos patienter med ätstörningar. Dessa har för anorexia nervosa definierats som hög grad av introversion, konformitet, perfektionism, rigiditet och tvångsmässigt beteende. För bulimia nervosa är impulsivitet, låg självkänsla samt antisociala personlighetsdrag vanligare. En ätstörning innebär förutom störningar i ätbeteende en komplex symtombild med försämrad fysisk hälsa samt reducering av de psykosociala funktionerna. Det är främst unga kvinnor som drabbas. Tidigare studier har identifierat personlighetsdrag som gör vissa individer mer sårbara för att utveckla en ätstörning, som perfektionistiska drag, högt kontrollbehov samt tvångsmässighet. Trettiotått patienter med ätstörningar har jämförts med ett normerat urval avseende självskattade personlighetsdrag och kognitiva funktioner. Resultatet visar på skillnader i ångestrelaterade personlighetsdrag, social anpassning och hostilitet. Depression, självskadande och personlighetsstörningar förekommer i gruppen. En jämförelse mellan undergrupper visar att patienter med bulimia nervosa har mer ångestrelaterade personlighetsdrag och ligger lägre vad gäller socialisation samt att anorexia nervosa förknippas med hög konformitet. Det neuropsykologiska testet visar inte på några signifikanta skillnader, förutom låga skattningar av den egna prestationen. Resultatet av studien bekräftar i många avseenden tidigare forskningsresultat vad gäller sårbarhet för ätstörningar.

Typ och Nyckelord: Proceedings ätstörningar, neuropsykologisk funktion, anorexia nervosa, eating disorders

Referens: Airaksinen, E., Larsson, M., & Forsell, Y. (in press) Neuropsychological functions in anxiety disorders: Evidence of episodic memory dysfunction. *Journal of Psychiatric Research*, 39, 207-214.

Abstract: Most of the available evidence on neuropsychological functioning in anxiety disorders is based on clinical samples, investigating persons affected by obsessive-compulsive disorder. Knowledge is sparse regarding cognitive functions in other types of anxiety disorders.

The aim of this study was to examine whether persons diagnosed with an anxiety disorder show neuropsychological impairments relative to healthy controls in tasks tapping episodic memory, verbal fluency, psychomotor speed, and executive functioning. Population-based samples comprising individuals affected by panic disorder with and without agoraphobia or agoraphobia (n=33), social phobia (n=32), generalised anxiety disorder (n=7), obsessive-compulsive disorder (n=16), and specific phobia (n=24) were compared with healthy controls (n=175) in test performance. Overall, the total anxiety disorder group exhibited significant impairments in episodic memory and executive functioning. Separate analyses on the respective anxiety subgroup indicated that panic disorder with and without agoraphobia, and obsessive-compulsive disorder were related to impairments in both episodic memory and executive functioning. In addition, social phobia was associated with episodic memory dysfunction. Verbal fluency and psychomotor speed were not affected by anxiety. Specific phobia and generalised anxiety disorder did not affect neuropsychological functioning.

Typ och Nyckelord: Journal anxiety, cognition, population-based

Referens: Airaksinen, E., Larsson, M., Lundberg, I., & Forsell, Y. (2004). Cognitive functions in depressive disorders: Evidence from a population-based study. *Psychological Medicine*, 34, 83-91.

Abstract: Background: Most of the available evidence on the effects of depression is based on clinical samples focusing on inpatients suffering from Major Depression. The aims of this study were to examine cognitive functioning in population-based samples and to determine whether cognitive performance varies as a function of depression subgroup.

Methods: Population-based samples (aged 20-64 years) with Major Depression (n=68), Dysthymia (n=28), Mixed Anxiety-Depressive Disorder (n=25) and Minor Depression (n=66) were examined on a variety of cognitive tasks (i.e., episodic memory, verbal fluency, perceptual-motor speed, and mental flexibility). 175 non-depressed individuals served as controls.

Results: The total group of depressed showed impairments in tasks tapping episodic memory and mental flexibility. Of more interest, however, was the observation that the pattern of impairments varied as a function of depressive subgroup: the Major Depression and Mixed Anxiety-Depressive Disorder groups exhibited significant memory dysfunction, whereas individuals with Dysthymia showed pronounced difficulties in mental flexibility. Minor Depression did not affect cognitive performance. Verbal fluency and perceptual-motor speed were not affected by depression.

Conclusions: These results indicate that persons with depressive disorders in the population exhibit cognitive impairments in tasks tapping episodic memory and mental flexibility and that cognitive impairment vary as a function of depressive disorder.

Typ och Nyckelord: Journal depression, cognition, population-based

Referens: [Almkvist, O., Darreh-Shori, T., Stefanova, E., Spiegel, R., & Nordberg, A. \(2004\). Preserved cognitive function after 12 months of treatment with rivastigmine in mild Alzheimer's disease in comparison with untreated AD and MCI patients. *European Journal of Neurology*. 2004 Apr; 11 \(4\): 253-61.](#)

Abstract: Cholinesterase inhibitors (ChEIs) have shown positive symptomatic effects on cognition, activities of daily living, and behavior in patients with Alzheimer's disease (AD). Rivastigmine is a slowly reversible ChEI that inhibits acetylcholinesterase and butyrylcholinesterase. We evaluated the effects of long-term rivastigmine treatment on cognitive function and plasma levels of ChE activity, and the relationship between ChE activity and cognition. Patients with mild AD (n = 11) treated with rivastigmine for 12 months were compared with matched groups of untreated patients with AD (n = 21) or mild cognitive impairment (MCI; n = 22) representing the natural course of the pre-clinical and very early stage of disease. For untreated AD patients, neuropsychological assessment was made at baseline and 12 months. Determination of ChE activity in plasma and assessment of global cognition, episodic memory, visuospatial ability, and attention were performed at 0 (baseline), 3, 6, and 12 months for treated AD patients and untreated MCI patients. At 12 months, cognitive function was slightly improved or maintained in mild AD patients treated with rivastigmine. In contrast, cognition was markedly worsened in untreated AD patients and unchanged or slightly worsened in untreated MCI patients. In the group of treated AD patients, there was a significant correlation between plasma ChE inhibition and cognition, particularly in relation to attention. This effect was most apparent at 3 months of treatment. In conclusion, a clear beneficial effect of rivastigmine was shown on cognitive function for patients with mild AD and plasma values of ChE inhibition were associated with attention.

Typ och Nyckelord: Journal Alzheimer, mild cognitive impairment, rivastigmine

Referens: Amberla, K., Waljas, M., Tuominen, S., [Almkvist, O.](#), Poyhonen, M., Tuisku, S., Kalimo, H., & Viitanen, M. (2004). Insidious cognitive decline in CADASIL. *Stroke*, 35(7), 1598-602.

Abstract: Background and purpose: Cerebral autosomal-dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL) causes repeated ischemic attacks leading to subcortical vascular dementia. The aim of this study was to characterize cognitive function in subjects with a C475T (R133C) mutation in the Notch3 gene, leading to CADASIL.

Methods: Prestroke (n=13) and poststroke (n=13) mutation carriers and mutation carriers with dementia (n=8) were compared with healthy noncarriers from the same families using a comprehensive set of neuropsychological tests.

Results: Changes in working memory and executive function were observed in the very early phase of the disease before transient ischemic attack (TIA) or stroke. Later, in the poststroke phase, the cognitive impairment concerned also mental speed and visuospatial ability. Finally, the subjects with dementia had multiple cognitive deficits, which engaged even verbal functions, verbal episodic memory, and motor speed. The 2 mutation carrier groups without dementia and the controls could be reliably distinguished using 3 tests that assessed working memory/attention, executive function, and mental speed. Episodic memory was relatively well-preserved late in the disease.

Conclusions: A deterioration of working memory and executive function was already observed in the prestroke phase, which means that cognitive decline may start insidiously before the first onset of symptomatic ischemic episodes.

Typ och Nyckelord: Journal CADASIL, dementia, stroke

Referens: [Andersson Stråberg, T., Sverke, M., Hellgren, J., & Näswall, K. \(in press\) Attitudes towards individualized pay among human service workers in the public sector. In C. Korunka & P. Hoffmann \(Eds.\), *Change and quality in human service work* \(Organizational psychology and health care, Vol 4\). Munich: Rainer Hampp.](#)

Abstract: The work climate has gone through immense changes during the recent decades, due to industrial reformation, economic recessions, technical advancements, and an increased global competition (Howard, 1995). The so-called New Public Management movement has inspired many European countries and has among other things led to changes in the way that wages are distributed (Pfeffer, 1997; Wikman, 2001). Wage distribution systems partly based on individual performance are increasingly taking over traditional wage distribution systems in many organizations in Europe (OECD, 1995). Employers appear to have great expectations that individualized performance-based wages will bring about higher employee motivation and performance etc (Lawler, 1991). The aim of this study is to investigate attitudes towards individualized pay among human service workers in the public sector and try to identify some of the factors behind their attitudes. Questionnaire data show that employees with the most positive attitudes towards individualized pay already had part of their salary based on performance. A person's attitude towards individualized pay also seems to be positively related to perceived workload and mental health complaints. Older employees and employees with longer tenure reported the most negative attitudes towards individualized performance based wages. This study contributes to a better understanding of some of the factors underlying attitudes towards individually based wages among human service employees.

Typ och Nyckelord: Book (chapter) pay attitudes, wage distribution, individualized pay

Referens: [Andersson-Stråberg, T. \(2004\). Differences in perceptions of justice in the wage settling process. Poster presented at the XXVIII International Congress of Psychology, Beijing, China, 8-13 August 2004.](#)

Abstract: Wage systems have become increasingly individualized and performance based in many countries. To reach outcomes such as higher employee efficiency and productivity, earlier research underscores that employees' perceptions of the fairness of the wage settling process are crucial. Using questionnaire data (collected among Swedish health care workers) this study investigates the relationship between demographics, personality, work

climate, and pay-related factors and four dimensions of justice - procedural, distributive, interpersonal, and informative - concerning pay. The results show that work climate characteristics and pay-related variables were the strongest predictors of all four justice dimensions, whereas demographics and personality only had marginal effects. Thus, organizations interested in changing employee perceptions of justice in the wage settling process in a positive direction, could for example aim at creating a more open, informative, and gender equal work place.

Typ och Nyckelord: Proceedings pay-for-performance, pay attitudes, wage distribution, ICP 2004

Referens: Arnaiz, E., Almkvist, O., Ivnik, R.J., Tangalos, E.G., Wahlund, L.O., Winblad, B., & Petersen, R.C. (2004). Mild cognitive impairment: a cross-national comparison. *Journal of Neurology, Neurosurgery & Psychiatry*. 2004 Sep; 75 (9): 1275-80.

Abstract: Objective: The main aim of this collaborative study was to assess the comparability of the most commonly used criteria for mild cognitive impairment (MCI) by comparing the cognitive performance of patients with MCI from the Mayo Clinic (USA) and the Karolinska Institutet (Sweden).

Methods: Standardised neuropsychological test scores were used to compare the two samples from the two institutions with regard to the number of cognitive domains in which performance was below 1.5 SD. Possible predictors for the conversion from MCI to Alzheimer's disease (AD) were assessed.

Results: When the two institutions were considered together in the Cox proportional hazard model, the number of affected cognitive domains below 1.5 SD was a significant predictor of time to AD diagnosis with age, education, and APOE ε4 genotype entered into the same model as covariates. The number of affected cognitive areas remained as a significant predictor when the institutions were considered separately. The logistic regression model of conversion to AD showed that only tests assessing learning and retention were predictors of developing AD.

Conclusions: Differences in population as well as in methodology of case ascertainment as well as other aspects may account for the observed variability between samples of patients with MCI. The number of impaired cognitive factors at baseline can predict the progression from MCI to AD. Furthermore, tests assessing learning and retention are the best predictors for progression to AD.

Typ och Nyckelord: Journal mild cognitive impairment, MCI, criteria

Referens: Axelsson, Ö. (2004). Semantic differentials of aesthetic appreciation of photographs. In J.P. Fróis, P. Andrade & J.F. Marques (Eds.), *Art and Science* (pp. 240-245). Lisboa, Portugal: International Association of Empirical Aesthetics (IAEA).

Abstract: Semantic differential scaling is commonly used in exploring perceptual and emotional dimensions of music and paintings. In the present experiment a new approach was taken by exploring the underlying dimensions of aesthetic appreciation of photographs, and a new semantic differential scale was designed. One hundred college and university students took part (65 women, 35 men: aged 19 - 47 years). Each participant scaled 5 out of 50 photographs with regard to 141 single attributes, utilizing a visual analogue scale of agreeableness. In order to reduce the number of attributes and to determine a competent measurement model, the attribute values of agreeableness were analyzed by the method of principal components. Criteria for reducing the number of attributes were that (a) components should be associated with aesthetic appreciation, and (b) every attribute should primarily load, highly, in only one of the components. Sixteen potential components were first extracted. Attributes and components that did not meet the two criteria were subsequently omitted from further analysis. Omitted components were, for instance, interpreted as: 'erotic', 'humorous' and 'arranged'. Seventy attributes were kept, and 35 bipolar semantic differential scales were formed. For each of these 35 bipolar scales an index of agreeableness was calculated by subtracting the scale value of the 'negative' attribute from the scale value of the 'positive' attribute (e.g. 'meaningful' minus 'meaningless'). These 35 resulting indexes were further explored by principal components analysis. Four components were found to sufficiently describe the data: Hedonic value, Expressiveness, Conventionality, and Composition. These four components correspond well to the dimensions previously found for paintings, although the present components are more nuanced, distinct and well defined. In contrast to previous research, the present semantic differentials were specifically designed as tools, for measuring aesthetic appreciation of photographs, and not only used as means of exploration.

Typ och Nyckelord: Book (chapter) aesthetic appreciation, photographs, principal component analysis

Referens: Backlund, L., Skåner, Y., Montgomery, H., Bring, J., & Strender, L.E. (2004). GPs decisions on drug treatment for patients with high cholesterol values: A think-aloud study. *BMC Medical Informatics and Decision Making*, 4:23.

Abstract: The purpose was to examine how General Practitioners (GPs) use clinical information and rules from guidelines in their decisions on drug treatment for high cholesterol values. Twenty GPs were presented with six case vignettes and were instructed to think aloud while successively more information about a case was presented, and finally to decide if a drug should be prescribed or not. The statements were coded for the clinical information to which they referred and for favouring or not favouring prescription. The evaluation of clinical information was compatible with decision-making as a search for reasons or arguments. Lifestyle-related information like smoking and overweight seemed to be evaluated from different perspectives. A patient's smoking favoured treatment for some GPs and disfavoured treatment for others. It was concluded that the method promised to be useful for understanding why doctors differ in their decisions on the same patient descriptions and why rules from the guidelines are not followed strictly.

Typ och Nyckelord: Journal drug treatment, decision making, cholesterol

Referens: Backlund, L., Skåner, Y., Montgomery, H., Bring, J., & Strender, L.E. (2004). The role of guidelines and the patient's life-style in GPs' management of hypercholestaemia. *BMC Family Practice*, 5:3.

Abstract: Recent Swedish and joint European guidelines on hyperlipidaemia stress the high coronary risk for patients with already established arterio-sclerotic disease (secondary prevention) or diabetes. For the remaining group, calculation of the ten-year risk for coronary events using the Framingham equation is suggested. There is evidence that use of and adherence to guidelines is incomplete and that tools for risk estimations are seldom used. Intuitive risk estimates are difficult and systematically biased. The purpose of the study was to examine

how GPs use knowledge of guidelines in their decisions to recommend or not recommend a cholesterol-lowering drug and the reasons for their decisions. Twenty GPs were exposed to six case vignettes presented on a computer. In the course of six screens, successively more information was added to the case. The doctors were instructed to think aloud while processing the cases (Think-Aloud Protocols) and finally to decide for or against drug treatment. After the six cases they were asked to describe how they usually reason when they meet patients with high cholesterol values (Free-Report Protocols). The two sets of protocols were coded for cause-effect relations that were supposed to reflect the doctors' knowledge of guidelines. The Think-Aloud Protocols were also searched for reasons for the decisions to prescribe or not to prescribe. According to the protocols, the GPs were well aware of the importance of previous coronary heart disease and diabetes in their decisions. On the other hand, only a few doctors mentioned other arterio-sclerotic diseases like stroke and peripheral artery disease as variables affecting their decisions. There were several instances when the doctors' decisions apparently deviated from their knowledge of the guidelines. The arguments for the decisions in these cases often concerned aspects of the patient's life-style like smoking or overweight- either as risk-increasing factors or as alternative strategies for intervention. It was concluded that coding verbal protocols for knowledge and for decision arguments seems to be a valuable tool for increasing our understanding of how guidelines are used in the on treatment of hypercholesterolaemia. By analysing arguments for treatment decisions it was often possible to understand why departures from the guidelines were made. While the need for decision support is obvious, the current guidelines may be too simple in some respects.

Typ och Nyckelord: Journal guide-lines, medical decions, hypercholesterolaemia

Referens: Baraldi, S. (2004). Effects of union merger on member-union relation: Comparing union affiliation and merger attitude. Paper presented at the XXVIII International Congress of Psychology, Beijing, China, 8-13 August 2004.

Abstract: Research on the effects of union mergers on the relation between member and its union, in terms of membership attitudes, has in large parts focused on either motives and barriers to merger, or organization-related factors such as structure and size. This longitudinal study investigates variations in union commitment, instrumentality, satisfaction, and support before and after an absorption between one large and one small union. We investigated whether these variations were related to affiliation to one or the other union, or whether members were positive or negative toward union mergers. The results confirmed the hypothesis that membership attitude variations were significantly related to merger attitude, but not to union affiliation. Membership attitudes decreased in general after the merger. However, this decrease was smaller among members with positive merger attitude than among members with negative merger attitude. These results support the general notion that the members' perception of a merger is an important factor in relation to its effects on the member-union relation.

Typ och Nyckelord: Proceedings union merger, member-union relation, affiliation, ICP 2004

Referens: Bergdahl, J., Larsson, A., Nilsson, L.-G., Riklund Åhlström, K., & Nyberg, L. (in press). Treatment of chronic stress in employees: Subjective, cognitive, and neural correlates. *Scandinavian Journal of Psychology*.

Abstract: This study reports the effect of an affect-focused intervention program, the Affect School (AS), on stress, psychological symptoms, cognitive functioning and neural activity. Fifty employees in social service and education, with high levels of chronic stress, were randomly divided into a treatment (N=27) and control (N=23) group. Complete sets of data were available in 20 participants in the treatment group and in 17 in the control group. The Perceived Stress Questionnaire assessed stress and the Symptom Check List-90 psychological symptoms before and after the treatment. Episodic-memory functioning under focussed and divided attention conditions was also assessed. Prior and after the AS, seven participants in the treatment group were studied with fMRI during episodic memory processing. After the AS there was a reduction in stress and psychological symptoms for the treatment group but not in the control group. The controls showed a reduction in episodic memory functioning whereas the performance of the treatment group remained intact. The fMRI scanning indicated a qualitative change in the neural network subserving episodic memory. These preliminary results suggest that the AS is effective on individuals with high stress.

Typ och Nyckelord: Journal psychological stress, memory, functional imaging

Referens: CALM Network (co-authored by B. Berglund). (2004). *Research for a Quieter Europe in 2020*. Brussels: European Commission, Research Directorate-General, Final Report. ISBN 3-200-00224-7.

Abstract: Noise pollution remains high on the list of citizen concerns and noise reduction has increasingly become a focus for EU legislation and a priority for research. Starting in 1996 with the Green Paper on Future Noise Policy, EU actions were taken not only to improve legislation on noise source emission but also on noise immission and health effects. In 2002, the Environmental Noise Directive delivered an approach to address environmental noise, to be executed at the national, regional and local levels according to the principle of shared responsibility. The Directive' vision is to avoid harmful effects of noise exposure from all sources and preserve quiet areas. To meet this vision, intensive research is required, and the Calm Network develops a noise research strategy for efficient and effective control of environmental noise in the future. The first goal is to support the transposition of the Directive and the second foal is to support further development of noise policy. The research needs include common methods for noise mapping, the assessment of noise exposure and perception, noise abatement including cost-benefit aspects, new technologies and system approaches for improved noise control at source and the further development of legislative standards. The major sources of environmental noise to be considered are transportation (road, rail and air traffic) and outdoor equipment. The structure of the noise research strategy is split into perception and emission related research combining these two policy goals.

Typ och Nyckelord: Report Book (chapter) community noise, perception, noise control

Referens: CEC-WG HSEA (co-authored by B. Berglund). (2004). *Dose-Effect Relationships for Night Time Noise*. Brussels: European Commission, WG Health and Socioeconomic Aspects (HSEA), Position Paper, November 11, 2004.

Abstract: The terms of reference for CEC-WG HSEA call for the provision of a Position Paper on the dose-effect relations for the Lnight metric of the Environmental Noise Directive. Up to 25% of the European population is estimated to be sleep disturbed by noise. The Lnight is defined as the long-term LAeq over 8 hours outside at the most

exposed façade. Short-term indicators have been used in sleep research. Conversion formulas to Lnight are therefore given for SEL to Lmax, instantaneous to long-term, inside to outside, and outside bedroom level to most exposed façade. Sufficient evidence for dose-effect relations or thresholds has been published for awakenings and instantaneous (onset) of motility, as well as for chronic increase of motility, increased risk of hypertension and self-reported (chronic) sleep disturbance. A complication is that aircraft and railways produce smaller number of noise events (10-50) per night with higher levels per event, whereas large roads have higher numbers but somewhat lower levels at the usual distances. There were sufficient data on civil aviation noise for deriving a dose-effect relation for noise-induced awakenings. The number of awakenings reaches a maximum at a SELinside of 58.8 dB. At 55 dB Lnight, nearly 100 overflights per night with SELinside of 58.8 dB (or 1 per 5 min) are possible. Since 58.8 dB SELinside corresponds to 44 dB Lmax,inside, 55 dB Lnight corresponds to approx. 45 dB Lmax, the guideline value recommended by WHO for night-time noise events.

Typ och Nyckelord: Report community noise, sleep disturbance, noise control

Referens: Berglund, B., Gidlöf Gunnarsson, A., Nilsson, M.E., Åberg, C., Clark, C., van Kamp, I., Lopez-Barrio, I., & Stansfeld, S.A. (2004). An environmental health model for children exposed to aircraft and road-traffic noise. In M. Brothnek & O. Jiricek (Eds.), *Inter-Noise 2004* (Paper 518). Prague: Czech Acoustical Society. [Available on CD]

Abstract: A children's environmental health model was successfully tested with structural equation modeling (SEM) technique. A multi-group SEM was applied to the school and home environments of 9-10 year old children living around major UK, Dutch and Spanish airports (n=2808). An excellent fit was obtained between the general hypothetical model and the empirical multi-group data (RMSEA = 0.019; GIF = 0.96). The model shows that aircraft noise has a large impact on aircraft annoyance whereas road-traffic noise has a small impact on road-traffic annoyance; these impacts are independent of the other exposures. Moreover, aircraft noise annoyance has a small impact on symptoms and sleep disturbance whereas road-traffic noise annoyance has a large and significant impact. Children's general health has a significant effect on children's sleep disturbance, which also was found true for road-traffic annoyance. Notably, children's psychological restoration indoors (but not outdoors) has a significant counteractive effect on children's annoyance to both road-traffic and aircraft noise. Adult social support has a negligible direct effect but a significant indirect effect on sleep disturbance with psychological restoration and annoyance as intervening variables.

Typ och Nyckelord: Proceedings Book (chapter) traffic noise, children, health, structural equation modeling

Referens: Berglund, B., Kihlman, T., Kropp, W., & Öhrström, E. (2004). *Soundscape Support to Health*. Gothenburg, Sweden: Chalmers, MISTRA Final Report Phase 1, March 2004. (In English with Swedish Summary), (Also available on CD)

Abstract: High levels of road-traffic noise makes urban and suburban areas unhealthy and unsustainable. This research programme's goal was to obtain strategic knowledge and provide means for creating healthy soundscapes in residential areas by utilizing variations in the acoustic soundscapes, which results from a multitude of sound sources. Two acoustic propagation models were developed for predicting the acoustic soundscape: the flat city model involving sound in single street canyons and the interaction between adjacent "canyons" (e.g., street & backyard), and the long range model viewing noise as wave-packets that are reflected and scattered inside the residential areas with their building structures. Acoustic soundscapes are difficult to modify by traditional means of noise control, e.g., screening will only lead to a redistribution of the sound and this will not be recognized in diffuse sound fields. Acoustically absorbing surfaces, along the transfer path from source to receiver, will reduce sound levels and otherwise transform soundscapes especially inside inner-yards. For the same building insulation (or same transfer of the acoustic soundscape), a much larger positive outdoor-indoor difference in perceived soundscapes was found to be accomplished at shielded sides than at the road traffic noise exposed sides. Consequently, buildings facing highly trafficked roads (>50 dB LAeq,24h) need much better sound insulation and shielding effectiveness for residents to perceive the soundscapes indoor and in the yard as acceptable. Clear benefits for health and well-being were demonstrated for residents with sound levels S45 dB (2 m from façade) on all sides of the dwelling as well as for residents with access to a quiet side of their dwelling (10-20% annoyance reduction). In conclusion, the research focus on the entire sound environment, not only one noise source at a time, shows that it is possible to introduce soundscaping as a strategic tool in city planning. Its goal would be to create positive and potentially restorative areas in cities, including quiet sides of buildings. Such a future development would give soundscape support to health.

Typ och Nyckelord: Report community noise, soundscape, psychoacoustics

Referens: Berglund, B., Lindblom, U., & Nordfors, L.-O. (2004). Bedside assessment of thermal sensibility in patients with longstanding pain, particularly those with neuropathic pain. In *Abstract Guide of the conference on Neuropathic Pain. Changing Paradigms in Diagnosis and Treatment*, (p. 61). Madrid, Spain: IASP and EFIC.

Abstract: Bedside assessment of thermal sensibility in patients with longstanding pain, particularly those with neuropathic pain. Bedside assessment of thermal sensibility in patients with longstanding pain, particularly those with neuropathic pain. During the years 1995-2001, quantitative sensory tests were conducted on 380 patients with longstanding, mostly neuropathic, pain who were referred to the Danderyd community hospital's pain section (i.e. 10 % of the patients treated). Tests with two stainless steel rollers tempered to 42 or 22 °C, were added to the conventional neurological bedside screening. Perception thresholds of warmth, cold, heat pain or cold pain were determined by the Marstock method. Dysesthesia was assessed by means of a list of descriptors of qualitatively normal and abnormal perceptions with own descriptions as one option. Most patients showed abnormal thermal (i.e. warm or cold) and/or tactile perceptions including allodynia. In a subgroup of patients, various extents of hypo- or hyperesthesia was tentatively quantified with magnitude estimation and evaluated in relation to normal variation in sensitivity at different body sites. The pain patients were able to scale magnitudes by appointing numbers to abnormal and normal perceptions evoked by the stimulation by warm or cold temperature at different body sites. Thermal (and superficial tactile) testing with stainless steel rollers was confirmed to be a quick and valid test method. Diagnostically important quantitative and qualitative abnormalities in thermosensation were demonstrated at individual level in a large group of neuropathic pain patients.

Typ och Nyckelord: Proceedings warmth, cold, touch, pain

Referens: Berglund, B., & Nilsson, M.E. (2004). Soundscapes perceived in built environments. In *ICA 2004*.

Abstract: Perceived soundscapes were assessed in listening walks with residents in road-traffic noise exposed residential areas. Shielded sides of buildings provided soundscapes that were more "soothing" and "pleasant" than soundscapes at road-traffic noise exposed sides of buildings. In significantly road-traffic noise exposed areas (>55 dB LAeq,24h), shielded sides could not provide soundscapes as positive as in a "quiet" residential area (<50 dB LAeq,24h). Positive aspects of soundscapes, e.g., "pleasant" and "soothing", were not predictable from measurements of A-weighted sound level or Zwicker loudness. This suggests that a new kind of method is needed for predicting soundscape quality in residential areas of the future.

Typ och Nyckelord: Proceedings soundscape, road-traffic noise, perception, ISBN: 4-9901915-6-0

Referens: Berglund, B., & Nilsson, M.E. (2004). Master scaling and its applications in soundscape psychophysics. *Archives of Acoustics*, 29(3), 530.

Abstract: Master scaling is required in soundscape field studies because it was developed for one-point measurements by different perceivers at different occasions. Perceptual measurement is a contextually based dynamic process, which is controlled by jointly scaling references and target soundscapes. Differences in references' (perceived) loudness are utilized for "calibrating" each respondent's reference scale to a master scale, which is applicable also to target soundscapes. Empirical evidence on master scaling shows that: Deviations in the form of pink-noise loudness functions constitute test of individual scaling ability; loudness of one target soundscape is measured and the interindividual variation is reduced to the size of the intraindividual variation. Empirical evidence on perceived soundscapes in listening walks shows that: the content and/or perceived quality is important determinants of soundscape loudness. Thus soundscapes at road-traffic "exposed" as opposed to "shielded" sides of buildings, or indoors as opposed to outdoors, exhibit large, reverse differences in loudness relative to what would be predicted from the LAeq (or other "averages"). This soundscape psychophysics is fitted for evaluating the effectiveness of noise mitigation methods and the effectiveness of tools for creating tranquil soundscapes.

Typ och Nyckelord: Journal master-scaling, psychophysics, soundscape, loudness

Referens: Berglund, B., & Nilsson, M.E. (2004). Master scaling and its application in soundscape psychophysics. In *Subjective and Objective Evaluation of Sound*. Poznan, Poland: Adam Mickiewicz University. [Available on CD]

Abstract: Master scaling is required in soundscape field studies because it was developed for one-point measurements by different perceivers at different occasions. Perceptual measurement is a contextually based dynamic process, which is controlled by jointly scaling references and target soundscapes. Differences in references' (perceived) loudness are utilized for "calibrating" each respondent's reference scale to a master scale, which is applicable also to target soundscapes. Empirical evidence on master scaling shows that: Deviations in form of pink-noise loudness functions constitute test of individual scaling ability; loudness of one target soundscape is measured and the interindividual variation is reduced to the size of the intraindividual variation. Empirical evidence on perceived soundscapes in listening walks shows that: the content and/or perceived quality are important determinants of soundscape loudness. Thus soundscapes at road-traffic "exposed" as opposed to "shielded" sides of buildings, or indoors as opposed to outdoors, exhibit large, reverse differences in loudness relative to what would be predicted from the LAeq (or other "averages"). This soundscape psychophysics is fitted for evaluating the effectiveness of noise mitigation methods and the effectiveness of tools for creating tranquil soundscapes.

Typ och Nyckelord: Proceedings master-scaling, psychophysics, soundscape, loudness

Referens: Berglund, B., Nilsson, M.E., & Pekala, P. (2004). Towards certification of indoor and outdoor soundscapes. In M. Brothnek & O. Jiricek (Eds.), *Inter-Noise 2004* (Paper 516). Prague: Czech Acoustical Society. [Available on CD]

Abstract: A diagnostic system for soundscape certification is proposed which builds on a neural network classifier. A radial basis network was successfully trained and tested on independent subsets of 30-s soundscape data. Acoustic input was 1/3-octave-band spectra and perceptual output profiles of 12 perceptual-emotional attributes. Thus, a differentiation and classification of acoustic soundscapes was learned from the perceived soundscapes. A new neural network is now being trained which utilizes more detailed acoustic information ("waterfalls": Ln,fast, T, 1/3-octave bands) from a database of 894 30-s soundscapes from road-traffic noise exposed residential areas (45-65 dB LAeq,24h); binaural and monaural recordings and perceptual-emotional attribute profiles from residents' listening walks. The currently developed diagnostic system is intended for green labeling of residential soundscapes. The neural network is intended as a design tool for city planners, architects, materials producers, etc. Acoustic soundscapes can for example be optimized in a future database of consequences of building plans, design of facades, sound insulation, etc.

Typ och Nyckelord: Book (chapter) soundscape, perception, neural network

Referens: Berglund, B., & Zheng, L. (2004). A bisensory detection and recognition test of human chemical sensitivity. In W. Mou, S. Li, & B. Qiu (Eds.), *Abstract Book from the XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004. [Available on CD] [Will be published in a special issue of the International Journal of Psychology in 2005]

Abstract: Odor and sensory-irritation detection and pyridine- and formaldehyde-recognition were tested by a bisensory method. False-alarms for detection and recognition were lower in chemically sensitive (CS) than insensitive (non-CS) or young-adults (YA). Odor cues predominated in detection. Sensory-irritation thresholds for pyridine were lower for YA than CS. Between-group differences in odor detection threshold was insignificant but CS had lowest recognition threshold for pyridine; slight between-group differences for formaldehyde. Although the interindividual differences in sensitivity were smaller for odor than sensory-irritation (h-index of Luce's choice theory), a small difference exists in odor sensitivity between CS and non-CS (d'-index of signal detection theory).

Typ och Nyckelord: Proceedings Book (chapter) chemical sensitivity, bisensory detection, signal detection theory, ICP 2004

- Referens:** Bergman, L.R., & Daukantaite, D. (in press). The importance of social circumstances for Swedish women's subjective well-being. *International Journal of Social Welfare*.
- Abstract:** The importance of social circumstances for middle-age women's general subjective well-being (SWB) were investigated in a representative sample of Swedish women, age 43 (N=369). The relationships between SWB and social circumstances (e.g., marital status, educational level) were explored by (1) relating social circumstances separately to the components of general SWB, (2) relating all studied social circumstances variables simultaneously to the components of general SWB, and (3) by relating a cumulative disadvantage index to the components of general SWB. In line with previous research, the results showed weak to moderate relationships between a number of social circumstances variables and general SWB. The strongest relationship was found between marital status and global life satisfaction. Off work due to illness and household income were the strongest predictors of Negative Affect. Switching the attention from a variable-oriented perspective, where each SWB component was studied separately, to a person oriented perspective, in which a typical profile of women with generalized low SWB was compared to a typical profile of women with generalized above average SWB, indicated a stronger impact of social circumstances on SWB for the cumulative disadvantage index and unemployment than was the case in the variable-oriented analyses. When personality factors were controlled for they nearly wiped out all relationships between the social circumstances variables and SWB, raising the question of whether social circumstances of the type measured here has any real importance for Swedish women's SWB that is not explained by these factors' relations to personality factors.
- Typ och Nyckelord:** Journal subjective well-being, social characteristics
- Referens:** Bergman, L.R., von Eye, A., & Magnusson, D. (in press). Person-oriented research strategies in developmental psychopathology. In D. Cicchetti (Ed.), *Developmental Psychopathology*. (Second edition)
- Abstract:** In this chapter, person-oriented research strategies in developmental psychopathology are reviewed. By "person-oriented", we mean research strategies where the focus is on the individual and not on the variable. The information about each individual is regarded, as far as possible, as an indivisible unit, both conceptually and in the empirical analyses. It usually implies that individuals are studied on the basis of their pattern of information in relevant variables at the appropriate level. This approach is in contrast to the standard variable-oriented approach where the variable is the main conceptual and methodological unit. In the person-oriented approach, most commonly the variable alone has no importance. Only in combination with other variables in an information pattern does it achieve meaning. These fundamental conceptual and theoretical issues are discussed in the chapter. Common person-oriented research methods are presented and discussed in the context of studying individual development.
- Typ och Nyckelord:** Book (chapter) person-oriented, development, psychopathology, cluster analysis
- Referens:** Berman, A.H. (2004). *Enhancing Health Among Drug Users in Prison*. Doctoral Dissertation. Stockholm: Center for Health Equity Studies (CHESS), nr. 3.
- Abstract:** Four interrelated studies on drug users in prison are presented within the framework of a proposed model for approaching the enhancement of health for persons that builds on an existential view of prisoners' needs, as well as the risk management and "good lives" perspectives. Risk management is the major focus in current offender rehabilitation based on research on "what works," which has shown that focusing treatment on risk factors termed "criminogenic needs," such as impulsivity, poor family relations and drug abuse, reduces recidivism by 10-15 percentage points. The "good lives" perspective proposes that offender rehabilitation should go beyond risk management and also address non-criminogenic needs such as autonomy, relatedness and competence as foundations for building personally meaningful lives.
- Study I explores the assessment of drug use problems, and describes the psychometric evaluation of the Drug Use Disorders Identification Test (DUDIT), a newly developed 11-item test for quick screening of drug-related problems. Studies II-IV explore treatment for offenders in prison identified as drug users. Study II is a randomized controlled trial of two auricular acupuncture treatments for men and women in prison, inconclusive with regard to point specificity but showing that participants in both groups reported reduced symptoms of discomfort and improved night-time sleep. Study III evaluates the Reasoning & Rehabilitation program, an internationally widespread cognitive-behavioral program for groups of offenders. Results showed significant pro-social short-term changes in sense of coherence, impulsivity and attitudes towards the criminal justice system, as well as a 25% lower risk of reconviction among program completers compared to matched controls. However, the quasi-experimental nature of the study precludes any certainty regarding program effects; a selection bias whereby more motivated program participants are recruited could explain the findings. Study IV is a pilot project exploring the special needs of a sub-group of drug-using inmates with psychiatric and/or violent co-morbidity. Inmates housed in psychiatric prison units were offered long-term auricular acupuncture treatment. Half of the 22 inmates in the study received treatment twice a week for over eight weeks, and those treated over 25 times had lower psychopharmacological medication levels than untreated controls.
- Studies I-IV address individual facets of a proposed model for enhancing health among drug users in prison. The health enhancement model approaches offender rehabilitation from perspectives of existential psychology, good lives and risk management. Specific definitions of physical, social, psychological/personal and spiritual needs indicate a framework according to which prison treatment can help drug-using offenders find ways to secure healthy need satisfaction.
- Typ och Nyckelord:** Dissertation drug use, risk management, prison
- Referens:** Berman, A.H., Lundberg, U., Krook, A.L., & Gyllenhammar, C. (2004). Treating Drug Using Prison Inmates with Auricular Acupuncture: A Randomized Controlled Trial. *Journal of Substance Abuse Treatment*, 26, 1-8.
- Abstract:** This study tested the viability of auricular acupuncture in prisons for alleviating inmates' symptoms of psychological and physical discomfort and reducing drug use. The experimental NADA protocol was compared with a non-specific helix control protocol in a randomized trial. Over a period of 18 months, a four-week, 14-session auricular acupuncture treatment program was offered in two prisons to 163 men and women with self-reported drug use. More participants in the helix group (58%) completed the treatment, defined as 10 treatment sessions, compared to 39% in the NADA group. Among treatment completers, no differences in self-reported symptoms of discomfort were found between the two methods. Drug use occurred in the NADA group but not in the helix group. In contrast, confidence in the NADA treatment increased over time while it decreased for the helix treatment. No significant negative side effects were observed for either method. The

results suggest that auricular acupuncture in the prison setting should be studied further, possibly as an adjunctive treatment to psychosocial interventions, if it is to prove a viable treatment alternative for prison inmates.

Typ och Nyckelord: Journal auricular acupuncture, drug use, prisons

Referens: Bernhard, C., & Sverke, M. (2003). Work attitudes, role stress and health among different types of contingent workers in the Swedish health care sector. *Research and Practice in Human Resource Management, 11*, 1-16.

Abstract: Contingent employment has been a frequently used tool for organisations to increase flexibility and cut labour costs. Previous research has suggested that contingent employment is no unitary phenomenon. By applying cluster analysis to data from the Swedish health care sector, the present study identified four types of contingent workers characterised by distinct profiles on demographic and work-related variables. Despite differences in organisational commitment, role overload, and job-induced tension, these groups of contingent workers reported rather similar levels of work attitudes, role stress, and well-being. The paper demonstrates the importance of combining variables in understanding the heterogeneity of contingent work and discusses how a pattern approach can provide valuable information for research on contingent employment and its consequences.

Typ och Nyckelord: Journal temporary work, work attitudes, well-being

Referens: Blomqvist, M., Augustsson, M., Bertlin, C., Holmberg, K., Fernell, E., Dahllöf, G., & Ek, U. (in press). How do children with ADHD interact in a clinical dental examination? A video analysis. *European Journal of Oral Sciences*.

Abstract: Attention deficit hyperactivity disorder (ADHD) is the most common behavioural disorder in school-age children today. The aim of the study was to make a detailed analysis of behavioral interactions between the dentist and the child patient with ADHD. All children born in 1991 (n=555) in one Swedish municipality were screened for attention and learning problems and assessed for ADHD. Twenty-two children with ADHD and a control group of 47 children without attention and learning problems were included in the study. The dental recall visit was recorded on video. The interaction between the dentist and the child was analyzed in detail and scored as verbal and non-verbal initiatives and responses. Compared to the children in the control group the children with ADHD made significantly more initiatives, especially initiatives with a focus that was another than the examination or relation to the dentist. The children with ADHD had fewer verbal responses and more missing responses. In conclusion, the problems in communication resulted in less two-way communication between the dentist and the children with ADHD compared to the interaction between the dentist and the children in the control group. The children with ADHD particularly had difficulties staying focused on the examination.

Typ och Nyckelord: Journal attention deficit hyperactivity disorder, behavioral sciences, child, dentistry

Referens: Boalt Boëthius, S., Ögren, M.-L., Sjøvold, E., & Sundin, E. (in press). Experiences of Group Culture and Patterns of Interaction in Psychotherapy Supervision Groups. *The Clinical Supervisor*.

Abstract: Beginner supervisees (n = 84) who worked with their psychotherapy supervisors in 28 supervision groups in an academic training context participated in this study. Self-ratings of ideal and actual group experiences were collected at three measurement points; at the beginning, middle and end of the supervision. The main purpose was to examine the group-members' experiences of polarization patterns of group roles, and group culture in terms of flexibility. The results showed that, for the majority of groups, experience of the role structure tended to change between the three measurements, either in role focus or in degree of polarization. A decrease in polarization was linked to improved group performance. Groups that did not experience that they improved their performance were characterized by Nurture or Dependency subgroups. In conclusion, the significance of polarization patterns and flexibility for the experience of performance in supervision group was emphasized. A certain degree of opposition and conflict in a group might contribute to growth and a more balanced group performance.

Typ och Nyckelord: Journal group interaction, group culture, performance

Referens: Boalt Boëthius, S., Ögren, M.-L., Sjøvold, E., & Sundin, E. (2004). Experiences of Polarization Patterns, Group Culture, and Group Performance in Psychotherapy Supervision Groups. *4th Nordic Conference on Social Psychology, Skövde*.

Abstract: Beginner supervisees (n = 84) and their psychotherapy supervisors who worked in 28 supervision groups in an academic training context participated in this study. SYMLOG self-ratings of actual and ideal experiences of the group interactions were collected at three measurement points; at the beginning, middle and end of the supervision. The main purpose was to examine group members' (supervisees and supervisors) experiences of patterns of polarization, which was observable in terms of development of subgroups within the supervision groups, and group culture in terms of flexibility. The results showed that, for the majority of groups, experiences of patterns of interaction, as measured at the three measurement points, involved changes in role functions or degree of polarization among group members. The group members tended to become slightly more satisfied with their informal roles and the group culture over time. Group members who experienced that the group interactions did not become more flexible also experienced that subgroups, characterized by Nurture or Dependency, had emerged in their groups. In conclusion, the significance of polarization patterns and flexibility was emphasized. A certain degree of opposition and conflict in the supervision group seemed to further development and flexibility in the group.

Typ och Nyckelord: Proceedings group interaction, polarization, flexibility

Referens: Boalt Boëthius, S., Ögren, M.-L., Sjøvold, E., & Sundin, E. Polarization patterns in psychotherapy supervision groups. *XXVIII International Congress of Psychology, Beijing, China, 8-13 August 2004*.

Abstract: Beginner supervisees (n = 84) and their psychotherapy supervisors who worked in 28 supervision groups in an academic training context participated in this study. SYMLOG self-ratings of actual and ideal experiences of the group interactions were collected at three measurement points; at the beginning, middle and end of the supervision. The main purpose was to examine group members' (supervisees and supervisors) experiences of

patterns of polarization, which was observable in terms of development of subgroups within the supervision groups, and group culture in terms of flexibility. The results showed that, for the majority of groups, experiences of patterns of interaction, as measured at the three measurement points, involved changes in role functions or degree of polarization among group members. The group members tended to become slightly more satisfied with their informal roles and the group culture over time. Group members who experienced that the group interactions did not become more flexible also experienced that subgroups, characterized by Nurture or Dependency, had emerged in their groups. In conclusion, the significance of polarization patterns and flexibility was emphasized. A certain degree of opposition and conflict in the supervision group seemed to further development and flexibility in the group.

Typ och Nyckelord: Proceedings group culture, polarization, flexibility, ICP 2004

Referens: Boalt Boëthius, S., Ögren, M.-L., Sjøvold, E., & Sundin, E. (2004). Polarization patterns in supervision groups. Group interaction and group climate in a psychotherapy training programme. *III European Conference of Psychoanalytic Group Psychotherapy: The individual and the group: bridging the gap*. Lissabon, Portugal.

Abstract: An analysis was made of 28 supervision groups in a psychotherapy training program on an academic basic training level. A total of 84 supervisees and 28 supervisors participated in the study. The training program was part of a five and a half-year long academic training program. The groups which consisted of three members and a supervisor, had a duration of 18 months. Each member had at least one adult client in long-term individual psychoanalytic psychotherapy, which was presented in the supervision sessions. Data was collected at three different occasions; at the beginning, middle and end of the training program. The main focus concerned polarization patterns of group roles, based on SYMLOG (Systems of the Multiple Levels of Observation of Groups) self image ratings at three occasions. A four dimensional model SPGR (Systematizing Person-Group Relations) was used. The four dimensions of this system were Control versus Nurture, Opposition versus Dependency, Influence versus Passivity and Withdrawal versus Synergy. The results showed that in most of the groups the role structure tended to shift over time, either in role focus or in severity of polarization. A decrease in polarization was linked to improved performance. Nurture and Dependency subgroups characterized groups that did not improve their performance. The discussion focuses on the significance of polarization patterns and the need for flexible pattern in supervision groups, as well as to what extent learning is linked to group climate.

Typ och Nyckelord: Proceedings group interaction, self-image, group climate

Referens: Boalt Boëthius, S., Ögren, M.-L., Sjøvold, E., & Sundin, E. (2004). Experiences of Group Culture and Patterns of Interaction in Psychotherapy Supervision Groups. *The Clinical Supervisor, 23(1)*, 101-121.

Abstract: Beginner supervisees (n = 84) and their psychotherapy supervisors who worked in 28 supervision groups in an academic training context participated in this study. SYMLOG self-ratings of actual and ideal experiences of the group interactions were collected at three measurement points; at the beginning, middle and end of the supervision. The main purpose was to examine group members' (supervisees and supervisors) experiences of patterns of polarization in terms of development of subgroups within the supervision group, and group culture in terms of flexibility. The results showed that, for the majority of groups, experiences of patterns of interaction, as measured at the three measurement points, involved changes in role functions or degree of polarization among group members. The group members tended to become slightly more satisfied with their informal roles and the group culture over time. Group members who experienced that the group interactions did not become more flexible also experienced that subgroups, characterized by Nurture or Dependency, had emerged in their groups. In conclusion, the significance of polarization patterns and flexibility was emphasized. A certain degree of opposition and conflict in the supervision group seemed to further development and flexibility in the group.

Typ och Nyckelord: Journal psychotherapy supervision, group interaction, polarization

Referens: Borg, E., & Borg, G. (2004). Natural scaling: Basic principles and some applications. Paper presented by E. Borg at the XXVIII International Congress of Psychology, Beijing, China, 8-13 August 2004. In W. Mou, S. Li, & B. Qiu (Eds.), *Abstract Book from the XXVIII International Congress of Psychology*.

Abstract: A great advantage with Natural Scaling, or "level-anchored ratio scaling", is that it is a direct scaling method combining "ratio (R) scaling" in the tradition of S. S. Stevens with verbally labeled "category (C) ratings". Resulting data belong to a "semi-ratio" scale and can be used both for obtaining general growth functions describing Stimulus Response relationships, and "absolute" levels of intensities for intra- and interindividual comparisons. The scales have been validated by physiological variables and tested for several sensory attributes. There is a wide field of applications in medicine, ergonomics and human factors, sports, and activities of daily life.

Typ och Nyckelord: Proceedings Book (chapter) scaling, level-anchored ratio scaling, stimulus response relationships, ICP 2004

Referens: Borg, E., & Kajser, L. (in press). A comparison between three rating scales for perceived exertion and two different work tests. *Scandinavian Journal of Medicine and Science in Sports*.

Abstract: In the present article three scales developed by G. Borg (see Borg, 1998, Borg and Borg, 2001) are compared on bicycle ergometer work. In the first study, comparing the Borg RPE and CR10 scales, 40 healthy subjects (12 men and 8 women with each scale) with a mean age of about 30 years (sd ? 6) participated. A work-test protocol with step-wise increase of work loads every minute was used (20 W increase for men and 15 W for women). Ratings and heart rates were recorded every minute and blood lactates every third minute. Data obtained with the RPE scale were described with linear regressions with individual correlations of about 0.98. Data obtained with the CR10 scale could also be described by linear regressions, but when described by power functions gave exponents of about 1.2 (sd ? 0.4) (with one additional constant included in the power function). This was significantly lower than the exponent of between 1.5 - 1.9 that has previously been observed. Mean individual correlations were 0.98. Blood lactate concentration grew with monotonously increasing functions that could be described by power functions with a mean exponent of about 2.6 (sd ? 0.6) (with two additional constants included in the power functions). In the second study, where also the more recently developed Borg CR100 scale (centiMax) was included, 24 healthy subjects (12 men and 12 women) with a mean age of about 29 years (sd ? 3) participated in a work-test with a step-wise increase of workloads (25 W) every third minute.

Ratings and heart rates were recorded. RPE values were described by linear regressions with individual correlations of about 0.97. Data from the two CR scales were described by power functions with mean exponents of about 1.4 (sd \approx 0.5) (with a-values in the power functions). Mean individual correlations were about 0.98. In both studies a tendency for a deviation from linearity between RPE values and HRs were observed. The obtained deviations from what has previously been obtained for work of longer durations (4-6 minutes) points to a need of standardization of work-test protocols and to the advantage of using CR-scales.

Typ och Nyckelord: Journal Borg Category-Ratio scale, growth function, exercise tests

Referens: Borg, E., & Letzter, M. (2004). A study of perceived exertion and a comparison of two CR-scales. In A.M. Oliveira, M.P. Teixeira, G.F. Borges, & M.J. Ferro (Eds.), *Fechner Day 2004* (pp. 325-330). Proceedings of the Twentieth Annual Meeting of The International Society for Psychophysics. Coimbra, Portugal: International Society for Psychophysics.

Abstract: Twenty-four well-trained male subjects participated in a sub-maximal work test on bicycle ergometer to compare the Borg CR10 and CR100 scales. CR-ratings of breathlessness and leg-exertion and measures of heart rate and blood lactate were obtained. With a basic perceptual noise constant included, power function exponents for breathlessness were 1.4 (CR10) and 1.8 (CR100) and for leg-exertion 1.7 (CR10) and 1.9 (CR100), significantly higher for CR100 data. Subjects also used a somewhat wider numerical range on the CR100 scale that also proved to be more fine-graded. Moderate correlations were obtained (0.44 - 0.54) between leg-exertion and physiological variables at 200 W. Physical working capacity obtained from HR (W170), was compared to estimates obtained from PE (WR7 and WR70). Leg-exertion rendered moderate correlations for both scales $r = 0.44$ (CR10) and $r = 0.53$ (CR100), breathlessness only for CR100, $r = 0.47$. The CR100 thus shows a slightly better discriminative capacity. A change towards using the CR100 may be recommended.

Typ och Nyckelord: Proceedings Book (chapter) Borg Category-Ratio Scale, growth functions, perceived exertion, Fechner Day

Referens: Borg, G. (2004). Level-anchored ratio scaling and applications. In A.M. Oliveira, M.P. Teixeira, G.F. Borges, & M.J. Ferro (Eds.), *Fechner Day 2004* (pp. 44-49). Proceedings of the Twentieth Annual Meeting of The International Society for Psychophysics. Coimbra, Portugal: International Society for Psychophysics.

Abstract: Several different kinds of scaling methods to measure perceptions and feelings exist. There is no consensus about which method should be used to study a certain problem. The advantage with "level-anchored ratio scaling" is pointed out. This method combines the advantages with "ratio scaling" for determinations of psychophysical functions with the advantages of "category scaling" for determinations of direct, separate levels of intensity. A review is given of the main principles behind the scale construction and the two methods: The Borg CR10 and centiMax (CR100) scales. Applications are presented from different fields, e.g. from medicine, ergonomics and human factors, and sports.

Typ och Nyckelord: Proceedings Book (chapter) scaling methods, perception, Borg CR10, Borg centiMax (CR100), Fechner Day

Referens: Borg, G. (2004). Problems on intersubjectivity and Borg's range model. In A.M. Oliveira, M.P. Teixeira, G.F. Borges, & M.J. Ferro (Eds.), *Fechner Day 2004* (pp. 172-177). Proceedings of the Twentieth Annual Meeting of The International Society for Psychophysics. Coimbra, Portugal: International Society for Psychophysics.

Abstract: A review of a way to "solve" a problem concerning intersubjectivity is given. It deals with a philosophical and a psychophysical problem. The philosophical one concerns an epistemological question of possible knowledge of other minds. The psychophysical deals with a "range model", that shows how interindividual comparisons of perceptual magnitudes may be accomplished. According to the model a "maximal" stimulus intensity is used as an intersubjective "anchor", and deliberately set subjectively "equal". The magnitude of a perception then depends upon its position in the range. Individual differences are defined as deviations from the general similarity. The proposition of similarity at "Max" is given it an epistemic priority.

Typ och Nyckelord: Proceedings Book (chapter) Borg's range model, intersubjectivity, perception, Fechner Day

Referens: Borg, G. (2004). Psychophysics and Perceptometry. In A.M. Oliveira, M.P. Teixeira, G.F. Borges, & M.J. Ferro (Eds.), *Fechner Day 2004* (p. 331). Proceedings of the Twentieth Annual Meeting of The International Society for Psychophysics. Coimbra, Portugal: International Society for Psychophysics.

Abstract: Fechner (1860) created psychophysics and made it known as an important scientific field. Many scientists have contributed to its development. Stevens' "ratio scaling" methods and laboratory experiments started a new development (See Stevens, 1975). The number and importance of applied studies have additionally shown the significance of the field. However, the potential for applications is very great.

Despite this development the field is not well-known. To some degree this may be due to the fact that the word psychophysics seems to scare or confuse many people, attract and repel. Even colleagues ask me what psychophysics really means. I often give a rather long explanation, saying that it is mainly a subfield within perception, with a focus on methods for determination of dimensions and magnitudes of experiences. However, many people associate the term with metaphysics, parapsychology and animism or psychosomatics. This is a drawback, since a good understanding of the meaning is only found in a very small group of specialists. Even in this group there is not a perfect consensus. The field is very wide and I think that there is a need for a complementary word. Many English words like "percept" have Greek or Latin roots, e.g. perceptum and percipere from Latin. "Metry" has a Greek root, referring to the process of measuring. Hybrid forms exist in science using combinations of Greek and Latin roots, such as "calorimetry". It is nowadays always important that the word is understandable in English, as the main scientific language, not the least in psychology with words such as psychometry. A word starting with percept and ending with metry seems to be the best combination. I would therefore propose the word "perceptometry" as a complement to psychophysics. It covers most important aspects, including those about intersubjectivity, intra- or intermodal comparisons with no specified stimuli, that is psychophysics, not necessarily with physics.

Typ och Nyckelord: Proceedings Book (chapter) psychophysics, perceptometry, Fechner Day

Referens: [Borg, G.](#) (2004). Anstrengungsempfinden und körperliche Aktivität. [Perceived exertion and physical activity.] *Deutsches Ärzteblatt*, 101, 15, 1016-1021.

Abstract: Exercise intensity and subjective symptoms can be identified by measuring the perception of exertion during stress testing. Borg's RPE scale (RPE, ratings of perceived exertion) is a reliable and valid method for estimating exertion. This scale is constructed to give ratings which grow linearly with work intensity. Perception of exertion is a good complement to physiological measurements. RPE determinations are used to identify level of intensities in healthy and trained subjects and in patients with cardiopulmonary or muscular-skeletal diseases, and in rehabilitation. Further, RPE may be used to evaluate problems in epidemiology or occupational medicine. This review informs about psycho-physiological basics and on applications in practical medicine.

Typ och Nyckelord: Journal physical activity, perception of exertion, Borg-RPE-Scale

Referens: [Borg, G.](#) (2004). Scaling Experiences during Work: Perceived Exertion and Difficulty. In N. Stanton et. al. (Eds.), *Handbook of Human Factors and Ergonomics Methods* (pp. 11-1-11-7). London and New York: CRC Press.

Abstract: Problems concerning experiences of exertion and difficulty in ergonomics and human factors are dealt with. The scaling methods developed by Borg, the "Borg-RPE-Scale" and the "CR-scales" (category-ratio scaling methods) are described and their pros and cons analyzed. The importance to follow instructions and administrations are pointed out. Examples of applications are given and reliability and validity coefficients reported. Some related methods for studying experiences of work loads are also reported.

Typ och Nyckelord: Book (chapter) ergonomics, difficulty, Borg CR scale

Referens: [Borg, G.](#) (2004). Principles in Scaling Pain and the Borg CR Scales®. In *Psychologica 2004*, 37, 35-37.

Abstract: This article focuses on different methods to measure pain. The importance of language and good verbal descriptors is emphasized. Some special laboratory and clinical studies of pain are reported. It is pointed out that there often is a need, not only to determine the level of pain in a certain situation, but also the changes with time, stimulation, therapy etc. This puts high demands on the metric properties of the methods. Five different kinds of scaling methods are presented and evaluated: Category-rating scales, the visual analogue scale (VAS), "ratio scaling" methods according to Stevens, cross-modal matching, and category-ratio (CR) scales according to Borg. The advantages with the last kind of scales are pointed out, since they are level-anchored ratio scales, and permit most kinds of calculations and also determinations of other subjective somatic symptoms of clinical importance for comparisons and differential diagnostics.

Typ och Nyckelord: Journal Borg CR10-scale, pain ratings, psychophysical scaling

Referens: [Brage, R., & Bergman, L.R.](#) (2004). *Attitudes toward surveys and survey experiences in the Swedish general population: Basic findings*. Stockholm University, Department of Statistics, Reports from the project Modern Statistical Survey Methods, No. 28.

Abstract: General and specific survey attitudes and survey experiences were assessed in a CATI sample survey on surveys with a total of 989 sample persons. The results suggest that attitudes toward surveys are important factors in explaining respondent behaviour. The three main samples were taken from 1. the general Swedish population, 2. participants in the Swedish Labour Force Survey (LFS), and 3. participants in the Swedish Survey of Living Conditions (SLC). The response rates in the main samples were 70, 83, and 64 percent, respectively. Also two samples of nonrespondents from LFS and SLC were studied, but the response rates were very low. The attitudes toward non-commercial surveys ("General Surveys", abbreviated GS) were rather positive in the main samples but varied significantly between the samples, while general attitudes toward "Market Surveys" (abbreviated MS) were close to neutral with no significant variation between the samples. The trust in Statistics Sweden as an agent was also higher than for private survey organisations. The request- and participation frequencies suggest a rather high survey pressure. For instance, 51 percent in the Swedish General Population Sample had been requested to participate in at least one survey during the last six months. Attitudes toward the current survey were positive and most reported an intent to participate in a replication. The results suggest that a recent previous survey experience may affect general attitudes toward surveys, advance letter reading, and intent to participate in future surveys, and that general survey attitudes partly explain the respondent's appreciation of a later specific survey. Principal Component Analyses (PCA) with oblique rotation of general attitude items gave four reliable components: General Survey Attitude, Worry and Risk, Market Survey Attitude, and General Survey Value, and a PCA on items related to the current survey gave one reliable component: Priority. Among demographic variables, only age and sex were somewhat related to survey attitudes. Six items were common with a survey on surveys, given in 1976, and related to the survey climate. Only one item (expected lack of time for the survey) indicated a deterioration. Otherwise the time change was in the other direction.

Typ och Nyckelord: Report survey attitudes, survey experiences, motivation

Referens: [Bunce, D., Kivipelto, M., & Wahlin, Å.](#) (2004). Utilization of cognitive support in episodic free recall as a function of apolipoprotein E and vitamin B12 or folate among adults aged 75 years and older. *Neuropsychology*, 18, 362-370.

Abstract: Apolipoprotein E (APOE), vitamin B12, and folate were examined in relation to free recall among 167 community-based older adults. Cognitive support at encoding and retrieval was also taken into account. Participants were classified as APOE ε4 or non-ε4 allele carriers and as either low or normal vitamin B12 or folate status. A significant association was identified between low vitamin B12 and the ε4 genotype in respect to free recall, but only in circumstances of low cognitive support. This result remained after removing dementia cases that occurred up to 6 years after testing. A similar, but nonsignificant, trend was evident in relation to folate. The research is discussed with reference to vulnerability models and genetic influences on brain reserves.

Typ och Nyckelord: Journal APOE, vitamin B deficiency, memory

Referens: [Bunce, D., Kivipelto, M., & Wahlin, Å.](#) (2004). Apolipoprotein E, B vitamins, and cognitive function in

older adults. *Journal of Gerontology: Psychological Sciences*, 60B, P41-P48.

Abstract: Recognition of dated and contemporary famous faces, short-term memory, and visuospatial abilities were investigated in adults aged 75 years and older as a function of apolipoprotein E (APOE) genotype, $\epsilon 4$ or not $\epsilon 4$, and whether participants recorded normal or low levels of B vitamins. No associations between B vitamins and APOE were identified in respect to short-term memory or visuospatial skills, or for contemporary famous faces. However, in respect to the recognition of dated famous faces, deficits in persons carrying the $\epsilon 4$ allele who also recorded low vitamin B12 values were found. The results suggest that the neurological structures and processes supporting face recognition may be vulnerable to the combined influence of the APOE $\epsilon 4$ allele and low levels of vitamin B12. This finding was unrelated to incipient dementia up to 6 years following testing. The results are discussed with reference to the neuroanatomical reserves that $\epsilon 4$ carriers may possess.

Typ och Nyckelord: Journal APOE, vitamin B deficiency, episodic memory

Referens: Busch, H. (2004). Adopting a self-management approach to chronic low back pain. In Abstract book, Eighth International Congress of Behavioral Medicine, Mainz, August, 2004. *International Journal of Behavioral Medicine*, 11, Suppl. 285.

Abstract: Objective: To examine changes in pain-related appraisals and coping strategies among patients suffering from chronic low back pain (CLBP). Design: 22 outpatients, 8 men and 15 women, were interviewed about past and present experiences of CLBP. The interviews were analysed using grounded theory. Results: Although 20% of the subjects immediately reported emotional distress due to the first experience of CLBP, 80% was able to inhibit psychological distress by disregarding pain and its potential implications. Disregarding defences seemed to protect the patients' self-concept and reduce emotional discomfort, although it did not promote recovery. Weakening defences were related to positive outcomes, such as an enhanced sense of responsibility for pain management and a readiness to change behaviours contributing to pain. Conclusions: Insight into CLBP favoured rehabilitation by helping subjects to adopt a self-management approach.

Typ och Nyckelord: Proceedings Journal chronic pain, coping, psychological defences

Referens: Busch, H., Montgomery, W., Melin, B., Lundberg, U. (2004). An experimental study of visospatial and verbal memory in chronic pain patients. In Abstract book, Eighth International Congress of Behavioral Medicine, Mainz, August, 2004. *International Journal of Behavioral Medicine*, 11, Suppl. 285.

Abstract: Objective: Cognitive bias, such as selective memory for pain related information is frequently observed in chronic pain patients and is mostly assessed using verbal material. Beside word lists, the current study used photographs of people presenting pain behaviours to assess memory bias in chronic pain patients. Chronic pain patients were hypothesized to show better recall of pain related words and pictures as compared to pain-free controls.

Methods: 28 female chronic neck pain patients and 28 pain-free female controls completed two computerized pictorial memory games and two word recall tasks.

Results: The results showed that patients and controls performed equally well in the neutral memory game. In the pain related game, patients performed worse than did controls. No significant differences were found in the word recall tasks.

Conclusions: The opposite findings of the two memory tasks can be interpreted as cognitive bias in different directions as predicted by the inverted U-function between arousal and performance.

Typ och Nyckelord: Proceedings Journal chronic pain, selective memory, cognitive bias

Referens: Bäckman, L., Wahlin, Å., Small, B.J., Herlitz, A., Winblad, B., & Fratiglioni, L. (2004). Cognitive functioning in aging and dementia: The Kungsholmen Project. *Ageing, Neuropsychology and Cognition*, 11, 212-244.

Abstract: The Kungsholmen Project (KP) is a community-based longitudinal study of aging and dementia targeting the 75+ population. In this article, we review empirical studies with a cognitive focus from the KP. The main findings indicate that (a) there is an age-related decline for some cognitive domains (e.g., episodic memory, verbal fluency, visuoconstructive skill, psychomotor speed), but not for others (e.g., primary memory, visuoceptive skill, motor-hand coordination), (b) multiple individual-difference variables within demographic (e.g., sex, education) life-style (e.g., activity levels), genetic (e.g., apolipoprotein E genotype), and health-related (e.g., vitamin B deficiency, depression, diabetes) domains are related to late-life cognitive functioning, (c) a potential for improving cognitive performance – a reserve capacity – is present also among very old adults, (d) the 2 most common dementia diseases, Alzheimer's disease (AD) and vascular dementia (VaD), affect cognition in a strikingly similar manner, (e) the role of individual-difference variables in cognitive functioning is markedly reduced in dementia – the pathogenesis itself may overshadow the influence of other variables, and (f) there is a long preclinical period in dementia during which cognitive deficits are detectable. As is true with the other projects represented in this issue, the KP portrays a rather diversified picture of cognitive aging, although systematic patterns are evident with regard to the variability of late-life cognitive functioning.

Typ och Nyckelord: Journal aging, cognition, population-based

Referens: Böhm, B., Smedler, A.-C., & Forssberg, H. (2004). Impulse control working memory and other executive functions in preterm children when starting school. *Acta Paediatrica*, 93, 1363-1371.

Abstract: Objective: The aim of this study was to explore whether children born preterm have deficient executive functions (EF) in comparison with children born at full term, and if so, whether this is dependent on inferior intelligence scores and can be correlated to specific neonatal risk factors and gender.

Methods: In a population based study the executive functions of 182 preterm children (birth weight less than 1500g, VLBW) and 125 controls from the Stockholm Neonatal Project were assessed at 51/2 years with a neuropsychological test battery (Nepsy, 1990).

Results: The controls surpassed the VLBW children on tests of executive functions (EF), even after controlling

for intelligence (IQ), a necessary correction since there were significant correlations between measures of EF and IQ. EF was associated with retinopathy of prematurity (ROP), and with visual impairment as a whole. In both groups, girls surpassed boys on tests of executive functions.

Conclusion: We conclude that it is possible to analyse executive functions already in preschool age. Preterm children are at risk of having subnormal levels of executive functioning, even though their general IQ is normal.

Typ och Nyckelord: Journal preterm birth, executive functions, intelligence

Referens: Chotai, J., Smedh, K., Johansson, C., Nilsson, L.-G., & Adolfsson, R. (2004). An epidemiological study on gender differences in self-reported seasonal changes in mood and behaviour in a general population of northern Sweden. *Nordic Journal of Psychiatry*, 58, 429-437.

Abstract: Gender differences have been reported regarding symptoms, prevalence and heritability of seasonal affective disorders (SAD). We focus on gender aspects in this study of self-reported seasonal changes in mood and behaviour in a general population. The Seasonal Pattern Assessment Questionnaire (SPAQ) was completed by 2620 adults (55.6% women) aged 35 – 85 years, enrolled in the Betula prospective random cohort study of Umeå, Sweden. October to February turned out to be suitable winter months. Seasonal affective disorder (SAD) was found in 2.2% and sub-syndromal SAD (S-SAD) in 5.7%. Women had about 1.5 times higher prevalences than men, and seasonality problems decreased with age in both genders. Preference for eating least was distributed with a peak in summer, whereas preference for eating most had a major peak in winter (winter eaters) and a minor peak in summer (summer eaters). Significantly more of winter eaters in women, and significantly more of summer eaters in men, felt worst in winter. Seasonal change in weight was considered significantly as a problem by women but not men. Winter behaviour of sleeping most was considered significantly as a problem by men but not women. Women reacted significantly to temperature-related changes (negatively to cold/short days and positively to hot/long days), whereas men reacted significantly to sunshine-related changes (negatively to cloudy days and positively to sunny days). Subtle gender differences may thus underlie the pathophysiology of seasonal problems. Studies of an eventual efficacy of treating SAD women with raised ambient temperature, and gender-specific comparisons with other therapies, would be of interest.

Typ och Nyckelord: Journal seasonal affective disorder, epidemiology, gender difference

Referens: Chotai, J., Smedh, K., Nilsson, L.-G., & Adolfsson, R. (2004). A dual vulnerability hypothesis for seasonal depression is supported by the seasonal pattern assessment questionnaire in relation to the temperament and character inventory of personality in a general population. *Journal of Affective Disorders*, 82, 61-70.

Abstract: Personality structure obtained from the psychobiological Temperament and Character Inventory (TCI) was studied in relation to self-reported seasonal variations in mood and behavior measured by the Seasonal Pattern Assessment Questionnaire (SPAQ). The subjects comprised 1761 adults (57.6% women) in the age range 35–85 years, enrolled in the Betula prospective random cohort study of Umeå, Sweden. Personality profiles of subjects who reported the occurrence of a high degree of seasonal variation as such were associated with a combination of high self-transcendence (ST) and high persistence (PS), irrespective of the level of harm avoidance (HA). Subjects who reported feeling worst in winter were associated with high HA, irrespective of the levels of ST and PS. Also, subjects feeling worst in summer or experiencing overall problems with seasonal variation were associated with high HA in their personality profiles. Using the SPAQ criteria to define seasonal affective disorder (SAD) or subsyndromal SAD (S-SAD), subjects with these disorders often had combinations of high self-transcendence (ST) and high persistence (PS), but with different associations with HA. No evaluations were made for SAD or subsyndromal SAD according to the DSM-IV or ICD 10 criteria. Our results relating SPAQ with TCI give support for a dual vulnerability hypothesis for seasonal depression proposed in the literature, where it is attributed to a combination of a seasonal factor and a depression factor. Examining the literature regarding the relationships between the different TCI scales and monoamine neurotransmitter functions, those relationships suggest that these two vulnerability factors for seasonal depression may be modulated by different neurotransmitter systems.

Typ och Nyckelord: Journal depression, personality, seasonal depression

Referens: Christianson, S.-Å., & Merckelbach, H. (2004). Are homicide offenders who claim amnesia liars? In P.A. Granhag & L.A. Strömwall (Eds.), *The detection of deception in forensic contexts*. Cambridge: Cambridge University Press.

Abstract: It is not uncommon that defendants claim amnesia for the crime of which they are accused. In this chapter, we focus on amnesia for homicide and the issue of whether this is genuine or feigned memory loss. Among lay people, a large majority believes that it is perfectly possible for an offender to develop complete amnesia for his crime and that in certain types of homicide, dissociative amnesia is a highly plausible scenario. Mental health professionals who appear as expert witnesses in such cases often assume that this type of memory loss is the joint effect of strong emotions and excessive drug or alcohol use. It is also common to seek arguments for this interpretation by interviewing the defendant. We present arguments for why this approach is dubious. To begin with, our empirical data from interviews with homicide offenders show that they have a strong motivation for feigning amnesia and also that their memory loss possesses the typical features of malingered amnesia. Second, dissociative amnesia is not the only or even the most prevalent form of crime-related amnesia. Third, the diagnostic differentiation between these types of amnesia cannot be made solely on the basis of interviews. To make this differentiation, experts should rely on tests (e.g., the SIMS), tasks (e.g., the SVT), and clues that are typical for malingering memory dysfunctions (e.g., sharp boundaries between remembering and forgetting). Although this may seem simple, such an approach requires sophisticated knowledge about diagnostic quality parameters. Many psychologists and psychiatrists do not possess such knowledge and therefore their competence to act as expert witnesses in cases in which claims of crime-related amnesia are raised is doubtful. A main question in this chapter was whether homicide offenders who claim amnesia are liars. A yes-or-no answer does not justice to the complexities of the whole issue. Rather, in considering all the obstacles a homicide offender has to meet in remembering and telling about the crime, it is not surprising that offenders often claim amnesia.

Typ och Nyckelord: Book (chapter) crime, offenders, amnesia

Referens: Critchley, H.D., Wiens, S., Rotshtein, P., Öhman, A., & Dolan, R.J. (2004). Neural systems supporting

interoceptive awareness. *Nature Neuroscience*, 7, 189-195.

Abstract: Influential theories of human emotion argue that subjective feeling states involve representation of bodily responses elicited by emotional events. Within this framework, individual differences in intensity of emotional experience reflect variation in sensitivity to internal bodily responses. We measured regional brain activity by functional magnetic resonance imaging (fMRI) during an interoceptive task wherein subjects judged the timing of their own heartbeats. We observed enhanced activity in insula, somatomotor and cingulate cortices. In right anterior insular/opercular cortex, neural activity predicted subjects' accuracy in the heartbeat detection task. Furthermore, local gray matter volume in the same region correlated with both interoceptive accuracy and subjective ratings of visceral awareness. Indices of negative emotional experience correlated with interoceptive accuracy across subjects. These findings indicate that right anterior insula supports a representation of visceral responses accessible to awareness, providing a substrate for subjective feeling states.

Typ och Nyckelord: Journal emotion, interoception, brain imaging

Referens: De Beni, R., Cornoldi, C., Larsson, M., Magnussen, S., & Rönnerberg, J. (in press) Memory in Experts: Visual Learning, Wine Tasting, Orienteering, and Speech-Reading. In T. Helstrup & S. Magnussen (Eds.), *Everyday Memory*. UK: Psychological Press.

Abstract:

Typ och Nyckelord: Book (chapter) memory, expertise, wine tasting

Referens: de Frias, C.M., Annerbrink, K., Westberg, L., Eriksson, E., Adolfsson, R., & Nilsson, L.-G. (in press). Catechol O-Methyltransferase Val158Met Polymorphism is associated with cognitive performance in nondemented adults. *Journal of Cognitive Neuroscience*.

Abstract: The catechol O-methyltransferase (COMT) gene is essential in the metabolic degradation of dopamine in the prefrontal cortex. In the present study we examined the effect of a Val158Met polymorphism in the COMT gene on individual differences and changes in cognition (executive functions and visuospatial ability) in adulthood and old age. The participants were 292 nondemented men (initially aged 35-85 years) from a random sample of the population (i.e., the Betula study) tested at two occasions with a 5-year interval. Confirmatory factor analyses were used to test the underlying structure of three indicators of executive functions (verbal fluency, working memory, and Tower of Hanoi). Associations between COMT, age, executive functioning and visuospatial (block design) tasks were examined using repeated measures analyses of variance. Carriers of the Val allele (with higher enzyme activity) compared to carriers of the Met/Met genotype (with low enzyme activity) performed worse on executive functioning and visuospatial tasks. Individuals with the Val/Val genotype declined in executive functioning over the 5-year period, whereas carriers of the Met allele remained stable in performance. An age x COMT interaction for visuospatial ability located the effect for middle-aged men only. This COMT polymorphism is a plausible candidate gene for executive functioning and fluid intelligence in nondemented middle-aged and older adults.

Typ och Nyckelord: Journal aging, genetics, executive functions

Referens: de Frias, C.M., Annerbrink, K., Westberg, L., Eriksson, E., Adolfsson, R., & Nilsson, L.-G. (2004). COMT gene polymorphism is associated with declarative memory in adulthood and old age. *Behavior Genetics*, 34, 533-539.

Abstract: Variation in memory performance is to a large extent explained by genes. In the prefrontal cortex, the catechol O-methyltransferase (COMT) gene is essential in the metabolic degradation of dopamine, a neurotransmitter implicated in cognitive functions. The present study examined the effect of a polymorphism in the COMT gene on individual differences and changes in memory in adulthood and old age. Tests assessing episodic and semantic memory were administered to 286 men (initially aged 35-85 years) from a random sample of the population (i.e., the Betula prospective cohort study) at two occasions followed over a 5-year period. Carriers of the Met/Met genotype (with low enzyme activity) performed better on episodic and semantic memory, as compared to carriers of the Val allele (with higher enzyme activity). Division of episodic memory into its recall and recognition components showed that the difference was specific to episodic recall, not recognition tasks; an effect that was observed across three age groups (middle-age, young-old, and old-old adults) and over a 5-year period. The COMT gene is a plausible candidate gene for memory functioning in adulthood and old age.

Typ och Nyckelord: Journal COMT, genetics, memory

Referens: de Frias, C.M., & Dixon, R.A. (in press). The structure and measurement invariance of the Memory Compensation Questionnaire: Findings from the Victoria Longitudinal Study. *Psychological Assessment*.

Abstract: Recent research with the Memory Compensation Questionnaire (MCQ) has examined changes, functions, and correlates of compensatory strategy use in older adults. The twofold aim of this study was to test (a) the hypothesized structure of the MCQ and (b) structural equivalence across age, gender, and time. The 7-scale MCQ was designed to measure 5 compensatory mechanisms and 2 general aspects of compensatory awareness. We assembled a 3-wave (6-year) sample (n = 521; age = 55-85 years) from the Victoria Longitudinal Study. The results of structural equation modeling supported (a) the a priori structure of the MCQ and (b) the inference of measurement invariance across the three dimensions. Accordingly, the MCQ is available for measuring self-reported efforts to compensate for everyday memory losses.

Typ och Nyckelord: Journal memory compensation questionnaire, invariance testing, old age

Referens: de Frias, C.M., Nilsson, L.-G., & Herlitz, A. (in press). Sex differences in cognition are stable over a 10-year period in adulthood and old age. *Aging, Neuropsychology and Cognition*.

Abstract: Sex differences in declarative memory and visuospatial ability are robust in cross-sectional studies. The present longitudinal study examined whether sex differences in cognition were present over a 10-year period, and whether age modified the magnitude of sex differences. Tests assessing episodic and semantic memory, and visuospatial ability were administered to 625 nondemented adults (initially aged 35-80 years), participating in the population based Betula study at two follow-up occasions. There was stability of sex

differences across five age groups and over a 10-year period. Women performed at a higher level than men on episodic recall, face and verbal recognition, and semantic fluency, whereas men performed better than women on a task assessing visuospatial ability. Sex differences in cognitive functions are stable over a 10-year period and from 35 to 90 years of age.

Typ och Nyckelord: Journal sex differences, memory, aging

Referens: de Frias, C.M., Tuokko, H., & Rosenberg, T. (in press). Caregiver physical and mental health predicts reactions to caregiving. *Aging and Mental Health*.

Abstract: Self-reported health and reactions to providing care to older adults with cognitive or physical impairments were examined. Health status was examined on a single occasion in 177 persons (aged 63 – 94 years) referred to programs within a comprehensive set of geriatric care services and the 133 family members involved in their care (ages 31 – 96 years). The five-scale Caregiver Reaction Assessment (CRA), was administered to the family members. Reliability analyses revealed that the CRA had good internal consistency. Being older was related to experiencing greater health problems in the caregiver role. Greater health problems from providing care were reported by caregivers in worse physical health and also when the care recipient had more physical pain. Caregivers who reported fewer health problems attributed to caregiving reported better mental health and less depressive symptomatology. Caregivers with health problems may be at increased risk of suffering from stress from caregiving.

Typ och Nyckelord: Journal caregiving, mental health, physical health

Referens: De Witte, H., Goslinga, S., Chirumbolo, A., Hellgren, J., Näswall, K., & Sverke, M. (in press). Baanonzekerheid als schending van het psychologisch contract bij vakbondsleden: Gevolgen voor vakbondsattitudes en opzegintentie in België en Nederland (Job insecurity as violation of the psychological contract among trade union members: Consequences on attitudes towards unions and the intention to resign membership in Belgium and the Netherlands). *Gedrag & Organisatie*.

Abstract: The consequences of job insecurity among union members are explored. Starting from the dominance of the instrumental motive for union membership, and using psychological contract theory, we hypothesise that the perception of job insecurity correlates with a lower level of perceived union support, less satisfaction with the union, reduced (affective) commitment towards the union, and a higher intention to resign union membership. These hypotheses were tested in Belgium and the Netherlands. Evidence was found for an association between job insecurity and a reduction in perceived union support. In Belgium, job insecurity was also associated with reduced union satisfaction and with the intention to resign membership. Job insecurity was not associated with union commitment, however. The results partly suggest that union members experience job insecurity as a violation of the psychological contract with their union.

Typ och Nyckelord: Journal job insecurity, psychological contract, unionization

Referens: De Witte, H., Näswall, K., Chirumbolo, A., Goslinga, S., Hellgren, J., & Sverke, M. (2004). Consequenties van tijdelijk werk en baanonzekerheid in vier Europese landen (Consequences of temporary work and job insecurity in four European countries). *Gedrag & Organisatie*, 17, 163-186.

Abstract: This contribution analyses whether temporary work and (the subjective perception of) job insecurity are associated with a reduction in job satisfaction and organisational commitment, as suggested in the literature. An interaction between temporary work and job insecurity is equally tested. Data from four European countries (Belgium, the Netherlands, Italy and Sweden) are used to test the robustness of the hypotheses. The results show that temporary work is not associated with a reduction in job satisfaction and organisational commitment. Job insecurity, however, is associated with a lower score on both outcome variables, as hypothesised. In two countries, an interaction was found: job insecurity was only associated with a reduction in job satisfaction and organisational commitment among workers with a permanent contract. These results suggest a violation of the psychological contract for this specific category of workers.

Typ och Nyckelord: Journal temporary work, job insecurity, job satisfaction

Referens: Dimdins, G., & Montgomery, H. (2004). Differentiating in-group favoritism from shared reality in intergroup perception. *Scandinavian Journal of Psychology*, 45(5), 417-427.

Abstract: Two basic factors influence mutual ratings of social groups: in-group favoritism (related to the evaluative aspects of a rating) and the perception of shared reality (related to the descriptive aspects). In two studies, we examine the usefulness of Peabody's (1968) method of separating evaluative and descriptive aspects of rating in intergroup judgments. In Study 1, Latvian and Russian students made different evaluations of both groups, but the same groups agreed on the descriptive ratings. In Study 2, male and female psychology students rated each other from own, in-group, and out-group perspectives. The participants did not show any in-group favoritism in their own ratings, but they expected their fellow students to be in-group biased. The participants agreed on the descriptive ratings of both groups. The results demonstrate that shared reality influences intergroup ratings, despite differences in evaluations.

Typ och Nyckelord: Journal ingroup, intergroup perception, shared reality

Referens: Dixon, R.A., Bäckman, L., & Nilsson, L.-G. (Eds.). (2004). *New frontiers in cognitive aging*. New York: Oxford University Press.

Abstract: This book contains 17 chapters in five different sections. One single introductory chapter is included in the first section. In this chapter Dixon and Nilsson discuss what the frontiers of cognitive aging are. The second section contains chapters by Denise Park, Christopher Herzog, David F. Hultsch, and Leah Light, who discuss new theoretical orientations in cognitive aging. The third section is on new directions in the cognitive neuroscience of aging with chapters by Naftali Raz, Lars Nyberg, Lars Bäckman, and Roberto Cabeza. The fourth section, on biological and health effects on cognitive aging, includes chapters by Ulman Lindenberger, Helene Christensen, Nancy L. Pedersen, Agneta Herlitz, Åke Wahlin, Peter Graf, and Paul Verhaegen. In the final section Daniel R. Birch discusses research directions, perspectives, and imperatives for the future.

Typ och Nyckelord: Book (chapter) cognition, memory, aging

- Referens:** Dixon, R.A., & de Frias, C.M. (2004). The Victoria Longitudinal Study: From characterizing cognitive aging to illustrating patterns and predictors of changes in memory compensation. *Aging, Neuropsychology and Cognition*, 11, 346-376.
- Abstract:** The article is divided into two sections. First, we describe the key characteristics of the Victoria Longitudinal Study (VLS), including the rationale, design, measures, and research objectives. In general, the VLS may be described as a large-scale, multi-cohort, longitudinal sequential study of human aging. Accordingly, the VLS provides data suitable for multiple descriptive, explanatory, and epidemiological research projects. Second, we present the background, methods and results of three new programmatic studies on intraindividual change and variability in memory compensation. Study 1 reports 6-year change and variability information on five mechanisms of memory compensation. Study 2 describes both personality and health influences on 6-year changes in memory compensation. Study 3 focuses on the influence of initial memory skill on 6-year change and variability in memory compensation.
- Typ och Nyckelord:** Journal cognitive aging, memory compensation, Victoria longitudinal study
- Referens:** Dixon, R.A., & Nilsson, L.-G. (2004). Don't fence us in: Probing the frontiers of cognitive aging. In R.A. Dixon, L. Bäckman, & L.-G. Nilsson (Eds.), *New frontiers in cognitive aging* (pp. 3-15). New York: Oxford University Press.
- Abstract:** This chapter describes the multidisciplinary nature of cognitive aging research. The main components that of this area are the aging neuroscience of cognition, aging health context of cognition, the genetics of cognition, the biological/physiological substrates of cognition, and new methodological techniques for measuring multiple aging-related influences on cognition. Rather than viewing these aspects of the context as separate and non-interactive influences, one may imagine that a defined subset of them may operate to form the critical epidemiological context of targeted phenomena in cognitive aging.
- Typ och Nyckelord:** Book (chapter) aging, cognition, neuroscience
- Referens:** Dixon, R.A., Wahlin, Å., Maitland, S.B., Hultsch, D.V., Hertzog, C., & Bäckman, L. (2004). Episodic memory change in late adulthood: Generalizability across samples and performance indices. *Memory & Cognition*, 32, 768-778.
- Abstract:** Younger adults recall more information from episodic memory tasks than do older adults. Because longitudinal studies are rare and often incompatible, the extent of actual late-life memory change is not well-established. We assemble two different longitudinal samples of normal older adults, each of which is tested twice at a 3-year interval using a battery of episodic memory indicators. Together, two-wave data from both the Victoria Longitudinal Study in Canada (VLS; n = 400) and the Kungsholmen Project in Sweden (KP; n = 168) cover a 40-year span of adulthood, ranging from 54 to 94 years of age. Principal memory tasks include categorizable word lists, story recall, and random word lists, as well as indicators of cognitive support. Overall, examination of performance on sets of common and complementary episodic tasks reveal that for both samples actual 3-year changes are modest and that when decline occurs it is gradual. The exception - greater decline for more supported tasks - suggests that these may be especially sensitive to late-life changes.
- Typ och Nyckelord:** Journal aging, episodic memory, population-based
- Referens:** Dåderman, A.M. (2004). Personlighetsmodeller och självskattningsskalor [Personality models and self-rated personality scales]. I L. Lidberg & N. Wiklund (Eds.), *Svensk rättspsykiatri: Psykisk störning, brott och påföljd [Swedish forensic psychiatry: Mental disorder, crime and consequence]* (pp. 428-454). Lund: Studentlitteratur.
- Abstract:** Personality is regarded as a dimensional concept that means, personality can be more or less normal. This approach enables personality to be measured with reliable, validated personality scales, and to be related to impairment of serotonergic function in the brain. Several personality inventories are described in the chapter, especially the Karolinska Scales of Personality, the Zuckerman Sensation Seeking Scales, form V, the Eysenck Personality Questionnaire, including an impulsiveness scale from the IVE (Impulsiveness-Venturesomeness-Empathy) inventory, the Tridimensional Personality Questionnaire, and the old dimensional scale, the Marke-Nyman Personality Temperament scale based on the personality theory of Henrik Sjöbring. In this way both old and new, and both Swedish and foreign personality concepts are linked together. Personality scales are easy to use and enable better stability and validity of results to be attained. This chapter is a revised version of a previously (2000) published work.
- Typ och Nyckelord:** Book (chapter) personality traits, reliability, validity
- Referens:** Dåderman, A.M. (2004). Ingripanden mot drogpåverkade personer. [Actions against persons who are intoxicated.] I S.-Å. Christianson & P.A. Granhag, *Polispsykologi [Police psychology]* (pp. 130-143). Stockholm: Natur & Kultur.
- Abstract:** Drug abusers are often simultaneous intoxicated with several different substances, for example amphetamine, Rohypnol and alcohol, and the police needs extended knowledge regarding legal and illegal drugs in order to anticipate the possible way in which particular drugs may influence the offender's behavior. The chapter is illustrated by several case descriptions. The roll of the police is very important, especially in severe cases of violent crimes, because without a proper evidence of a drug in the urine a forensic psychiatric evaluation may lead to a wrong decision.
- Typ och Nyckelord:** Book (chapter) abuse of drugs, police psychology, behavior
- Referens:** Dåderman, A.M., & Kristiansson, M. (2004). Psychopathy-related personality traits in male juvenile delinquents: An application of a person-oriented approach. *International Journal of Law and Psychiatry*, 27, 45-64.
- Abstract:** We have employed cluster analysis on a sample of juvenile delinquents that included about 60% psychopaths

(PCL-R) with scores above 30, and examined the relationships between psychopathy-related personality traits and psychopathy in order to highlight the need of different treatment strategies. The juvenile delinquents were 56 males with early onset of conduct disorder (DSM-IV) whose ages ranged from 14 to 20 years, with a mean of 17 years (SD=1.2), from four youth correctional institutions in Sweden. Personality traits were measured along five dimensions: impulsiveness, monotony avoidance, socialization, verbal aggression, and somatic anxiety; scales were taken from the Karolinska Scales of Personality. With respect to personality traits, we discovered seven clusters; three of these were multi-deviant clusters (the members of these clusters had all traits deviant from what is normal), three of these consisted of participants for who the majority of traits were deviant (only one or two traits were within the normal range), and one of these consisted of participants for who all traits were within the normal range. No significant correlations were found between the personality scale scores and the PCL-R scores. We suggest that juvenile delinquents are a heterogeneous group and that young people with psychopathy may develop different personality pattern. The classification will be helpful in managing therapeutic efforts in male adolescents with conduct disorder.

Typ och Nyckelord: Journal psychopathy (PCL-R), cluster analysis, juvenile delinquents

Referens: [Dåderman, A.M., Lindgren, M., & Lidberg, L. \(2004\). The prevalence of dyslexia and AD/HD in a sample of forensic psychiatric rapists. *Nordic Journal of Psychiatry*, 58, 371-381.](#)

Abstract: The prevalence of dyslexia and Attention Deficit/Hyperactivity Disorder (AD/HD) (DSM-IV) is markedly increased among those who are sentenced for criminal offences. The aim of the study was to identify developmental disabilities, dyslexia, and AD/HD among severely disturbed men in forensic psychiatric care, and to study the co-occurrence of such disabilities, with the objective to discuss the importance of the diagnoses in forensic psychiatry. The participants were ten males who had committed rape on adult women, and included two murder-rapists; one of which had murdered more than one victim (i.e., a serial murderer). All had been assigned to special long-term forensic psychiatric care, based predominantly on a psychodynamic ground. In order to be identified as having dyslexia, a participant's performance on at least three out of four tests of academic skills had to be markedly below the expected level (more than two stanine steps), given the participant's nonverbal intellectual capacity and considering the length of his education. AD/HD was investigated by studying the participants' forensic psychiatric files and by a clinical interview. Seven of the ten participants met the DSM-IV criteria for dyslexia, and six of them met the DSM-IV criteria for AD/HD. Four participants had AD/HD and dyslexia, three had AD/HD but no dyslexia, and two had dyslexia but no AD/HD. Only one participant had neither dyslexia nor AD/HD. The participants with dyslexia performed well in tests assessing nonverbal reasoning, visuo-spatial capacity, and visual memory. Although the generalisation of the results from ten rapists is severely limited, the results indicate the importance of assessing dyslexia as well as AD/HD in people who are admitted for forensic psychiatric assessment. The lack of correct diagnoses may negatively influence the choice of appropriate forensic psychiatric care. Early assessment of those disorders might have a positive influence on the psychological development and socialisation process in people with dyslexia and/or AD/HD.

Typ och Nyckelord: Journal dyslexia, AD/HD, forensic psychiatric rapists

Referens: [Dåderman, A.M., & Wiklund, N. \(2004\). Nyare svensk rättspsykiatrisk forskning, \[Recent research in Swedish forensic psychiatry,\] pp. 397-454. I L. Lidberg & N. Wiklund \(Eds.\), *Svensk rättspsykiatri: Psykisk störning, brott och påföljd. \[Swedish forensic psychiatry: Mental disorder, crime and consequence.\]* Lund: Studentlitteratur.](#)

Abstract: Recent research in Swedish forensic psychiatry is reviewed. The chapter introduces the reader into the history of Swedish forensic psychiatry and contains a table which summaries relevant dissertations defended between 1898 and 2004. The following topics are reviewed briefly in this chapter: backgrounds factors and mental status of offenders undergoing forensic psychiatric evaluation, biological markers and violence, risk factors for relapse into new severe crime and validity of the risk instruments, research regarding several "new" or "difficult" diagnoses, abuse of anabolic steroids, abuse of legal and illegal drugs, especially Rohypnol, validity and reliability of forensic psychiatric evaluations, psychological tests, scales and structured interviews, and prisoners with mental disorders.

Typ och Nyckelord: Book (chapter) review, forensic psychiatry, Swedish research

Referens: [Eisler, A.D. \(2004\). Time perception in humans. In W. Mou, S. Li, & B. Qiu \(Eds.\), *Abstract Book from the XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.](#)

Abstract: It is generally believed that time exists as a physical reality and that the empirical verifiability of the laws of nature involve the concept of time. When psychologists first considered the problem of time, a fundamental distinction became apparent between the primary experience of duration, ascribed to a "time sense," and the human rational idea of time. It has become more evident in recent years that human mental abilities are potential capacities which are realized through learning and the development of new strategies regarding their use. This holds for time, as a concept, an experience, and for time perception. In the present papers mainly the biological and the cognitive aspects of time and time perception in humans are examined. Two of the papers extend the frontiers of the classical psychophysical tradition: Grondin presents studies that focus on time estimation and attentional mechanisms, and Hellström deals with time-order error patterns. Bastin and Friedman take a developmental approach to study time perception in view of temporal "distances" and of temporal "locations". Bueno finally considers phenomena associated with time perception in music, in particular how the generalized complexity as well as the hedonic value of a musical excerpt influences subjective duration.

Typ och Nyckelord: Proceedings Book (chapter) duration, estimation, time sense, ICP 2004

Referens: [Eisler, A.D. \(2004\). Cognitive impairment and subjective time in schizophrenics. In R. Shiffrin \(Ed.\), *Abstract Book of the Third Annual Summer Interdisciplinary Conference*. Cavalese, Italy: Indiana University, Department of Psychology.](#)

Abstract: There is evidence that sense of time and temporal perspective are fundamental integrative cognitions of human experience. Accordingly temporal disintegration of the relation between past, present and future indicate a disrupted timeline and induce depersonalization. Schizophrenia is in general regarded as a disorder of cognition (Bleuler, 1911; Spitzer et al., 1978). Much of the research on time perception claims that schizophrenics have a disturbed sense of time, and that the schizophrenic's ability to estimate time is disrupted. Minkowski stated as early as 1927 that extreme distortion of subjective time was the central symptom of schizophrenia. An

experimental study (Eisler et al., 2001) was conducted to compare time perception of short durations, including intra- and interindividual variability of subjective duration judgments, in Japanese schizophrenic and in healthy males. The psychological methods of reproduction, and of verbal estimation in subjective seconds, were used. It was found 1) that the means of the reproductions do not differ between the two groups, 2) the schizophrenics verbally estimated all durations longer and less veridical than the healthy subjects, 3) the variability of the estimates between, as well as within, subjects is much greater in schizophrenics than in the healthy group, 4) also the estimates by the schizophrenic group showed an approximately linear function of responses vs. the reference durations in log-log coordinates, in agreement with Stevens' power law. Schizophrenics are described in terms of distraction and of chaotic and disorganized behavior. This important aspect of schizophrenic symptomatology typically results in cognitive impairment. The impairment may be at the root of the deviant, though fairly consistent, estimations by the schizophrenic subjects. This vulnerability entails that the schizophrenics seem to be unable to translate perceived time into numbers (seconds) probably because of their general difficulty in being able to quantify. To be more specific, it appears that the better understanding of the cognitive processes and the vulnerability factors of experiencing time and of time-structuring behavior is important knowledge as to how the schizophrenics individuals orient themselves in time and space. The conclusion is that our result does not support the view of general time distortion as such in schizophrenia.

Typ och Nyckelord: Proceedings cognition, duration, perception

Referens: [Eisler, A.D., Eisler, H., Ericsson, Ch., & Yoshida, M. \(in press\). The psychometric approach to assess risk judgment. In A. Burge \(Ed.\), *Abstract Book of the 4th Annual International Conference on Social Sciences*. Honolulu, USA: East West Council for Education.](#)

Abstract: It is important to use a wide range of risk factors when studying how people perceive potential danger. The present study examined perception of 54 global risk factors in a human ecological perspective, using a psychometric paradigm and psychophysical scaling. The results revealed significant differences between gender. The female subjects estimated risks as more serious than the male did. Also significant age differences were obtained. Discussion focuses on the meaning of gender and age differences in risk perception as well on both theoretical and methodological implications.

Typ och Nyckelord: Book (chapter) ecology, perception, risks

Referens: [Eisler, A.D., Eisler, H., & Montgomery, H. \(2004\). A quantitative model for retrospective subjective duration. *NeuroQuantology*, 4, 263-291.](#)

Abstract: In retrospective, as opposed to prospective, temporal tasks, the subject is unaware that a duration judgment will be required. In previous studies, the durations to be judged retrospectively were filled with some cognitive task, like reading. To reduce cognitive effects and keep as close to the "internal clock" as possible, in the present study the durations (ten, ranging from 1.3 to 20 sec) were filled with noise and the method of reproduction was used. Assuming the psychophysical power law, the single *retrospective* reproductions could be well predicted from (a) the Parallel-Clock Model (originally developed for *prospective* reproduction experiments, H. Eisler, 1975), together with (b) individual parameter values obtained from prospective data and thus recovered in the retrospective, when (c) the standard durations were transformed by a common additive term. This term was interpreted as representing the influence on where in time the subjects positioned the start of the duration, depending on familiarization with the situation, and boredom.

Typ och Nyckelord: Journal cognition, internal clock, neural loops

Referens: [Eisler, A.D., Eisler, H., & Yoshida, M. \(in press\). The cognitive representation of global risks: Empirical studies. In S. Dannenmann \(Ed.\), *Coping with risks due to natural hazards in the 21st century - RISK 21*. Rotterdam: Balkema Publishers.](#)

Abstract: The present study, which is part of a comprehensive project, examines both cultural diversity and cultural similarity of perceived risk factors between German, Japanese, Swedish and American subjects, with the focus on human ecology. Similarities as well as differences between the four cultures were found. Unexpectedly, the German and Swedish subjects were most concerned about hunger and poverty. Another notable similarity is that overpopulation was viewed as a high-risk factor by both the Swedish and the American groups. Gender differences were also obtained. The findings contribute to our understanding of how people in different cultures and of different gender presently perceive global risk factors. The current research provides substantial evidence that perception of risks represents a cultural value, belief, ecological worldview and level of knowledge that may have developed over long periods of the particular cultural group's experience of both the physical and the social environment. However, over the course of human history the dangers faced have changed in many respects.

Typ och Nyckelord: Book (chapter) culture, environment, ecology

Referens: [Eisler, A.D., Eisler, H., & Yoshida, M. \(2004\). Cross-cultural ranking of human-environment interactions. In W. Mou, S. Li, & B. Qiu \(Eds.\), *Abstract Book from the XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.](#)

Abstract: In order to study how people in various cultures perceive global environmental problems and environmental behavior we conducted studies in four cultures: the Japanese, German, Swedish and the United States. Subjects in all four cultures ranked the United States among the most environment polluting countries, the Germans included also China and the Swedes included Russia among them. In contrast to the German, the Swedish and the American groups the Japanese ranked Japan as well as belonging to the most environment polluting countries. Furthermore, the German and the Swedish groups viewed their own countries as those most protecting the environment. The present study provides insight into cultural differences and illustrates the fact that the Japanese exhibit self-critical tendencies as opposed to the German and the Swedish groups.

Typ och Nyckelord: Proceedings Book (chapter) behavior, environment, perception, ICP 2004

Referens: [Eisler, A.D., Eisler, H., & Yoshida, M. \(2004\). The landscape of global risks. In R. Shiffrin \(Ed.\), *Abstract Book of the Third Annual Summer Interdisciplinary Conference*. Cavalese, Italy: Indiana](#)

University, Department of Psychology.

Abstract:

The environment that we are living in today is uncertain, complex and changing. The international expansion and the trend of globalization, with further increases in technology transfer, drastically lead to even more global risks problems. Many people are having difficulties in understanding and interpreting risk probabilities, especially when the probability is small and the risk involved is unfamiliar. They tend to be insensitive to uncertainty and the validity of available information. It is also recognized that culturally based attitudes and values can influence general orientation toward risk and uncertainty. Thus people in different cultures select different risks to be concerned about. Our aim in this paper is to study in a human ecological perspective how global risks are perceived nowadays and how the cognitive representation and orientation toward these risks is framed and interpreted. In the present study subjects living in the Stockholm area completed a survey (Yoshida, 2000) containing 54 global risk factors. The result revealed that growing gap between the rich and the poor, terrorism, air pollution, corruption and religious fanaticism were judged as high global risk factors. Gender differences were also obtained. Generally, the female subjects perceived the global risks as more serious than did the male subjects, with the exception of religious fanaticism. Systematic risk analysis has been identified as long ago as 3200 B. C. (Covello & Mumpower, 1985). What may be different today in the perceived landscape of global risks? The differences today are that the risks, being global, are more difficult to manage because of their non localized nature. In the past, risks were more perceptible and thereby more easy to identify. The results suggest the potential role of research in global risk perception with applying cultural theory since the cultural norms and values play an important role how people perceive and evaluate risky options.

Typ och Nyckelord: Proceedings Book (chapter) globalization, human ecology, technology

Referens:

Eisler, A.D., Eisler, H., & Yoshida, M. (2004). Risk and risk perception. In Abstract Book of the *CENAT, Natural Hazards Competence Centre, Workshop 2004*. Davos-Dorf, Switzerland: The Swiss Federal Institutes of Technology and Swiss Universities.

Abstract:

Risk is an assessment of the probability of some adverse effect resulting from a hazard. Hazards are threats to people and to what people value (Lowrance, 1976). There is an important distinction between 1) personal risks (for instance, risk concerning injuries and death for the individual) and 2) global risks (collective risks which concern the own group, the own society, the human being and the whole world). In the present study we used a psychophysical approach and the method of categorization to examine the perception of global risk factors in four diverse cultural groups. Generally, the female subjects rated the risk factors higher than did the male subjects. The female subjects also tended to focus on the consequences of a risk event, whereas the judgment of males focused on its probability. This finding agrees with research reported by Drottz-Sjöberg (1991).

Typ och Nyckelord: Proceedings collective risks, global risks, hazards

Referens:

Eisler, H. (2004). Two sensory registers allow the measurement of perceived time. In R. Shiffrin (Ed.), *Abstract Book of the Third Annual Summer Interdisciplinary Conference*. Cavalese, Italy: Indiana University, Department of Psychology.

Abstract:

In comparisons of experienced (subjective) duration in the second range between different conditions a typical result is that one condition entails an over- or underestimation. Besides the ambiguity of the terms over-, resp. underestimation, a result just pointing out a difference in subjective duration seems unsatisfactory. However, subjective duration follows Stevens' power function $t = k \cdot T^p$, a fact that makes it possible to pinpoint which of the three parameters k , p lies behind empirical differences. In our experiments on time perception the preferred psychophysical method was duration reproduction. The parallel-clock model which assumes two sensory registers ("clocks") in parallel, one starting to accumulate subjective duration units from the start of the standard until the end of the reproduction, the other accumulating subjective duration units during the reproduction, allows the computation of (psychologically interpretable) parameter values. For instance, it was shown in recent work that k can be interpreted as defining the moment in time when the subject experiences the start of a duration.

Typ och Nyckelord: Proceedings Book (chapter) duration, psychophysics, sensory register

Referens:

Ek, U., Fernell, E., & Jacobsson, L. (in press). Cognitive and behavioural characteristics in blind children with bilateral optic nerve hypoplasia. *Acta Paediatrica Scandinavica*.

Abstract:

To describe cognitive and behavioural characteristics in a group of blind children with bilateral optic nerve hypoplasia (ONH). Data from records, parents, teachers, and repeated developmental assessments of 13 blind children with ONH, born in 1988-98 were analysed. All children had neuroimaging and/or hormonal evidence of midline malformations. They were all blind and able to communicate with speech. Severe mood swings and temper tantrums were common, especially during the first years of life. Later in life sluggish tempo, low frustration tolerance and a narrow range of interests were common. Autism had been diagnosed in 6/13 children, autistic like condition (ALC) was found in another 3. The behaviour of the remaining 4 children was not within the autism spectrum. Eight children had cognitive capacities within normal or near normal area, 5 had mental retardation. Autism/ALC was found in all cognitive subgroups. All children exhibited fluent speech and of these, 12 had started to talk at the expected age, but had clear deficiencies in communicative ability. These children had a common pattern of behavioural characteristics including autism spectrum disorders independent of intellectual capacities.

Typ och Nyckelord: Journal optic nerve hypoplasia, ONH, cognitive, behaviour, autism

Referens:

Eklund, J.M., & af Klinteberg, B. (2004). Presentation "Violent behaviour and risky alcohol use in adolescent boys and girls as related to personality characteristics". *The European Conference of Adolescence, Alcohol and Drugs (ECAAD)*, in Stockholm, Sweden, 17-19 June.

Abstract:

Background: Previous research has reported differences in personality between violent and non-violent subjects as well as between subjects with or without alcohol use or abuse. Most research, however, has focused on adults or young adults.

Aim: The aim was to study whether self reported violent behaviour, risky alcohol and drug use among normal adolescents are associated with personality traits as found in groups of adults.

Method: The sample comprised adolescents in 8th grade (14-year-olds) in a mid-sized community in Sweden (n=966; 414 boys, 552 girls).

Results: Adolescents with indications of risky alcohol use could generally be described as being more impulsive and having a stronger need for change and action. Furthermore, they were less adjusted and less socially conforming, more aggressive and irritable as compared to those without risky alcohol use. Boys with risky alcohol use also reported more somatic complaints and tension. Adolescent boys who reported violent acts were more impulsive and less adjusted than boys who were not violent. Violent girls, in turn, as compared to non violent girls, displayed higher sensation seeking, higher aggressiveness and more suspicious attitude, as well as higher scores on muscular tension. The revealed differences in personality between adolescents with or without problem behaviour were more pronounced in girls than in boys and in adolescents with a combination of problem behaviours as compared to those with only one such problem behaviour. Drug use was reported by few adolescents. The results, however, indicated some differences in personality associated with drug use.

Conclusions: Findings concerning personality traits associated with violence and alcohol use in adults were replicated in adolescents. The present results indicated that although problem behaviours are more common among boys, girls engaging in e.g. violent behaviour may have more disturbed personality function.

Typ och Nyckelord: Proceedings person-oriented method, alcohol use, violent behavior, personality traits

Referens: Eklund, J.M., Alm, P.O., & af Klinteberg, B. (2004). Presentation "Monoamine oxidase (MAO) activity and triiodothyronine (T3) level in violent offenders with early behavioural problems". The 4th Annual Conference of the International Association of Forensic Mental Health Services (IAFMHS) *Mental Health Services at the Interface of Mental Disorder, Addiction and Crime*, Stockholm, Sweden, 6-9 June.

Abstract: Background: There is growing knowledge about genetic and biological factors of importance for the development of antisocial behaviour. Low activity of the biological marker monoamine oxidase (MAO) and high level of triiodothyronine (T3) have previously been separately related to antisocial disorder (Stålenheim, von Knorring & Wide, 1998) and criminality (Alm et al., 1994; Alm et al., 1996), especially violent (Belfrage et al., 1992; Orelund et al., 1998) or persistent criminality (Alm et al., 1996; Stålenheim, 2004). Our previous research on young lawbreakers and controls indicated that among criminal boys there is a subgroup of boys with attention difficulties who proceed to violent offending even in the absence of early manifestations of aggression. However, aggressive behaviour was independently related to violent offending and a combination of all three early behavioural problems further increased the likelihood for violent offences.

Aims: The overall aim of the present study was to further investigate early behavioural problems and violent offending concerning the biological markers MAO and T3. Since several studies have focused on either T3 levels or MAO activity, the present study focuses on combinations of T3 levels and MAO activity.

Method: A group of young lawbreakers (n=69) and controls (n=34) followed from age 11-14 years to adult age with complete information on early criminality, attention difficulties and aggressive behaviour, as well as on subsequent violent offending and the biological markers T3 and MAO activity was investigated.

Results: Two subgroups of boys were identified as having the highest risk for committing violent crimes later in life: boys with early criminality and attention difficulties, either with or without additional aggressive behaviour. Thus, four groups were selected for the preliminary analyses below: boys with these early behavioural problems with (n=17) or without (n=24) violent offending; and boys without early behavioural problems with (n=0) or without (n=19) violent offending. Subjects without subsequent violent offending but with other criminality were excluded and therefore three groups with 17 boys in each group remained. Boys with early behavioural problems (regardless of their future violent offending) had significantly lower mean MAO activity and higher mean T3 level than boys without behavioural problems. Further, boys with early behavioural problems who proceeded to violent offending had lower mean MAO activity and higher mean T3 level compared to those who did not become violent offenders. To study the combination of the two biological markers in relation to behavioural problems and violent offending, a person-oriented analysis was performed on the total sample. High T3 level was found more frequently than expected, according to a chance model, in violent offenders with early behavioural problems, irrespective of MAO activity. Low MAO activity, however, was found more frequently in this group only in those with high T3 level.

Conclusions: The results further support MAO activity and T3 level as important biological markers for antisocial behaviour. Since smoking has previously been found to lower the MAO activity, the effect of this possible confounding factor is discussed.

Typ och Nyckelord: Proceedings monoamine oxidase (MAO), triiodothyronine (T3), criminality, violence, attention difficulties, aggressive behaviour, longitudinal study

Referens: Falk, B., Montgomery, H., & Gregersen, N.-P. (2004). Implicit construction of consequences of accidents among young male speeding drivers. *3rd International Conference on Traffic & Transport Psychology*, Nottingham, UK, 5-9 September 2004.

Abstract: This study is the first step in a project aimed at developing interventions to enhance road safety among young drivers. It is based on social cognitive psychology, especially the Elaboration Likelihood Model (ELM). According to ELM personal reflection is important for attitude and behaviour change. But how to make reflection come about is a complex issue, involving how cognitive schemas develop and change. In order to gain a deeper understanding of how young male speeding drivers mentally and implicitly construe the consequences of accidents, an exploratory qualitative study based on in-depth interviews was carried out. Participants were seven males between 20 and 23 years of age with a driver's licence, all demonstrating excessive speeding behaviour when driving.

Results indicate: (1.) Serious consequences of accidents are only remotely, if at all, present in the minds of the participants. (2.) After prompting, the most frightening consequence is perceived as being the cause of other persons' suffering or death. (3.) How the cause of an accident is construed influences the anticipation of the emotional consequences of an accident. (4.) Participants are well aware of risks in traffic, including the fact that young males have a riskier driving-style and are more accident-prone than others. But this knowledge does not seem to be integrated and personalised, most likely due to over-confidence in driving skills. (5.) The subjective experience of being a competent driver seems important for the self image. While participants strive towards reaching mastery, many risky incidents are encountered. (6.) Participants describe intensely pleasurable feelings of concentration when driving in high speed. These feelings are well in line with the

concept of "flow" and appear also among participants showing no explicit signs of sensation-seeking.

Implications of the study for developing interventions based on advances in social cognitive psychology are discussed.

Typ och Nyckelord: Proceedings attitude change, young drivers, traffic safety

Referens: Falkenberg, H. (2004). Employee work climate perceptions during a decade of change in the Swedish health care sector. Poster presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.

Abstract: The health care sector has in many countries been subject to market influences to reduce costs and increase efficiency. This study investigates how work climate changed for different occupational groups in a Swedish hospital going through numerous changes, including transformation from public to private ownership as well as downsizing. Questionnaire data, collected four times between 1994 and 2002, indicate that the variations in work climate between different kinds of changes were quite small, but that different health care professions to some extent were affected differently by various changes. The results contribute to an increased understanding of how structural change may affect work climate, which in turn, may have important implications for organizational effectiveness and service quality.

Typ och Nyckelord: Proceedings work climate, organizational change, health care, ICP 2004

Referens: Falkenberg, H., Sverke, M., Hellgren, J., Näswall, K., & Braun, C. (2004). Sjukvård på bolag: Hur påverkas personalen? [Turning hospitals into stock companies: How is staff affected?] *Arbetsmarknad & Arbetsliv*, 10, 117-133.

Abstract: The forming of public stock companies has been common in the health care sector for some time. Despite this, the knowledge of how such transformations affect personnel is rather limited. The present study focuses on what impact the transformation of St Görans hospital into a public stock company had on the staff. The initial assumption has been that a change of type of management entails an organizational restructuring, which may result in changes of the employees' work climate as well as affecting their attitudes towards work and the organization. In order to investigate this, data were collected at two points in time, at both St Görans hospital and Södertälje hospital. The results show that leadership and organizational commitment developed in a positive way in the public stock company St Görans, but also that the transformation into a public stock company resulted in some role overload. One conclusion is that the forming of a public stock company not necessarily has to be negative for the employees if the conditions are favorable and the leaders are highly involved.

Typ och Nyckelord: Journal work climate, attitudes, organizational change

Referens: Forsberg, B., & Lindvall, T. (2004). Luftföroreningar och hälsa: Skadliga ämnen och besvärande lukt. [Air pollution and health: Adverse substances and odor annoyance.] In A. Thuvander (Ed.), *Miljökonsekvensbeskrivning och hälsa. Några föroreningskällor-beskrivning och riskbedömning [Environmental Consequences and Health. Some Environmental Agents-Descriptions and Risk Assessment]* (pp. 43-73). Stockholm: Socialstyrelsen. [ISBN 91-7201-866-6]

Abstract:

Typ och Nyckelord: Book (chapter) air pollutants, health, olfaction

Referens: Galambos, N.L., MacDonald, S.W.S., Naphtali, C., Cohen, A.-L., & de Frias, C.M. (in press). Cognitive performance differentiates selected aspects of psychosocial maturity in adolescence. *Developmental Neuropsychology*.

Abstract: This study examined age differences in adolescents' cognitive performance, and the relations between cognitive performance and psychosocial maturity. Forty-eight adolescents in grades 9 (n=22) and 12 (n=26) were measured on intelligence (composite, crystallized, fluid), executive functioning (backward digit span, verbal fluency, Color Trails 2, Stroop interference, everyday problem solving), and psychosocial maturity (subjective age, problem behavior, psychological maturity). Older adolescents performed better on crystallized intelligence and everyday problem solving measures. Significant relations between aspects of cognitive performance and psychosocial maturity emerged. Problem behavior was related to lower crystallized and fluid intelligence whereas psychological maturity was related to higher crystallized intelligence and better performance on the Color Trails 2. Psychosocially mature adolescents had significantly higher composite IQ scores than did pseudomature adolescents. Mature adolescents also showed advantages in crystallized and fluid intelligence, and in performance on the Color Trails 2, compared to their less mature counterparts (the combined group of immature and pseudomature adolescents). The results suggest that cognitive abilities are related to psychosocial maturity.

Typ och Nyckelord: Journal cognitive performance, psychosocial development, adolescence

Referens: Gallagher, D.G., & Sverke, M. (in press). Contingent employment contracts: Are existing theories still relevant? *Economic and Industrial Democracy*.

Abstract: Within most nations there has been growing evidence of a shift from "traditional" or on-going employment contracts to arrangements which are more "fixed-term" or "contingent" in structure. The growth of contingent employment arrangements raises questions concerning the applicability of existing theories of individual behaviour (e.g., satisfaction, motivation, etc.). Utilizing "employment commitment" as an illustrative example, this article examines potential limitations in the applicability of commitment theory to different forms of contingent employment contracts. It also addresses some implications for union representation in contingent work arrangements.

Typ och Nyckelord: Journal commitment, contingent work, temporary employment

- Referens:** Goulding, A., [Westerlund, J.](#), Parker, A., & Wackermann, J. (2004). The first digital autoganzfeld study using a real-time judging procedure. *European Journal of Parapsychology*, Vol 19, 66-93.
- Abstract:** A new technique for digital autoganzfeld is used, in which the receiver's mentation report is captured and automatically stored to digital audio file to make possible a play back of the film clips (picture and film sound) and the mentation (sound) exactly synchronously. This feature might simplify the evaluation of a trial and render better insights into the study of psi. Another advantage with the new digital system is that it is possible to allow two target film clips to be used rather than one, which is a more time- and cost efficient way of collecting data. In order to evaluate how well the newly developed digital autoganzfeld system works, it was used in 128 trials in which 64 receivers took part. It was hypothesised that the digital ganzfeld result would statistically significantly exceed the mean chance expectation (25%) as measured by direct hits, the sessions being evaluated by an external judge. The result was a direct hit rate of 23% ($p=.386$, binomial one-tailed test), which was close to chance expectation. In half the trials, the receivers also evaluated their sessions, which resulted in a direct hit rate of 14% ($p=.050$, binomial two-tailed test). Exploratory analyses yielded results that might explain the failure to give a significant psi-hitting result.
- Typ och Nyckelord:** Journal autoganzfeld, psi, real-time judging procedure
- Referens:** [Hallberg, U.E.](#), & [Sverke, M.](#) (2004). Construct validity of the Maslach Burnout Inventory: Two Swedish health care samples. *European Journal of Psychological Assessment*, 20, 320-338.
- Abstract:** Burnout has become a serious matter in workplace health, and the Maslach Burnout Inventory (MBI) is today the most widely used instrument for assessing the construct empirically. The present study examined the construct validity of a Swedish translation of the instrument for human service employees (MBI-HSS). Data from two samples of health care workers (N=448 and N=462) were used to test six propositions concerning dimensionality, internal consistency, measurement model stability, and relationships with predictors and outcomes. Support for the postulated three-factor model of emotional exhaustion, depersonalization and (reduced) personal accomplishment as well as for adequate reliabilities of the dimensions was found. A post hoc modification of the MBI was suggested in order to improve model fit. Multi-group confirmatory factor analysis indicated stability of measurement model parameters across organizational settings. Moreover, the propositions about the association between the burnout dimensions and predictors and outcomes were partly supported. Taken together, these tests provide strong support for the construct validity of the Swedish translation of the MBI-HSS.
- Typ och Nyckelord:** Journal burnout, dimensionality, construct validity
- Referens:** [Hellgren, J.](#) (2004). Hospital privatization: Its impact on employees' work climate, attitudes and health. Paper presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.
- Abstract:** During the last decades reorganizations in terms of corporatization and privatization of public organizations have been frequent. This trend has also affected the Swedish health care sector and there are now acute care hospitals with different types of ownership. This study is based on data collected 2001/2002 in three Swedish hospitals with different ownership. Using analysis of variance (MANCOVA) the employees of the three hospitals are compared with respect to their work climate perceptions, attitudes and health. Practical implications for policy-makers and hospital managers of the effects of different ownership on employees' work experiences, attitudes, and health are discussed.
- Typ och Nyckelord:** Proceedings privatization, attitudes, health, ICP 2004
- Referens:** [Hellgren, J.](#) (2004). Beliefs and apprehensions about individualized pay-systems among Swedish health-care workers. Poster presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.
- Abstract:** During the last decades the implementation and utilization of individualized, performance-based pay systems has increased. This trend has affected many employees who now are in a situation where their work performance is evaluated and where they have to argue for potential pay raises. This study addresses the issue of attitudes, fears and apprehensions concerning individualized pay-for-performance systems among employees working in the health care sector. The data are currently being collected by means of a questionnaire survey. The results will increase the understanding of disadvantages and benefits associated with the growing use of more individualized pay systems.
- Typ och Nyckelord:** Proceedings individualized pay-system, attitudes, health-care, ICP 2004
- Referens:** [Hellgren, J.](#) (2004). How are employee attitudes and well-being affected by downsizing? A comparison of survivors with changed and unchanged job content. Paper presented at the *6th Annual Conference of the European academy of occupational health psychology*. Porto, 24-26 November 2004.
- Abstract:** During the last decades, economic pressures and international competition have forced organizations to reduce their costs while still preserving, or increasing, their productivity and quality. As a consequence, many organizations have relied on large-scale workforce reductions to improve organizational effectiveness and competitive ability. Organizational downsizing, in the form of permanent layoffs and offers of early retirement, has become a frequently used strategy and perceptions of job insecurity have emerged as an important stressor in work-life. Previous research has identified work attitudes and well-being of survivors as critical for obtaining the anticipated beneficial outcomes, but our knowledge is limited regarding the effects of downsizing on different types of survivors. It may be that survivors who have been relocated or had their immediate work situation changed in terms of assigned work tasks and perceived obligations may react differently compared to survivors whose work situation are more or less unaffected by the downsizing. The theoretical assumption underlying this study suggests that role stressors such as workload and role conflict may be even worse for survivors who had their work situation changed. At the same time the amount of job challenge may decrease in an organization going back to basic and routine work. This study also relies on theoretical research suggesting that changes in attitudinal constructs, such as job satisfaction, job involvement, organizational commitment, and turnover intention, may be related to behavioral patterns and, hence, to work outcomes. Drawing upon theories on organizational attachment and well-being, the aim of this study was to examine the effects of downsizing on employee attitudes and well-being by comparing survivors who had their work

situation changed as a function of the downsizing process with survivors whose situation remained unaffected. Longitudinal questionnaire data were obtained during the course of downsizing. Multivariate analysis (MANCOVA) showed an overall significant effect of work status (changed, unchanged) on job attitudes and health. Univariate ANCOVAs showed that survivors with a changed work situation reported less favorable work attitudes and more health complaints as compared to survivors who did not have their work situation changed. The results indicate that downsizing survivors' perceptions of changed work situation seems to be important in relation to their role stress experiences, attitudes, and well-being. This highlights the importance to differentiate between different types of survivors when trying to understand the psychological mechanisms involved in this kind of organizational change, not least for organizations with the ambition to optimize the possibilities to actually reach the downsizing goals. These findings are important in order to better understand and counteract negative reactions following organizational downsizing.

Typ och Nyckelord: Proceedings downsizing, survivors, health

Referens: [Hellgren, J., Näswall, K., & Sverke, M. \(in press\). There's more to the picture than meets the eye: A comparison of downsizing survivors with changed and unchanged job content. *South African Journal of Industrial Relations*.](#)

Abstract: During the last decades many organizations have relied on large-scale workforce reductions to improve organizational effectiveness and competitive ability. Organizational downsizing, in the form of permanent layoffs and offers of early retirement, has become a frequently used strategy. Previous research has identified work attitudes and well-being of survivors as critical for obtaining the anticipated beneficial outcomes, but knowledge is limited regarding the effects of downsizing on different types of survivors. Drawing upon theories on organizational attachment and well-being, the aim of this study was to examine the effects of downsizing on employee attitudes and well-being by comparing survivors who had their work situation changed as a function of the downsizing process with survivors whose situation remained unaffected. Longitudinal questionnaire data were obtained during the course of downsizing. The results show that survivors with a changed work situation reported higher levels of role stress, less favorable job attitudes and more health complaints as compared to survivors who did not have their work situation changed. These findings are important in order to better understand and counteract negative reactions following organizational downsizing.

Typ och Nyckelord: Journal downsizing survivors, attitudes, health

Referens: [Hellgren, J., Sverke, M., Falkenberg, H., & Baraldi, S. \(in press\). Hospital privatization and work climate: A comparison of the work environment of physicians at three hospitals under different types of ownership. In C. Korunka & P. Hoffmann \(Eds.\), *Change and quality in human service work* \(Organizational psychology and health care, Vol 4\). Munich: Rainer Hampp.](#)

Abstract: In an attempt to make hospitals more cost effective and improving the quality of medical care, privatization of Swedish hospitals have become more frequent during the past decade. There is a need for knowledge about psychological effects of privatization on health care personnel. We investigated physicians' perception of their work environment in three hospitals with different forms of ownership — from traditional public administration to for-profit private stock company. The results point towards certain advantages of privatized hospitals. Physicians at the privatized hospital included in the study perceived their work environment in some respects as more positive than did the physicians at the non-privatized hospitals.

Typ och Nyckelord: Book (chapter) work climate, physicians, privatization

Referens: [Hellgren, J., Sverke, M., & van der Vliet, C. \(in press\). The union side of downsizing: Investigating members' union attitudes. In H. De Witte \(Ed.\), *Job insecurity, union involvement and union activism*. Aldershot: Ashgate.](#)

Abstract: This chapter focuses on how employees perceive their union during downsizing. The limited interest that has gone into understanding how union attitudes are affected by downsizing is surprising given that most layoffs take place in unionized workplaces. The hypothesis in this study is that members who believe that their union treats them in a just and fair way and represents their interests in a good way, are likely to express positive attitudes towards their unions as opposed to those who perceive union representation in a less positive way. Data presented in this chapter are based on questionnaires from the staff of a Swedish emergency hospital undergoing organizational change. The study concluded that characteristics of organizational downsizing and the way it is implemented have important consequences for members' attitudes towards their union in the hypothesized way.

Typ och Nyckelord: Book (chapter) union membership, job insecurity, union attitudes

Referens: [Hellström, Å. \(2004\). Majorness comparisons of triads. In A.M. Oliveira, M.P. Teixeira, G.F. Borges, & M.J. Ferro \(Eds.\), *Fechner Day 2004* \(pp. 389-394\). Proceedings of the Twentieth Annual Meeting of The International Society for Psychophysics, Coimbra, Portugal, October 18-22, 2004.](#)

Abstract: Listeners compared successive triads, designed to span a major-minor continuum, with respect to how far in the major-direction they appeared to be. Results were well described by Hellström's sensation-weighting model. Although comparison strategies varied between listeners, for the longest ISI used, 3,200 ms, the weight of the first-presented triad tended to be lower than that of the second-presented one. The mean time-order error was negative, that is, the second triad in a pair tended to be heard as more major-like than the first.

Typ och Nyckelord: Book (chapter) Proceedings stimulus comparison, triads, time-order effects, Fechner Day

Referens: [Hellström, Å., & Rammsayer, T.H. \(2004\). Effects of time-order, interstimulus interval, and feedback in duration discrimination of noise bursts in the 50- and 1000-ms ranges. *Acta Psychologica*, 116, 1-20.](#)

Abstract: Participants compared durations of paired white-noise bursts, with interstimulus interval (ISI) 100, 300, 900, or 2700 ms, presented in the order standard (St)-comparison (Co) or Co-St. St was 50 or 1000 ms, and 75% difference thresholds for "longer" and "shorter" judgments were estimated. In Experiment 1 feedback was given; in Experiment 2, with ISIs 900 and 2700 ms, there was no feedback. For St = 1000 ms, the just

noticeable difference (JND) was generally smaller with the order St-Co than with Co-St; for St = 50 ms, the JND relation was the opposite. JNDs increased with shorter ISIs. Time-order errors were positive for St = 50 ms and negative for St = 1000 ms, and approached zero for longer ISIs. Using Hellström's sensation-weighting (SW) model, the ratio of the stimulus weights for the first and second burst was estimated; this ratio was generally > 1 for St = 50 ms and < 1 for St = 1000 ms. JNDs were smaller with feedback than without; the greatest reduction was found for St = 1000 ms and an ISI of 2700 ms with the order Co-St, possibly because feedback increased participants' attention to the first stimulus. These results demonstrate the sensitivity of discrimination measures for long as well as brief durations to the factors of ISI, presentation order, and feedback. They also suggest different modes of stimulus processing for short and long durations.

Typ och Nyckelord: Journal time perception, perceptual discrimination, psychophysical measurement

Referens: Hjortskov, N., Rissén, D., Blangsted, A.-K., Fallentin, N., Lundberg, U., & Søgaard, K. (2004). The effect of mental stress on heart rate variability and blood pressure during computer work. *European Journal of Applied Physiology*, 92, 84-89.

Abstract: The aim was to evaluate the cardiovascular and subjective stress response to a combined physical and mental workload, and the effect of restitution. Twelve females without prior experience of laboratory experiments participated in the study. Computer work related mental stressors were either added to or removed from a standardized computer work session in the laboratory. Beat-to-beat blood pressure and electrocardiogram (ECG) were recorded continuously during the experiment. The participants reported subjective experiences of stress on six categories using an 11-point scale before and at the end of the work. Heart rate variability (HRV) variables were calculated from the ECG recordings, and a reduction in the high frequency component of HRV, and an increase in the low to high frequency ratio were observed in the stress situation compared to the control sessions. No changes were seen in the low frequency component of HRV. The stressors induced an increase in blood pressure compared to baseline that persisted – or for the diastolic pressure – even increased in the subsequent control session. No differences were observed for subjective experience of stress with the exception of a time trend in the exhaustion scale i.e. a progression in reported exhaustion with time. The results – and the dissociation between HRV and blood pressure variables – indicate that HRV is a more sensitive and selective measure of mental stress. It could be speculated that HR derived variables reflect central pathway in cardiovascular control mechanisms ("central command"), while the blood pressure response is more influenced by local conditions in the working muscles that partly masks the effect of changes in mental workloads. In the restitution after each work session, HRV and blood pressure variables were partly normalized as expected. However, eight minutes of restitution were insufficient to restore blood pressure to resting values.

Typ och Nyckelord: Journal mental stress, heart rate variability, blood pressure

Referens: Holmberg, U. (2004). *Police Interviews with Victims and Suspects of Violent and Sexual Crimes: Interviewee's experiences and interview outcomes*. Stockholm: Stockholms universitet, Psykologiska institutionen.

Abstract: The police interview is one of the most important investigative tools that law enforcement has close at hand, and police interview methods have changed during the twentieth century. A good police interview is conducted in the frame of the law, is governed by the interview goal, and is influenced by facilitating factors that may affect the elicited report. The present doctoral dissertation focuses on police interviews in cases of very serious crimes of violence and sexual offences. Results reveal crime victims' and perpetrators' experiences of being interviewed and police officers' attitudes towards conducting interviews related to traumatizing crimes. Study 1 revealed that when police officers interviewed *murderers* and *sexual offenders*, the interviewees perceived attitudes characterized by either *dominance* or *humanity*. Police interviews marked by dominance and suspects' responses of *anxiety* were mainly associated with a higher proportion of denials, whereas an approach marked by humanity, and responses of being *respected* were significantly associated with admissions. In line with Study 1, the victims of rape and aggravated assault in Study 2 also revealed the experience of two police interview styles, where an interviewing style marked by *dominance* and responses of *anxiety* was significantly associated with crime victims' omissions of information. Moreover, a *humanitarian* interviewing style, and crime victims' feelings of being *respected* and *co-operative*, was significantly related to crime victims providing all information from painful events. Special squad police officers' attitudes towards *interviewing crime victims*, in Study 3, also showed a *humanitarian* approach and *two dominant approaches*, one affective and the other refusing. The attitude towards *interviewing suspects* of crimes in focus revealed *humanitarian* and *dominant* interviewing attitudes, and an approach marked by *kindness*. The present thesis shows that, during their entire career, an overwhelming majority of the special squad police officers have experienced stressful events during patrol as well as investigative duty. Results show that symptoms from stressful event exposures and coping mechanisms are associated with negative attitudes towards interviewing suspects and supportive attitudes towards crime victim interviews. Thus, experiences from stressful exposures may automatically activate ego-defensive functions that automatically generate dominant attitudes. Moreover, it is important to offer police officers who have been exposed to stressful events the opportunity to work through their experiences, for example, through debriefing procedures. After debriefings, police officers are better prepared to meet crime victims and suspects and, through conscious closed-loop processes, to conduct police interviews without awaking ego-defensive functions.

Typ och Nyckelord: Dissertation police interview, crime victims, suspects, attitude function

Referens: Holmgren, S., Molander, B., & Nilsson, L.-G. (in press). Intelligence in adult age: Effects of sibship size and birth order. *European Journal of Cognitive Psychology*.

Abstract: A study on intelligence (i.e., block design and word comprehension) and executive functioning (i.e., working memory and verbal fluency) as related to family size and birth order was performed in middle-aged, young-old, and old-old adults. Previous studies and theories on the structural issues of family environment and its relationship to intelligence was the point of departure of this research. Using data from healthy participants, aged 35-85 years, in the Betula project (Nilsson et al., 1997, 2004), this study revealed that effects of sibship size and birth order, previously demonstrated in children, remain in adult age. Working memory was the most sensitive of the four tests used for revealing effects of the sibship size and birth order. Implications for the relationship between executive functioning and intelligence, and implications for the confluence and resource dilution models (Blake, 1981; Downey, 2001; Zajonc, 1976) are discussed.

Typ och Nyckelord: Journal sibship size, birth order, intelligence

- Referens:** Isaksson, K., Johansson, G., Lindroth, S., & Sverke, M. (in press). Women's career patterns in Sweden: A life event approach. *Community, Work and Family*.
- Abstract:** Although research on and models of career patterns are often implicitly assumed to be of general validity, they are usually coloured by their cultural, ethnic and historical background and by a lack of gender perspective. One of the most critical research gaps concerns changes and transitions in women's careers. The general aim of this paper is to describe career patterns over the life course of women born in the 1950s in Sweden - in terms of shape, level and stability. Data were collected from work histories in the interviews of a sample of Swedish women aged 43 (n = 109) as part of a longitudinal study. Career patterns were plotted based on life events related to education, family and work. Results revealed relative stability of labour-force participation, but not of work hours over the life course. Most of the women worked part-time taking care of children for a varying number of years. Continuous full-time work (from 16 to 43) was highly unusual and almost entirely limited to women without children. Nevertheless, career progress in terms of moving to higher career levels was a common feature of the cohort albeit largely restricted to female dominated occupations. The significance of a generous welfare state supportive for women's career opportunities as well as a highly gender segregated labour market are discussed. A tentative new model of career patterns, taking account of women's experiences and sensitive to welfare state context, is proposed, as a basis for future research with larger and more diverse samples.
- Typ och Nyckelord:** Journal career pattern, life-event, women
- Referens:** Johansson, G. (in press). Arbetspsykologi. [Work Psychology.] In P. Hwang, I. Lundberg, J. Rönnerberg, & A.-C. Smedler (Eds.), *Vår tids psykologi. [Psychology of our Time.]* Stockholm: Natur & Kultur.
- Abstract:** This chapter gives an overview of current issues, theory, and research in the area of work psychology. A brief historic background is followed by sections on Swedish work psychology in an international perspective, the psychology of work environments, work-related stress, personnel selection and assessment, and work and gender. Special emphasis is given to the fact that labour markets, the labour force, and the nature of work is going through profound changes.
- Typ och Nyckelord:** Book (chapter) work, gender, change
- Referens:** Johnson, M. (2004). Approaching the salutogenesis of sense of coherence: The role of 'active' self-esteem and coping. *British Journal of Health Psychology*.
- Abstract:** Objectives: The aim of this work was to investigate the health relevant status of sense of coherence (SOC). First, its relation to general health was studied. Second, the importance of self-esteem (SE) type, locus of control, "fighting spirit", and coping style for SOC was explored. It was predicted that, SOC has relevance for good health and that active types of self-esteem together with the other adaptive dispositions play a role in SOC.
- Design: Cross-sectional, retrospective study.
- Methods: The personality and health questionnaires were administered to 409 undergraduates. The data were analysed using correlations and hierarchical multiple regression methods.
- Results: The correlational and regression analyses indicate that SOC has more importance for health than the other more specific adaptive styles. They further revealed that, although negative affect was a main predictor of SOC and health, an active type of SE (a combination of high basic and high earning SE) and locus of control were associated with a high SOC.
- Conclusions: It is concluded that SOC has a unique relation to general health, and although SOC strongly reflects affective traits, the concept seems also to mirror more dynamic dispositions, referring to an active self-esteem structure and self-determination.
- Typ och Nyckelord:** Journal self-esteem, active coping, health
- Referens:** Kihlman, T., Öhrström, E., & Berglund, B. (2004). Monitoring the long-term development of the community noise situation. In M. Brothnek & O. Jiricek (Eds.), *Inter-Noise 2004* (Paper 623). Prague: Czech Acoustical Society. [Available on CD]
- Abstract:** The community noise situation changes slowly and the goal – a community without noise disturbances – is very remote. It is, however, important to monitor if the development goes in direction of increasing or decreasing problems. The studies in the program Soundscape Support to Health have given some quantitative data on how differences in the acoustic soundscape can influence residents' perceived soundscapes as well as their annoyance and sleep disturbance. It is insufficient to look only at the sound pressure levels outside the most exposed facades. Cost effective measures to reduce the adverse effects and promote positive effects can be retrieved from soundscape studies. Monitoring the development by sufficiently accurate acoustic measurements in a sufficient number of points is very expensive. A better way is to try to measure the adverse effects of the community noise. Annoyance is one adverse candidate variable that can be measured at reasonable cost. A first study of this kind has been performed in Sweden through telephone interviews directed to 2000 persons. The results are promising.
- Typ och Nyckelord:** Book (chapter) community noise, soundscape, annoyance
- Referens:** Krantz, G., Berntsson, L., & Lundberg, U. (in press). Total workload, work stress and perceived symptoms in Swedish male and female white-collar employees. *European Journal of Public Health*.
- Abstract:** Background: The aim of this study was to analyse how paid work, unpaid household tasks, child care, work-child care interactions and perceived work stress are associated with reported symptoms in male and female white-collar employees.
- Methods: A questionnaire was mailed to 1300 men and 1300 women belonging to the white-collar sector, with at least 35 hours of regular employment a week and a participant age of between 32 and 58 years. It contained items relating to total workload (hours spent on paid work, unpaid household tasks and childcare), subjective indices for work stress and symptoms. The response rate was 65% (743 women; 595 men). Gender

difference in symptom prevalence was tested by analyses of variance. Odds ratios were used to estimate the bivariate associations between work-related variables and symptom prevalence. A multivariate analysis estimated the effect of paid and unpaid work interaction, work-childcare interplay and possible synergy.

Results: The frequency and severity of symptoms was higher in women than in men ($P < 0.0001$). Employed women's health was determined by the interaction between conditions at work and household duties (OR 2.09; 1.06-4.14), whereas men responded more selectively to long working hours, i.e. .50 h/week (OR 1.61; 1.02-2.54). However, childcare (.21 h/week) appeared to have a buffer effect on the risk of a high level of symptoms in men working long hours.

Conclusion: Working life and private circumstances and the interplay between them need to be taken into account to curb stress-related ill health in both men and women. Key points † A deeper understanding of the association between workload (paid and unpaid), perceived stress and reported symptoms in both men and women, undertaken in the same study, is important in order to avoid unnecessary medication and sick-leave among women in the first case. † Employed women's reported symptoms were determined by an interaction between conditions at work and at home, whereas men responded more selectively to work conditions. † The work-home conflict as a reason for ill-health, especially among women, was not confirmed in this study. Rather, it lends support to the beneficial effects of multiple roles. A plausible explanation is that academics often have sufficient job flexibility to reduce work-family conflict and heighten levels of job satisfaction, which positively affect health outcome. † Working life and private circumstances and the interplay between them need to be taken into account to curb stress-related ill health in both men and women.

Typ och Nyckelord: Journal gender, workload, stress

Referens: Krantz, G., Berntsson, L., & Lundberg, U. (2004). Total workload and symptom perception among Swedish male and female with collar workers. In W. Mou, S. Li, & B. Qiu (Eds.), *Abstract Book from the XXVIII International Congress of Psychology* (p. 560). Beijing, China, 8-13 August 2004.

Abstract: Purpose: To investigate the association between symptoms and paid and unpaid work in Swedish male and female white collar workers.

Methods: The Total Workload Questionnaire and a symptom checklist were completed by 743 women and 595 men.

Results: Women had a greater total workload, devoted more time to household chores and childcare and perceived more stress from paid work. Prevalence of symptoms was higher in women than in men. Childcare seemed to have a buffering effect on symptoms in men working long hours.

Conclusion: Both paid and unpaid work needs to be taken into account in the study of stress related disorders.

Typ och Nyckelord: Proceedings Book (chapter) unpaid work, stress, symptoms, ICP 2004

Referens: Krantz, G., Forsman, M., & Lundberg, U. (2004). Consistency in physiological stress responses and electromyographic activity during experimental stress in women and men. *Integrative Physiological and Behavioral Science*, 39, 105-118.

Abstract: Physiological responses serve the role as objective indicators of stress as well as a link between psychosocial stress and various health outcomes. The aim of the present experiment was to compare different physiological stress responses (systolic and diastolic blood pressure, heart rate, urinary epinephrine and norepinephrine, salivary cortisol) as well as trapezius muscle activity, measured by surface electromyography, during mental and physical stress in 11 women and 10 men. The results show significantly increased activity in all measures but cortisol and significant associations between sympathetic arousal and EMG activity. The association between sympathetic arousal and muscle activity is of importance for understanding the high prevalence of musculoskeletal disorders in mentally stressful but physically light work tasks. Men had higher blood pressure and a more pronounced increase in epinephrine output than women, whereas women had higher heart rate. It was concluded that sympathetic activity is more sensitive to moderately intense experimental stress than pituitary adrenocortical (cortisol) activity and that men respond to experimental performance stress with more epinephrine output than women. The correlations between the different indicators of sympathetic arousal were high but can only explain 30-70 percent of the variance. Thus, several parameters are needed in order to obtain a reliable measure of sympathetic activity.

Typ och Nyckelord: Journal catecholamines, cortisol, trapezius EMG

Referens: Larsson, J.-O., Bergman, L.R., Earls, F., & Rydelius, P.-A. (2004). Behavioral profiles in 4-5 year-old children: Normal and pathological variants. *Child Psychiatry and Human Development*, 35, 143-162.

Abstract: Normal and psychopathological patterns of behavior symptoms in preschool children were described by a classification approach using cluster analysis. The behavior of 406 children, average age 4 years 9 months, from the general population was evaluated at home visits. Seven clusters were identified based on empirically defined dimensions: attention, hyperactivity, aggressiveness, social relationship problems, sleeping problems, eating problems, depression and anxiety. Clusters scoring high in inattention, hyperactivity, aggressiveness, and social relationship problems but low in depression and anxiety were found and could indicate early onset conduct disorder. The approach of analysing patterns of symptoms expands the basis on which normal and psychopathological patterns are distinguished.

Typ och Nyckelord: Journal behavior problems, pre-school children, cluster analysis

Referens: Larsson, M. (2004). Människans minne för lukt – Från aversioner till Proustianska luktminnen. I L. Öberg (Ed.). *Näsans Kunskap [What the nose knows]* (pp.15-27). Södertörns Högskolas Förlag.

Abstract:

Typ och Nyckelord: Book (chapter) minne, lukt, aversioner

Referens: Larsson, M. (in press). Smell your way back to childhood: Autobiographical odor memory. In W. Ostreng (Ed.) *Synergies: Interdisciplinary Communications 2003/2004* (pp. 86-89). Centre for Advanced Study.

Abstract:

Typ och Nyckelord: Book (chapter) memory, odor, modality

Referens: Larsson, M., & Bäckman, L. (in press). Odor identification in old age: Demographic, sensory, and cognitive correlates. *Aging, Neuropsychology and Cognition*.

Abstract: The purpose of this study was to determine correlates of odor identification in old age. One hundred and thirty-two men and women (60-91 years) were assessed in a number of tasks tapping sensory acuity (i.e., odor sensitivity, intensity discrimination, quality discrimination) and different cognitive abilities (i.e., perceptual speed, executive functioning, verbal fluency). Hierarchical regression analyses revealed that age, female sex, olfactory sensitivity, quality discrimination, cognitive speed, and verbal fluency were the most potent correlates of odor identification in general. In addition, the age-related variance in odor identification was eliminated when age-related deficits in odor sensitivity, quality discrimination, and perceptual speed were taken into account. This pattern of outcome suggests that age-related differences in these abilities underlie the well-established age impairment in odor identification.

Typ och Nyckelord: Journal olfaction, aging, cognition

Referens: Larsson, M., & Melinder, A. (in press). Underestimated sensations: Everyday odor memory in clinical and forensic settings. In T. Helstrup & S. Magnussen (Eds.), *Everyday Memory*. UK, Psychological Press.

Abstract:

Typ och Nyckelord: Book (chapter) olfaction, forensic, clinical

Referens: Larsson, M., Nilsson, L.-G., Olofsson, J.K., & Nordin, S. (2004). Demographic and cognitive predictors of cued odor identification: Evidence from a population-based study. *Chemical Senses*, 29, 547-554.

Abstract: This study investigated demographic and cognitive correlates of cued odor identification in a population-based sample from the Betula project: 1906 healthy adults varying in age from 45 to 90 years were assessed in a number of tasks tapping various cognitive domains, including cognitive speed, semantic memory and executive functioning. The results revealed a gradual and linear deterioration in cued odor identification across the adult life span. Overall, females identified more odors than men, although men and women performed at the same level in the oldest age cohort (85-90 years). Hierarchical regression analyses revealed that age, sex, education, cognitive speed and vocabulary were reliable correlates of performance in the odor identification task. In addition, age-related deficits in the included demographic and cognitive variables could not fully account for the observed age-related impairment in identification, suggesting that additional factors are underlying the observed deterioration. Likely candidates here are sensory abilities such as olfactory detection and discrimination.

Typ och Nyckelord: Journal Betula project, individual differences, odor identification, olfaction

Referens: Larsson, M., & Willander, J. (2004). Luksinnet i vårdmiljön. [The olfactory sense in the care of elderly.] In H. Wijk (Ed), *Goda miljöer och aktiviteter för äldre - VÅRDlitt 62* [Good Environments and Activities for Elderly] (pp. 95-108). Lund: Studentlitteratur.

Abstract: Kapitlet behandlar övergripande luksinnet samt hur lukter kan användas för att förbättra vårdmiljön. Luksinnet är människans evolutionärt äldsta sinnessystem och även det sensoriska system som utvecklats tidigast hos individen. Precis som för syn och hörsel påverkas luksinnet negativt av åldrandet. Det är viktigt att inse att olika luktfunktioner påverkas i olika grad av åldrandet. Lukter påverkar en rad beteendefunktioner som t.ex. aptit och minnesframplockning. Ett vanligt problem bland äldre är t.ex. nedsatt aptit till följd av försämrad luktfunktion. Genom att tillföra adekvata lukt- och smakämnen till mat och måltidsmiljöer går det att öka aptiten hos de äldre. Vi argumenterar för att lukter kan användas i ett antal situationer för att förbättra äldremiljöer. En förutsättning är dock att lukterna noga valts ut baserat på den specifika individen och den aktuella miljön.

Typ och Nyckelord: Book (chapter) åldrande, lukt, vårdmiljö

Referens: Larsson, M., Öberg, C., & Bäckman, L. (in press). Recollective experience in odor memory: Influences of adult age and familiarity. *Psychological Research*.

Abstract: We examined recollective experience in odor memory as a function of age, intention to learn, and familiarity. Young and older adults studied a set of familiar and unfamiliar odors with incidental or intentional encoding instructions. At recognition, participants indicated whether their response was based on explicit recollection (remembering), a feeling of familiarity (knowing), or guessing. The results indicated no age-related differences in the distribution of experiential responses for unfamiliar odors. By contrast, for familiar odors the young demonstrated more explicit recollection than the old adults, who produced more know and guess responses. Intention to learn was unrelated to recollective experience. In addition, the observed age differences in remember responses for familiar odors were eliminated when odor naming was statistically controlled. This suggests that age-related deficits in activating specific odor knowledge (i.e., odor names) play an important role for age differences in recollective experience for olfactory information.

Typ och Nyckelord: Journal odor memory, recollection, aging

Referens: Laurell, J., & Dåderman, A.M. (in press). Psychopathy (PCL-R) in a forensic psychiatric sample of homicide offenders: Some reliability issues. *International Journal of Law and Psychiatry*.

Several studies have shown that psychopathy is overrepresented among homicide offenders. There is a

Abstract: consensus that Hare's Psychopathy Checklist-Revised PCL-R is currently the most valid and useful tool for diagnosing psychopathy (e.g., Fulero, 1995). Usually, when making a diagnosis of psychopathy, both an interview and an examination of the subject's files are used. However, it has been discussed what is really required to be able to rate psychopathy in a reliable manner. The aim of the present study was to rate retrospectively the degree of psychopathy in 35 homicide offenders being subjected to forensic psychiatric assessment. This rating of psychopathy was carried out using forensic psychiatric files and court verdicts only. Another aim was to examine the reliability of PCL-R in this specific Swedish sample of homicide offenders. There was a good agreement between the two raters with respect to the categorical diagnosis of psychopathy (Cohen's kappa = .81, $p < .001$), which indicates that retrospective ratings of psychopathy are well suited for research purposes. The prevalence of psychopathy among the homicide offenders was 31.4% (using a cut-off score of 30), which means that the construct of psychopathy may contribute to the understanding of the phenomenon of homicide. In the planning of treatment for homicide offenders, a consideration of possible psychopathy is necessary. As criminal psychopaths are known to relapse into violent criminality, it is very important that they are given efficient treatment, placement and management.

Typ och Nyckelord: Journal psychopathy (PCL-R), interrater reliability, homicide offenders

Referens: [Laurell, J., & Dåderman, A.M.](#) (in press). Recidivism is related to psychopathy (PCL-R) in a group of men convicted of homicide. *International Journal of Law and Psychiatry*.

Abstract: It is well known that psychopaths are a group with high risk for criminality. Despite that researchers and clinicians have not yet agreed on a general cause of psychopathy. However Raine (2002) advocated a biosocial model of violent behaviour where the greatest risk for criminal behaviour occurred when both heredity and environmental risk factors (e.g., social class, childhood history) were present. In this follow-up study, 35 men convicted of homicide were assessed retrospectively for psychopathy according to the Psychopathy Checklist-Revised (PCL-R). Information on personal history, as well as from legal documents and records of offences committed by the subjects was also obtained. Fourteen of the 35 men were classified as psychopaths. Two men, both rated as psychopaths, had criminal parents. Twenty-seven of the men had a social relationship with their victim, and eleven out of these were rated as psychopaths. There was no difference in PCL-R scores between those who had a social relationship with their victim and those who did not. The psychopaths relapsed more frequently than the nonpsychopaths into criminality after their prison term. This result confirms previous research indicating that psychopathy is a risk factor for recidivism. It is, therefore, very important that psychopaths get the best possible treatment, aftercare, and supervision.

Typ och Nyckelord: Journal homicide offenders, psychopathy (PCL-R), risk factors

Referens: [Leander, L., Granhag, P.A., & Christianson, S.Å.](#) (in press). Children exposed to obscene phone calls: What they remember and tell. *Child Abuse and Neglect*.

Abstract: Objective: This case study examined children's reports from an obscene phone call (i.e., a verbal sexual abuse). We investigated which type of information the children reported, the completeness and accuracy of the children's statements, and whether there were systematic patterns in terms of memory distortions and omissions.

Method: The completeness and the accuracy of the children's statements were examined by matching 64 children's statements given during police interviews with a detailed documentation of each phone call, made by the perpetrator during the actual phone calls.

Results: All children remembered the phone call per se, but they were found to omit almost all of the sexual and sensitive information (perpetrator's questions and statements) and about 70% of the neutral information given by the perpetrator. However, the children were accurate in the information they did report.

Conclusions: The fact that the children did remember more of the neutral information suggests that they actually remembered the sexual information as well, but that they chose not to report it. Results indicate that children who have been sexually abused may remember more than they report in an initial interview. One possible underlying reason is that children experience shame or embarrassment.

Typ och Nyckelord: Journal obscene phone call, verbal abuse, children's memory

Referens: [Li, J., Nilsson, L.-G., & Wu, Z.](#) (2004). Effects of age and anxiety on episodic memory: Selectivity and variability. *Scandinavian Journal of Psychology*, 45, 123-129.

Abstract: Selective age-related differences in source memory relative to item memory, and individual differences in memory performance in relation to anxiety were explored with high- and low-anxious subjects screened from normal young and elderly adults. They were read false facts about the locations of well-known and unknown sights in a male or female voice. Intentional and incidental learning instructions were administered for source memory. Selective age-related deficits in source memory were observed under both encoding conditions. Higher level of anxiety was related to lower memory performance only in the old group; this relation was stronger in source recall. The findings suggest that the presence of such selectivity is unrelated to the tradeoff between item encoding and source encoding. Anxiety affects the variability, and mediates the selectivity of age effects on episodic memory.

Typ och Nyckelord: Journal source memory, aging, anxiety

Referens: [Lindberg, S.](#) (2004). *Perceptual determinants of print quality*. Stockholm: Stockholm University, Department of Psychology.

Abstract:

Typ och Nyckelord: Dissertation perceived print quality, visual noise, gloss unevenness

Referens: [Lindfors, P.](#) (2004). *Questions on women's situation, life satisfaction and health. The 2004 IDA follow-up survey on women. Technical report*. Stockholm University, Department of Psychology, Reports from the project Individual Development and Adaptation, No. 86.

Abstract: This technical report describes the 2004 follow-up study of the women within the longitudinal research program Individual Development and Adaptation (IDA). The purpose of this study was to follow-up on women's life situation, life satisfaction, life style and health. Data were collected via questionnaires that were mailed to all eligible women in the IDA main group (N=629) of whom about 82% volunteered for participation in the study. The report covers details on the data collection procedure, the measures included in the questionnaire and frequency tables for each measure.

Typ och Nyckelord: Report IDA, follow-up, women

Referens: Lindfors, P., Lundberg, O., & Lundberg, U. (in press). Sense of coherence and biomarkers of health in 43-year old women. *International Journal of Behavioral Medicine*.

Abstract: The aim of the present cross-sectional study was to investigate how sense of coherence (SOC) relates to biomarkers of health in 43-year old non-smoking pre-menopausal women. Before taking part in a standardized medical health examination including assessment of blood pressure, blood lipids and physical symptoms, participants completed a 3-item measure of SOC. On the basis of their SOC scores, the 244 women with complete data sets were categorized into one of three groups with a weak, intermediate or strong SOC. Results showed that women with a strong SOC had significantly lower levels of systolic blood pressure ($p < .05$) and total cholesterol ($p < .05$) than did women with a weak SOC. It is suggested that the lower levels of systolic blood pressure and total cholesterol found in women with a strong SOC may constitute a biological buffer against ill health and disease.

Typ och Nyckelord: Journal sense of coherence, medical examination, IDA

Referens: Lindfors, P., Lundberg, O., & Lundberg, U. (2004). Sense of coherence and biomarkers of health in women. In Abstract Book from Eighth International Congress on Behavioral Medicine, p.119. Mahwah, NJ: Erlbaum. *International Journal of Behavioral Medicine*, 11, Suppl 1.

Abstract: Prior research has shown that sense of coherence (SOC) is related to health and disease. However, studies linking SOC with biomarkers of health are still scarce. Consequently, the present study aimed at investigating how SOC relates to physiological measures obtained from medical examinations. A cohort consisting of 43-year-old women completed a 3-item measure of SOC. The participants then took part in a standardized medical health examination including assessment of blood pressure and blood lipids. On the basis of their SOC scores, the 337 women were categorized into one of three groups showing weak, intermediate or strong SOC. Statistical analyses showed that women with a weak SOC had significantly higher levels of systolic blood pressure ($p < .05$), triglycerides ($p < .05$) and total cholesterol ($p < .05$) than did women with a strong or an intermediate SOC. The higher levels of systolic blood pressure, total cholesterol and triglycerides found in women with a weak SOC may result from higher stress levels and may contribute to increased health risks. It is suggested that, in comparison to individuals with a weak SOC, individuals with a strong SOC have access to resources for handling daily life stress, which reduce chronic stress and cumulative load on bodily systems thus increasing the likelihood of remaining healthy.

Typ och Nyckelord: Proceedings Journal SOC, biomarkers, women

Referens: Lindfors, P., & Lundberg, U. (2004). Biomarkers of health and well-being in women and men. In Abstract Book from Eighth International Congress on Behavioral Medicine, p. 331. Mahwah, NJ: Erlbaum. *International Journal of Behavioral Medicine*, 11, Suppl 1.

Abstract: The objective is to present findings from two studies on physiological indicators of psychological well-being (PWB). In the first study, the Ryff scales covering self-acceptance, environmental mastery, positive relations, personal growth, purpose in life, and autonomy were used to assess PWB in highly educated white-collar workers at the same workplace. Physiological indicators, including salivary cortisol, urinary catecholamines and blood pressure, were assessed in a real life setting during two workdays. Analyses of data from 12 women and 11 men revealed that individuals with high PWB had significantly lower total cortisol release than did individuals with low PWB, while no significant differences emerged for catecholamines or blood pressure. Moreover, individuals with high PWB reported significantly fewer symptoms. No significant differences in demographic factors or work characteristics were found between groups. In a second study, sense of coherence (SOC) was used to assess PWB in 43 year-old women who took part in a standardized medical examination. Analyses of data from 337 women showed that individuals reporting a strong SOC had significantly lower systolic blood pressure and total cholesterol than did women with a weak SOC. The two studies indicate possible mechanisms linking PWB to health-related biological reactions. It is suggested that, in comparison to individuals with low PWB, individuals with high PWB have access to resources for handling daily life stress, which reduce chronic stress and cumulative load on bodily systems and increase the likelihood for remaining healthy.

Typ och Nyckelord: Proceedings Journal biomarkers, positive health, stress

Referens: Lindgren, M. (2004). *Brottsoffer i rättsprocessen: Om ideala brottsoffer och goda myndigheter. [Crime victims in the criminal justice process: On ideal victims and good authorities.]* Stockholm: Jure AB.

Abstract: During the past few decades interest in, and concern for, crime victims have grown considerably in Sweden. New acts have been introduced and existing ones have been revised and amended, research into crime victim issues has developed and the situation of crime victims has increasingly been brought to the fore in the criminal justice system. The question is whether this new focus has had any significant impact on the way crime victims are treated by the criminal justice system.

The thesis shows that a number of measures and reforms have been implemented with a view to improving the support, protection and assistance afforded to crime victims, e.g. with regard to criminal injuries compensation, the provision of legal counsel, the obligation of the police and public prosecutors to provide victims with information about the criminal justice process and about developments in their cases, providing crime victims with a new identity etc. However, the results of the empirical studies show that the government's intentions have not yet been fully translated into action. Despite the extensive obligations of the police when it comes to the provision of information, approximately 25 per cent of crime victims stated that they had not received any such information. The studies also show that the police only rarely pay attention to the fact that some victims are subjected to repeat victimisation. In addition, the manner in which victims are treated by the

police appears to vary depending on the type of crime involved. For example, compared to victims of burglary and mugging, a considerably larger number of assault victims described the police officers they met as brusque, surly and uninterested. Regarding the experience victims have of the public prosecutors assigned to their cases, the negative views expressed concern mainly the timing of the first contact with the prosecutor. Many victims do not meet the prosecutor until the day of the trial, either shortly before the trial itself or in the actual courtroom. Crime victims are also relatively often dissatisfied with the waiting arrangements in court buildings; a recurring complaint is that they had to share a waiting room with the accused.

Typ och Nyckelord: Dissertation crime victims, police work, victimisation

Referens: Lindqvist, J.K., Dåderman, A.M., & Hellström, Å. (in press). Internal reliability and construct validity of the Novaco Anger Scale-1998-S in a sample of violent prisoners in Sweden. *Psychology, Crime & Law*.

Abstract: In this study, the internal reliability and construct validity of the recently adapted Swedish version of the Novaco Anger Scale-1998 (NAS-1998-S; Lindqvist, Dåderman, and Hellström, 2003), as well as its scale correlations with demographic and criminality variables, were investigated. Construct validity was established by assessing the correlation pattern of the scales of NAS-1998-S with concurrent scales of similar and distinct constructs. Ninety-five male violent prisoners, ranging in age from 18 to 67 years, participated. The results demonstrated good internal reliability, consistent intrascale relationships, and appropriate construct validity of NAS-1998-S. The number of previous convictions had a moderate negative relationship with capacity of control. Age and education correlated negatively with the NAS-1998-S scales, except Regulation. In addition to psychometric issues, the results were discussed from a clinical perspective on the offender population.

Typ och Nyckelord: Journal anger scales, violent prisoners, construct validity

Referens: Lindwall, M. (2004). *Exercising the self: On the role of exercise, gender and culture for physical self-perceptions*. Unpublished doctoral dissertation. Stockholm: Stockholm University, Department of Psychology.

Abstract: In modern society, individuals constantly pass judgments on their own body and physical competence as well as that of other people. All too often, the verdict is less favourable. For the person, these physical self-perceptions (PSP) may negatively affect global self-esteem, identity, and general mental well being. The overall aim of this thesis is to examine primarily the role that exercise, but also the roles that gender and culture, play in the formation of PSP. In Study I, using confirmatory factor analyses, strong support for the validity of a first-order, and a second-order hierarchical and multidimensional model of the Physical Self-Perception Profile (PSPP; Fox & Corbin, 1989) was found across three national samples (Great Britain, Sweden and Turkey) of university students. Cross-cultural differences were detected, with the British sample demonstrating higher latent means on all PSPP subdomains except for the physical condition subdomain (Condition), than the Swedish and Turkish samples. In Study II, a higher self-reported exercise frequency was associated with more positive PSP (in particular for Condition) and more importance attributed to PSP in Swedish university students. Males demonstrated higher overall PSPP-scores than females. In Study III, a true-experimental design with randomisation into an intervention and a control group was adopted. Strong support for the effects of an empowerment-based exercise intervention programme on PSP and social physique anxiety (SPA) over six months for adolescent girls was found. The relations of exercise, gender and culture with PSP, SPA and self-esteem are discussed from the standpoints of a variety of theoretical models (e.g., the EXSEM-model), and frameworks (self-presentation and objectification theory). The two theories of self-enhancement and skill-development are examined with regard to the direction of the exercise-physical self relationship and motivation for exercise. Arguments for the relevance of exercise and PSP for practitioners in promoting general mental well-being and preventing modern-day diseases are outlined.

Typ och Nyckelord: Dissertation exercise, physical self-perceptions, intervention

Referens: Lundberg, U. (2004). Aktivitet och återhämtning. *Svensk medicin*, 74, 55-62. Gothia.

Abstract: Artikeln beskriver betydelsen av en adekvat balans mellan aktivitet (energimobilisering) och vila/återhämtning för hälsa och välbefinnande, samt de psykobiologiska mekanismer som är involverade.

Typ och Nyckelord: Journal katabola processer, anabola processer, balans

Referens: Lundberg, U. (in press). Catecholamines. In G. Fink (Ed.), *Encyclopedia of Stress*. Academic Press, San Diego.

Abstract: The catecholamines have been of central interest and importance in stress research since the first demonstrations of the role of sympathetic arousal in response to stress exposure early in the 20th century. Numerous animal experiments have illustrated the active defence reaction and the "emergency function" of the adrenal medulla, which increases the organism's chances of survival by "fight-or-flight". During the last three decades, a considerable number of studies in humans, in laboratory as well as in natural settings, has confirmed and extended the conclusions from the animal studies. The aim of this chapter is to summarize research and conclusions relevant to the role of catecholamines in stress and health, including their assessment and methodological considerations, as well as gender differences in catecholamine responses to stress.

Typ och Nyckelord: Book (chapter) stress, sympathetic arousal, measurements

Referens: Lundberg, U. (in press). Workplace stress. In G. Fink (Ed.), *Encyclopedia of Stress*. Academic Press, San Diego.

Abstract: This article summarizes present knowledge regarding how the modern work environment may contribute to stress and negative health outcomes. Models of stress, such as the demand-control, effort-reward imbalance and the allostatic load models are described. Research is reported, indicating possible psychophysiological mechanisms between work stress and health problems such as cardiovascular illness and musculoskeletal disorders.

Typ och Nyckelord: Book (chapter) job strain, allostatic load, health

- Referens:** [Lundberg, U., & Hellström, B. \(2002\).](#) Workload and morning salivary cortisol in women. In Abstract Book from the Eighth International Congress of Behavioral Medicine, Mainz, August 25-28, 2004. *International Journal of Behavioral Medicine*, Vol 11, Suppl, 171.
- Abstract:** The hypothalamic-pituitary-adrenocortical (HPA) axis and cortisol secretion play an important role in a number of disorders. Previous studies have shown a link between indicators of work-related stress and salivary morning cortisol. In addition, excessive overtime (10 hours or more/week) has been found to be predictive of myocardial infarction in women. The aim of this study was to investigate the association between workload and morning cortisol in women, using data from the most recent wave of data collection within the IDA-project (Individual Development and Adjustment). Saliva samples were obtained four times during the first 45 min after awakening (0, 15, 30, and 45 min) in the morning on a work-free day from more than 200 fulltime employed women born in 1955 and representing a normal population of a small city in Sweden. Amount of paid work (regular work and overtime) was reported in a questionnaire. Significant positive correlations were found between the amount of overtime at work and each of the four measurements of morning cortisol (varying from $r=0.29$ to $r=0.38$, $p<0.01$). In addition, participants with excessive overtime (more than 10 hours/week) had on average about twice as high ($p=0.01$) morning cortisol levels than women with moderate overtime (<10 hours/week) or normal working hours (35-40 hours/week). The results are consistent with earlier findings and suggest that morning cortisol is a sensitive indicator of work overload in women. In view of the health problems associated with chronic overactivity of the HPA axis, highly elevated morning cortisol could be an important risk factor. However, due to the cross-sectional nature of the present study, additional research is necessary in order to reveal the specific pathways linking work-related stress to elevated morning cortisol.
- Typ och Nyckelord:** Proceedings Journal HPA axis, health risks, overtime
- Referens:** [Lundberg, U., & Wentz, G. \(2004\).](#) *Stressad hjärna, stressad kropp. Om sambanden mellan psykisk stress och kroppslig ohälsa. [Stressed brain, stressed body. About the relation between mental stress and somatic illness.]* Wahlström och Widstrand.
- Abstract:** The book reviews the evidence and psychobiological mechanisms explaining the relationships between psychosocial stress and various bodily symptoms.
- Typ och Nyckelord:** Book (chapter) stress, somatic health, mechanisms
- Referens:** [Lundström, J.N., Frasnelli, J., Larsson, M., & Hummel, T. \(in press\).](#) Sex differentiated responses to intranasal trigeminal stimuli. *International Journal of Psychophysiology*.
- Abstract:** The aim of the study was to address sex-related hemispheric differences in trigeminal event-related potentials, while controlling for the subjects' olfactory sensitivity. Event-related potentials to lateralized stimulation with the trigeminal stimulant CO₂ were recorded in 28 healthy young subjects (16 women). There was no sex-related difference in olfactory sensitivity. Results indicated a sex-differentiated response to trigeminally induced pain. Women were found to have generally higher amplitudes and shorter latencies of the late positive component than men. Moreover, men and women exhibited different hemispheric activations in that women expressed shorter latencies over the left hemisphere than men. The pronounced sex-related difference of the late positive component suggests a cognitive / emotional impact on the processing of intranasal pain as indicated by others.
- Typ och Nyckelord:** Journal trigeminal, ERP, cognition
- Referens:** [Lövdén, M., Bergman, L.R., Lindenberger, U., & Nilsson, L.-G. \(in press\).](#) Studying individual aging in an interindividual context: Typical paths of age-related, dementia-related, and mortality-related cognitive development in old age. *Psychology and Aging*.
- Abstract:** This study has two objectives: (1) to explore typical paths of cognitive development associated with aging, terminal decline, and dementia; and (2) to promote and illustrate an individual-oriented approach to the study of cognitive aging based on long-term longitudinal panel data. Data emanate from a population-based sample ($n=500$; age range T1=60-80) tested at three occasions five years apart. Results document interindividual differences in multivariate patterns of change. While cognitive changes generally covary, the results suggest that subgroups of individuals may develop along paths characterized by selective changes in a subset of cognitive functions. Typical progression of dementia followed a developmental cascade from low declarative memory, via low functioning across all observed cognitive measures, to dementia diagnosis, and finally death.
- Typ och Nyckelord:** Journal cognitive aging, episodic memory, semantic memory, individual-oriented, dementia
- Referens:** [Lövdén, M., Rönnlund, M., Wahlin, Å., Bäckman, L., Nyberg, L., & Nilsson, L.-G. \(2004\).](#) The Extent of Stability and Change in Episodic and Semantic Memory in Old Age: Demographic Predictors of Level and Change. *Journal of Gerontology: Psychological Sciences*, 59B, 130-134.
- Abstract:** Structural stability and change in semantic and episodic memory performance as well as interindividual differences in 5-year changes in these constructs are examined within a sample of older adults (age range T1 = 60- 80; $n = 361$). Interindividual differences in change were limited but significant. Stability coefficients were higher for semantic memory (.95) than for episodic memory (.87). Changes in episodic and semantic memory performance were strongly associated ($r = .68$). Across time, variances and covariances increased, and a tendency toward dedifferentiation in terms of increasing correlations was found. Chronological age was related to both level and change, but gender and education were only related to level of memory performance. Collectively, these results depict relatively high degrees of structural stability and stability of interindividual differences in declarative memory in old age.
- Typ och Nyckelord:** Journal memory change, longitudinal, interindividual differences
- Referens:** [Lövdén, M., & Wahlin, Å. \(in press\).](#) The sensory-cognition association in adulthood: Different magnitudes in processing resources, episodic memory, and false memory. *Scandinavian Journal of Psychology*.

Abstract: One hundred and forty-six participants (age range = 20-80) completed a battery of tests designed to measure visual acuity, processing speed, inhibition, episodic memory, and false memory. The relations between visual acuity and general cognitive ability, as well as between visual acuity and the indicators of this construct, were evaluated with structural equation modeling. The measurement model confirmed that the indicators of the individual cognitive abilities could be grouped into a general cognitive functioning factor. However, the relation between episodic and false memory was not completely explained by the shared association with this general factor. Furthermore, visual acuity predicted approximately half of the age-related variance in the general cognition factor. Also, the proportion of age-related variance shared with vision was highest in inhibition and lowest in false memory. The results are discussed in the light of common cause accounts of cognitive aging.

Typ och Nyckelord: Journal cognitive aging, common cause, episodic memory

Referens: [Magnusson, D., & Stattin, H. \(in press\). The person in the environment: Towards a general model for scientific inquiry. In R.M. Lerner \(Ed.\) *Theoretical models of human development*. Volume 1 of Handbook of Child Psychology \(6th edition\), Editor-in-chief William Damon. New York: Wiley.](#)

Abstract: This is an extensively revised version of the article "Person context interaction theories" published in the 5th version of the handbook. The main new element in this chapter is the clear distinction between basic principles and working mechanisms in theoretical and empirical analyses of individual developmental processes are characterized by basic principles, which exist across individuals and cultures. These basic principles should be considered in theoretical and empirical analysis of any developmental issue.

Typ och Nyckelord: Book (chapter) environment, basic principles, working mechanisms

Referens: [Maitland, S.B., Herlitz, A., Nyberg, L., Bäckman, L., & Nilsson, L.-G. \(in press\). Selective sex differences in declarative memory. *Memory & Cognition*.](#)

Abstract: Sex invariance of a six-factor, higher order model of declarative memory (two second-order factors: episodic and semantic memory, and four first-order factors: recall, recognition; fluency, knowledge) was established for 1796 participants (35-85 years). Metric invariance of first and second-order factor loadings across sex was demonstrated. At the second-order level, a female advantage was observed for both episodic and semantic memory. At the first-order level, sex differences in episodic memory were apparent for both recall and recognition, whereas the differences in semantic memory were driven by a female superiority in fluency. Additional tests of sex differences in three age groups (35-50, 55-65, and 70-85 years of age) indicated that the female superiority in declarative memory diminished with advancing age. The factor-specific sex differences are discussed in relation to sex differences in hippocampal function.

Typ och Nyckelord: Journal episodic memory, semantic memory, gender

Referens: [Mellner, C. \(2004\). *Women's subjective and objective health over time: the role of psychosocial conditions and physiological stress responses*. Stockholm: Stockholm University, Department of Psychology.](#)

Abstract: Today, health problems are likely to have a complex and multifactorial etiology, whereby psychosocial factors interact with behaviour and bodily responses. Women generally report more health problems than men. The present thesis concerns the development of women's health from a subjective and objective perspective, as related to psychosocial living conditions and physiological stress responses. Both cross-sectional and longitudinal studies were carried out on a representative sample of women. Data analysis was based on a holistic person-oriented approach as well as a variable approach. In Study I, the women's self-reported symptoms and diseases as well as self-rated general health status were compared to physician-rated health problems and ratings of the general health of the women, based on medical examinations. The findings showed that physicians rated twice as many women as having poor health compared to the ratings of the women themselves. Moreover, the symptom "a sense of powerlessness" had the highest predictive power for self-rated general health. Study II investigated individual and structural stability in symptom profiles between adolescence and middle-age as related to pubertal timing. There was individual stability in symptom reporting for nearly thirty years, although the effect of pubertal timing on symptom reporting did not extend into middle-age. Study III explored the longitudinal and current influence of socioeconomic and psychosocial factors on women's self-reported health. Contemporary factors such as job strain, low income, financial worries, and double exposure in terms of high job strain and heavy domestic responsibilities increased the risk for poor self-reported health in middle-aged women. In Study IV, the association between self-reported symptoms and physiological stress responses was investigated. Results revealed that higher levels of medically unexplained symptoms were related to higher levels of cortisol, cholesterol, and heart rate. The empirical findings are discussed in relation to existing models of stress and health, such as the demand-control model, the allostatic load model, the biopsychosocial model, and the multiple role hypothesis. It was concluded that women's health problems could be reduced if their overall life circumstances were improved. The practical implications of this might include a redesign of the labour market giving women more influence and control over their lives, both at and away from work.

Typ och Nyckelord: Dissertation health, longitudinal, psychosocial stress

Referens: [Mellner, C., Krantz, G., & Lundberg, U. \(2005\). Medically unexplained symptoms in women as related to physiological stress responses. *Stress and Health*, 21, 45-52.](#)

Abstract: The present, cross-sectional study explored whether self-reported symptoms are related to physiological stress indicators in a group of 43-year-old women representing the general population in Sweden. Analyses were performed both on raw scores of physiological indicators and on a multisystem summary index of allostatic load as a measure of cumulative biological burden. Participants answered a health questionnaire and underwent a medical examination including blood pressure, heart rate measurements, determination of blood lipids and stress hormones. Urinary epinephrine and norepinephrine were measured both on a working day and a work free day at home. In addition, salivary morning cortisol was measured on a non-work day. The physiological profiles based on raw scores from 222 women showed that women with a high symptom load had significantly higher levels of cortisol ($p < .05$), and higher heart rate ($p < .05$) than did those with a low symptom load. In contrast, women with a low symptom load had significantly higher levels of epinephrine on a work free day than did women with a high symptom load ($p < .05$). No significant differences were found in norepinephrine responses. When analysing the summary measure of allostatic load in relation to symptom prevalence no significant difference between the symptom groups emerged. One possible explanation for this

result could be that a majority of the study population was healthy, reporting a low level of symptoms in general. However, the results support the notion that common, medically unexplained symptoms among women are associated with certain biological parameters known to play a role in the development of ill health.

Typ och Nyckelord: Journal women, health, stress

Referens: [Moniri, S. \(2004\).](#) Action memory in elderly bilinguals. *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.

Abstract: This study's goal was to compare action memory performance of 170 monolinguals and 334 bilinguals in three adult age groups: middle-aged (35-45), young-old (50-65), and old-old (70-80) at two measurement occasions in a longitudinal study. The tests were free recall, cued recall (cues: verb or category) and recognition of 32 sentences. The results revealed in all condition there was: a) a bilinguality advantage; b) a superiority of SPTs over VTs; c) a substantial decline of performance in both bilingual and monolingual old-old adults. It was concluded that bilingualism may play an important role in developing more effective learning strategies.

Typ och Nyckelord: Proceedings elderly bilingual, action memory, longitudinal study, ICP 2004

Referens: [Montgomery, H. \(2004\).](#) Från naiv realism till delad verklighet – social kognition i ett pedagogiskt sammanhang. [From naive realism to shared reality - social cognition in an educational context.] In A. Bron & A. Gustavsson (Eds.), *Pedagogik som vetenskap* (pp. 68-87). Stockholm: Pedagogiska institutionen, Stockholms universitet.

Abstract: This paper contrasts two fundamental concepts in social cognition: (1) Naive realism - the notion that people naively take for granted that they have accurate contact with the external reality being unaware of the fact that their experiences largely are construed subjectively. (2) Shared reality - the notion that people coordinate each others' thoughts and behavior in relation to the external world. It is argued that efficient education requires that both teacher and student can overcome their naive realism in order to find a shared reality where understandings from both teacher as well student are mutually acknowledged. This shared reality is built up in an ongoing dialogue between teacher and student. Examples are given from economy education.

Typ och Nyckelord: Book (chapter) naive realism, shared reality, education

Referens: [Montgomery, H., Sharafi, P., & Hedman, L. \(2004\).](#) Engaging in activities Involving Information technology: Dimensions, modes, and flow. *Human Factors*, 46, 334-348.

Abstract: An engagement mode involves a subject (e.g., a user of Information Technology) who is engaged in an activity with an object in a certain manner (the mode). The purpose of this study is to develop a general model of engagement modes that may be used for understanding how IT-related activities are shaped by properties of the user and the IT-object. A questionnaire involving items on IT engagement and the experience of flow was administered to 300 participants. The results supported a model of engagement modes (the EM model) involving five different engagement modes (Enjoying/Acceptance, Ambition/Curiosity, Avoidance/Hesitation, Frustration/Anxiety, and Efficiency/Productivity) characterized on three dimensions (Evaluation of object, Locus of control between subject and object, and intrinsic or extrinsic Focus of motivation). The flow experience follows from a balance between Enjoying/Acceptance and Efficiency/Productivity propelled by Ambition/Curiosity. It was concluded that The EM model could give a platform for considering how IT users, IT applications and IT environments should work together to yield both enjoyment and efficiency. Furthermore, the EM model could lead to IT training programs on different levels of specificity.

Typ och Nyckelord: Journal information technology, engagement mode

Referens: Nilsson, E., [Wahlin, Å.](#), MacDonald, S.W., Fastbom, J., & Growdon, J. (2004). Comorbidity: Cognitive and functional declines in Alzheimer's disease as a function of diabetes. Poster presentation at the *10th Cognitive Aging Conference*, Atlanta, GA, USA.

Abstract: Diabetes is known to be a risk factor for cognitive impairment in non-demented elderly. It is also a risk factor for developing Alzheimer's Disease (AD). Previous studies, examining rate of cognitive decline in preclinical AD, have shown no effect of demographic or genetic risk factors. In diagnosed AD-patients, it would also seem that additional pathology does not exacerbate the cognitive deficits. Thus, it would seem that once AD-pathology has started affecting cognitive function, other factors add little to the decline. Using data gathered from patients at the Memory Disorders Unit at Mass. General Hospital, the effect of diabetic status on cognitive decline after clinical diagnosis of probable Alzheimer's Disease (AD) was studied. Data for 695 patients diagnosed with probable AD was examined. Of these, 46 had a diagnosis of diabetes. Each patient visited the Memory Disorders Unit between two and 23 times. At visits to the unit, cognitive testing by means of the Blessed Dementia Scale (BDS) was performed. Data on Activities of Daily Living (ADL) function was also collected. Preliminary data analyses do not support the hypothesis that the rate of cognitive decline in AD-patients would be influenced by diabetic status. More elaborate analyses will be presented, and results will be discussed relative to previous findings.

Typ och Nyckelord: Proceedings Alzheimer's disease, diabetes, functional abilities

Referens: [Nilsson, L.-G. \(2004\).](#) Våra långtidsminnen. [Our long-term memories.] *Tvärsnitt*, 3, 22-26.

Abstract: This describes, in popularized form, how memory can be conceived of as consisting of four different but interacting forms of long-term memory: procedural memory, perceptual representation system, semantic memory, and episodic memory. Various phenomena of these four different forms of long-term memory are illustrated with data from the longitudinal Betual-project on aging, memory, and health.

Typ och Nyckelord: Journal memory systems, aging, health

Referens: [Nilsson, L.-G. \(in press\).](#) Kan generna lära oss något om minnet? [Can genes teach us anything about memory?] *Norska Vetenskapsakademiens årsbok*.

- Abstract:** This chapter in the yearbook of the Norwegian Academy of Sciences constitutes a summary of a lecture held at the academy in February 2004. The chapter describes how declarative memory can be divided into episodic and semantic memory. Each of these two memory systems can be further subdivided into recall and recognition (episodic memory), knowledge and fluency (semantic memory). On the basis of data from the longitudinal Betula project on memory, aging and health, it is furthermore described how different genes seem to affect episodic memory, and recall in particular, but not semantic memory.
- Typ och Nyckelord:** Book (chapter) memory, genetics, health
- Referens:** Nilsson, L.-G. (2004). Memory and genes – is there an association? In W. Östreg (Ed.), *Synergies*. Oslo: Centre for Advanced Study.
- Abstract:** This chapter describes the work the author did when he was a fellow at the Centre for Advanced Study in Oslo, during the academic year of 2003-2004. The theoretical work done during this year was focused on possible associations between different genetic markers and human memory. The time at the Centre gave many excellent opportunities to discuss this topic and other scientific topics with colleagues in philosophy and biology.
- Typ och Nyckelord:** Book (chapter) genetics, memory, health
- Referens:** Nilsson, L.-G., Adolfsson, R., Bäckman, L., Cruys, M., Nyberg, L., Small, B. J., & Van Broeckhoven, C. (2004). Impairment of episodic memory and word fluency in carriers of the APOE $\epsilon 4$ allele. *Behavior Genetics*, 34, 654.
- Abstract:** We examined the effect of the epsilon4 allele of ApolipoproteinE (APOE) in non-demented individuals in the age range of 35-90 years of age. In a prospective cohort study we demonstrated a more pronounced $\epsilon 4$ -related deficit for participants in the age of 65 years and older in tasks assessing episodic recall. Somewhat smaller $\epsilon 4$ -related deficits for these persons were found in episodic recognition and verbal fluency. No deficits were found in tasks assessing vocabulary, primary memory and priming. We also demonstrated that carriers of the $\epsilon 4$ allele in the age of 50-60 years performed at a higher level than non-carriers of this allele in episodic recall tasks, but not in episodic recognition tasks, nor in tasks assessing semantic memory, primary memory and priming. Furthermore, we found a dose effect, such that carriers of two $\epsilon 4$ alleles fail more profoundly in acquiring and recollecting episodic information than carriers of one $\epsilon 4$ allele, who in turn fail more than carriers of non- $\epsilon 4$ alleles. The pattern of findings observed for older $\epsilon 4$ carriers suggests that these individuals have particular difficulty when the executive task demands are high. Several factors (e.g., smaller hippocampal volumes, less effective neural repair mechanisms, preclinical dementia) may account for these findings. On the basis of the data obtained we argue that analyses of the effect of specific genes in cognition should be accompanied by assessment of performance at a specific level, with due attention to the age of the individual.
- Typ och Nyckelord:** Journal memory, genetics, aging
- Referens:** Nilsson, L.-G., Adolfsson, R., Bäckman, L., de Frias, C.M., Molander, B., & Nyberg, L. (2004). Betula: A prospective cohort study on memory, health and aging. *Aging, Neuropsychology and Cognition*, 11, 134-148.
- Abstract:** This article describes the Betula Study with respect to objectives, design, participants, and assessment instruments for health and cognition. Three waves of data collection have been completed in five-year intervals since 1988-1990. A fourth wave started in 2003 and will be completed in 2005. An overview of Betula research is presented under the headings of memory and cognition and cognitive neuroscience. Health-related issues and sex differences as well as comparisons between cross-sectional and longitudinal studies are discussed in the first section. The influence of different genes and of some brain abnormalities for memory functioning in adulthood and old age constitute main topics in the second section. New data are presented on the association between blood pressure and dementia. We demonstrated that a demented group of participants had higher levels of systolic blood pressure and pulse pressure than non-dementia controls 10 years before diagnosis. The new fourth wave of data collection will, in addition to enriching the Betula database, permit revisiting and reanalyzing the existing data from new perspectives.
- Typ och Nyckelord:** Journal memory, health, Betula project
- Referens:** Nilsson, L.-G., & de Frias, C.M. (in press). The effect of genetics and vascular health on memory functioning: The Betula study. In Q. Jing, G. d'Ydewalle, M.R. Rosenzweig, H. Zhang, & K. Zhang (Eds.), *Proceedings of the 28th International Congress of Psychology*. London: Psychology Press.
- Abstract:** This chapter presents a review of the role of different genes and vascular health factors in understanding normal and pathological human memory. Recent results are presented from a large-scale prospective cohort study on memory, health, and aging. The Betula project. Possible mechanisms for the genetic and vascular influences on individual differences and changes in memory in adulthood and old age are discussed. It is proposed that multiple genes, each with specific functions, impact different memory systems and at specific points in the adult lifespan. It is also suggested that a combination of experimental methods in cognitive psychology, genetics, and brain imaging may be the ultimate recipe for the detection of early signs of neurodegenerative diseases.
- Typ och Nyckelord:** Proceedings Book (chapter) memory, genetics, brain imaging, individual differences
- Referens:** Nilsson, L.-G., & de Frias, C.M. (in press). The effect of genetics and vascular health on memory functioning: The Betula Study. In W. Mou, S. Li, & B. Qiu (Eds.), *Abstract Book from the XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.
- Abstract:** This chapter presents a review of the role of different genes and vascular health factors in understanding normal and pathological human memory. Recent results are presented from a large-scale prospective cohort study on memory, health, and aging, The Betula Project. Possible mechanisms for the genetic and vascular influences on individual differences and changes in memory in adulthood and old age are discussed. It is proposed that multiple genes, each with specific functions, impact different memory systems and at specific points in the adult lifespan. It is also suggested that a combination of experimental methods in cognitive psychology, genetics, and brain imaging may be the ultimate recipe for the detection of early signs of neurodegenerative diseases.

Typ och Nyckelord: Proceedings Book (chapter) genetics, memory, Betula project, ICP 2004

Referens: Nilsson, L.-G., & Larsson, M. (in press). Self-referent beliefs about memory and actual performance: Relationships with age and sex. In S. Magnussen & T. Helstrup (Eds.), *Everyday memory*. Hove, UK: Psychology Press.

Abstract: Previous research has demonstrated a positive, but modest, relationship between knowledge about one's own memory capabilities and objective memory performance as measured by laboratory memory tests in late life. Less is known about the relationship between subjective and objective measures across a wider range of the life span. Little is also known whether men and women differ in their abilities to estimate subjectively the actual memory capacity. We used data from a large prospective study on memory health and aging to shed light on this lack of knowledge. The results obtained show age deficits and female superiority in episodic memory completely in line with previous research. The data obtained for semantic memory are also in line with those obtained in previous research. When relating these objective measures of memory to subjective measures significant correlations were found for old participants in episodic memory, but not for younger subjects and not for semantic memory. An interesting and not previously shown result was obtained when relating the subjective experience of a change in memory function to the actual change demonstrated in objective assessment of memory. It was found that men, not women, as they become older show a growing insight of a declining memory functioning. We discuss this result involving both age and sex variables as reflecting more serious memory conditions in men than in women.

Typ och Nyckelord: Book (chapter) subjective memory, objective memory, age, sex differences

Referens: Nilsson, L.-G., & Ohta, N. (Eds.). (in press). *Memory and society: Psychological Perspectives*. Hove, UK: Psychology Press.

Abstract: This book includes 18 chapters on various topics related to how laboratory research on memory and theories developed on the basis of such research can be implemented in practical, applied situations in society. The chapters are organized around three broad topics. Each topic is introduced by a chapter written by the editors of the book. The first topic is about self, society, and culture with contributions from Qi Wang and Martin A. Conway, Susan Joslyn and Jonathan W. Schooler, D. Stephen Lindsay and J Don Read, and Kathy Pedzek. The second topic is about learning in social settings including four chapters written by Dietrich Albert, Cord Hockemeyer and Toshiaki Mori, Robert A. Bjork and Elizabeth L. Bjork, Elizabeth L. Bjork, Robert A. Bjork and Malcom D. MacLeod, Yukio Itsukushima, Kazunori Hanyu, Yasunari Okabe, Makiko Naka, Yuji Itoh and Satoshi Hara. The third topic is entitled Memory deficits: Social costs and includes six chapters written by Fergus I.M. Craik, Ingvar Lundberg, Robert L. Logie and Sergio Della Sala, Masaru Mimura, Douglas Herrmann, Michael M. Gruneberg, Steve Fiori, Jonathan W. Schooler and Rebecca Torres, and Barbara A. Wilson.

Typ och Nyckelord: Book (chapter) memory, society, culture

Referens: Nilsson, L.-G., & Ohta, N. (in press). Self, society, and culture. In L.-G. Nilsson & N. Ohta (Eds.), *Memory and society: Psychological Perspectives*. Hove, UK: Psychology Press.

Abstract: This chapter introduces the main concepts that are dealt with in this section of the book. One common theme in the four chapters Qi Wang and Martin A. Conway, Susan Joslyn and Jonathan W. Schooler, D. Stephen Lindsay and J Don Read, and Kathy Pedzek is autobiographical memory. The four chapters also converge on the notion that memory of the past is based on how the individual conceives of the present, and that this conceptualization of the present is built up in a narrative way throughout life – in much the same way that a society or a culture is built up by oral or written narrative in that society.

Typ och Nyckelord: Book (chapter) self, autobiographical memory, society

Referens: Nilsson, L.-G., & Ohta, N. (in press). Learning in social settings. In L.-G. Nilsson & N. Ohta (Eds.), *Memory and society: Psychological Perspectives*. Hove, UK: Psychology Press.

Abstract: This chapter introduces main concepts, theories and data that are covered in this section of the book. After having discussed the applied ambitions of Herrmann Ebbinghaus the chapter reflects on the topics of e-learning, an interesting theory how to optimize treatment and training, intended and unintended forgetting, and eyewitness testimony. The four chapters are written by Dietrich Albert, Cord Hockemeyer and Toshiaki Mori, Robert A. Bjork and Elizabeth L. Bjork, Elizabeth L. Bjork, Robert A. Bjork and Malcom D. MacLeod, Yukio Itsukushima, Kazunori Hanyu, Yasunari Okabe, Makiko Naka, Yuji Itoh and Satoshi Hara.

Typ och Nyckelord: Book (chapter) e-learning, forgetting, eyewitness testimony

Referens: Nilsson, L.-G., & Ohta, N. (in press). Memory deficits: Social costs. In L.-G. Nilsson & N. Ohta (Eds.), *Memory and society: Psychological Perspectives*. Hove, UK: Psychology Press.

Abstract: This chapter summarizes the section about practical consequences of various forms of memory deficits and the costs involved, both with respect to the individual and his or her family and with respect to the society. Memory deficits occurring in normal aging and pathological changes in old age, memory deficits that are related to dyslexia, working memory problems in everyday cognition, problems in executive functions chronic alcoholics, and Korsakoff amnesics. This chapter also includes a description of memory failures and their causes in everyday life and the rehabilitation of memory in everyday life. The chapter authors in this section of the book are: Fergus I.M. Craik, Ingvar Lundberg, Robert L. Logie and Sergio Della Sala, Masaru Mimura, Douglas Herrmann, Michael M. Gruneberg, Steve Fiori, Jonathan W. Schooler and Rebecca Torres, and Barbara A. Wilson.

Typ och Nyckelord: Book (chapter) aging, dyslexia, rehabilitation

Referens: Nilsson, L.-G., & Rönnerberg, J. (in press). Learning and memory. In K. Pawlik & G. d'Ydewalle (Eds.), *Psychological concepts: An international historical perspective*. Hove, UK: Psychology Press.

Abstract: This chapter describes major concepts in the area of learning and memory in a historical perspective. The

chapter takes into account the various influences that cultures have had on the concepts used in learning and memory research of today. A large portion of the chapter is devoted to defining and discussing different forms of learning and memory. The issue of behavior vs. cognition is discussed at some length. The concepts of storage of information, the spatial metaphor of memory, and memory trace are central concepts in memory research and are therefore dealt with thoroughly and are evaluated in the light of today's knowledge of human memory. The chapter is ended by a discussion of the requirements for scientific concepts to survive.

Typ och Nyckelord: Book (chapter) concepts, memory, learning

Referens: Nilsson, L.-G., Söderlund, H., Berger, K., Breteler, M., de Ridder, M., Dufouil, C., Fuhrer, R., Giampoli, S., Hofman, A., Pajak, A., Sans, S., Schmidt, R., & Launer, L.J. (in press). Cognitive test battery of CASCADE: Tasks and data. *Aging, Neuropsychology and Cognition*.

Abstract: This paper presents the cognitive test battery used in the CASCADE Study (Cardiovascular Determinants of Dementia) for examining the consequences of cerebral white matter lesions and atrophy. The test battery includes nine different tasks assessing memory, executive function, and global cognitive function. Three episodic memory tasks were used in combinations to assess the role of attention and speed on encoding. Estimates of short- and long-term memory capacity were also derived from these three memory tasks. Semantic memory production / frontal lobe functions were assessed by means of a word fluency test. The Letter Digit Substitution test and the Stroop test were used to assess speed of processing and attention. Motor speed was measured with the Purdue Pegboard test, and global cognitive function was assessed by the Mini Mental State Examination. Overall performance data for the whole CASCADE sample and for each of eight study centers are presented for each test. Possible reasons for performance differences among study centers are discussed.

Typ och Nyckelord: Journal memory, executive function, cognition

Referens: Nilsson, M.E., Kaczmarek, T., & Berglund, B. (2004). Perceived soundscape evaluation of noise mitigation methods. In M. Brothanek & O. Jiricek (Eds.), *Inter-Noise 2004* (Paper 514). Prague: Czech Acoustical Society. [Available on CD]

Abstract: Traffic noise mitigation changes the perceived soundscape. New methods were developed for characterizing such changes perceptually. The new methods involve sampling of large numbers of short excerpt soundscapes (5 s) from binaural soundscape recordings (at least 45 min). Summarizing perceptual data over a large number of soundscape excerpts identified the distinguishing feature of each soundscape, to be separated from the mere existence of common sounds, for instance, occasional sounds from people talking, footsteps and passing cars. Preliminary results from 12 listeners showed that they were able to discriminate between road-traffic noise-polluted soundscapes recorded before and after the erection of a noise barrier. Further research will determine psychophysical relationships for soundscape preference and annoyance, separately for different noise mitigation methods. These relationships will be used for evaluating the perceptual efficiency of different noise mitigation methods, in addition to the reduction accomplished in A-weighted sound level.

Typ och Nyckelord: Book (chapter) traffic noise, noise barrier, perception

Referens: Näswall, K. (2004). *Job insecurity from a stress perspective: Antecedents, consequences, and moderators*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: The current trend in working life to lower costs by reducing personnel or employing staff on short-term basis has brought instability and uncertainty to many employment situations. Organizations strive to be flexible in their staffing, but the consequences for the individual employees are uncertainty and reduced predictability. Job insecurity is a phenomenon that has received growing attention in research as well as in working life. In the present thesis job insecurity is considered a subjective phenomenon that is best understood from a stress perspective. The focus is on the individual's appraisal and interpretation of the situation along with the interaction that occurs between the individual and the situational characteristics in the shaping of this appraisal. The overall purpose of the thesis is to shed light on the concept of job insecurity from the perspective of transactional theories of stress.

Four specific objectives were formulated. The first objective was to differentiate job insecurity from objective indicators of uncertainty in terms of outcomes. The second objective was to examine the extent to which different background variables could explain job insecurity experiences. The third objective was to establish, using meta-analytic techniques, to what extent job insecurity has negative outcomes for the individual and the organization. Finally, the fourth objective was to investigate the influence of personality characteristics in the relation between job insecurity and stress reactions. Using data from four European countries, the results of the first study indicate that the individual's perception of job insecurity was more detrimental to well-being than objective uncertainty. The second study utilized the same data base as the first study and showed that most demographics were weak or inconsistent predictors of job insecurity, but also that temporary employment and blue-collar work were associated with higher levels of job insecurity. The results of the meta-analysis also confirm that job insecurity is indeed associated with negative outcomes for individuals and organizations. The last study showed that the influence of job insecurity cannot be attributed to the disposition of the person experiencing job insecurity. Future research should focus on factors that help the individual in dealing with this stressor.

Typ och Nyckelord: Dissertation job insecurity, transactional stress theories, appraisal

Referens: Näswall, K. (2004). Uncertainty in the Workplace: Indications from Swedish Research. Paper presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.

Abstract: Job insecurity has severe consequences, such as strain reactions, dissatisfaction, and turnover intention, but not for all individuals who experience it. Also, the experience of job insecurity varies among individuals in similar objective situations. There is no clear answer to the questions: Who is more likely to experience job insecurity, and who suffers the consequences? Data from several studies attempting to answer these questions is used to shed light on an issue of increasing importance in modern working life.

Typ och Nyckelord: Proceedings job insecurity, strain, moderating variables, ICP 2004

- Referens:** [Näswall, K. \(2004\).](#) The buffering effect of employability on job insecurity outcomes. Poster presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.
- Abstract:** The demands of flexibility placed on organizations during the last decades have brought on unpredictable conditions and job insecurity for employees. The stressor job insecurity gives rise to stress experiences and has been linked to several different negative outcomes, such as negative work attitudes and adverse health symptoms. Data from white-collar workers were collected to investigate the hypothesis that those perceiving themselves as more attractive to other employers in the labor market react less negatively to job insecurity, by testing the buffering effect of employability on the relation between job insecurity and negative outcomes.
- Typ och Nyckelord:** Proceedings job insecurity, employability, moderator, ICP 2004
- Referens:** [Näswall, K. \(2004\).](#) Something for the pain? The moderating effects of two types of social support on three strain outcomes related to job insecurity. Paper presented at the *6th Conference of the European Academy of Occupational Health Psychology*, Oporto, Portugal, 24-26 November 2004.
- Abstract:** The demands of more flexibility placed on organizations during the last decades have brought on unpredictable conditions and job insecurity for employees. Job insecurity can be defined as the worry a person feels about the future of her employment situation. The experience of job insecurity results from the individual appraising a situation as posing demands that exceed her resources to counteract them. Job insecurity is thus expected to give rise to stress experiences and has been linked to several different negative outcomes, such as negative work attitudes and adverse health symptoms. Because of these negative consequences it is important to investigate job insecurity and how its effects can be buffered. Certain factors have been proposed to moderate the relation between job insecurity and strain. One such factor is social support, which may assist the individual in her efforts to reduce the uncertainty, or facilitate coping with uncertainty perceptions. The present study investigates how work-based and family-based support, moderate the relation between job insecurity and well-being. The present study tested the moderating effect of two types of social support, work-based and family-based support on three strain outcomes, namely mental health complaints, somatic health complaints, and carry-over effects. Questionnaire data were collected at a large Swedish retail organization undergoing major restructuring (N=555). Multiple hierarchical regression analyses were used to test the main effect of social support and job insecurity on strain outcomes, as well as for testing the interactive effect of job insecurity and social support on the strain outcomes. The results showed that after controlling for demographic variables there indeed were main effects of both job insecurity and social support on the outcome variables. There was also an indication that work-based support served as a moderator of the relationship between job insecurity and mental health complaints, and that family-based support moderated the relationship between job insecurity and somatic complaints as well as carry-over effects. Even if the study design is cross-sectional, there is theoretical and empirical support for the suggested direction of relationships. The results are consistent with previous research pointing to the negative effects of job insecurity. The results also indicate that social support may have important positive main effects for employee well-being. There is also some indication that social support may alleviate the negative effects of job insecurity.
- Typ och Nyckelord:** Proceedings job insecurity, social support, well-being
- Referens:** [Näswall, K. \(2004\).](#) Catch me if I fall? The moderating effects of work-based family-based support on the consequences of job insecurity. Paper presented at the *2nd South African Work Wellness Conference*, Potchefstroom, South Africa, 24-26 March 2004.
- Abstract:** The demands of more flexibility placed on organizations during the last decades have brought on unpredictable conditions and job insecurity for employees. Job insecurity can be defined as the worry a person feels about the future of her or his employment situation. The experience of job insecurity is the result of the individual appraising the situation as posing demands that exceeds her or his resources to counteract them. Job insecurity thus gives rise to stress experiences and has been linked to several different negative outcomes, such as negative work attitudes and adverse health symptoms. Because of these negative consequences it is important to look at how the effects of job insecurity can be buffered. Certain factors have been proposed to moderate the relation between job insecurity and negative well-being, because of their function as coping resources. One such coping resource is social support. The present study investigates how work-based and family-based support moderate the relation between job insecurity and well-being. Questionnaire data were collected at a large Swedish public administration undergoing major restructuring. The results show that after controlling for demographic variables there indeed were main effects of both job insecurity and social support on both outcome variables, and that the outcomes of job insecurity were less negative among those receiving family based support to a higher degree.
- Typ och Nyckelord:** Proceedings job insecurity, social support, well-being
- Referens:** [Näswall, K., Sverke, M., & Hellgren, J. \(in press\).](#) Stand by me: The moderating effects of work-based and family-based social support on the relation between job insecurity and strain. *South African Journal of Industrial Relations*.
- Abstract:** The increasing demands of flexibility placed on organizations have brought on unpredictable conditions and job insecurity for employees. Numerous studies suggest that job insecurity gives rise to stress experiences and is linked to various negative outcomes, such as impaired work attitudes and adverse health symptoms. However, less is known about how these negative consequences can be buffered. The present study investigates whether work-based and family-based support moderate the relation between job insecurity and subsequent strain. Questionnaire data were collected at two measurement occasions at a large Swedish retail organization undergoing major restructuring. The results show that after controlling for demographic variables and Time 1 levels there were main effects of job insecurity on two of the three outcome variables. Family-based support was found to moderate the negative effect of job insecurity on mental health complaints and somatic complaints, whereas no moderating effect of work-based support was found. The results suggest that employees can benefit from their support network during times of turbulence, and that the utilization of such networks should be encouraged.
- Typ och Nyckelord:** Journal job insecurity, family-based support, work-based support
- Referens:** [Näswall, K., Sverke, M., & Hellgren, J. \(in press\).](#) The moderating role of personality characteristics on the relation between job insecurity and strain. *Work & Stress*.

Abstract: The experience of job insecurity has been linked to several different outcomes, such as negative attitudes toward work and the organization, turnover intention, as well as health complaints. However, since the strength of these effects have been found to vary across studies, it is vital to identify factors that could influence the relations. Despite a great amount of research interest in job insecurity and its consequences, few studies have investigated how personality moderates the relation between job insecurity and strain. The present study examines the moderating role of three personality characteristics (negative affectivity, positive affectivity, and external locus of control) on the relation between job insecurity and outcomes (mental health complaints, job dissatisfaction, and job-induced tension). Data from 400 nurses at a Swedish acute care hospital (response rate 71 %; 91 % women, age 20–68) showed that both job insecurity and personality were related to strain. Also, the data indicated some buffering effect of personality. Despite the gender bias of the sample, the study provides additional support for the notion that job insecurity affects strain even after controlling for individual characteristics. The study also expands the literature on job insecurity by pointing out the influence of personality characteristics on the relation between stressors and strain.

Typ och Nyckelord: Journal job insecurity, job stress, nurses

Referens: Persson, J., Bringlöv, E., Nilsson, L.-G., & Nyberg, L. (2004). The memory enhancing effects of ginseng and ginkgo biloba in healthy volunteers. *Psychopharmacology*, 172, 430-434.

Abstract: The use of herbal remedies, such as Ginkgo biloba and Ginseng, for improving cognitive performance has become increasingly popular during recent years. Several previous studies have indicated that administration of Ginkgo biloba and Ginseng may improve aspects of learning and memory in healthy volunteers. These results, however, are generally not supported by well-controlled clinical studies. Also, positive results have often been reported from studies investigating effects related to short-term, chronic administration of the extract. Nonetheless, both Ginkgo biloba and Ginseng are marketed as having the capacity to enhance cognitive functions, such as memory and learning, in the long-term. This study aimed at investigating whether the use of Ginkgo biloba and Ginseng for a long period of time has positive effects on performance on learning and memory. Community-dwelling volunteers (N=3500) from The Betula prospective cohort study: Memory, health, and aging were included in the study. Results: It was found that the use of neither Ginkgo biloba (N=40) nor Ginseng (N=86) was associated with enhanced memory performance in any of the eight memory tests examined, compared to control groups either using or not using nutritional supplements. These findings indicate that use of Ginkgo biloba or Ginseng does not provide any quantifiable beneficial effects on memory performance in the long-term in healthy adult volunteers.

Typ och Nyckelord: Journal memory, herbal remedies, cognition

Referens: Posse, M., Hällström, T., & Backenroth-Ohsako, G. (2004). Psychosocial predictors of alexithymia examined over a 12-month period in a non-patient female population. *European Journal of Psychiatry*, 18 (3), 133-141.

Abstract: Conclusions in previous studies on the stability of alexithymia and its relation to anxiety and depression have been drawn without differentiating the concept of relative stability regarding individual differences from the concept of stability in absolute scores. Furthermore previous studies have not explicitly modeled absolute change in alexithymia scores as a function of absolute change in scores on psychosocial symptom severity.

Against this background, we wanted to examine the absolute stability of alexithymia over a 1-year period in a non-patient population. We also wanted to investigate whether psychosocial variables explain changes in alexithymia over time.

In a 12-month follow-up study, changes in the level of alexithymia, feelings of well-being, somatic anxiety, depressive symptoms, and social disability were examined in a sample of nursery workers. Two hundred and fifty-three subjects were reported for the investigation. Our findings show that although absolute changes in alexithymia may be observed, a high degree of relative stability can also be observed. Changes in alexithymia were found to be independent of changes in symptom severity and demographic characteristics.

The results may indicate that alexithymia is not merely a direct concomitant of psychosocial symptom severity or the result of a common cause, that is also responsible for the onset of psychosocial symptoms.

Typ och Nyckelord: Journal alexithymia, longitudinal, well-being

Referens: Preisler, G. (in press). Development of communication in deafblind children. *Scandinavian Journal of Disability Research*.

Abstract: The aim of the study was to describe the development of communication between deafblind children and their parents in real life settings using video registrations. Longitudinal case studies of six children suffering from severe visual impairment in combination with profound hearing impairment are presented. Four of the six children also have additional functional disabilities affecting their motor and cognitive development. At the time of the first video recording the children were between 6 months and 3;9 years old. They were observed for a period of two years. Detailed analyses of the video recordings showed that all of the children in the study could communicate with their parents and the parents with their child. Even if the expressions varied and sometimes were difficult to interpret, the early development of communication followed the same patterns as that for "normal" children, from interest in social games with the caregiver to interest in the physical environment and thereafter an intent to share their experiences with another person.

Typ och Nyckelord: Journal communication, deafblind, children

Referens: Preisler, G., Tvingstedt, A.-L., & Ahlström, M. (2004). "Man får ha riktigt mycket tålamod. Intervjuer med barn med cochlea implantat. ["You need a lot of patience". Interviews with children with cochlear implants.] Rapport, nr 117. Stockholm University: Department of Psychology.

Abstract: Within the framework of a longitudinal study of deaf children with cochlear implants, eleven children with cochlear implants were interviewed. The aim was to take part of their 5 - 7,5 years experience of using a cochlear implant. Six children attended special schools for the deaf, five regular classes. All but one used their implant daily. The children appreciated that the implant enabled them to perceive sounds in the environment. Some of the children in regular classes could take part in one-to-one conversations with the teachers but had difficulties following teaching and discussions. This was in accordance with what the children's parents and teachers had maintained. Peer interaction was said to be best when other children commanded at least some

signs.

Typ och Nyckelord: Report cochlear implants, longitudinal

Referens: Ruchkin, V.V., Kuposov, R.A., af Klinteberg, B., Orelund, L., & Grigorenko, E.L. (in press). Platelet MAO-B, personality, and psychopathology. *Journal of Abnormal Psychology*.

Abstract: The article investigates the relationships between platelet monoamine oxidase (MAO-B) activity, personality, and psychopathology. The relationships between MAO-B, the personality trait of novelty seeking, and psychopathology (DSM-IV diagnoses) were assessed in 178 incarcerated male juvenile delinquents. Both internalizing and externalizing psychopathology were negatively related to MAO-B activity, even after controlling for smoking. In the final reduced model, novelty seeking fully mediated the relationships between MAO B and externalizing, but not internalizing, psychopathology. It was hypothesized that low platelet MAO B activity does not directly predispose individuals to psychopathology, but is related to specific personality traits, which in turn represent a vulnerability factor for psychopathology. Future studies should help clarify the nature of the relationships between personality, biological markers, and psychopathology.

Supported by: The Swedish Medical Research Council, the Soderstrom-Koenig Fund, the Royal Swedish Academy of Sciences, and Successful Intelligence.

Typ och Nyckelord: Journal monoamine oxidase (MAO), juvenile delinquents, personality, psychopathology

Referens: Runeson, R., Norbäck, D., af Klinteberg, B., & Edling, C. (2004). The influence of personality, measured by the Karolinska Scales of Personality (KSP), on symptoms among subjects in suspected sick buildings. *Indoor Air, 14*, 394-404.

Abstract: The aim was to study possible relationships between personality traits as measured by the Karolinska Scales of Personality (KSP), a self-report personality inventory based on psychobiological theory, and medical symptoms, in subjects with previous work history in suspected sick buildings. The study comprised 195 participants from 19 consecutive cases of suspected sick buildings, initially collected in 1988-92. In 1998-99, the KSP inventory and a symptoms questionnaire were administered in a postal follow-up. There were 16 questions on symptoms, including symptoms from the eyes, nose, throat, skin, and headache, tiredness, and a symptom score (SC), ranging from 0 to 16, was calculated. The questionnaire also requested information on personal factors, including age, gender, smoking habits, allergy and diagnosed asthma. The KSP ratings in the study group did not differ from the mean personality scale norm scores, calculated from an external reference group. Females had higher scores for somatic anxiety ($P < 0.01$), muscular tension ($P < 0.001$), psychic anxiety ($P < 0.01$), psychastenia ($P < 0.05$), indirect aggression ($P < 0.05$), and guilt ($P < 0.05$), while males scored higher on detachment ($P < 0.001$). Subjects with higher SC were found to display higher degree of somatic anxiety ($P < 0.001$), muscular tension ($P < 0.001$), psychic anxiety ($P < 0.001$), psychastenia ($P < 0.001$), inhibition of aggression ($P < 0.05$), detachment ($P < 0.05$), suspicion ($P < 0.01$), indirect aggression ($P < 0.01$), and verbal aggression ($P < 0.05$). In addition, ocular, respiratory, dermal, and systemic symptoms (headache and tiredness) were significantly related to anxiety- and aggressivity-related scales. There were associations between personality scales and change of symptom scores (SC) during the 9-year period. The associations between KSP personality traits and symptoms were more pronounced in females. In conclusion, there are gender differences in personality and SBS symptoms. Personality may play a role in the occurrence of symptoms studied in indoor environmental epidemiology. Our results support a view that measurement of personality could be of value in future studies and vulnerability to environmental stress.

Typ och Nyckelord: Journal anxiety, aggression, fatigue, headache, personality, sick building syndrome

Referens: Rust, A., & Affenzeller, J. (2004). CALM – Strategic planning of future noise research in Europe. In M. Brothanek & O. Jiricek (Eds.), *Inter-Noise 2004* (Paper 277). Prague, Czech Acoustical Society. [Available on CD] [B. Berglund is CALM partner]

Abstract: The thematic EU network CALM1 acting from Oct. 2001 to Oct. 2004 aims at the definition of a strategy plan for future noise research in Europe. It shall promote the EU-wide reduction of environmental noise and thereby improve the quality of life for the citizens of Europe within the next twenty years. The CALM strategy paper issued in 2002 gives a first overview of the noise research priorities for the future. Meanwhile, the further activities of the network were focused on deepening and detailing the research needs and priorities in all relevant fields of environmental noise covering both noise emission and noise perception. The most important aspects of noise emission comprise traffic noise from road, rail and aircraft and noise from outdoor equipment. In order to put the outcomes of the network on a broad basis, special workshops with stakeholders from universities, research institutions and industry were held and provided a wide range of essential inputs. This paper describes the background as well as the overall status and results of the network with special emphasis on the latest findings about the research requirements in the fields of road traffic and railway noise.

Typ och Nyckelord: Book (chapter) future noise research, EU, traffic noise

Referens: Rönnlund, M., & Nilsson, L.-G. (in press). Adult life-span patterns in WAIS block design performance: Cross-sectional versus longitudinal age gradients and relations to demographic predictors. *Intelligence*.

Abstract: Aging pattern in WAIS-R Block Design test (BDT) performance were examined cross-sectionally and longitudinally. One sample (35-80 years, $n = 1000$) was assessed in 1988-1990 and five years later (836 returned). An independent cohort-matched sample ($n = 974$) was included at Time 2 to estimate the magnitude of practice effects. Relations between BDT performance, gender, and education were also examined. The cross-sectional analyses indicated a gradual age-related deterioration from 35 to 55, even when minor practice effects were adjusted for. Decline was apparent for the older cohorts, regardless of estimation method. Education-adjusted cross-sectional differences showed a similar pattern. A minor age- and time-invariant gender difference favoring males was observed. Education predicted some time-related change, such as higher education was associated with lesser decline. Collectively, the results demonstrate the need to control for cohort and retest effects in cross-sectional and longitudinal studies, and reveal interesting relations between BDT performance and demographic variables.

Typ och Nyckelord: Journal block design, aging, cross-sectional, longitudinal

- Referens:** Rönnlund, M., Nyberg, L., Bäckman, L., & Nilsson, L.-G. (in press). Stability, improvement, and decline in adult life-span development of declarative memory: Cross-sectional and longitudinal data from a population-based sample. *Psychology and Aging*.
- Abstract:** Five-year changes in episodic and semantic memory performance were examined in a sample of 829 participants from 10 age cohorts (35-80 years). A second, cohort-matched, sample (n = 959) was assessed at Time 2 to control for practice effects. Longitudinal changes indicated improved episodic memory performance for the younger cohorts, in contrast with the gradual age-related decrements depicted by cross-sectional data. For groups 60 years or older performance declined substantially. Practice effects were observed for the episodic measure, but even when these were adjusted for results were consistent with a late onset (> 60 years) of decline. Semantic memory showed minor improvements until age 55, with less steep decrements in old age as compared with episodic memory. Cohort differences in educational attainment appear to account for discrepancies between cross-sectional and practice-adjusted longitudinal data, both for episodic and semantic memory. Collectively, the results show that the age-trajectories for episodic and semantic differ, and underscore the need to control for cohort and retest effects in cross-sectional and longitudinal studies, respectively.
- Typ och Nyckelord:** Journal episodic memory, semantic memory, practice effects
- Referens:** Schenkman, B.N. (2004). Aesthetics aspects on web design. In *Interactive Society with Information Commons*. Tokyo: Keio University. [Invited paper presented at Interactive Society with Information Commons, Keio University, Tokyo, Japan, 22 – 23 January 2004.]
- Abstract:** Understanding aesthetics in psychological terms is one domain of empirical aesthetics. With the use of the computer, aesthetics has taken on a new importance. Traditionally the emphasis of Human Factors and of Human computer Interaction (HCI) has been on productivity, safety or health. For a web page, one has e.g. investigated how long time a user needs in order to find a certain item. The minimization of time would increase the productivity of the user. For a few years a new emphasis has been seen in both Human Factors and HCI on affective values, such as aesthetics, user satisfaction, hedonic values or flow. For consumer products the aesthetic aspects of form, meaning, function and the hedonic aspect of flow are the important factors. A satisfactory product should probably have high values on all factors. There are a number of small details that may be seen as necessary conditions, albeit not sufficient, for an appealing computer or web presentation. Without fulfilling these conditions, no aesthetic perception will be possible. The total impression is e.g. dependent on the fonts, the consistency and colors used. Technical factors such as downloading speed will affect the impression of the user. Overview is also an important general aspect. The industrial research and development will use standards, heuristics and traditions for aesthetic considerations. User studies are recommended. Self reports and interviews are important sources. One should note that the designer or the programmer is not equal to the user or the consumer. Academic research, and also applied industrial research, is helped by using psychophysical methods, scales, the semantic differential, pair wise comparisons and physiological measures such as eye movements or EEG. The new kinds of mobile computers, including mobile phones, will probably put a large emphasis on design features. These devices are often seen as personal accessories, expressing part of the user's personality. When these devices use web pages, their format has to be adapted to the capacities of the devices. For a successful aesthetic design of future products and services, one needs to consider the contributions of engineering, design and psychology.
- Typ och Nyckelord:** Proceedings aesthetics, web design, user studies
- Referens:** Schenkman, B.N., & Brunström, K. (2004). Design principles of night vision systems in cars: a simulation study. In E.F. Fallon & N. Karwowski (Eds.), *The Ninth International Conference on Human Aspects of Advanced Manufacturing: Agility and Hybrid Automation* (pp. 620-630). Galway, Ireland: The Department of Industrial Engineering, National University of Ireland, Galway.
- Abstract:** Design principles for an infrared night vision system in cars were studied in a stationary car simulator. Twenty participants drove for about 45 minutes on a rural route in night conditions where four objects on or next to the road were placed. When the camera was situated on the grill of the car and the scale was true-size, i.e. 1:1, the time to collision was the longest. Changing the scale to 1:2, a wide-angle view, decreased this time. When the camera was situated on the roof of the car, the scale change instead resulted in an increase of the time to collision. The results may be explained by differences between the optic arrays presented to the drivers and to motion adaptation. Principal component analysis indicated that the most important component was related to obstacle detection and that speed and lateral position of the car were independent. A camera for a night vision system should preferably be placed at the level of the car grill and the presentation scale should be 1:1.
- Typ och Nyckelord:** Book (chapter) design principles, night vision systems, simulation
- Referens:** Schmidt, R., Launer, L.J., Nilsson, L.-G., Pajak, A., Sans, S., Berger, K., Breteler, M.M., de Ridder, M., Dufoil, C., Giampaoli, S., & Hofman, A. (2004). MRI of the brain in diabetes mellitus: the cardiovascular determinants of dementia (CASCADE) study. *Diabetes*, 53, 687-692.
- Abstract:** Diabetics are at increased risk for stroke, but little is known about the presence of other brain lesions. We studied the association of MRI-detected brain lesions to diabetes in 1,252 individuals aged 65-75 years who were randomly selected from eight European populations registries or defined working populations. All scans were centrally read for brain abnormalities including infarcts, white matter lesions and atrophy. We used a 3-point scale to rate periventricular white matter lesions, volume of subcortical lesions was calculated according to their number and size. Subjective grading of cortical atrophy by lobe and summation of the lobar grades resulted in a total cortical atrophy score. The mean of three linear measurements of the ventricular diameter relative to the intracranial cavity defined the severity of subcortical atrophy. After adjustment for possible confounders, diabetes was associated with cortical brain atrophy but not with any focal brain lesions or subcortical atrophy. There existed a strong interaction of diabetes and hypertension, such that the association between diabetes and cortical atrophy existed only in hypertensive but not in the normotensive participants. Cognitive and pathological data are needed to determine the clinical significance of these findings, as well as to understand the mechanisms underlying these associations.
- Typ och Nyckelord:** Journal adult diabetes mellitus, brain, complications

- Referens:** Selenius, H., & Dåderman, A.M. (2004). Neuropsykiatriska funktionshinder [Neuropsychiatric functional disabilities]. I L. Lidberg & N. Wiklund (Eds.), *Svensk rättspsykiatri: Psykisk störning, brott och påföljd [Swedish forensic psychiatry: Mental disorder, crime and consequence]* (pp. 507-529). Lund: Studentlitteratur.
- Abstract:** The Swedish forensic psychiatric population is characterized by a high prevalence of dyslexia and ADHD. Despite that, these neuropsychiatric disabilities are seldom considered in a forensic psychiatric investigation. Two dyslexic men, who underwent a forensic psychiatric investigation, are described in order to illustrate the relationship between dyslexia and violent crimes. Furthermore, difficulties in ADHD and Asperger's syndrome are presented and related to violence and criminality. In the end of the chapter relevant legal issues concerning support and service for persons with neuropsychiatric functional disabilities are shortly brought up.
- Typ och Nyckelord:** Book (chapter) dyslexia, ADHD, forensic psychiatry
- Referens:** Shamoun, S. (2004). *Post-decision Processes: Consolidation and value conflicts in decision making*. Stockholm: Stockholm University, Department of Psychology.
- Abstract:** The studies in the present thesis focus on post-decision processes using the theoretical framework of Differentiation and Consolidation Theory. This thesis consists of three studies. In all these studies, pre-decision evaluations are compared with post-decision evaluations in order to explore differences in evaluations of decision alternatives before and after a decision. The main aim of the studies was to describe and gain a clearer and better understanding of how people re-evaluate information, following a decision for which they have experienced the decision and outcome. The studies examine how the attractiveness evaluations of important attributes are restructured from the pre-decision to the post-decision phase; particularly restructuring processes of value conflicts. Value conflict attributes are those in which information speaks against the chosen alternative in a decision. The first study investigates an important real-life decision and illustrates different post-decision (consolidation) processes following the decision. The second study tests whether decisions with value conflicts follow the same consolidation (post-decision restructuring) processes when the conflict is controlled experimentally, as in earlier studies of less controlled real-life decisions. The third study investigates consolidation and value conflicts in decisions in which the consequences are controlled and of different magnitudes.
- The studies in the present thesis have shown how attractiveness restructuring of attributes in conflict occurs in the post-decision phase. Results from the three studies indicated that attractiveness restructuring of attributes in conflict was stronger for important real-life decisions (Study 1) and in situations in which real consequences followed a decision (Study 3) than in more controlled, hypothetical decision situations (Study 2).
- Finally, some proposals for future research are suggested, including studies of the effects of outcomes and consequences on consolidation of prior decisions and how a decision maker's involvement affects his or her pre- and post-decision processes.
- Typ och Nyckelord:** Dissertation decision making, post-decision processes, value conflict
- Referens:** Sharafi, P., Hedman, L., & Montgomery, H. (in press). Using information technology: Engagement modes, flow experience, and personality orientations. *Computers in Human Behavior*.
- Abstract:** The Engagement Mode (EM) model describes how a subject (e.g., an IT user) engages in an activity with an object (e.g., and IT application) in a certain mode. The model specifies five engagement modes: (Enjoying/Acceptance, Ambition/Curiosity, Avoidance/Hesitation, Frustration/Anxiety, and Efficiency/Productivity), which are characterized on three dimensions (evaluation of object, locus of control between subject and object, and extrinsic or intrinsic focus of motivation). Using questionnaire data from 290 participants, we extended previous empirical support for the model as well as describe the model's relationship to flow experience. In addition, it was found that autonomy, controlled and impersonal orientation (Deci and Ryan, 1985a) in conjunction with socio-demographic variables differentiated among specific engagement modes and flow experience. We conclude that the EM model, flow experience, and causality orientation theories provide a uniform framework for understanding how people adapt to information technology.
- Typ och Nyckelord:** Journal information technology, engagement mode, personality orientation
- Referens:** Sigrell, B. (2004). En grandios ensamhet. I A.-M. Appelberg, M. Sundén, M. Winberg Salomonsson, B. Sigrell, & L. Teurnell. *Narcissism*. Svenska psykoanalytiska föreningens skriftserie nr 7.
- Abstract:**
- Typ och Nyckelord:** Book (chapter) narcissism
- Referens:** Sigrell, B., Sundblad, G., & Rönnås, P.-A. (2004). To what extent do students generate learning issues that correspond to pre-set faculty objectives? *Medical Teacher*, 26:4, 378-381.
- Abstract:** The aim of the study was to investigate whether the content of the problems in a problem-based learning programme directs the students to the faculty's educational objectives. Sixteen students in two study groups in a three-year programme for training in psychotherapy generated 228 learning issues. The tutors reported the issues and the discussion themes. The learning issues and themes were compared with the faculty objectives. The correspondence between faculty objectives and learning issues/themes was 79% in the study groups, which showed that the problems presented direct the students to the faculty goals. The result also shows that it is important to study not only the learning issues but also what students talk about while preparing the reports in their group.
- Typ och Nyckelord:** Journal problembased learning, faculty objectives, learning issues
- Referens:** Sikström, S., & Nilsson, L.-G. (2004). Using the cue elimination technique to derive an equation between performances in episodic tests. *European Journal of Cognitive Psychology*, 16, 481-510.
- Abstract:** Lawful equations describing relations between empirical measurable variables, that are free of fitted parameters, and that can be derived from simple assumptions, are rare in psychology. However, this paper proposes one such equation that describes the relation between the performances on four different explicit

episodic memory tests: free recall, cued recall, recognition, and cued recognition. The performance on each test is determined by the strength of three different and independent cues: the event cue, the context cue, and the target cue. The Cue Elimination Technique (CET) is introduced where cues are eliminated so that equations can be rewritten so that performance on three tests can be used to predict performance on the fourth test. Results from five conditions show a non-significant deviation between the predicted and the empirical probabilities of retrieval. Two estimates of each cue strength, which are based on different data sets, can be made so that the cue strengths can be empirically validated. Manipulations of psychological variables produce meaningful effect on the cue strengths so that CET can be used to dissociate cue strengths in episodic memory.

Typ och Nyckelord: Journal recall, recognition, lawful

Referens: Skånér, Y., Backlund, L., [Montgomery, H.](#), Bring, J., & Strender, L.E. (in press). General practitioners' reasoning when considering the diagnosis heart failure: a think-aloud study. *BMC Family Practice* 2005, 6:4.

Abstract: Diagnosing chronic heart failure is difficult, especially in mild cases or early in the course of the disease, and guidelines are not easily implemented in everyday practice. The aim of this study was to investigate general practitioners' diagnostic reasoning about patients with suspected chronic heart failure in comparison with recommendations in European guidelines. The think-aloud technique was used. Fifteen general practitioners reasoned about six case vignettes, representing authentic patients with suspected chronic heart failure. Information about each case was added successively in five steps. The general practitioners said their thoughts aloud while reasoning about the probability of the patient having chronic heart failure, and tried to decide about the diagnosis. Arguments for and against chronic heart failure were analysed and compared to recommendations in guidelines. Information about ejection fraction was the most frequent diagnostic argument, followed by information about cardiac enlargement or pulmonary congestion on chest X-ray. However, in a third of the judgement situations, no information about echocardiography was utilized in the general practitioners' diagnostic reasoning. Only three of the 15 doctors used information about a normal electrocardiography as an argument against chronic heart failure. Information about other cardio-vascular diseases was frequently used as a diagnostic argument. It was concluded that the clinical information was not utilized to the extent recommended in guidelines. Some implications of our study are that 1) general practitioners need more information about how to utilize echocardiography when diagnosing chronic heart failure, 2) guidelines ought to give more importance to information about other cardio-vascular diseases in the diagnostic reasoning, and 3) guidelines ought to treat the topic of diastolic heart failure in a clearer way.

Typ och Nyckelord: Journal medical diagnosis, guide-lines, reasoning

Referens: Stansfeld, S., [Berglund, B.](#), Fischer, P., Öhrström, E., & López Barrio, I. (2004). *RANCH: Road Traffic and Aircraft Noise Exposure and Children's Cognition and Health: Exposure-Effect Relationships and Combined Effects*. London: Queen Mary University of London, RANCH Final Report.

Abstract: The RANCH project is the largest study of noise and children's health to date. It examines exposure-effect relationships for over 2000 children at 89 schools around Heathrow, Schiphol and Barajas airports as well as for 160 children in traffic noise exposed residential areas in Sweden. Soundscape studies in the UK and Sweden examined all the sounds in the environment together and their relevance for the health outcomes. On the whole, similar effects of noise on school performance and annoyance were found across the Netherlands, Spain and the UK. Aircraft noise has special causal effects on children's school performance and health. The functions most adversely affected by noise are reading, recognition memory and annoyance. It is not known if the effects are temporary or permanent. Road traffic noise is associated with annoyance, but did not affect reading. An unexpected association was found between road traffic noise and recall memory, needs further investigation. Opportunities for psychological restoration and restorative environments improve children's well-being and potentially protect against adverse reaction to noise. Action is recommended at a European level to provide healthy educational environments for children attending high noise exposed schools.

Typ och Nyckelord: Report community noise, health, school performance

Referens: [Stillström, H.](#) (2004). Content, context and comparison - Some differences in the stereotypes of male and female managers. *6th European Social Cognition Network Meeting*, Lissabon, 8th-11th September, 2004.

Abstract: The lack of females in corporate management continues to render several different explanations. A better understanding of this phenomenon is sought in the present project by studying people's cognition in a social context, presumably heavily influenced by group categorisation, social identity, and social reality. A first step in this process is to investigate the stereotype content of male and female managers. In order to elicit the cultural stereotypes and minimise the concern of social desirability, participants were instructed to describe the typical view of male and female managers. They were also asked to write down their own views of good and bad managers. A data driven categorisation process resulted in a coding scheme comprising of five main categories, three of which have a corresponding opposite. The main categories are: 1. Communication and openness to change, 2. Ability to convey responsibility, interest, support and motivation, and 3. Professionalism, competence and experience with their corresponding negatives. The other two main categories comprise of the different female and male stereotypical items that did not fit within the positive-negative dimensions. Further analyses will be made of the stereotypes of males and females, and how these are situated in the positive-negative dimensions. It is also of interest to investigate whether particular items are typically mentioned concurrently, as suggested by previous research. Ambivalence in the stereotypes of female managers was found. The stereotypes of male managers appear to be more or less equally unflattering to the female stereotypes, but described in a more consistent way. Explanations of the findings include role incongruity and the tendency for subordinates to stereotype less and pay more attention to individuating information about their superiors than vice versa.

Typ och Nyckelord: Proceedings stereotypes, ambivalent sexism, role incongruity

Referens: Sundström, A., Marklund, P., [Nilsson, L.-G.](#), Cruets, M., Adolfsson, R., Van Broeckhoven, C., & Nyberg, L. (2004). ApoE influences on neuropsychological function after mild head injury: Within-person comparisons. *Neurology*, 62, 1963-1966.

Abstract: The objective of this study was to examine the relationship between neuropsychological outcome following mild head injury (MHI) and APOE genotype. Data from a population-based longitudinal study (N=3500) was used to

identify 34 adults who suffered MHI during the course of the study. Their pre-injury and post-injury performances on a battery of 9 neuropsychological tests were compared within person, and the post-injury performance was compared to that of age and gender-matched controls. The within-person comparisons showed that participants with at least one APOE ϵ 4 allele (n=11) had a significantly decreased post-injury performance on three of the tests, whereas the post-injury performance for APOE ϵ 4-negative participants (n=23) was unchanged. There was no significant difference in post-injury performance between participants with/without the ϵ 4 allele, and neither group was impaired relative to controls. It was concluded that APOE genotype may influence the outcome following a MHI. Pre-post injury within-person comparisons seem more sensitive than control-group comparisons for detecting injury-related effects.

Typ och Nyckelord: Journal head injury, Apolipoprotein E, memory

Referens: [Svenson, O.](#) (in press). Pre- and post-decision construction of preferences: Differentiation and consolidation. In Lichtenstein, S. & Slovic, P. *The Construction of Preference*. Cambridge University Press.

Abstract: This article starts with a description of decision research in the past as a development towards an understanding of decision making as a process in which a decision maker's decision rules and problem representations interact in the construction of preferences leading to a final choice. The Differentiation and Consolidation Theory (Svenson, 1992) describes pre- and post-decision constructions of preferences and provides a framework for a discussion of process studies and regularities in human decision processes. Recent findings about pre- and post-decision processes are presented followed by some methodological considerations for future decision research. For example, it is argued that within subjects designs should be used whenever possible and that interindividual differences concerning importance of attributes must be accommodated before aggregating group data.

Typ och Nyckelord: Book (chapter) decision, Differentiation and Consolidation Theory

Referens: [Svenson, O.](#) (in press). Motivation, decision theory and human decision making. In S. Kreitler & A. Renninger (Eds.), *Cognition and Motivation: Forging an Interdisciplinary Perspective*. Cambridge University Press.

Abstract: There are two main approaches to study human decision making. Process approaches focus on the decision process, how the information is interpreted and reinterpreted, what decision rules are used to reach a decision etc. Structural approaches do not follow the intervening decision process, but attempt to predict choices based on parameters of the decision problems. In this chapter, what is here called, fundamental motivation (the result of thirst, need for social closeness, competition etc) motivates a particular choice. Process motivation as used in this chapter covers how a decision maker is motivated to process the available information to reach a decision (how to ignore, reinterpret information, what decision rules to apply to reach a final decision that is satisfactory with respect to both process motivation and fundamental motivation etc). Since the 1950ies process approaches of decision research have been quite explicit about process motivation. Standard structural approaches were silent about motivation for along time until the 1990ies, when an interest in emotion, decision making and individual differences, at least implicitly, brought different fundamental motivations into the field. However, motivation has been neglected in most decision research, and in particular in mainstream structural approaches.

Typ och Nyckelord: Book (chapter) decision theory, motivation

Referens: [Sverke, M.](#) (2004). Proactive vs. Reactive Implementation of Downsizing in Swedish Hospitals: Employee Perceptions of Change and their Effects on Work Attitudes and Well-being. Paper presented at the *2nd South African Work Wellness Conference*, Potchefstroom, South Africa, 24-26 March 2004.

Abstract: The accelerating rate of organizational change in modern working life has gradually affected the health-care organizations in their strivings for economic rationalization and improved effectiveness. However, even though the consequences of organizational restructuring and downsizing are well-documented, less is known about how such negative effects may be reduced. One important aspect in this context concerns how organizational change is implemented. This study provides an opportunity to evaluate different strategies for the implementation of downsizing by comparing two Swedish hospitals with different ownership. One of the hospitals was, as the first hospital in Sweden, transformed into a non-profit public stock company in 1994 and could, by virtue of its independent role, implement downsizing proactively, use its own means to increase productivity, and involve the staff in the change process. Questionnaire data from the nursing staff of the stock company were supplemented with comparison data from a hospital run as a traditional public administration unit which had to implement downsizing reactively according to the decisions made by the health care authorities. In general, the results show that employees at the hospital that was run as a non-profit company had more positive perceptions of the restructuring as compared to their colleagues at the public administration unit. At both hospitals, perceptions of change and downsizing-related characteristics were important predictors of employee work attitudes and well-being. These findings provide insights concerning the importance of a long-term strategic implementation of organizational change.

Typ och Nyckelord: Proceedings downsizing, job insecurity, organizational change

Referens: [Sverke, M.](#) (2004). Life-span exposure to psycho-social work conditions related to well-being among middle-aged women. Paper presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.

Abstract: Research has consistently linked unfavorable work conditions to impaired well-being, but little is known about the combined effects of exposure to psycho-social factors in a life-span perspective. Using a sample of Swedish women, occupational codes from each six-month period from the entry of working life until age 43 were matched with average levels (derived from a national survey) of demands, control, and support for each occupation held by the women. Relating the pooled effects over the course of the career to various indicators of well-being contribute to the understanding of the factors involved in women's well-being at work.

Typ och Nyckelord: Proceedings women, career, work environment, ICP 2004

Referens: [Sverke, M.](#) (2004). The consequences of employment uncertainty for the individual, the organization,

and the union: The role of union support. Paper presented at the *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.

Abstract: Job insecurity has received growing recognition in connection with the transformation of working life, but little is known about how unionization affects its consequences. Using data from four European countries, this study investigates the consequences of job insecurity and tests for a potential moderator effect of perceived union support. The results replicate previous findings of adverse effects on employee well-being and work attitudes, and also indicate that job insecurity may have detrimental consequences for unions. Although the findings are less consistent across countries with respect to the role of union support, a supportive union may reduce the effects of insecurity.

Typ och Nyckelord: Proceedings job insecurity, unionization, social support, ICP 2004

Referens: [Sverke, M. \(2004\). Proactive vs. Reactive Implementation of Downsizing in Swedish Hospitals: Effects of employee change perceptions on work attitudes and well-being. Paper presented at the 6th Conference of the European Academy of Occupational Health Psychology, Oporto, Portugal, 24-26 November 2004.](#)

Abstract: The accelerating rate of organizational change in modern working life has gradually affected the health-care organizations in their strivings for economic rationalization and improved effectiveness. However, even though the consequences of organizational restructuring and downsizing are well-documented, less is known about how such negative effects may be reduced. One important aspect in this context concerns how organizational change is implemented.

This study provides an opportunity to evaluate different strategies for the implementation of downsizing by comparing two Swedish hospitals with different ownership. One of the hospitals was, as the first hospital in Sweden, transformed into a non-profit public stock company in 1994 and could, by virtue of its independent role, implement downsizing proactively, use its own means to increase productivity, and involve the staff in the change process. Questionnaire data from the nursing staff of the stock company (N=338) were supplemented with comparison data from a hospital run as a traditional public administration unit (N=378) which had to implement downsizing reactively according to the decisions made by the health care authorities. Multivariate analysis of variance (MANCOVA) revealed overall differences in downsizing characteristics between the two hospitals. Nurses at the hospital that was run as a non-profit company reported less job insecurity, role ambiguity and role conflict as compared to their colleagues at the public administration unit, but there were no differences in role overload. There were also multivariate mean differences in change perceptions. In comparison to the reactive public administration, nurses at the proactive stock company reported significantly more positive attitudes towards downsizing and commitment to the downsizing goals in addition to more organizational justice and participation in the change process. Multivariate regression procedures were used to predict employee work attitudes (job satisfaction and organizational commitment) and well-being (mental health complaints and emotional exhaustion). After controlling for demographics, perceptions of change and downsizing-related characteristics were important predictors of employee work attitudes and well-being.

These findings provide insights concerning the importance of a long-term strategic implementation of organizational change in showing that a proactive stance towards change is likely to avoid some of the negative effects on employees. It appears crucial for organizations facing downsizing to allow for employees to take part in the diagnosing of the problem and the development of a shared vision of how to organize in order to create wide-spread commitment to the pursuing of organizational goals in the long-term perspective. To the extent this is accomplished, employees' attitudes and well-being are likely to be more positive, thus facilitating for the organization to reverse decline.

Typ och Nyckelord: Proceedings health-care, work attitudes, change perceptions

Referens: [Sverke, M., Chaison, G.N., & Sjöberg, A. \(2004\). Do union mergers affect the members? Short- and long-term effects on attitudes and behavior. *Economic and Industrial Democracy*, 25, 103-124.](#)

Abstract: Although union mergers have occurred since the earliest stages of unionization, few attempts have been made to uncover the psychological effects of merger on member attitudes and behavior. The literature suggests that intended results of a merger (e.g., economies of scale, reduced jurisdictional disputes) can be accompanied by unintended consequences, such as lowered degrees of union commitment and membership participation. This study examined the effects of a union merger on members' attitudes and participation in union activity using questionnaires. Baseline data from two merging unions and a comparison union were collected a year prior to the merger, and longitudinal follow-up surveys were administered twice. Our results suggest that membership commitment, satisfaction, and participation do not necessarily have to be sacrificed for the benefits of building larger, more stable and powerful unions through mergers.

Typ och Nyckelord: Journal merger, union attitudes, organizational change

Referens: [Sverke, M., Hellgren, J., & Näswall, K. \(in press\). We get by with a little help from our unions: Psychological contract violations and downsizing. In H. De Witte \(Ed.\), *Job insecurity, union involvement and union activism*. Aldershot: Ashgate.](#)

Abstract: Many research studies have brought up job insecurity as an increasingly serious problem in organizations. Research on job insecurity and psychological contract violations attributes impaired well-being and negative attitudes toward the organization to the fear of job loss. Research efforts have also been directed at identifying how negative consequences of downsizing and job insecurity can be mitigated. Very little is known, however, about how attempts to deal with job insecurity may differ between unionized and non-unionized employees. The present paper, therefore, focuses on the type of social support that is provided by the union, and asks to what extent unionized and non-unionized employees differ with respect to how they deal with experiences of job insecurity. We begin our investigation with a theoretical discussion of job insecurity and how it can be considered a breach of the psychological contract. The exit, voice, and loyalty framework is used in order to understand how union members and non-members may cope with job insecurity. Our empirical investigations are based on data from a sample of nurses in a Swedish health care organization going through downsizing. We relate our results both to the exit, voice, loyalty framework, as well as to theories regarding the psychological contract.

Typ och Nyckelord: Book (chapter) job insecurity, psychological contract, downsizing

- Referens:** Sverke, M., Hellgren, J., Näswall, K., Chirumbolo, A., De Witte, H., & Goslinga, S. (2004). *Job insecurity and union membership: European unions in the wake of flexible production*. Brussels: P.I.E.-Peter Lang.
- Abstract:** In recent decades profound changes in the nature of employment relations have occurred across Europe and in other economies the world over. Many workers have been involuntarily regulated to part-time employment, hired on temporary employment contracts, or otherwise displaced in some way. Increased flexibility in the staffing of organizations is becoming a cause of discomfort for many employees who are concerned over their future employment. An expanding body of research suggests that such job insecurity can be of essential importance from the occupational health perspective as well as the managerial, due to its effects on employees' work attitudes and well-being. This book addresses the nature of job insecurity and investigates its consequences for individuals, the organizations they work for, as well as their labor unions. It also examines whether factors associated with union membership help employees to cope with employment uncertainty. The book is based on a European project involving Belgium, Italy, the Netherlands, and Sweden. Both individuals and organizations can face consequences from the increased insecurity that is prevailing in working life today. By identifying and explaining those factors which result in job insecurity, and examining how the experience affects individuals, organizations, and unions, the authors wish expand the body of knowledge concerning job insecurity. Such knowledge can lead to a greater focus on this phenomenon within working life, and result in more of an effort being put into realizing how preventive measures can be implemented in the future.
- Typ och Nyckelord:** Book (chapter) job insecurity, unions, Europe
- Referens:** Söderlund, H., Nilsson, L.-G., Berger, K., Breteler, M.M., de Ridder, M., Dufoir, C., Fuhrer, R., Giampaoli, S., Hofman, A., Pajak, A., Sans, S., Schmidt, R., & Launer, L. (in press). Cerebral changes on MRI and cognitive function: the CASCADE study. *Neurobiology of Aging*.
- Abstract:** The aging, non-demented brain undergoes several physiological changes, some of which may and some of which may not affect cognitive function. The goal of the present study was to examine the effects of subcortical and periventricular white matter hyperintensities (WMHs), and cortical and subcortical atrophy on cognitive function (episodic and semantic memory, attention, and perceptual, cognitive, and motor speed). This was done within a European collaborative study, CASCADE (Cardiovascular Determinants of Dementia), in which Magnetic Resonance Imaging (MRI) was performed on community-dwelling individuals. The study includes 1,254 persons from eight European study centers, ranging between 64 and 76 years of age (M 69.4 + 3.3; 55% men). When demographics (age, education, and sex), study center, and concurrent brain changes had been adjusted for, periventricular WHMS predicted lower performance in motor speed and Stroop (errors). The findings are consistent with findings from lesion and functional neuroimaging studies.
- Typ och Nyckelord:** Journal white matter hyperintensities, MRI, cognition
- Referens:** Söderlund, H., Nyberg, L., & Nilsson, L.-G. (2004). Cerebral atrophy as predictor of cognitive function in old, community-dwelling individuals. *Acta Neurologica Scandinavica*, 109, 398-406.
- Abstract:** The impact of cortical and subcortical atrophy on cognitive function was examined in a sample of older communitydwelling men and women. Magnetic resonance imaging was performed on a sample of 129 individuals [age: 68.4 3.6 years (mean SD), range 64-74 years, 64 women and 65 men, Mini-Mental State Examination scores above 23] to assess cortical and subcortical atrophy. Participants also performed a number of cognitive tasks, and the measures of atrophy were used to predict performance in these tasks. In men, frontal cortical atrophy predicted worse performance in word fluency and Stroop test, and occipital cortical atrophy was associated with poor performance in motor speed. In women, poor performance in motor speed was associated with subcortical atrophy at the level of the caudate nucleus. Atrophy in certain areas was associated with poor performance in specific cognitive tasks, although the amount of explained variance was rather limited in this quite homogenous sample.
- Typ och Nyckelord:** Journal memory, cortical atrophy, subcortical atrophy
- Referens:** Torbiörn, I. (2004). Staffing policies and practices in European MNC's: strategic sophistication, culture-bound policies or ad-hoc reactivity. In H. Scullion & M. Linehan (Eds.), *International Human Resource Management: A critical text*. Chippenham, UK, Palgrave.
- Abstract:** The chapter deals with one of four traditional parameters of International Human Resource Management (IHRM), namely the staffing of international operations. Here IHRM is not taken to mean staffing, but staffing is used, and discussed, as a criterion indicative of IHRM strategies, as well as of company concern about cultural contexts, organisational needs or situational options. Thus the object of the chapter is not staff as such but what company use of staff may tell, in particular about what may hold for European MNC's. Assuming a particular relevance of staffing for international firm performance, and based on a model explaining staffing patterns at firm levels, MNC's practices are discussed as indicative of, first IHRM-strategies, then of factors commonly held, to be determinants of staffing. Staffing patterns of European MNC's are concluded to mainly reflect configurative strategies as well as ad-hoc reactivity, both approaches reflecting a culturally and structurally varied context of MNC's domiciles and host markets. Here, further, the validity and relevance of a dichotomous staffing criterion of IHRM is questioned. This may hold for European MNC's in particular.
- Typ och Nyckelord:** Book (chapter) European MNC's, IHRM, staffing
- Referens:** Trost, K., & Bergman, E. (2004). *Men's work and well-being in a lifespan perspective. Technical report from the 2002-2003 data collection*. Stockholm University, Department of Psychology, Reports from the project Individual Development and Adaptation, No. 85.
- Abstract:** The report presents information from the longitudinal IDA project (Individual Development and Adaptation). The IDA data collection started in 1965 for three complete school-grade cohorts of children in grades 3 (the main group), 6 (the pilot group), and 8. The pilot and main groups have been followed up to middle adulthood. This technical report focuses on the men in the main group at the age of approximately 47-48. It includes a brief overview of the IDA program and previous data collections as well as more detailed information about the 2002-2003 data collection for men specifically.
- Typ och Nyckelord:** Report men's work, men's well-being, longitudinal

- Referens:** [Törngren, G., & Montgomery, H. \(2004\).](#) Worse Than Chance? Performance and Confidence Among Professionals and Laypeople in the Stock Market. *Journal of Behavioral Finance*, 5(3), 246–251.
- Abstract:** In two studies, stock market professionals (N1=22, N2=21) and lay-people (N1=29, N2=34) provided 30-day forecasts for 20 stocks and estimated the size of their own errors as well as the mean errors for their own and the other group. Both groups predicted that the errors made by professionals would be only half the size of the errors made by lay-people. In reality, the errors of both groups were about the size predicted for the lay-people. Participants also estimated their ability to pick the best performing stock from two options. Both groups proved to be overconfident in their ability to predict the best performing stock. Professional predictions were only successful 40% of the time, a performance below what would be expected from chance alone. Self reports and correlations between forecasts and price movements suggested that the professionals based their predictions on specific information of the stocks without sufficient awareness of the unreliability of this information, whereas the lay-people used simple heuristics based on previous price movements.
- Typ och Nyckelord:** Journal overconfidence, stock market, prediction
- Referens:** Uvnäs-Moberg, K., Arn., I., & [Magnusson, D.](#) (in press). The psychology of emotion. The role of the oxytonergic system. *International Journal of Behavioral Medicine*.
- Abstract:** For a long time, empirical research on the role of biological factors has focused on antisocial behavior. In recent years empirical research has demonstrated the existence of a complementary biological system, connected with well-being, calm and positive social interactions- the calm- connection system. As an integrated part of the functioning of the total organism, the concept of the calm- connection system enriches the theoretical basis for empirical research in the recently developed area of "positive development".
- Typ och Nyckelord:** Journal oxytonergic system, emotion, biological factors
- Referens:** [Wahlin, Å.](#) (2004). Health, disease, and cognitive functioning in old age. In R.A. Dixon, L. Bäckman, & L.-G. Nilsson (Eds.), *New frontiers in cognitive aging* (pp. 279-302). Oxford, UK: Oxford University Press.
- Abstract:** The accumulation of multiple chronic illnesses with advancing age is well established, and characterizes a significant proportion of the elderly population. This chapter discusses how that is commonly dealt with in cognitive aging research. The absence of a comprehensive view about cognition-associated diseases may result in failures to take into consideration health conditions that are critical to cognitive functioning, sometimes selectively, and this may be particularly true in the study of old age. Different approaches to the definition of health and disease are discussed, followed by examples of research explicitly focused on the relation between healthrelated variations and cognitive performance. Finally, possible ways to expand this research are proposed. The main message of the chapter is the need for clarity about what it means that participants in cognitive aging research are rarely free of disease.
- Typ och Nyckelord:** Book (chapter) cognitive aging, health, comorbidity
- Referens:** [Wahlin, Å.](#) (2004). Sex differences in cognitive functioning: Health moderators and mediators. Invited symposium (The Betula Project, a prospective study of ageing, memory and dementia. Convener: Lars-Göran Nilsson) at the *8th Nordic Meeting in Neuropsychology*, Turku, Finland.
- Abstract:** Sex differences in adult cognitive functioning are well documented. Prominent theoretical accounts at the biological level refer to sex steroid differences or differentially sized cortical regions, and alternate accounts at the sociocultural level have suggested that sources of sex differences could include differential life experience and social expectations. Yet, theoretical accounts based on health have generally been overlooked. Based on data from the Betula project, we present preliminary results concerning the impact of medical health on sex differences in cognitive functioning. At odds with some previous findings, the effects of medical health were similar in men and women (i.e., sex differences were not moderated by variation in medical health). However (and in accordance with other reports), inspection of mediating effects (the extent to which sex differences were accounted for by health variation) revealed that, overall, cognitive sex differences were suppressed by health differences. When mediating health variables were controlled, sex differences tended to magnify on tests for which there was a female advantage but disappear where there was a male advantage.
- Typ och Nyckelord:** Proceedings cognition, moderators, mediators
- Referens:** [Wahlin, Å.](#) (2004). Health moderators and mediators of sex differences in cognitive functioning. Invited symposium (The Betula Study: Memory, health and ageing. Convener: Lars-Göran Nilsson) at the *1st International Conference on Aging, Cognition, and Neuroscience*, Madrid, Spain.
- Abstract:** Sex differences in adult cognitive functioning are well documented. Prominent theoretical accounts at the biological level refer to sex steroid differences or differentially sized cortical regions, and alternate accounts at the sociocultural level have suggested that sources of sex differences could include differential life experience and social expectations. Yet, theoretical accounts based on health have generally been overlooked. Based on data from the Betula project, we present preliminary results concerning the impact of medical health on sex differences in cognitive functioning. At odds with some previous findings, the effects of medical health were similar in men and women (i.e., sex differences were not moderated by variation in medical health). However (and in accordance with other reports), inspection of mediating effects (the extent to which sex differences were accounted for by health variation) revealed that, overall, cognitive sex differences were suppressed by health differences. When mediating health variables were controlled, sex differences tended to magnify on tests for which there was a female advantage but disappear where there was a male advantage.
- Typ och Nyckelord:** Proceedings cognition, health, moderators and mediators
- Referens:** [Wahlin, Å.](#) (2004). Health and cognitive functioning in old age. Invited co-speakers: R.D. Hill (University of Utah), D. Bunce (University of London), M.P.J. van Boxtel (Maastricht University), & K. Anstey (Australian National University). *XXVIII International Congress of Psychology*, Beijing, China,

8-13 August 2004.

Abstract: The absence of a comprehensive view about cognition-associated diseases may result in failures to take into consideration health conditions that are critical to cognitive functioning, sometimes selectively. This may be particularly true in the study of old age. Different approaches to the definition of health and disease are discussed, followed by examples of research explicitly focused on the relation between health-related variations and cognitive performance among elderly persons. Possible ways to expand this research are exemplified. The main message is the need for clarity about what it means that participants in cognitive aging research are rarely free of disease.

Typ och Nyckelord: Proceedings aging, cognition, health, ICP 2004

Referens: Wahlin, Å., MacDonald, S.W., deFrias C.M., Nilsson, L.-G., & Dixon, R.A. (2004). How health and biological age influence age and sex differences in cognitive aging: moderating, mediating, or both? Poster presentation at the *10th Cognitive Aging Conference*, Atlanta, GA, USA.

Abstract: We examined the moderating and mediating roles of health and biological age (BioAge) on chronological age and sex differences in cognitive functioning in a sample of adults, aged 61-95 years (n = 386) from the Victoria Longitudinal Study. Both health and BioAge were found to moderate age and sex differences such that the negative effects of age were most pronounced among participants of relatively better health and younger biological age, whereas sex differences were more pronounced among participants experiencing comparatively poorer health. Although health mediated a moderate amount (m = 20%) of age-related cognitive variation, BioAge mediated considerably more variance (m = 60%), even after statistical control for differences in health. Notably, both health and BioAge predicted cognitive variation independently of chronological age, and accounted for a significant portion of observed sex differences in cognitive performance. To the extent that health and BioAge may represent potential explanatory categories for both age and sex differences in late-life cognitive performance, future research will benefit from greater substantive attention to the mechanics of these relationships.

Typ och Nyckelord: Proceedings aging, cognition, health

Referens: van Dijk, E.J., Breteler, M.M.B., Schmidt, R., Berger, K., Nilsson, L.-G., Ouderkerk, M., Pajak, A., Sans, S., de Ridder, M., Dufoir, C., Fuhrer, R., Giampaoli, S., Launer, L.J., & Hofman, A. (in press). The association between blood pressure, hypertension and cerebral white matter lesions: The CASCADE Study. *Hypertension*.

Abstract: Cerebral white matter lesions are frequently observed on magnetic resonance imaging (MRI) scans in elderly people and are associated with stroke and dementia. Elevated blood pressure is presumed one of the main risk factors, although data are almost exclusively derived from cross-sectional studies. We assessed in ten European cohorts the relation between concurrently and previously measured blood pressure levels, hypertension, its treatment and severe cerebral white matter lesions on MRI.

In total 1805 non-demented subjects aged 65-75 years of age were sampled from on-going community-based studies that were initiated 5-20 years prior to the MRI. White matter lesions in the periventricular and subcortical region were rated separately using semi-quantitative measures. We did logistic regression analyses adjusted for potential confounders in 1625 people with complete data.

Concurrently and formerly assessed diastolic and systolic blood pressure levels were positively associated with severe white matter lesions. Both, increase and decrease in diastolic blood pressure were associated with more severe periventricular white matter lesions. People with poorly controlled hypertension had a higher risk of severe white matter lesions than those without hypertension, those with controlled or untreated hypertension.

Higher blood pressure was associated with an increased risk of severe white matter lesions. Successful treatment of hypertension may reduce this risk. A potential negative effect of decreasing diastolic blood pressure level on the occurrence of severe periventricular white matter lesions should be taken into account.

Typ och Nyckelord: Journal hypertension, stroke, dementia

Referens: van Kamp, I., Nilsson, M.E., van Kempen, E., Stellato, R.K., Lopez-Barrio, I., Davis, H., & Stansfeld, S.A. (2004). Combined effects of aircraft noise and road traffic noise on annoyance: the RANCH study. In M. Brothnek & O. Jiricek (Eds.), *Inter-Noise 2004* (Paper 398). Prague: Czech Acoustical Society. [Available on CD]

Abstract: One of the objectives of the EU 5th Framework project RANCH (Road traffic and Aircraft noise exposure and children's cognition and health) is to provide knowledge on exposure-response relationships in children between chronic noise exposure and physical and psychological health outcomes including annoyance. Data collected in three large field surveys among schoolchildren enabled us to study the exposure-response relations in greater detail than had been accomplished in previous studies. This paper describes annoyance responses of schoolchildren in relation to the combined exposure to road- and air-traffic noise during both day and evening (LAeq,7-23h). Data are derived from a questionnaire and tests administered to a sample of children aged 9-11 years visiting primary schools around London Heathrow Airport (N=1182), Amsterdam Schiphol Airport (N=737) and Madrid Airport Barajas (N=920). As part of a paper-and-pencil test battery, the children completed a questionnaire on perceived health, sleep quality, coping with noise, annoyance and noise interference with activities. The interaction of air and road traffic noise on source-specific annoyance, as well as total annoyance was analysed. Combined exposures were calculated as multiplicative interactions. Results showed that the effects of aircraft noise on annoyance were greater in high road traffic noise situations. Similarly, high road traffic noise exposure had a larger effect upon annoyance in high aircraft noise exposure situations than in low aircraft noise exposure. These results only held for the separate annoyance questions (the air- and road traffic components separately) and not for total annoyance, supporting the so called combined noise source paradox.

Typ och Nyckelord: Book (chapter) traffic noise, children, annoyance

Referens: Vannini, P., Almkvist, O., Franck, A., Jonsson, T., Volpe, U., Kristoffersen Wiberg, M., Wahlund, L.O., & Dierks, T. (2004). Task demand modulations of visuospatial processing measured with functional

magnetic resonance imaging. *NeuroImage*, 2004 Jan; 21 (1): 58-68.

Abstract: Brain imaging based on functional magnetic resonance imaging (fMRI) provides a useful tool to examine neural networks and cerebral structures subserving visuospatial function. It allows not only the qualitative determination of which areas are active during task processing, but also estimates the quantitative contribution of involved brain regions to different aspects of spatial processing. In this study, we investigated in 10 healthy subjects how the amount of task (computational) demand in an angle discrimination task was related to neural activity as measured with event-related fMRI. Task demand, indicated by behavioral performance, was modulated by presenting clocks with different angular disparity and length of hands. Significant activations were found in the cortical network subserving the visual and visuospatial processing, including the right and left superior parietal lobules (SPL), striate visual areas, and sensorimotor areas. Both blood oxygenation level-dependent (BOLD) signal strength and spatial extent of activation in right as well as left SPL increased with task demand. By contrast, no significant correlation or a very weak correlation was found between the task demand and the BOLD signal as well as between task demand and spatial extent of activations in the striate visual areas and in the sensorimotor areas. These results support the hypothesis that increased computational demand requires more brain resources. The brain regions that are most specialized for the execution of the visuospatial task can be assessed by relating the imposed task demand to the functional activation measured.

Typ och Nyckelord: Journal fMRI, visuospatial function

Referens: Wenchen, L., [Schenkman, B.](#), Brunström, K. (2004). Night vision systems in cars: Principles and recommendations. In W. Mou, S. Li, & B. Qiu (Eds.), *Abstract Book from the XXVIII International Congress of Psychology*. Beijing, China, 8-13 August 2004. [Available on CD] [Will be published in a special issue of the International Journal of Psychology in 2005]

Abstract: Driving a car at night and the effects of using a vision enhancement system, especially those based on infrared image information are reviewed. Principles and a short technical background are given for night vision systems in cars, primarily when using an infrared camera. The following issues are discussed: Human vision at night, infrared image information and human factors of night vision systems. These are eye movements, reaction time, and lateral position, workload of the driver. Recommendations, based on visual ergonomics, for where to put the image are given, for which suitable image distances, locations and sizes are discussed.

Typ och Nyckelord: Proceedings Book (chapter) night vision systems, infrared image information, human factors, ICP 2004

Referens: [Westerlund, J.](#), & [Dalkvist, J.](#) (2004). A test of predictions from five studies on telepathic group communication of emotions. In *The Parapsychological Association 47th Annual Convention: Proceedings of presented papers*.

Abstract: The purpose of the present study was to test a set of predictions from a previous series of telepathy studies, involving 337 university students. In these studies, groups of receivers were asked to discriminate between positive and negative emotional slide pictures that were being looked at by groups of senders. The senders and the receivers were sequestered in separate acoustically insulated rooms. None of the eight predictions was confirmed by data from a replication study, involving a total of 605 university students as participants. Discussed are three explanations denying that any telepathic communication occurred, either in the original series of experiments or in the new ones, and three explanations assuming that some telepathic communication did occur, after all. The three explanations denying the occurrence of any telepathic effect were: (1) All significant results obtained in the original experiments were caused by random variation. (2) The replication experiments were better controlled than the original experiments. (3) The original positive results were obtained through systematic selection. All of these three explanations were judged to be plausible. The three explanations assuming that some telepathic communication did occur were: (1) Some of the eight hypotheses were only partly true and need to be modified. (2) The distribution(s) of some critical person or situation variable(s) had changed during the six years of experimentation, which, in turn, has affected the results. (3) The replication experiments were run at less favourable times with respect to some physical factors: local sidereal time (LST) – an astronomical time and space measure, which is indirectly related to the magnitude of cosmic radiation that reaches the earth – and disturbances in the earth's magnetic field, as measured by the ap-index. On the basis of empirical tests, the two latter explanations (changing distributions of critical personal or situational variables and changing LST or ap-index) were rejected as unlikely. It was concluded that, taken together, the three explanations assuming that no telepathic communication had occurred could well account for the failure to confirm any of the predictions.

Typ och Nyckelord: Proceedings prediction, telepathy, experiment

Referens: [Westerlund, J.](#), [Parker, A.](#), [Dalkvist, J.](#), & [Goulding, A.](#) (2004). Remarkable correspondances between Ganzfeld mentation and target content - psi or a cognitive illusion? In *The Parapsychological Association 47th Annual Convention: Proceedings of presented papers*.

Abstract: Remarkable correspondences between Ganzfeld mentation and target content have been reported since the early start of Ganzfeld experiments in parapsychology. These correspondences may be due to some anomalous information transfer (e.g., telepathy) or they may be due to a cognitive illusion on the part of the person who perceives them as remarkable. The present paper presents two studies conducted in order to investigate which of these two possibilities is the more probable. Both studies were based on data collected during the first formal experiment run with a new technique called Digital Ganzfeld (Goulding, Westerlund, Parker & Wackermann, 2001). In this experiment the receiver's mentation was stored as a digital audio file that was synchronized with the target videoclip (as well as with the three decoy clips, as all clips were of exactly the same length). An external judge (JW) then played the mentation file together with the different clips in the set that was used and ranked the different clips according to similarities with the mentation. The main result was close to chance with a direct hit rate of 23% (Goulding, Westerlund, Parker & Wackermann, 2004). However, at the same time as the judge did this judging, he also tried to discern any correspondences between the mentation and any of the four clips (before knowing which one was the target) that appeared to him to be very remarkable (presented as Study 1 in this paper). A total of 20 remarkable correspondences were collected. Of these, only 6 (30%) were correspondences between the mentation and the target whereas the remaining 14 (70%) were correspondences between the mentation and decoys. This result is not significantly different from chance expectation. It was argued that this result gives some support to the cognitive illusion hypothesis, but that the study was lacking in statistical power. In order to gain stronger statistical power, a group of 11 students rated each of the 20 correspondences on scales ranging from 0-100 (presented as Study 2 in the present paper). The students did not rate the correspondences that were hits (i.e., correspondences with the target) as significantly more impressive than the correspondences that were misses (i.e., correspondences with one of the decoys). This result speaks against the psi-hypothesis, but the results should be interpreted with

some caution since the students could not be said to have been 100% blind. Taken together, the results of the two studies presented here help us be more conservative about concluding that remarkable correspondences between receiver mentation and target content are due to psi when they may be due to cognitive illusions (or subjective validation).

Typ och Nyckelord: Proceedings ganzfeld, psi, cognitive illusion

Referens: Wiens, S., Fransson, P., Dietrich, T., Lohmann, P., Ingvar, M., & Öhman, A. (2004). Keeping it short: A comparison of methods for brief picture presentation. *Psychological Science, 15*, 282-285.

Abstract: Research has shown that backward masking is a powerful tool for studying unconscious mental processes. Whereas studies have traditionally presented stimuli using cathode-ray tube (CRT) monitors or mechanical shutters together with slide projectors, recent studies (mainly in functional magnetic resonance imaging, fMRI) have begun to use methods based on liquid crystal displays (LCDs) and thin-film transistor (TFT) technology. However, because of differences in technology, all methods may not be equally suited for masking. When methods were compared for their accuracy in presenting pictures at short durations, LCD and TFT presentations had poor accuracy, but shutter and CRT presentations had better accuracy. Because CRTs interfere with the imaging process in fMRI, we recommend the use of mechanical shutters. However, our results may not generally apply to all displays, so we advise researchers to validate the presentation parameters of their displays. The procedure described here may be useful for that purpose.

Typ och Nyckelord: Journal consciousness, backward masking, picture presentation

Referens: Wiens, S., Fransson, P., Ingvar, M., & Öhman, A. (2004). Activation of fusiform gyrus to masked neutral faces at brief (10-60 ms) durations. Paper presented at the *10th annual meeting of the organization for human brain mapping*, Budapest, Hungary.

Abstract: Looking at pictures activates the fusiform gyrus (FG). We used fMRI to study FG activation to neutral faces presented at six durations ranging from 10 to 60 ms. To manipulate perceptual awareness of the faces, each target was followed immediately by a scrambled face. Thus, target faces were backward masked.

The block designed experiment consisted of 4 runs, 3 with and 1 without concurrent fMRI measurement. In each of the first 2 fMRI runs, the 10 participants were shown 2 blocks of masked faces at durations of 10, 20, 30, 40, 50, and 60 ms. To control for stimulus duration, these runs included similar blocks with scrambled faces as targets. In the third fMRI run, participants were shown faces for 900 ms (i.e., non-masked) to identify regions of interest in bilateral FG. Last, participants were shown blocks of masked faces (as in the first two runs, but without fMRI). After each block, participants reported how many faces they counted and how visible the faces appeared. In all runs, each block comprised 20 targets.

Figure 1 shows mean number of counted faces (bar) and mean visibility ratings (line) of masked neutral faces at the six durations. These data suggest that participants were completely unaware of the faces at 10 ms and showed little awareness at 20 ms. Also, although awareness increased with longer durations, participants generally rated masked faces as less visible than non-masked faces that received visibility ratings of 5 (not shown).

The fMRI data were analyzed with SPM2 (rfx). For the data with non-masked faces (run 3), activation maxima occurred in left and right FG at [-38, -38, -24] and [44, -42, -24], respectively. These locations were used to define regions of interests for the analysis of the fMRI data for masked faces (runs 1 and 2). For each participant, a fixed-effects analysis specified regressors for the six durations for non-scrambled and scrambled target faces, and also for movement and session effects. In a subsequent (random-effects) repeated-measures ANOVA, regressors specified the six durations for non-scrambled and for scrambled faces (to control for differences in duration). Figures 2 and 3 show mean effects (betas) for left and right FG, respectively, across the six durations for scrambled and non-scrambled masked faces. Note that the asterisk indicates that there was a significant difference between the mean betas for faces and scrambled faces at a particular duration ($p < 0.05$, FWE for spheres with a 3-voxel radius centered on the activation maxima).

Results were that first, bilateral FG responded to masked faces at 60 ms that were perceived as moderately visible. Second, right FG responded even to masked faces with low visibility (30-50 ms). Third, the data suggested no obvious relationship between FG activation and either target duration or awareness. Fourth, there was no evidence for FG activation to neutral faces of which participants were completely unaware (10 ms).

Typ och Nyckelord: Proceedings face perception, backward masking, brain imaging

Referens: Wiklund, G., Grigorenko, E., & af Klinteberg, B. (2004). Presentation "Children and psychopathic traits". The 4th Annual Conference of the International Association of Forensic Mental Health Services (IAFMHS) *Mental Health Services at the Interface of Mental Disorder, Addiction and Crime*, Stockholm, Sweden, 6-9 June; and the *European Conference of Adolescence, Alcohol and Drugs (ECAAD)*, Stockholm, Sweden, June 17-19, 2004.

Abstract: Introduction: The empirical and theoretically well-grounded concept of psychopathy is primarily based on research on forensic populations. Research focus is to investigate and explore if there is a core feature of psychopathy that is present in non-antisocial individuals. The purpose of this study is to analyze psychopathy in a group of children recruited from elementary schools in a midsize industrial town in Central Russia. Confirmatory Factor analysis is used to find out which factor model has the best data-fit, in addition to international comparisons. Other studies have extracted two or three factors: 1. Impulsive and antisocial lifestyle, 2. Narcissism, 3. Callous and unemotional traits (the second factor is added in the three factor solution). The two first factors are highly related to symptoms of oppositional defiant disorder, conduct disorder, and attention deficit hyperactivity disorder and are also etiologically associated with intellectual deficits, lower socioeconomic status and dysfunctional family backgrounds. The third factor "callous unemotional traits" (CU-traits) is a trait that is present in a small subgroup of antisocial children. This subgroup seems to show a more severe and violent pattern of antisocial behaviour and has a different etiology, highly associated with abnormalities in the processing of emotional information. The research concerning CU-traits in samples of normal children is limited, which makes this study important in adding more understanding to the concept of psychopathy in children.

Method: A group of normal children, 276 girls and 230 boys, age: 8 to 17 years, mean 12.3 (SD: 2.8) were assessed with the Psychopathy Screening Device (PSD), developed by Paul Frick and Robert Hare. PSD ratings

were made by multiple judges. Furthermore the children were assessed with the Youth Self-Report (YSR) inventory and rated by multiple judges on withdrawal, anxiety/depression, and a variety of problems in social relations etc. as well as delinquent and aggressive behaviour. Confirmatory Factor Analysis with principal axis factoring and Promax rotation on boys and girls separately is performed with the PSD items. The factors will be correlated with the different scales on YSR for validation.

Preliminary results will be presented of two- or three factor solutions and related to YSR information for male and female subjects separately. The results will be discussed in terms of usefulness in supporting earlier findings and making inter-cultural comparisons.

Conclusions: By differentiate personality traits from antisocial behaviour, we might be more able to detect early signs in children with psychopathic tendencies.

Typ och Nyckelord: Proceedings antisocial behaviour, psychopathic traits, PSD, YSR

Referens: Wikström, J., Lundh, L-G., [Westerlund, J.](#), & [Högman, L.](#) (2004). Preattentive bias for snake words in snake phobia? *Behaviour Research and Therapy*, Vol 42(8), 949-970.

Abstract: Stroop interference and skin conductance responses (SCRs) for words related to snakes, spiders, flowers, and mushrooms were studied in a group of women (n=40) with snake phobia who were randomised to a stress or no-stress condition. The 21 low-stress snake phobics showed Stroop interference for unmasked (but not for masked) snake words, compared with 21 age- and sex-matched controls. Stroop interference was not significantly different between high-stress and low-stress snake phobics. No support for stronger SCRs for masked snake words was found in snake phobics in a lexical decision task with masked presentations of the same words. The lack of a masked Stroop interference in snake phobics suggests a possible difference in cognitive-emotional mechanisms underlying specific phobia vs. other anxiety disorders that deserves further investigation.

Typ och Nyckelord: Journal snake phobia, stroop, cognitive-emotional mechanisms

Referens: [Willander, J.M.](#), [Christianson, S.Å.](#), Berndtsson, J., Schüler, J., & [Larsson, M.](#) (2004). I smell therefore I remember: Odors as cues to emotional memories. *XXVIII International Congress of Psychology*, Beijing, China, 8-13 August 2004.

Abstract: The aim of this research was to examine olfactory cuing of emotional and neutral events. In Study 1, subjects were exposed to a series of photo slides depicting an emotional event along with a congruent odor or no odor. Results indicated that both central details and circumstantial information of the emotional event were better retained following olfactory cuing. In study 2, we explored the role of olfactory congruency and retention interval on recall proficiency of emotional events. Results will be presented both with respect to memory performance and experiential measures. Support: Swedish Research Council to Maria Larsson (F0647/2001).

Typ och Nyckelord: Proceedings odor, emotional memories, autobiographical memories, ICP 2004

Referens: [Willander, J.M.](#), [Christianson, S.Å.](#), Berndtsson, J., Schüler, J., & [Larsson, M.](#) (2004). Olfactory cuing of emotional events. *26th Annual Meeting of the Association for Chemoreception Sciences*, Sarasota, FL, 2004.

Abstract: The aim of this research was to examine olfactory cuing of emotional and neutral events. In Study 1, subjects were exposed to a series of photo slides depicting an emotional event (car accident) along with a congruent odor (i.e. petrol) or no odor. Five days later participants were asked to recall details of the event. Results indicated that both central details and circumstantial information of the emotional event were better retained following olfactory cuing. In study 2, we explored the role of olfactory congruency and retention interval on recall proficiency of emotional events. Subjects were presented with series of photo slides showing either emotional or neutral events in conjunction with a context congruent odor, a context incongruent odor, or no odor. We expected that olfactory cuing in general enhance recall performance as compared to the no odor condition, and that memory for emotional events with olfactory congruent processing will be better than that for non-congruent processing. Results will be presented both with respect to memory performance (e.g., number of details, accuracy), assessed 24 hours and eight days after exposure across all cue formats, and experiential measures (e.g., arousal, intensity).

Support: Swedish Research Council to Maria Larsson (F0647/2001).

Typ och Nyckelord: Proceedings odor, emotional memories, autobiographical memories

Referens: [Willander, J.M.](#), [Christianson, S.Å.](#), Berndtsson, J., Schüler, J., & [Larsson, M.](#) (2004). When odors matters: odor cuing of emotional events. *The 2004 Congress of The European Chemoreception Research Organization*, Dijon, September 12-15, 2004.

Abstract: The aim of this research was to examine olfactory cuing of emotional and neutral events. In Study 1, subjects were exposed to a series of photo slides depicting an emotional event (car accident) along with a congruent odor (i.e. petrol) or no odor. Five days later participants were asked to recall details of the event. Results indicated that both central details and circumstantial information of the emotional event were better retained following olfactory cuing. In study 2, we explored the role of olfactory congruency and retention interval on recall proficiency of emotional events. Subjects were presented with series of photo slides showing either emotional or neutral events in conjunction with a context congruent odor, a context incongruent odor, or no odor. We expected that olfactory cuing in general enhance recall performance as compared to the no odor condition, and that memory for emotional events with olfactory congruent processing will be better than that for non-congruent processing. Results will be presented both with respect to memory performance (e.g., number of details, accuracy), assessed 24 hours and eight days after exposure across all cue formats, and experiential measures (e.g., arousal, intensity).

Support: Swedish Research Council to Maria Larsson (F0647/2001).

Typ och Nyckelord: Proceedings odor, emotional memories, autobiographical memories

- Referens:** Winblad, B., Palmer, K., Kivipelto, M., Jelic, V., Fratiglioni, L., Wahlund, L.O., Nordberg, A., Backman, L., Albert, M., [Almkvist, O.](#), Arai, H., Basun, H., Blennow, K., de Leon, M., DeCarli, C., Erkinjuntti, T., Giacobini, E., Graff, C., Hardy, J., Jack, C., Jorm, A., Ritchie, K., van Duijn, C., Visser, P., & Petersen, R.C. (2004). Mild cognitive impairment. Beyond controversies, towards a consensus: report of the International Working Group on Mild Cognitive Impairment. *Journal of International Medicine*, 2004 Sep; 256 (3): 240-6.
- Abstract:** The aim of the symposium was to integrate clinical and epidemiological perspectives on the topic of Mild Cognitive Impairment (MCI). A multidisciplinary, international group of experts discussed the current status and future directions of MCI, with regard to clinical presentation, cognitive and functional assessment, and the role of neuroimaging, biomarkers and genetics. Agreement on new perspectives, as well as recommendations for management and future research were discussed by the international working group. The specific recommendations for the general MCI criteria include the following: (i) the person is neither normal nor demented; (ii) there is evidence of cognitive deterioration shown by either objectively measured decline over time and/or subjective report of decline by self and/or informant in conjunction with objective cognitive deficits; and (iii) activities of daily living are preserved and complex instrumental functions are either intact or minimally impaired.
- Typ och Nyckelord:** Journal mild cognitive impairment, MCI, assessment
- Referens:** [von Essen, J.D.](#) (in press). Enactment Enhances Integration Between Verb and Noun, but Not Relational Processing, in Episodic Memory. *Scandinavian Journal of Psychology*.
- Abstract:** Improved recall has consistently been demonstrated following motor activation at encoding (SPT), compared to traditional verbal learning (VT). Enhancements of item-specific processing and relational processing have been proposed as possible mechanisms to account for this SPT effect. There is ample evidence supporting the notion of enhanced item-specific processing, however it is still unclear whether enhancement of relational processing contributes to improved recall. In the present study, 2 experiments were designed to address this issue. In Experiment 1, memory under 2 encoding conditions (VT vs. SPT) and 3 recall conditions (free recall vs. category-cued recall vs. verb-cued recall) were studied in 3 large samples (N = 500-600). Experiment 2 replicated the findings of Experiment 1, and controlled for the use of actual objects, short-term memory effects, and carryover effects, in Experiment 1. The results in both experiments showed an interaction between type of encoding and type of recall. Verb-cued recall was affected differently by SPT encoding, as compared to category-cued recall and free recall. The results indicate that enhanced integration between verb and noun is an effect of SPT encoding, whereas enhanced relational processing is not.
- Typ och Nyckelord:** Journal subject-performed tasks, relational processing, item-specific processing
- Referens:** [von Essen, J.D.](#), & [Nilsson, L.-G.](#) (2004). Memory effects of motor activation in subject performed tasks and sign language. In W. Mou, S. Li, & B. Qiu (Eds.), *Abstract Book from the XXVIII International Congress of Psychology* (p. 536). August 8-13, 2004, Beijing, China. Electronic version.
- Abstract:** The controversy regarding whether motor activation per se is causing the subject-performed task (SPT) effect, is addressed by comparing the effect of SPT to the effect of encoding by means of a sign language task (SLT). The SLT condition is claimed to be a verbal/linguistic task, and including relevant motor activation. The results showed that subjects in the SLT condition performed similarly to subjects in the SPT condition in free recall. Subjects in both these conditions outperformed subjects in the control conditions. It is suggested that the SPT and SLT superiority is caused mainly by relevant motor activation.
- Typ och Nyckelord:** Proceedings Book (chapter) subject performed task, sign language, ICP 2004
- Referens:** [Wulff, C.](#), [Bergman, L.R.](#), & [Sverke, M.](#) (2004). Intellectual ability and satisfaction with school and work: A longitudinal study from age 13 to 43. Paper presented at the *6th Conference of the European Academy of Occupational Health Psychology*, Oporto, Portugal, 24-26 November 2004.
- Abstract:** The present study concerns the importance of intellectual ability for the satisfaction with school and work for a Swedish sample of about 1000 men and women, followed longitudinally from age 13 to age 26 (men) or 43 (women). Verbal, inductive, spatial and general ability were studied. There were some weak significant positive correlations between satisfaction and intelligence at age 13 but not at age 16. By the age of 26, there were significant but weak negative correlations between job satisfaction and intelligence and between satisfaction with ongoing education and intelligence. For women at the age of 43, there was a positive relation between intelligence and intrinsic job satisfaction. The results suggest that there may be a non-linear relationship between ability and job satisfaction under some conditions. LISREL-analysis was also performed.
- Typ och Nyckelord:** Proceedings ability, job satisfaction, education
- Referens:** [Wångby, M.](#) (2004). *Questions about life-style in 2002. Follow-up survey on the 1998 data collection among females in the IDA-project*. Stockholm University, Department of Psychology, Reports from the project Individual Development and Adaptation, No. 84.
- Abstract:** This technical report describes a mail questionnaire follow-up of the main group of females in the longitudinal research program Individual Development and Adaptation (IDA). It concerned health related behaviors and the survey was carried out in 2002.
- Typ och Nyckelord:** Report women, health, survey
- Referens:** [Väfors-Fritz, M.](#), [Grigorenko, E.](#), & [af Klinteberg, B.](#) (2004). Presentation "Psychosocial disturbances; Internal and external differential manifestations from a gender perspective". The *European Conference of Adolescence, Alcohol and Drugs (ECAAD)*; Symposium 'Cultural and Ethnic Aspects', Stockholm, Sweden, June 17-19, 2004.
- Abstract:** Background: The expression of psychosocial disturbances is greatly debated today. Most research in this area has been conducted on boys and less is known about its prevalence and expression among girls. Present study will explore gender differences in the manifestation of neuropsychiatric aspects of personality such as high

levels of impulsivity, anxiety, guilt, and indirect aggression. Previous results suggest that girls tend to express psychosocial problems/behavioural problems with less frequency than boys do. However, findings also reveal that the occurrence of behavioural problems of girls tends to go unreported. Thus, the aim was to further investigate in what way these personality risk indicators gets manifested in girls' behaviour. Hence, this study will focus on the following objectives: whether boys express more behaviour problems (e.g. attention difficulties, social problems, and sensation seeking) than girls and if the manifestation of impulsivity and other risk aspects of personality gets displayed differently depending on gender.

Methods: Measures of the Karolinska Scales of Personality (Schalling et al, 1987) were used to measure variables such as impulsivity, anxiety, guilt and indirect aggression, the Psychopathy Screening Device (Frick et al, 2000) was utilized to assess sensation seeking, and the Child Behavior Checklist (Achenbach, 1991) was used for the variables concerning psychosocial problems. Subjects consisted of a total of 506 Russian children, 276 girls and 230 boys, aged 8 to 17 yrs. The sample is representative of children in a Russian urban city with a population slightly over a million people.

Results were reported and discussed in terms of possible gender related differences in the manifestation of psychosocial problems in relation to risk symptoms such as high levels of impulsivity and anxiety.

Typ och Nyckelord: Proceedings culture, personality, KSP, PSD, YSR, adolescence, delinquency

Referens: Xu, W.L., Qiu, C.X., Wahlin, Å., Winblad, B., & Fratiglioni, L. (2004). Diabetes Mellitus and risk of dementia in the Kungsholmen Project: A 6-year follow-up study. *Neurology*, 63, 1181-1186.

Abstract: Background: Research on diabetes mellitus as a risk factor for dementia and its main subtypes has produced conflicting results. The authors investigated the relationship between diabetes mellitus and risk of dementia, Alzheimer disease (AD), and vascular dementia (VaD).

Methods: A dementia-free cohort of 1,301 community dwellers aged 75 years and older in Stockholm, Sweden, was longitudinally examined twice over 6 years to detect dementia cases (Diagnostic and Statistical Manual of Mental Disorders-III-R diagnostic criteria). Cox proportional hazards models were used to analyze the data with adjustment for several potential confounders.

Results: During the 5,584 person-years of follow-up, 350 subjects developed dementia, including 260 AD and 49 VaD cases. Diabetes mellitus was associated with hazard ratios (HR) of 1.5 (95% CI 1.0 to 2.1, p 0.04) for dementia, 2.6 (95% CI 1.2 to 6.1) for VaD, and 1.3 (95% CI 0.9 to 2.1) for AD. Patients who were treated with oral antidiabetic medications had HRs of 1.7 (95% CI 1.0 to 2.8, p 0.04) for dementia and 3.6 (95% CI 1.3 to 9.5) for VaD. There were significant interactions of diabetes with severe systolic hypertension (180 mm Hg) on dementia and its main subtypes, and of diabetes with heart disease on VaD.

Conclusions: Diabetes mellitus increases the risk of dementia, and VaD in particular, in very old people. The risk for dementia and VaD is especially high when diabetes mellitus occurs together with severe systolic hypertension or heart disease.

Typ och Nyckelord: Journal diabetes, dementia, risk factor

Referens: Yonker, J.E., Liu, W., Nilsson, L.-G., & Anthenelli, R.M. (2004). Sex differences in visuospatial ability and episodic memory as a function of alcohol consumption. *Alcoholism: Clinical and Experimental Research*, 28, 148A.

Abstract: Irrespective of alcoholism, sex differences in visuospatial ability as well as episodic memory have been reliably demonstrated. Studies in alcoholics have consistently documented cognitive deficits in visuospatial ability, problem solving and memory function. This cross-sectional, population-based study examined if sex differences in cognitive performance could be impacted by alcohol consumption. Drinking data were collected from 2224 randomly sampled adults, ages 35-85, who participated in the Betula Study on Memory, Health and Aging. Participants were classified into non-, light-, moderate- and heavy drinking subgroups based on sex-adjusted normative values. Cognitive tasks demonstrating clear sex differences such as episodic memory tasks (favoring females) and spatial visualization tasks (favoring males) were conducted and performance was assessed by sex and drinking group. After controlling for age and education, overall analyses found expected sex differences in episodic memory and spatial visualization that were apparent across the entire population. When these sex differences were examined by drinking group, visuospatial performance favoring men disappeared for moderate to heavy drinking groups, but higher performance by women on episodic memory tasks was consistent across all levels of alcohol consumption. Traditional biomarkers of increased alcohol consumption (GGT and MCV) correlated with reported drinks per day. These results lend support to the theory that moderate alcohol intake may be beneficial to cognitive function in women, but not necessarily in men.

Typ och Nyckelord: Journal sex differences, visuospatial ability, episodic memory, alcohol, cognition

Referens: Yonker, J.E., Liu, W., Nilsson, L.-G., & Anthenelli, R.M. (2004). Influence of alcohol consumption on cognitive performance in age- and education- matched women. *Alcoholism: Clinical and Experimental Research*, 28, 148A.

Abstract: Few studies have examined how variations in alcohol consumption affect women's cognitive task performance. Preliminary research has suggested that women's cognitive performance may actually benefit from a moderate level of alcohol use. The purpose of this study was to examine the influence of alcohol consumption on cognition in an age- and education- matched sample of non- alcohol dependent women. Participants were drawn from a large Swedish population- based study- the Betula Prospective Study on Memory, Health and Aging. Self-reported drinking levels of beer, wine and liquor were used to categorize 1468 women into groups of non- drinking, light drinking, moderate drinking, or heavy drinking participants. To control for potential confounds of age and education on cognitive ability, the 40 women in the heavy drinking group were randomly matched by age and education to 40 women in each of the other drinking groups. A battery of cognitive tasks was conducted which included episodic memory, semantic memory, verbal fluency, block design, and the Mini-Mental State Examination (MMSE). ANOVA results indicated a significant influence of drinking group on the global cognitive measure, MMSE, with post-hoc analyses revealing that the heavy drinking group performed at a significantly higher level than did the other three groups. Furthermore there was a tendency for the heavy drinking group to perform at a higher level on both the episodic memory and verbal fluency tasks. There were no significant effects of drinking group on semantic memory or block design. Somewhat paradoxically, increased alcohol consumption may be associated with enhanced cognitive performance in non- alcohol dependent women, particularly on the MMSE measure. These results provide additional evidence to the

growing literature that some non-alcoholic women's cognitive performance may benefit from moderate levels of alcohol consumption.

Typ och Nyckelord: Journal alcohol consumption, episodic memory, verbal fluency

Referens: Yonker, J., Nilsson, L.-G., Herlitz, A., & Anthenelli, R.M. (in press). Sex differences in spatial visualization and episodic memory as a function of alcohol consumption. *Alcohol and Alcoholism*.

Abstract: Irrespective of alcoholism, sex differences in visuospatial ability as well as episodic memory have been reliably demonstrated. Studies in alcoholics have consistently documented cognitive deficits in visuospatial ability, problem solving and memory function. This cross-sectional, population-based study examined if sex differences in cognitive performance could be impacted by alcohol consumption. Drinking data were collected from 2224 randomly sampled adults, ages 35-85, who participated in the Betula Study on Memory, Health and Aging. Participants were classified into non-, light-, moderate- and heavy drinking subgroups based on sex-adjusted normative values. Cognitive tasks demonstrating clear sex differences such as episodic memory tasks (favoring females) and spatial visualization tasks (favoring males) were conducted and performance was assessed by sex and drinking group. After controlling for age and education, overall analyses found expected sex differences in episodic memory and spatial visualization that were apparent across the entire population. When these sex differences were examined by drinking group, visuospatial performance favoring men disappeared for moderate to heavy drinking groups, but higher performance by women on episodic memory tasks was consistent across all levels of alcohol consumption. Traditional biomarkers of increased alcohol consumption (GGT and MCV) correlated with reported drinks per day. These results lend support to the theory that moderate alcohol intake may be beneficial to cognitive function in women, but not necessarily in men.

Typ och Nyckelord: Journal sex differences, visuospatial ability, episodic memory, alcohol, cognition

Referens: Zettergren, P. (2004). Female alcohol abuse and social adjustment in late adolescence and early adulthood as related to early life peer status: A person-oriented approach. Presentation at the *European Conference of Adolescence, Alcohol and Drugs*, Stockholm.

Abstract: Adhering to a person-oriented approach, a modern clustering technique was applied to longitudinal sociometric measures, with the aim of identifying temporally stable age 10 to age 13 peer status clusters of girls. In addition, stable friendship groups were identified by a more traditional classification technique. Peer status clusters and friendship groups were then associated to late adolescence, and young adulthood adjustment. The study included 445 females from the Swedish longitudinal research program Individual Development and Adaptation. Results showed that, by late adolescence and young adulthood, rejected girls were at increased risks for criminal offending and especially for alcohol abuse (2 and 8 times increased risk, respectively). Childhood confounding variables, like aggression, withdrawal, school achievement, and SES, were introduced and explained some of the significant results that were found. However, the significant association between peer rejection and late adolescence and young adulthood alcohol abuse remained relatively unaffected by the introduction of these potentially confounding variables. A later midlife follow-up, showed that, in general, rejected girls did not differ significantly from other girls in their adjustment, including self-declared alcohol consumption.

Typ och Nyckelord: Proceedings peer status, longitudinal, adjustment

Referens: Zimmer, H.D., Helstrup, T., & Nilsson, L.-G. (in press). Action-events in everyday life and their remembering. In S. Magnussen & T. Helstrup (Eds.), *Everyday memory*. Hove, UK: Psychology Press.

Abstract: On the basis of a large body of research on action memory, this chapter discusses how this area has developed and how the basic principles established can be implemented in many situations of memory in everyday life. It is discussed at some length how action skills are acquired and how actions are executed. It is also discussed how actions can be visually encoded and how visually encoded action events are remembered. Accuracy of memory for perceived and imagined is another topic that is considered at some length in the chapter. Still another topic is actions are intended in the context of prospective memory.

Typ och Nyckelord: Book (chapter) actions, action memory, subject-performed tasks

Referens: Ögren, M.-L., Jonsson, C.-O., & Sundin, E. (in press). Group supervision in psychotherapy. The relationship between focus, group climate and perceived attained skill. *Journal of Clinical Psychology*.

Abstract: This study examined supervisees' and supervisors' view on focus and group climate in group supervision, and their relationship with supervisees' attained skill. After supervision, supervisees completed a revised version of Buckley's measure of psychotherapeutic skill. Supervisees' and supervisors' experience of focus and climate in the supervision was measured with a questionnaire, Topics and Climate (TAC). The results showed that supervisors' ratings of the extent to which different foci were used in the supervision were significantly higher compared to supervisees' ratings. Hierarchical regression analysis showed that differences in supervisor style were related to supervisees' experience of attained skill. Supervisees' experience of the degree to which focus in supervision was on Psychodynamic processes was positively related to perceived attained skill while focus on Theoretical aspects was negatively related. These findings underline the importance of research work with topics and group processes in group supervision.

Typ och Nyckelord: Journal group supervision, climate, psychotherapeutic skill

Referens: Ögren, M.-L., & Sundin, E. (2004). Gruppens inverkan på lärandeprocessen. Preliminära resultat från ett pågående forskningsprojekt om grupphandledning inom utbildningsramar. [Group supervision in an academic training context. An on-going research project and preliminary results from one study.] *Matrix*, 21, 60-73.

Abstract: The purpose of this paper was to present: 1) the design of an on-going research study of group supervision in psychotherapy; and 2) preliminary results concerning the usage of the group format in supervision. The study on group supervision is performed in collaboration between five Swedish universities and university affiliated clinics. Data is collected from supervisors and supervisees at different measurement points, levels of training, and psychotherapeutic orientations. The study will explore differences between various training levels and psychotherapeutic orientations with regard to the impact of group supervision, supervisor style, group climate

and the learning process on the usage of the group format. The preliminary findings from the study that were summarized in this paper concerns supervisee and supervisor ratings of experienced and ideal usage of the group format. The sample consisted of supervisees and supervisors on the basic training level. Irrespective of psychotherapy orientation, both supervisors and supervisees emphasized a need for paying more attention to group processes and group interaction in group supervision.

Typ och Nyckelord: Journal supervision, psychotherapy, group format

Referens: Öhman, A., & Wiens, S. (2004). The concept of an evolved fear module and cognitive theories of anxiety. In A.S.R. Manstead, N.H. Frijda & A.H. Fischer (Eds.), *Feelings and emotions: The Amsterdam symposium* (pp. 58-80). Cambridge, UK: Cambridge University Press.

Abstract: Consistent with theories that postulate appraisal as a key mechanism of emotion, the theoretical rationale behind the currently prominent cognitive therapy for disorders of anxiety and depression stresses the role of conscious processing in the generation of fear and anxiety. This emphasis, however, runs counter to recent developments in physiological, cognitive, and social psychology that documents the importance of automatic processes in many psychological contexts. The point of departure for this chapter can be summarized in terms of the concept of an evolved fear module: a relatively independent behavioral, mental, and neural system that has evolved as a response to recurrent survival threats in mammalian evolution. The module is postulated to be selective, automatic, encapsulated, and realized in specific neural circuitry centered on the amygdala. Research using masked stimuli show that the fear module is independent of conscious cognition. From this perspective, consciously accessible cognition has little role in the activation of fear and anxiety but may be important in maintaining the emotion over time.

Typ och Nyckelord: Book (chapter) emotion, fear, evolution

Referens: Östlund, G., Borg, K., & Wahlin, Å. (2004). Cognitive functioning in post polio patients with and without general fatigue: No evidence for compromised cognitive abilities. *Journal of Rehabilitation Medicine*, 36, 1-6.

Abstract: Objective and design: This study examined 2 main hypotheses. First, whether patients with post-polio suffering from general fatigue (n = 10) demonstrate cognitive deficits compared with patients with post-polio without general fatigue (n = 10). Secondly, by systematically varied test order administration we examined whether such differences varied as a function of increasing cognitive load during cognitive testing. Subjects: Twenty patients diagnosed with post-polio syndrome, 10 with general fatigue and 10 without fatigue. Results: Neither of the 2 hypotheses were confirmed. The group with general fatigue reported elevated levels of depression. However, no systematic association between level of depression and cognitive performance could be detected. Conclusion: The results of this study provide no evidence that general fatigue or cognitive load affects cognitive functioning in post-polio.

Typ och Nyckelord: Journal post-polio, fatigue, cognition