

Annual Report 2001

Annual Report 2001 innehåller totalt **233** referenser sorterade efter försteförfattarens efternamn. Under året anställda forskare vid Psykologiska institutionen är markerade med blå färg.

Lite statistik

- Av 233 bidrag är 64 "in press".
- 116 referenser avser artiklar i vetenskapliga tidskrifter (Journal). Av dessa var 38 st "in press".
- 58 referenser avser böcker eller bokkapitel (Book (chapter)). Av dessa var 25 "in press".
- 10 referenser avser rapporter (Report). Av dessa var en "in press".
- 48 referenser avser konferensbidrag (Proceedings). Av dessa var en "in press".
- 14 referenser avser doktorsavhandlingar (Dissertations) som lagts fram under året.
- 206 av alla bidrag är på engelska, 24 på svenska och tre på övriga språk (spanska, tyska och italienska).

Referens: af Klinteberg, B. (2001). Antisocial behavior in a neuropsychological perspective. *SiS konferensen 'Ung med tung problematik'* [Young with serious problematics]. Stockholm, August 2001.

Abstract:

Typ och Nyckelord: Proceedings hyperactive behavior, aggressiveness, longitudinal study

Referens: af Klinteberg, B., & Bergman, L.R. (2001). Personality types emerging from the Karolinska Personality Scales: A person-oriented approach. *Xth European Conference on Developmental Psychology*, Uppsala, August 22-26, 2001.

Abstract:

Typ och Nyckelord: Proceedings cross-cultural studies, personality, alcohol, violence

Referens: Alehagen, S., Wijma, K., Lundberg, U., Melin, B., & Wijma, B. (2001). Catecholamine and cortisol reaction to child birth. *International Journal of Behavioral Medicine*, 8, 50-65.

Abstract:

One way to study the stressfulness of childbirth is to examine the output of stress hormones. In this study, urinary catecholamines and salivary cortisol from 50 primiparous women were collected for one day during the gestational weeks 37-39, hourly during labor and delivery, and 2 hours and 2 days postpartum. All three stress hormones increased statistically significantly from pregnancy to labor. The increase in adrenaline and cortisol was more than 500% and the increase in noradrenaline about 50%. After labor the output decreased, but not statistically significantly below the levels during late pregnancy. Hormone levels during late pregnancy, during labor and delivery and during the period postpartum mostly did not correlate systematically. However, noradrenaline and adrenaline, as well as adrenaline and cortisol were positively correlated during labor. After administration of epidural analgesia, noradrenaline and adrenaline decreased significantly, whereas cortisol did not change. In conclusion, the results of this study support the assumption that childbirth is a very stressful event and that the stress responses vary considerably between the women. The substantial increase of adrenaline and cortisol compared with noradrenaline indicate that the mental stress is more dominated than the physical stress during labor.

Typ och Nyckelord: Journal urinary catecholamines, salivary cortisol, child birth, primiparous women

Referens: Austers, I. (2001). *Perspectives of ethnic group attributions*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract:

The present thesis includes three empirical studies exploring the impact of perspective-taking on attributions of stereotypes and causal explanations of behavior by different ethnic groups. The main purpose of the present thesis was to test the assumption that different aims and interests, which relate to different perspectives, result in different outcomes of people's judgments. Study 1 examined attributions of value stereotypes in a real world minority/majority setting in Latvia with Latvians representing a majority and Russians a minority ethnic group. Russians, who experienced themselves as minority in relation to Latvians, perceived themselves as more similar to the in-group members in comparison to Latvian participants. The Russian stereotype of Latvians was more in line with the stereotype Latvians ascribed to themselves than was true for the Latvians' stereotype of Russians as compared to the stereotype Russians ascribed to themselves. Both ethnic groups in the study stereotyped "contemporary people" in a similar way. The aim of Study 2 was to gain a better understanding of people's ability to take an ethnic out-group's perspective in explaining positive or negative intergroup behavior. Participants, when asked to explain intergroup behavior by imagining the out-group's perspective, gave similar causal attributions to those usually obtained in studies using the direct (one's own) perspective. From the imagined (out-group's) perspective participants gave more internal explanations for positive than negative behaviors by in-group members. In Study 3 participants (all being undergraduate

students and ethnic Latvians) were asked to explain the behavior of a political union commonly associated with interests of Russians living in Latvia (thus being an out-group in relation to participants) from four different perspectives. The results showed a predominance of internal reasons to situational reasons in the explanations of the behavior of the out-group and the out-group-reflected ("what do you think what they think we think") perspectives, but only nonsignificant differences between the two types of reasons in case of the out-group's and the student perspectives were used. In sum, the findings of the three studies speak in favor of the existence of a shared reality, which is used differentially depending on what motivation is activated from a certain perspective.

Typ och Nyckelord: Dissertation perspective taking, causal explanations, stereotypes

Referens: Austers, I. (in press). Attribution of value stereotypes as a consequence of group membership: Latvian and Russian students living in Latvia compared. *International Journal of Intercultural Relations*.

Abstract: This study examined stereotyping in a real world minority/majority context. A total of 157 Latvian and 172 Russian high school students rated the importance of a wide variety of values for oneself, for one's ethnic in-group, for out-group members, and for contemporary people. The minority group members (Russians) attributed very similar value profiles to themselves and to the in-group members, which was not true for the majority group members (Latvians). There was also a higher degree of correspondence between the Latvians' stereotype of their own group (autostereotype) and the stereotype of Latvians held by Russians than between the Russian autostereotype and the stereotype of Russians held by Latvians. There were no differences between the groups with respect to value profiles attributed to contemporary people. The results were interpreted in terms of the social context of situations involving a minority and a majority group.

Typ och Nyckelord: Journal value stereotypes, ethnic minority/majority

Referens: Austers, I. (in press). Ability to take an out-group's perspective in explaining positive and negative behaviors. *Scandinavian Journal of Psychology*.

Abstract: A total of 251 Latvian and Russian schoolteachers explained positive and negative behaviors from their own perspective and from the perspective of an ethnic out-group. The results were in line with the attributional pattern usually found in studies using the direct perspective of judgment (Hewstone, 1990), when participants are asked to take perspective of the ethnic out-group. That is, there was an outcome effect in causal attributions for in-group actors and a categorization effect for negative behavior from the imagined (out-group's) perspective. The attributions from the direct perspective only partly replicated the commonly found pattern. The results support Montgomery's (1994) perspective theory.

Typ och Nyckelord: Journal

Referens: Austers, I., & Montgomery, H. (in press). Explaining an out-group's political behavior from four different perspectives. *Journal of Baltic Psychology*.

Abstract: A total of 192 undergraduate students explained actions by a political union that was an out-group in relation to the participants. The between-subjects design included four perspectives: own, out-group's, out-group reflected (a judgment of what the out-group members think about the opinion of participant's group), and student (more distanced from the judgment object) perspective. There was a predominance of psychological (internal) reasons over situational (external) reasons in the explanations of the behavior of the out-group from the own and the out-group reflected perspectives, while there were only nonsignificant differences between the two types of reasons when the out-group's and the student perspectives were used. The results suggest asymmetry in perception of the divergence between own view and out-group's view: the same perspective difference was obtained from the participants' perspective and from how the participants thought from the out-group's perspective.

Typ och Nyckelord: Journal causal explanations, perspectives, political behavior

Referens: [Backenroth, G. \(2001\). *The self-reported experiences of hearing impaired people's integration in working life*. Stockholm University: Reports from the Department of Psychology, No. 865.](#)

Abstract: Hearing loss constitutes a hidden disability in working life. The purpose of this study was to investigate the experiences of hearing impaired individual's integration in working life. The investigation group comprised of a random sample of 41 hearing impaired individuals of both sexes, aged between 25 and 55 years. The methods used were an in-depth semi-structured interview and symbolic models illustrating various levels of integration. The results demonstrated that the majority of hearing impaired persons do feel integrated in their work group to a high, very high or moderate degree. No differences regarding the experience of integration was found between the sexes. However, hearing impairment in working life would appear to have different implications for women than for men. There was a relationship between the experience of integration and satisfaction with some factors of the social work environment, namely satisfaction with work associates, with managers and perceived appreciation in the workplace. Integration is perceived and expressed in a variety of ways. The symbolic models illustrating various levels of integration showed a moderate statistical association with the reported five-point scale of integration. The case studies presented illustrate the interplay between individual hearing impaired persons and their work conditions. Hearing impaired individuals learn to cope at work with their hearing loss in various ways, some more successful than others. The result of this interplay is usually an interaction between the hearing impaired person's personal and social assets and his or her work environment, particularly the social environment at the work place.

Typ och Nyckelord: Report hearing impairment, integration, work

Referens: [Backenroth, G. \(2001\). People with disabilities and the changing labour market - some challenges for counseling practice and research on workplace counseling. *International Journal for the Advancement of Counselling*, 23, 21-30.](#)

Abstract: Nearly a quarter of the entire population of the EU has a disability. Disabled employees have become increasingly integrated into the labor force. According to a national survey and an international literature review, disabled people's experiences enrich the cultural diversity of the workplace. The purpose of the present

paper is to present current research trends and identify future research needs in terms of occupational counseling for disabled employees. Research in this area poses many challenges, and there is a clear need for an interdisciplinary approach. Counseling-oriented, work-oriented and manager-based models are discussed in this paper. Counseling can promote collaboration with various agencies, such as family organizations, educators and managers, thus laying the foundations for developing the competencies needed in the labor markets of the future. The paper goes on to discuss the role of empowerment, self-advocacy and social relations over the life span.

Typ och Nyckelord: Journal disability, workplace, counseling

Referens: [Backenroth-Ohsako, G. \(2001\). Kulturmöten mellan döva och hörande på arbetslivets arena. \[Cultural encounters between the deaf and the hearing at the work scene.\] *Socialvetenskaplig tidskrift*, 4, 326-336.](#)

Abstract: Today we have an increased knowledge of how we can make use of our cultural resources. Paradoxically enough we make little use of this knowledge. The aim of this article is to present some perspectives which might contribute to the understanding of disabled persons' opportunities for social inclusion at the work scene. The starting point suggests that the work scene gives an opportunity for a cultural encounter between the deaf and the hearing. A cultural encounter may or may not contribute to social inclusion at the work place. Identifying disabled persons' cultural affiliation may increase our understanding for how successful social inclusion may turn out. Examples are given from research with deaf and hearing impaired persons. An individual's competence profile may also enhance or obstruct the person's social inclusion in the work group. The prevailing view of disabled persons in our society has not been competence enhancing or focusing on their resources or on what they might contribute. By applying an interactionistic perspective we can appreciate the disabled person as an active agent interacting with and influencing his or her environment. Fostering empowerment on all levels in society is emphasized as well as looking at old problems in a novel way. Managing diversity at the work scene has to do, among other things, with a versatile leadership, a bicultural approach, bridging and creating a work atmosphere where development and quality of life for all employers are reached, both those representing the majority culture and those representing the minority culture.

Typ och Nyckelord: Journal social inclusion, culture, diversity

Referens: [Berglund, B., Eriksen, C.A., & Nilsson, M.E. \(2001\). Exploring perceptual content in soundscapes. In E. Sommerfeld, R. Kompas & T. Lachmann \(Eds.\), *Fechner Day 2001* \(pp. 279-284\). Lengerich, Germany: Pabst Science Publishers.](#)

Abstract: At the quiet and noisy sides of buildings 69 residents of three residential areas found 414 soundscapes to be similar with regard to sounds discerned. The most frequently heard sound was road traffic. At the quiet sides, children playing, talking people, birds and unidentified sounds were more often heard indoors with windows closed than outdoors. Generally, sounds heard outdoors were louder than those heard indoors. Ventilation and traffic sounds were loudest at the quiet and noisy sides, respectively. The loudest soundscapes were found at the noisy side outdoors and the least loud at the quiet side with closed window. The perceived quality of the soundscapes were assessed with 12 attributes representing the four components adverse, reposing, affective, and expressionless (88% explained variance in PCA). The outdoor soundscapes showed predominantly high agreeableness for adverse attributes and low agreeableness for the reposing attributes and the reverse indoors with closed window. This outcome was more pronounced at the noisy side. The most livable soundscapes would tentatively include a composition of sounds that create a harmony restful to the ear and mind.

Typ och Nyckelord: Proceedings Book (chapter) soundscape, perceived sound quality, loudness, Fechner Day

Referens: [Berglund, B., Gunnarsson, A., Job, R.F.S., & Nilsson, M.E. \(2000\). An innovative approach to creating a questionnaire for the Sick Building Syndrome. *Archives of the Center for Sensory Research*, 5\(1\), 1-75.](#)

Abstract: A questionnaire was designed for assessing the Sick Building Syndrome (SBS). An innovative approach was created in which sets of questions focused not only on building-related causes but also on person-related causes. Moreover, a new perceptual procedure for measuring symptoms in SBS was invented and utilized. The SBS questionnaire consists of four basic categories of questions: (a) on demographics and general factors related to the respondent as an individual, (b) on environmental perceptions of residential building features, and residential, environmental factors including indoor air, (c) on person-related factors including personality, attitudes and psychosocial (work) environments, and (d) on body perceptions related to SBS in the form of conventional symptoms as well as detailed descriptors referring to specific body sites (eyes, upper airways and the skin). An elaborate procedure was followed in selecting sets of items and scales for measuring personality psychometrically. With the approval of test constructors, recognized personality tests were selected after a screening procedure based on reliability as well as the validity for the general population. Environmental perceptions and symptoms were measured according to good practice in psychophysical research. The completed SBS questionnaire was first tested for understandability in SBS affected occupants of a building. After rephrasing questions and other adjustment of the questionnaire, it was finally tested in a field study of three residential buildings in which many occupants had claimed that they had the SBS. This test proved that this new SBS questionnaire has good potentials for separating building-related and person-related factors in SBS.

Typ och Nyckelord: Journal sick building syndrome, questionnaire design, environmental perceptions

Referens: [Berglund, B., Harju, E.-L., Kosek, E., & Lindblom, U. \(2001\). Quantitative and qualitative perceptual analysis of cold dysesthesia and hyperalgesia in fibromyalgia. *Archives of the Center for Sensory Research*, 6\(2\), 77-93.](#)

Abstract: Somatosensory perception thresholds, perceived intensity, and quality of perceptions were assessed in 20 women with fibromyalgia syndrome (FMS) and in 20 healthy age-matched female controls. All patients and controls scaled perceived intensity and described perceived quality of randomized thermal (Thermotest) and tactile (von Frey filaments) stimulation. Perceived intensity was scaled by free-number magnitude estimation and interindividual comparability was accomplished by Master Scaling. Perceived quality was assessed by choosing verbal descriptors from a list. Thenar was used as a reference for each modality tested. All patients were able to reliably scale perceived intensity at the thenar, as well as in pain-affected body areas. Perception thresholds for cold pain, heat pain, cold-pain tolerance and heat-pain tolerance were significantly lower in

patients than controls. For cold and tactile stimulation, the master scaled perceived intensities were significantly higher in patients' pain-affected areas, whereas for warmth/heat stimulation, the intensities were significantly lower. In the qualitative perceptual analysis the most striking and significant finding was the aberration of cold-evoked perceptions in all patients: most stimuli in the range of 30-10 °C were reported as heat or other paresthetic or dysesthetic perceptions. The perceptual quality of warmth, and of touch, did not differ from the controls. Another aberration was observed in the nociceptive range of thermal and of tactile stimulation as significantly more frequent pain-related descriptors than in controls. This indicates a general nociceptive facilitation in addition to the lower thermal pain thresholds. The combination of cold hyperesthesia, cold dysesthesia, and multimodal hyperalgesia suggests a selective pathophysiology at a particular level of integration, possibly in the insular cortex. It is suggested that the aberrations revealed by the supraliminal sensory evaluation may be generic for FMS. Particularly, the aberrations established in all patients for perceived quality and intensity in the cold sensory channel may be an additional diagnostic criterion.

Typ och Nyckelord: Journal fibromyalgia, cutaneous perception, sensory dysfunctions

Referens: [Berglund, B., Harju, E.-L., Kosek, E., & Lindblom, U. \(in press\). Quantitative and qualitative perceptual analysis of cold dysesthesia and hyperalgesia in fibromyalgia. *Pain*.](#)

Abstract: Somatosensory perception thresholds, perceived intensity, and quality of perceptions were assessed in 20 women with fibromyalgia syndrome (FMS) and in 20 healthy age-matched female controls. All patients and controls scaled perceived intensity and described perceived quality of randomized thermal (Thermotest) and tactile (von Frey filaments) stimulation. Perceived intensity was scaled by free-number magnitude estimation and interindividual comparability was accomplished by Master Scaling. Perceived quality was assessed by choosing verbal descriptors from a list. Thenar was used as a reference for each modality tested. All patients were able to reliably scale perceived intensity at thenar, as well as in pain-affected body areas. Perception thresholds for cold pain, heat pain, cold-pain tolerance and heat-pain tolerance were significantly lower in patients than controls. For cold and tactile stimulation, the master scaled perceived intensities were significantly higher in patients' pain-affected areas, whereas for warmth/heat stimulation, the intensities were significantly lower. In the qualitative perceptual analysis the most striking and significant finding was the aberration of cold-evoked perceptions in all patients: most stimuli in the range of 30-10 °C were reported as heat or other paresthetic or dysesthetic perceptions. The perceptual quality of warmth, and of touch, did not differ from the controls. Another aberration was observed in the nociceptive range of thermal and of tactile stimulation as significantly more frequent pain-related descriptors than in controls. This indicates a general nociceptive facilitation in addition to the lower thermal pain thresholds. The combination of cold hyperesthesia, cold dysesthesia, and multimodal hyperalgesia suggests a selective pathophysiology at a particular level of integration, possibly in the insular cortex. It is suggested that the aberrations revealed by the supraliminal sensory evaluation may be generic for FMS. Particularly, the aberrations established in all patients for perceived quality and intensity in the cold sensory channel may be an additional diagnostic criterion.

Typ och Nyckelord: Journal fibromyalgia, cutaneous perception, sensory dysfunctions

Referens: [Berglund, B., Harju, E.-L., & Lindblom, U. \(2001\). Perceptual analysis of sensory dysfunctions in patients with neuropathic pain and fibromyalgia. *Archives of the Center for Sensory Research*, 6\(2\), 1-8.](#)

Abstract: Patients with ongoing pain constitute a severe clinical and social problem: ca. 40% of the adult Swedish population suffer from more or less ongoing pain; ca 10% of these are unable to lead a normal life due to severe pain. Whereas acute pain is a warning for injury and disease, ongoing long-term pain does not fulfill any biologically positive function. The interplay was mapped supraliminally between the ongoing pain in patients with neuropathic pain and fibromyalgia and the simultaneously appearing abnormal perceptions caused by dysfunctions in cutaneous senses (warmth, cold, touch). This was made possible by new scientific assessment methods developed for this purpose in which experimentally induced perceptions at different body areas can be validly compared between individual patients and healthy controls and within individuals at different occasions. To facilitate such comparisons, a reference material for warmth and cold perception was also produced for healthy young and old women and men. One new method bases on master scaling of perceived intensity and utilizes the healthy thenar eminence as reference body area. The scaling of perceived intensity of warmth, cold and touch was supplemented by a new method for assessing perceived quality utilizing a small set of verbal descriptors. In neuropathic pain affected body areas, abnormal psychophysical functions and distorted perceptions are common in the three modalities; different combinations of normal, hypo-, and hypersensitivity were found for perceived intensity of warmth, cold or touch; still contralateral pain unaffected body areas always show normal psychophysical power functions. Conversely, normal psychophysical power functions of perceived intensity were found in the most pain affected body areas in fibromyalgia. However, for cold and tactile stimulation, the perceived intensities were significantly higher for these patients than controls, whereas for warm/heat stimulation, they were significantly lower. The most striking and significant finding was that all fibromyalgia patients had aberrant cold-evoked perceptions, most stimuli in the range of 30-10 °C were reported as heat or other paresthetic or dysesthetic perceptions. These aberrations for cold may be generic for FMS and may be used as an additional diagnostic criterion.

Typ och Nyckelord: Journal cutaneous perception, sensory dysfunction, master scaling

Referens: [Berglund, B., Harju, E.-L., & Lindblom, U. \(2001\). Master scaling calibrates the pain patient's perceived intensity scales for touch, cold and warmth. *Archives of the Center for Sensory Research*, 6\(2\), 9-29.](#)

Abstract: A new approach is presented for scaling perceived intensity of touch, cold and warmth based on magnitude estimation. In this method, named master scaling, thenar is utilized as common reference area for scaling and calibrating perceived intensity. The master scaling is particularly well suited for clinical applications in which the stimulation in pain-affected body areas may create a complex perception (e.g., perception of paradoxical heat for cold stimulation). The results from three different experiments showed that: (a) All patients and healthy subjects were able to scale adequately the perceived intensity of touch, cold, and warmth at unaffected body areas; (b) Thenar stimulations were shown to be adequate common references in the joint scaling of perceived intensity of other body areas in pain patients as well as healthy persons; (c) Individual thenar psychophysical functions can be used for screening patients and healthy persons with regard to their ability to scale perceived intensity in touch, cold and warmth; (d) Master scaled perceived intensity scales can be used for determining if various pain-unaffected body areas are normal or abnormal in patients and in healthy persons; and (e) The interindividual variation in perceived intensity is considerably reduced after master scaling and approaches that of intraindividual variation as estimated from other modalities. Finally, empirically based thenar Master Functions of perceived intensity for each of the three modalities touch, cold and warmth are proposed to be

used in future studies on touch, cold, and warmth in patients, as well as in health persons.

Typ och Nyckelord: Journal pain syndromes, cutaneous perception, master scaling

Referens: [Berglund, B., Harju, E.-L., & Lindblom, U. \(2001\). Central and peripheral neuropathic pain characterized by perceived intensity and quality of touch, cold and warmth. *Archives of the Center for Sensory Research*, 6\(2\), 31-53.](#)

Abstract: Beside examination criteria were used for selecting 21 patients with chronic neuropathic pain: 12 suffered from peripheral nerve lesions and 9 from central lesions, including 7 with central post-stroke pain. Somatosensory function was tested in psychophysical experiments at the pain-affected body areas, at the homologous contralateral painfree areas, and at the contralateral thenar as a common reference site. Perceived intensity and perceived quality were determined for 26 tactile, 32 cold and 38 warm stimuli, each set presented in random order. For contralateral thenar, individual perceived intensity scales of touch, cold and warm show high reliability and normal psychophysical power functions for all 21 patients. The individual perceived-intensity scales at thenar were utilized as references for Master Scaling of perceived intensities at the pain-affected body areas and their contralateral areas (6 each at the upper extremity and the torso and 13 at the lower extremity). In the pain-affected areas, abnormal psychophysical functions and distorted perceptions are revealed for all three modalities. Different combinations of normal, hypo-, and hypersensitivity are found for perceived intensity that cannot be predicted from the perception thresholds. The descriptor analysis reveals that significantly more descriptors related to pain and dysesthesia are reported for pain areas than contralaterally. Five out of seven post-stroke patients display abnormal descriptors for all cold stimuli and report these as paradoxical heat. No correlation is established between ongoing pain and any of the painful or dysesthetic evoked perceptions or with hyper- or hypoesthesia for perceived intensity. A correlation has, however, earlier been shown between evoked and ongoing pain in both human experimental models of provoked acute pain and some studies on patients. We hypothesize that a positive correlation is related to pain sustained by ongoing nociception, which may be insignificant in the longstanding neuropathic pain condition based on central processes that generate pain independently of afferent nociceptive inflow.

Typ och Nyckelord: Journal neuropathic pain, cutaneous perception, sensory dysfunctions

Referens: [Berglund, B., Hassmén, P., & Preis, A. \(in press\). Annoyance and spectral contrast are cues for similarity and preference of sounds. *Journal of Sound and Vibration*.](#)

Abstract: Previous research has suggested that perceived similarity is based on primarily cognitive processes, whereas preferences are based to a larger extent on affective processes. This was put to an empirical test utilizing 15 complex sounds as stimuli and 25 subjects for the assessments. Various versions of multidimensional scaling were used as a method of comparison. The results show that data analyses must take into account individual differences in similarity and non-preference. Contrary to the hypothesis expressed, both similarity and non-preference were found to be based mainly on affective responses because a major proportion of the explained variance originated from the perceived annoyance of sound. This was not true for perceived loudness or for the acoustic variables of Zwicker's loudness and Aures's sharpness. Spectral contrast calculated as the number of maxima in the normalized Zwicker's specific loudness spectra was found to be the best acoustic candidate for explaining at the individual level what properties of sound cause them to be perceived as similar or non-preferred.

Typ och Nyckelord: Journal loudness, similarity, preferences

Referens: [Berglund, B., & Lindvall, T. \(in press\). Olfaction. In S. Kuwano \(Ed.\), *Handbook of Human Factors*. Tokyo, Japan: Asakura Publishing Co. Ltd. \(transl. to Japanese\).](#)

Abstract: This handbook chapter describes the human sense of smell starting with the chemical stimulation of receptor cells and concludes with odor interaction processes at the perceptual level. The receptor cells terminate in knobs with cilia which are the initial site of olfactory signal transduction which in turn is similar to other receptor-mediated neuronal communication processes. In contrast to most other neurons, olfactory receptor cells are continuously, but slowly being regenerated. The axons of the olfactory receptor cells form bundles which carry the olfactory information directly, without synapses, to the olfactory bulbs of the brain. There are 800-1000 genes that encode altogether 1000 odor receptors and each type of receptor is expressed in thousands of neurons. Thus far, no specific receptors have been identified and it is not possible to predict odor sensations from chemical structure of an odorant or to establish the "odor space". The human olfactory system has a higher capacity than chemical instruments to identify a large number of odors at weaker concentrations. This is supported by processes of selective self-adaptation, cross-adaptation and facilitation. The input-output characteristics of the olfactory systems adheres to a power function with exponents less than one for most chemical compounds which means that the olfactory system attenuates the stimulus information, relatively more at high concentrations. An even stronger attenuating function is activated for mixtures of different odorous substances. Odor perception is modulated by activities in the trigeminal system.

Typ och Nyckelord: Book (chapter) olfactory system, sensory processes

Referens: [Berglund, B., & Lindvall, T. \(in press\). The olfactory environment. In S. Kuwano \(Ed.\), *Handbook of Human Factors*. Tokyo, Japan: Asakura Publishing Co. Ltd. \(transl. to Japanese\).](#)

Abstract: Comfort is an essential aspect of a healthy environment. The air we breathe evokes air-quality perceptions which contribute to this comfort (odor, freshness, etc.). The perception of air is multisensorial (olfaction, trigeminal, warmth, cold, pressure) but is still perceived as an entity, i.e., as having one odor. Environmental odors are broad-band mixtures of hundreds of odorants, constituents of air which humans are unable to pinpoint. The qualitative character of air results from the joint impact of a large number of chemical and physical as well as sensory components. The discipline of psychophysics provides a tool box of techniques for sensory evaluation of air quality. The main approaches to sensory evaluation of indoor air quality include detection or identification, discrimination, equal-attribute matching, category scaling, magnitude estimation, descriptor profiling, classification, and multidimensional scaling. If perceived air quality in a building is improved by removing pollution sources and increasing ventilation, the risk for adverse health effects is typically also reduced. Indoor air quality assessments with psychological methods is either conducted directly in rooms or based on materials and compounds testing. Models are, however, required for predicting human reactions to real life exposures from laboratory tests of individual materials. Such tests also have other important uses, for example, labeling of materials and products or guiding company product development.

Other applications for sensory testing are auditing buildings, comparing buildings or occupant groups and comparing systems and interventions within a building.

Typ och Nyckelord: Book (chapter) air quality, sensory evaluation, materials testing

Referens: Berglund, B., & Nilsson, M.E. (2001). Total annoyance (or total loudness) models of combined community sounds. *Archives of the Center for Sensory Research*, 6(3), 33-59.

Abstract: A theoretical consequential analysis was applied to hitherto proposed psychophysical and perceptual models of total annoyance (or total loudness) of combined community sounds. The great majority of proposed models describe total annoyance in terms of source-specific annoyance or in terms of annoyance-matched sound levels. These models were accommodated in a general perceptual or a general psychophysical model. The two are shown to be mathematically equivalent under certain assumptions about the value of their constants together with assumptions about the psychophysical annoyance function for singular sounds. The analysis of the proposed models showed that model predictions were greatest for the Independent Effect Model and smallest for the Strongest Component Model, with model predictions of other models falling between these two extremes. Despite great variability, a general trend was found in the results from previous psychoacoustical experiments: The contribution of a given sound to total annoyance is less if combined with a relatively strong sound than if combined with a less strong sound. This outcome may be related to nonlinearities in response scales, interactions between combined sounds (e.g., masking), or the annoyance integration principle. Future experiments should be designed with the purpose of estimating the relative importance of these factors for total annoyance. Proposed models do not allow for "compromise" outcomes, that is, the combined sound is less annoying than the most annoying of the sounds combined. This is, however, a common outcome in field and laboratory studies. In 18 empirical studies, "compromise" outcomes were typically found if source-specific annoyance referred to sounds heard within combined sound (mainly field studies) and not, if referred to singular sounds presented alone (only laboratory studies). This call for experimental research, where singular and combined sounds are scaled for both total annoyance and source-specific annoyance as heard within combined sound.

Typ och Nyckelord: Journal combined sound, prediction models, loudness

Referens: Berglund, B., & Nilsson, M.E. (2001). Identification of sounds from traffic. *Archives of the Center for Sensory Research*, 6(3), 61-70.

Abstract: Listeners' ability to identify road-traffic, aircraft, or train sounds in environmental sound recordings was studied in a psychoacoustical experiment involving 16 participants. In free-labeling identification, excerpt traffic sounds were described in terms of "object" (sound-producing source) rather than in terms of perceptual attribute. The main sounds identified were traffic sounds, but a few references were also made to machine-related or water-related sources. Sounds from aircraft were easier to identify than the sounds from trains, which in turn were easier to identify than the sounds from road-traffic. This identification order was confirmed in multiple-choice and dominant-source identification tasks. Compared to free-labeling, multiple-choice identifications produced considerably more false alarms (i.e., identification of a sound source not present). For multiple-choice, several sound sources were particularly identified in the excerpt road-traffic and train sounds although the (recorded) sound was typically clearly discerned in the joint dominant-source identification task. Comparison with physical properties of sound suggested that spectral rather than temporal cues were used in sound-source identification.

Typ och Nyckelord: Journal traffic sound, identification, false-alarms

Referens: Berglund, B., & Nilsson, M.E. (2001). Total and source-specific loudness of singular and combined traffic sounds. *Archives of the Center for Sensory Research*, 6(3), 71-93.

Abstract: Unlike previous research on total loudness (or annoyance) of combined traffic sounds, the present also included the scaling of source-specific loudnesses as heard *within* the simultaneously presented sounds. In three experiments, the same 20 participants scaled total and source-specific loudness of pairs of road-traffic, aircraft and train sounds, with the aid of free-number magnitude estimation. The results showed that for *equally loud* combined sounds, source-specific loudness of both sounds will be reduced because of masking. For *unequally loud* combined sounds, the less loud sound will be substantially or completely reduced, whereas the louder sound will stay more or less unchanged. The total loudness gain was great for equally loud sounds combined, on average 4.5 dB expressed in equal-loudness calibrated sound level. This gain is inconsistent with energy summation, which at most would give 3 dB. Total loudness ($_{tot|ab}$) and source-specific loudness heard within combined sound ($_{a|ab}$, $_{b|ab}$) were found to adhere to a general loudness integration model: $_{tot|ab} = (_{a|ab} + _{b|ab})^{1/n}$, where different values of the constant n define arithmetic summation ($n=1$), Euclidean summation ($n=2$), and the strongest component principle ($n=\infty$). The empirical n -values were found to range from 2.5 to 2.9, which means that total loudness is less than the arithmetic or Euclidean sum but greater than that of the loudest sound. Corresponding n -values for source-specific loudness of traffic sounds heard alone ($_{a|a}$, $_{b|b}$) ranged from 4.1 to 4.2. Thus, our comprehensive findings for combined traffic sounds are in disagreement with the most commonly proposed models: arithmetic summation of source-specific loudnesses, the strongest component principle, or source-corrected energy summation.

Typ och Nyckelord: Journal traffic noise, loudness integration, masking

Referens: Berglund, B., & Nilsson, M.E. (2001). Total and source-specific loudness of simultaneous and time-separated traffic sounds. *Archives of the Center for Sensory Research*, 6(3), 95-103.

Abstract: A road-traffic and train sound of constant duration at a "soft" or "loud" level of (perceived) loudness were combined in various patterns of overlap in time (no, total, or partial overlaps). These combined sounds were scaled with regard to total and source-specific loudness. The main finding was that the relationship between total and source-specific loudness depends on the relative level, as well as, on the temporal relation of the two traffic sounds combined. So called "compromise" outcomes, in which source-specific loudness is greater than total loudness, were commonly found for combinations of unequally-loud sounds separated in time, but not for equally-loud sounds or simultaneously presented sounds. This agrees with the idea that total loudness of time-separated, unequally-loud sounds is "averaged" over the complete time period of these combined sounds whereas the source-specific loudness of the louder (or the softer) sound is averaged over the comparatively shorter time period during which it is heard. This way of assessing loudness of combined sounds may very well in principle be valid also for annoyance and thus explain compromise outcomes in field studies of combined noise.

Typ och Nyckelord: Journal loudness, compromise, integration time

Referens: Berglund, B., & Nilsson, M.E. (2001). An attempt to capture the perceived soundscape. In *Abstract Book from NOPHER 2001: An International Symposium on Noise Pollution & Health*, p. 60. London, UK: Institute of Laryngology & Otology, University College of London.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Berglund, B., & Nilsson, M.E. (2001). Variation in perceived soundscape due to shielding building and facade. In R. Boone (Ed.), *Inter-Noise 2001* (vol. 3, pp. 1253-1256). The Hague: Nederlands Akoestisch Genootschap (NAG).

Abstract: The perceived soundscape varies in space and time. In urban residential areas, this variation is due to the particular pattern of sound emissions, acoustic transformations due to shielding buildings, and insulation and facade reflections. Residents living in road-traffic noise exposed apartment buildings (62 dB LAeq,24h) participated in structured walks. At 6 listening stations indoors and outdoors, the residents repeatedly assessed their own soundscapes with regard to perceived loudness. Each soundscape's perceived loudness was master scaled and expressed in pink noise equivalents (PNE). The results were: (i) The indoor soundscape is considerably greater in perceived loudness at the noisy side than at the quiet side of an apartment although the corresponding difference in A-weighted sound level (LAeq) is small. (ii) The indoor-outdoor difference in perceived loudness at the road-traffic noise exposed facade of an apartment building is small although the corresponding difference in A-weighted sound level is large. It is concluded that residents' perceived loudness of their own soundscapes during walks can be calibrated to a common scale. Evaluations of the efficiency of shielding buildings and facades may be substantially improved if perceptual measurements of the soundscapes are utilized.

Typ och Nyckelord: Proceedings Book (chapter) soundscape, loudness, master scaling

Referens: Bergman, L.R. (in press). Studying processes: Some methodological considerations. To be published in L. Pulkkinen (Ed.), *Personality in the life course: Paths to successful development*. Cambridge: Cambridge University Press.

Abstract: The aim of this chapter is to discuss strategies and methods for studying processes. It is claimed that almost all methods for studying individual development in current use lack process characteristics and do not, in their assumptions and model features, correspond to the theoretical assumptions usually held by developmental researchers. Some promising classes of methods are discussed from the perspective of contributing to the understanding of developmental processes. Among these are person-oriented methods and methods based on models for nonlinear dynamical systems.

Typ och Nyckelord: Book (chapter) development, interactionism, dynamical systems

Referens: Bergman, L.R. (2001). A person approach in research on adolescence: Some methodological challenges. *Journal of Adolescent Research*, 16, 28-53.

Abstract: Research on adolescence has to face a number of methodological challenges, which tend to be particularly relevant for studies concerning this period of life. Some of these issues are addressed in this article. First, a metatheoretical perspective is introduced in the form of the person approach, which is based on the holistic-interactionistic research paradigm. In a person approach the individual as a "functioning whole" is central and not the variable, as is the usual case. This perspective has consequences both for the theoretical thinking and for the methodological approach. A short overview is given of major types of pattern-based methods often used for carrying out a person approach. Against this background, some methodological challenges for research on adolescence are discussed: Studying growth in patterns or configurations, interindividual differences in maturational tempo, a dynamic versus a static perspective, and prediction and explanation.

Typ och Nyckelord: Journal longitudinal, cluster analysis, adolescence, meta-theoretical perspective, person-oriented, holistic-interactionistic

Referens: Bergman, L.R. (2001). (Guest Ed.). Modern interactionism. In *Special Issue of European Psychologist*, 6, 151-152.

Abstract: This special issue of *European Psychologist* presents a number of different perspectives on modern interactionism. The general theoretical framework is taken from the pioneering work of David Magnusson and developmental aspects are emphasized. The issue contains articles by Magnusson (holistic-interactionistic paradigm), Susman (mind-body interaction), Pervin (a dynamic systems approach to personality), Bergman and El-Khoury (typological approaches in a developmental context), and Nesselroade (intraindividual variability in development).

Typ och Nyckelord: Journal interactionism, development, personality, biology, person approach

Referens: Bergman, L.R., & El-Khoury, B.M. (2001). Developmental processes and the modern typological perspective. *European Psychologist*, 6, 177-186.

Abstract: Within the general theoretical framework of the holistic-interactionistic paradigm, the need for using methods reflecting the process characteristics of a developmental study is emphasized and certain limitations of current research practice in this regard are pointed out. We focus on a person-oriented approach that can be regarded as a modern typological approach, where patterns of values in relevant variables describing the individual are regarded as indivisible, so that the variable has a meaning only as a part of such pattern. It is claimed that such an approach can be more process-oriented and more compatible with the holistic-interactionistic paradigm than conventional methods. Some relevant classification-based methods are briefly reviewed, and a new method (TYFO) is presented that aims at finding typical developmental patterns in data without striving for a complete classification. The procedure is illustrated with an empirical example.

Typ och Nyckelord: Journal interactionism, typology, person approach

Referens: Bergman, L.R., & Magnusson, D. (2001). Person-centered research. In T. Cook & C. Ragin (Eds.), *International Encyclopedia of the Social & Behavioral Sciences, Vol. 16: Logic of inquiry and research design* (pp. 11333-11339). Oxford: Elsevier.

Abstract: Person-centered research focuses on the person as a functioning totality within the domain studied. Often individuals' patterns of values in the variables under study become the main analytical units and subjected to, for instance, classification analysis where persons with similar value profiles are sorted into the same class. Person-centered research can be contrasted to variable-centered research where the focus instead is on the variable as the main unit. The perspective given in the article is quantitative, aiming at explaining and understanding individual differences. A very short historical overview of the emergence of person-centered research is first given and its close relationship to the typological approach indicated. Then a presentation of the theoretical foundation of the modern person approach is given. It is considered a useful meta theory for the planning and implementation of person-centered research. Finally, an overview of common methods is presented, focusing on methods for descriptive classification analysis.

Typ och Nyckelord: Book (chapter) classification, interactionism, interaction

Referens: Bergman, L.R., Magnusson, D., & El-Khoury, B.M. (in press). Studying individual development: A person-oriented approach. Vol. 4 in the series *Paths through life* (D. Magnusson, Ed.). Mahwah, NJ: Erlbaum.

Abstract: This volume gives an overview of the person-oriented approach and both theoretical, methodological, and computational aspects are treated. An extensive example of empirical person-oriented research is also given that is concerned with the study of boys' externalising adjustment. Data is taken from the longitudinal research program Individual Development and Adaptation. Person-oriented research focuses on the person as a functioning totality within the domain studied. In many methodological realizations of this approach individuals' patterns of values in the variables under study become the main analytical units and subjected to, for instance, classification analysis where persons with similar value profiles are sorted into the same class.

Typ och Nyckelord: Book (chapter) development, interactionism, cluster analysis

Referens: Berman, A.H., & Lundberg, U. (in press). Auricular acupuncture in prison psychiatric units: A pilot study. *Acta Psychiatrica Scandinavica*.

Abstract: The study explores whether auricular acupuncture can be a viable treatment form for inmates in prison psychiatric units. Inmates in a prison psychiatric unit and in a support unit for violent behavior were offered group treatment with auricular acupuncture three times a week over a period of nine months. Another prison psychiatric unit served as a control group. Twenty-two inmates received treatment, eleven for over eight weeks. Results showed that cortisol levels were generally higher for inmates in the support unit than for the other two groups. Inmates treated at least 25 times were prescribed fewer psycholeptic drugs than controls. Perceived autonomy increased for treated inmates in the psychiatric unit. Inmates treated for over eight weeks experienced improved inner harmony and calm and better clarity over future plans. It is concluded that acupuncture is a non-verbal form of treatment that can be appropriate for prison psychiatric units. The treatment facilitates contact and complements other psycho-social treatment forms.

Typ och Nyckelord: Journal auricular acupuncture, prison, psychiatry

Referens: Bernhard, C., Richter, P., & Sverke, M. (2001). Intra- and extraorganizational influences on consequences of alternative work arrangements: How much can be learnt by including both perspectives? Paper presented at "New Organizational Challenges for Human Service Work: The VIIth European Conference on Organizational Psychology and Health Care", Stockholm, 11-13 October 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Bernhard, C., & Sverke, M. (2001). Different natures and consequences of contingent employment. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Borg, E.A. (2001). Comparison between two rating scales for perceived exertion. In E. Sommerfeld, R. Kompass & T. Lachmann (Eds.), *Fechner Day 2001* (pp. 298-302). Lengerich, Germany: Pabst Science Publishers.

Abstract: Thirtytwo subjects, 16 men and 16 women, participated in an experiment to compare the two now very commonly used rating scales for perception of exertion, viz. the Borg RPE scale and the Borg CR10 scale (see, e.g., Borg, 1998). One group of 8 men and 8 women used each scale. Workloads were increased every minute, with 15 watts for men, and with 10 watts for women, to a voluntary maximum. With a basic perceptual noise constant in the power function, group exponents of $n=0.67$ for men and $n=0.93$ for women, with the RPE scale, and of $n=1.2$ for men and $n=0.85$ for women, with the CR10 scale, were obtained. The mean exponent of $n=0.76$ for the RPE scale, was significantly less than 1.0, and the mean exponent of $n=1.05$ for the CR10 scale, was significantly less than 1.5. If this is an underestimation of the exponent, a work-test with one minutes increase of workloads may be risky, e.g., for cardiac patients. Estimations of individual working capacity from the two scales gave significant correlations with W170 of .778 (RPE) and .587 (CR10). A transformation equation for the two scales was also determined, $RPE=6 + 2.8(CR10 - 0.3)^{0.79}$, confirming the theoretical relationship.

Typ och Nyckelord: Proceedings Book (chapter) psychophysics, scaling, perceived exertion, Fechner Day

Referens: Borg, G. (2001). Are we subjected to a "long-standing measurement oversight"? In E. Sommerfeld, R. Kompass & T. Lachmann (Eds.), *Fechner Day 2001*. Proceedings of the Seventeenth Annual Meeting of the International Society for Psychophysics. Leipzig, Germany.

Abstract: According to the internationally well-known expert in perception of taste, Linda Bartoshuk, scientists have been underestimating the difficulties in interpersonal comparisons. When using scales for rating intensities of experiences, there is a 'long-standing measurement oversight'. People with great differences in their sensory perceptions may still give very similar ratings because of their different experiences and frames of references. In this article Bartoshuk's idea is presented, and the author's way of handling the problem is reported. The main aspects of this method consist of using a special verbally level-anchored ratio scale (the CR10 scale or CR100), and a reference modality selected to be as intersubjectively valid as possible, including a special anchor as a 'fixed point'. The latter can e.g. be a 'Maximal perceived exertion and heaviness' because of its good interpersonal preciseness.

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

Referens: Borg, G., & Borg, E. (2001). A new generation of scaling methods: Level anchored ratio scaling, *Psychologica*, 28, 15-45. Faculdade de Psicologia e de ciências da educação, Universidade de Coimbra.

Abstract: Principles, methods, and experiments in verbally level anchored ratio scaling, also called CR-scaling is presented. To the main principles belong: Stevens' "ratio scaling" methods; the Range Model according to Borg; determinations of the size of the subjective dynamic range; quantitative semantics for the selection and placement of verbal anchors; the avoidance of end effects; psychophysiological validations; a special anchor, as a "fixed star", for intersubjectivity; and possibilities for a two-way communication. The final scale is a level anchored ratio scale, that covers a natural range of intensities, and where there is a congruence in meaning between the numbers and the verbal anchors. In the psychometric scale development, this is the last generation of methods for scaling sensory perceptions, experiences and emotions. Empirical support has been obtained in several laboratory and field studies. There is a vast application in clinical diagnostics, in training and rehabilitation, in sports and ergonomics.

Typ och Nyckelord: Journal Category-Ratio Scaling, perceived exertion, intersubjectivity

Referens: Brehmer, B., Lipshitz, R., & Montgomery, H. (Eds.). (in press). *How professionals make decisions*. Mahwah, NJ: Lawrence Erlbaum Associates.

Abstract: According to Zsombok (1993), naturalistic decision making is "the way people use their experience to make decisions in field settings." The objective of this volume is to present recent advances in naturalistic decision-making research and methodology. Its title is intended to capture a central characteristic of naturalistic decision-making, namely, the importance of studying people who have some degree of expertise in the domain in which they make decisions. The book is divided into three broad sections: Individual Decision Making, Decision Making in Social Contexts and Methodology. The substantive concerns pertain to how individual and groups make decisions in professional and organizational settings, and to developing suitable methods for studying these questions rigorously.

Typ och Nyckelord: Book (chapter) naturalistic decision making, expertise

Referens: Bylin, S. (2000). *Simulated Amnesia for an Imaginary Crime Event: Characteristics and consequences*. Department of Psychology, Stockholm University. (Doctoral dissertation).

Abstract: The present thesis includes three studies aimed at investigating simulated forgetting for an imaginary crime event. Individuals were tested as perpetrators after having read a story about "themselves" committing either manslaughter or a traffic crime resulting in a fatality. Study 1 investigated the effects that instructing individuals to simulate memory loss for their offence might have on their subsequent genuine memory performance. Results showed that simulation of memory impairment does have a negative impact on individuals' later attempts at genuine recall, as compared to non-simulators. Study 2 investigated effects of repeated simulation on later genuine memory performance since suspects are often subjected to repeated interrogations and, hence, might simulate amnesia on several occasions. Results showed no differences between repeated and non-repeated simulators, suggesting that the first test occasion is critical for later memory performance. Study 3 was carried out in order to elucidate what processes might account for the negative effects of simulation. Individuals were instructed to simulate memory loss either by omitting (withholding) information, or by committing errors (distorting information). As in Study 1 and Study 2, simulators' later genuine recall was compared with that of non-simulators, but in Study 3 it was also compared with the performance of individuals without any previous recall attempt (i.e., no rehearsal). Results showed that individuals in the omission condition, when asked to respond genuinely, perform on the same level as individuals without rehearsal, but when tested on multiple-choice questions, no differences were found between the groups. Moreover, individuals seemed more prone to omit information when tested by free recall but more inclined to commit (distort) information when asked specific questions. In sum, the main findings from the three studies were: (i) simulating forgetting in order to withdraw from guilt does have a negative impact on individuals' later attempts at genuine recall, (ii) repeated simulation of forgetting does not seem to lead to poorer memory impairment than does non-repeated simulation, (iii) the difference in genuine memory performance between simulators and non-simulators might, under some conditions, vanish when individuals are given copy cues, and (iv) individuals simulating forgetting do so mainly by omitting information but also, especially when asked specific questions, by committing information. The most plausible explanation for simulators' poorer genuine memory seems to be effects of non-rehearsal, but findings are also discussed in terms of retrieval-induced forgetting, misinformation effects, and suppression.

Typ och Nyckelord: Dissertation simulated amnesia, crime, memory performance, omission and commission errors, rehearsal

Referens: Chaison, G., Sverke, M., & Sjöberg, A. (2001). The impact of union merger on membership participation. *Journal of Labor Research*, 12, 356-372.

- Abstract:** Using data from a survey of union members, we explore how an amalgamation of two Swedish unions affects membership participation. The research literature on the topic is mostly anecdotal and speculative, suggesting that mergers might have detrimental effects on membership participation because they create large unions with centralized governance and administration. But in this study, we do not find a broad-based decline in membership participation measured before and after merger as well as in relation to a comparison union that did not merge. These results are discussed in terms of the national context of union mergers in Sweden and the ways that mergers are negotiated, presented, and implemented to preserve membership participation.
- Typ och Nyckelord:** Journal union mergers, union participation, organizational restructuring
- Referens:** Chirumbolo, A., [Hellgren, J.](#), De Witte, H., Goslinga, S., [Näswall, K.](#), & [Sverke, M.](#) (2001). Consequences of job insecurity for the organization and the individual: A European study. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.
- Abstract:**
- Typ och Nyckelord:** Proceedings
- Referens:** Chotai, J., Forsgren, T., [Nilsson, L.-G.](#), & Adolffson, R. (2001). Season of birth variations in the temperament and character inventory of personality in a general population. *Neuropsychobiology*, 44, 19-26.
- Abstract:** Since several studies show season of birth variations in morbidity, suicidal behavior, and CSF (cerebrospinal fluid) monoamine metabolites, we investigated season of birth variations in personality in the population. We analyzed by multiple regressions the Temperament and Character Inventory (TCI) for 2130 individuals partaking in the Betula prospective random cohort study. The personality dimensions were correlated significantly with age and gender. We stratified the data according to age, gender and the season of TCI measurement. By the median split in each stratum, a high value group and a low value group was obtained for each of the personality dimensions. Those born during February-April were significantly more likely than those born during October-January, to have high NS (novelty seeking) among women, particularly the subscale high NS2 (impulsiveness vs. Reflection), and to have high PS (persistence among men). Temperament profiles also showed season of birth variations. We discuss the associations in the literature between personality and the monoamines serotonin and dopamine, and suggest that our results are compatible with a hypothesis of season of birth variation in the monoamine turnover. The personality traits are likely to be influenced by several genetic and environmental factors, one of them being the season of birth.
- Typ och Nyckelord:** Journal personality, serotonin, dopamine
- Referens:** Christensen, H., & [Lundberg, U.](#) (in press). Musculoskeletal problems as a result of work organization, work tasks and stress during computer work. *Work & Stress*.
- Abstract:** This Editorial introduces the Special Edition of *Work & Stress* based on an international conference, "Prevention of muscle disorders in computer users: scientific basis and recommendations", held in March 2001 in Göteborg, Sweden. At this conference the PROCID project, "Prevention of Muscular Disorders in Operation of Computer Input Devices", was finalized and "the state of the art" concerning computer work was in focus, comprising epidemiological, psychological, organizational, physiological and rehabilitation factors. The Special Edition presents research that contributes to an understanding of epidemiological, organizational and psychological aspects of computer work exposures.
- Typ och Nyckelord:** Journal computer work, recommendations, PROCID
- Referens:** De Witte, H., [Näswall, K.](#), Chirumbolo, A., Goslinga, S., [Hellgren, J.](#), & [Sverke, M.](#) (2001). Consequences of temporary work in four European Countries: Does job insecurity mitigate the relationship between temporary work and various outcome variables? Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.
- Abstract:**
- Typ och Nyckelord:** Proceedings
- Referens:** [Dåderman, A.M.](#) (in press). Klinisk användning och missbruk av bensodiazepiner med fokus på flunitrazepam. [Clinical use, and abuse of benzodiazepines, particularly flunitrazepam.] I G. Holmberg, A.M. Dåderman, B. Jonasson, L.E. Ingerloo, E. Bjerke, A. Carlstedt, J. Ahlner & M. Kristiansson. *Lugnande medel som oroar. [Sedative substances what make us anxious.]* Stockholm: Fritzes.
- Abstract:** This chapter presents the extent and character of benzodiazepine use and abuse in Sweden. More than 20 drugs that are available and approved in Sweden are classified as benzodiazepines. They are mainly used as sedatives. Dependent on the active ingredient, the drugs may be classified into eight categories, the most common being diazepam, flunitrazepam, lorazepam, and oxazepam. In the product information for some benzodiazepine compounds it is emphasised that the drugs are intended for short-term treatment and that they are addictive, particularly in patients on long-term treatment and at high doses. It is further stated that particular caution is warranted when treating patients with impaired general health or patients with substance abuse. Withdrawal from benzodiazepine use often leads to problems in the form of sleeplessness, worry, headaches, etc, but also muscle- and stomach spasms may occur as well as altered degrees of consciousness, and, in rare cases, delirium and convulsions. Anterograde amnesia is a well-established effect of benzodiazepines; flunitrazepam (e.g., Rohypnol) has superior amnesic qualities. This chapter highlights several epidemiological methods for estimating abuse of benzodiazepines in Sweden. The results show that this category of substance abuse is common and that flunitrazepam is particularly abused in young people.
- Typ och Nyckelord:** Book (chapter) benzodiazepines, anterograde amnesia, abuse

- Referens:** [Dåderman, A.M.](#) (in press). Flunitrazepam och kriminalitet - internationella erfarenheter - en litteraturstudie. [Flunitrazepam and criminality - some international experiences - a review.] I G. Holmberg, A.M. Dåderman, B. Jonasson, L.E. Ingerloo, E. Bjerke, A. Carlstedt, J. Ahlner & M. Kristiansson. *Lugnande medel som oroar. [Sedative substances what make us anxious.]* Stockholm: Fritzes.
- Abstract:** Several Swedish and international studies have suggested a certain association between use of benzodiazepines, particularly flunitrazepam, and unprovoked (exaggerated) violence and anterograde amnesia. In the majority of such cases, the benzodiazepine compound involved was one of several intoxicants. The combination with alcohol was most frequent, but concomitant use of other drugs such as heroin, methadon and marijuana, was common. In this context, particular attention is in many parts of the world paid to young people as an especially vulnerable category.
- Typ och Nyckelord:** Book (chapter) flunitrazepam, violence, anterograde amnesia
- Referens:** [Dåderman, A.M.](#) (in press). Vidtagna åtgärder internationellt. [Some international legal interventions.] I G. Holmberg, A.M. Dåderman, B. Jonasson, L.E. Ingerloo, E. Bjerke, A. Carlstedt, J. Ahlner & M. Kristiansson. *Lugnande medel som oroar. [Sedative substances what make us anxious.]* Stockholm: Fritzes.
- Abstract:** A survey was made of internationally reported measures aimed at limiting the availability of these drugs. The problems associated with flunitrazepam and criminality have been in focus in numerous countries. Measures have been introduced to limit their availability, for instance in the form of information about the possible hazards of the drugs, or by having them classified as narcotics, and in some cases by prohibiting the sale of such drugs. A considerable reduction in the availability of any drug, for example the flunitrazepam compounds, would demand international collaboration with simultaneous deregistration or prohibition in most countries - an issue that could possibly be raised within the framework of the European Union since the illegal market is predominant.
- Typ och Nyckelord:** Book (chapter) flunitrazepam, abuse, international collaboration
- Referens:** [Dåderman, A.M.](#), & Edman, G. (2001). Flunitrazepam abuse and personality characteristics in male forensic psychiatric patients. *Psychiatry Research*, 103, 27-42.
- Abstract:** Sixty male non-psychotic forensic psychiatric patients (aged 16-35 years) were studied after they completed their ordinary forensic psychiatric assessment (FPA). The prevalence of flunitrazepam (FZ) abuse was investigated by using both structured and in-depth interviews with the objective of studying the relationship between the abuse and personality traits. The patient's characteristics, DSM-IV disorders, and actual sentences were obtained by studying their files. In order to obtain measures on their personality traits, self-report inventories were administered to the patients. Eighteen out of 60 patients were FZ abusers, but only 4 of them received a diagnosis related to the FZ abuse during the ordinary FPA. In almost all cases, however, indications of the FZ abuse were found in the files. No differences in personality traits were found between the groups. The frequency of previous admissions to an FPA and actual sentences of robbery, weapons offenses, narcotic-related offenses, and other crimes (such as theft) among the FZ abusers deviated significantly from forensic non-FZ abusers. Therefore, the FZ abuse per se might be more responsible for their tendency to commit crimes characterized by danger and thrill-seeking (such as robbery, weapons offences, and theft) than personality. The most important conclusion is that assessment of FZ abuse is needed in forensic psychiatry.
- Typ och Nyckelord:** Journal flunitrazepam abuse, personality traits, forensic psychiatry
- Referens:** [Dåderman, A.M.](#), Fredriksson, B., Kristiansson, M., Nilsson, L.-H., & Lidberg, L. (in press). Violent behavior and impulsive decision-making while intoxicated with flunitrazepam and alcohol: A case study in forensic psychiatric patients. *Journal of the American Academy of Psychiatry and the Law*.
- Abstract:** It is known that many male juvenile delinquents in Sweden and in Australian commit violent crimes while intoxicated with flunitrazepam (FZ). We have also noted the abuse of FZ in forensic psychiatric patients. Our objective was to study violent behaviour and impulsive decision-making in forensic psychiatric patients while intoxicated with FZ in order to discuss the pharmacological properties of FZ. We have studied five forensic psychiatric cases, all of whom were assessed in 1998. All of the subjects reported earlier reactions to FZ, including hostility and memory disturbances. At the time of their crimes they were all intoxicated with FZ, often in combination with alcohol or other drugs, such as amphetamine or cannabis. In contrast to their behaviour based on their ordinary psychological characteristics, their crimes were extremely violent, and the subjects lacked both the ability to think clearly and empathy with their victims. Our observations support the view that FZ abuse can have a major negative impact on the brain and these effects are compounded by the concurrent use of alcohol or other drugs. These effects raise questions about the responsibility of FZ abusers when under the influence of the drug. We discuss the pharmacological properties of FZ in vulnerable persons and draw some conclusions about the position of FZ in society and its use as a sleeping drug.
- Typ och Nyckelord:** Journal flunitrazepam, violence, forensic psychiatry
- Referens:** [Dåderman, A.M.](#), & Lidberg, L. (2001). El abuso flunitrazepam (Rohypnol) en combinación con alcohol provoca violencia premeditada grave en varones jóvenes delincuentes [Abuse of flunitrazepam (Rohypnol) in combination with alcohol provokes grievous violence in male juvenile delinquents]. *RET Revista de toximánias*, 28, 28-42. (The Spanish translation of the article published 1999 in *The Journal of the American Academy of Psychiatry and the Law*, 27(1).)
- Abstract:** Este estudio se centra en 19 delincuentes que estaban frecuentemente intoxicados con flunitrazepam (FZ), casi exclusivamente bajo el nombre comercial de Rohypnol. Los nombres populares para las pastillas de Rohypnol son Rophies, Ropies, Roofies, Ropes, Roches, Rochas, Dos, Rophs, Ropers, Ribs, R-25, Roach-2s, "Trip and Fall" ("Viaje y Caída"), "Remember all" ("Acuerdate de todo"), "Mind Erasers" ("Borramentes", "Borramemorias"), "Forget pills" ("Píldoras para olvidar") y "Date Rape Drug" ("Droga para una cita-violación"). Una sobredosis de FZ incrementa la sensación de poder y de autoestima, reduce el temor y la inseguridad y hace creer que todo es posible. FZ se asocia también con episodios de pérdida puntual de memoria y con violencia compulsiva, sobretodo si se combina con alcohol. Los sujetos fueron elegidos de entre subpoblación de 47 delincuentes varones jóvenes de instituciones correccionales nacionales de Suecia. El historial de los sujetos se obtuvo mediante entrevistas en profundidad y pruebas de personalidad, incluyendo la escala de búsqueda de

sensaciones de Zuckerman, el cuestionario de personalidad de Eysenck, y la escala de personalidad de Karolinska. Los datos relativos a actos criminales previos se obtuvieron del registro de la policía nacional suecia. Casi todos los abusadores de FZ habían sido sentenciados con anterioridad por actos violentos graves. Nuestros datos sugieren que el abuso de FZ por sujetos psiquiátricamente vulnerables (por ejemplo con altas puntuaciones en susceptibilidad al enfado y agresión verbal) suponen un serio peligro tanto para los consumidores como para la comunidad. Nuestros resultados apoyan el hallazgo de que FZ debería clasificarse como una droga de Categoría I (es decir, una droga similar a los narcóticos fuertes).

Typ och Nyckelord: Journal flunitrazepam, violence, juvenile delinquents

Referens: [Dåderman, A.M., & Lidberg, L. \(in press\). L. Relapse in violent crime in relation to cerebrospinal fluid monoamine metabolites \(5-HIAA, HVA, and HMPG\) in male forensic psychiatric patients convicted of murder: A 16-year follow-up. *Acta Psychiatrica Scandinavica*.](#)

Abstract: Our purpose was to investigate if low level of cerebrospinal fluid (CSF) monoamine metabolites of 5-HIAA, HVA, and HMPG, predict relapse in violent crimes. Relapse in crime and level of CSF monoamine metabolites (5-HIAA, HVA, and HMPG) was studied in a group of 29 murderers. The follow-up was 16 years. Fourteen of the 29 murderers were convicted of crime; nine of them committed violent crimes; one was convicted of new murder. The differences in mean CSF monoamine metabolites were lower in subjects who relapsed into any type of crime, but only the difference in mean CSF HVA was statistically significant. The risk to commit new murder is very small in males who earlier have been convicted of murder. Low level of CSF HVA is associated with an increased risk for relapse in any type of crime.

Typ och Nyckelord: Journal 5-HIAA, HVA, HMPG, relapse in crime, forensic

Referens: [Dåderman, A.M., Wirsén Meurling, A., & Hallman, J. \(2001\). Different personality patterns in non-socialized \(juvenile delinquents\) and socialized \(air force pilot recruits\) sensation-seekers. *European Journal of Personality, 15*, 239-252.](#)

Abstract: Young delinquents are known to be sensation-seekers. Not all sensation seekers become delinquents; many engage in socially accepted activities, like mountaineering or parachute jumping. The present study compares 47 juvenile delinquents (mean age 17 years) with 18 Swedish air force pilot recruits (mean age 23 years) and 19 conscripts (mean age 18 years) as control group. Sensation-seeking behavior, impulsiveness, and psychiatric/psychological vulnerability were measured by the Zuckerman Sensation-Seeking Scales (SSS), the Karolinska Scales of Personality, and the Eysenck Personality Questionnaire. Two separate multivariate analyses of variance were performed, followed up by stepdown analyses to identify those personality scale scores that contributed uniquely. In order to clarify the relationships, the pooled within-group correlations among scales were computed. Juvenile delinquents and pilot recruits were both high in sensation-seeking, but on different subscales. Delinquents were *high* in impulsiveness, somatic anxiety, and in extraversion-sociality, and *low* in socialization, suggesting psychiatric/psychological vulnerability. The findings may have implications for the treatment of juvenile delinquents.

Typ och Nyckelord: Journal juvenile delinquents, air force pilot recruits, sensation-seeking

Referens: [Eisler, A.D. \(2001\). The human sense of time: Biological, cognitive and cultural approaches. *Proceedings of the XIIth ESCOP*, p. 89. The XIIth Conference of the European Society for Cognitive Psychology, Edinburgh, September 5-8, 2001. Invited paper.](#)

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Eisler, A.D., & Eisler, H. \(2001\). Subjective time in a patient with neurological impairment. *Psychologica, 28*, 193-206.](#)

Abstract: Subjective time is the feeling of how time is now passing, or how much time has passed. The human capacity to estimate clock time seems to be a highly stable function, varying only with severe disorders or in brain pathology. Subjective time estimation is the human ability to estimate objective (physical) time without cues from external clocks. An important aspect of studies of time perception concerns the effect of brain surgery with neurological impairment. Richards carried out a time reproduction experiment with the renowned individual H.M., who underwent a bilateral medial temporal lobe resection that included the hippocampus, entailing a severe memory loss. H.M. was required to reproduce durations ranging between 1 and 300 s. The present study attempts to highlight the functioning of time perception in H.M. as opposed to healthy subjects, by applying the parallel-clock model (H. Eisler, 1975) to H.M.'s data. With this model, the parameters of the psychophysical power function can be determined from duration reproduction data. One of the remarkable features of time perception revealed by this model is that the psychophysical function shows a break, dividing the function into a lower and an upper segment. The most conspicuous deviations from healthy subjects, which H.M. showed, are: 1) the high value of the experienced starting point of the upper segment, 2) the large overlap at the break, and 3) the position of the break at an extremely long duration. On the basis of the present evidence, H.M. placed the start of long durations more than 50 s before their actual start, which, together with a decelerating psychophysical function, entailed a very slow increase of subjective with clock duration. The results indicate that H.M. had a tendency to forget more and more what he was supposed to be doing, but is reminded again and again. Our findings favor the view that the damage to the hippocampus critically concerns the permanent encoding and subsequent retrieval of the task given in the instruction. We conclude that the impaired memory results in increasingly fewer time units being accumulated because H.M. intermittently forgets his task, but that once accumulated, time units are kept.

Typ och Nyckelord: Journal brain, memory, subjective time

Referens: [Eisler, A.D., Eisler, H., & Mori, S. \(2001\). Time perception: Comparison of schizophrenic and healthy Japanese males. In *Abstract Book of the VIIth European Congress of Psychology*, p. 120. London: The British Psychological Society, July 1-6, 2001.](#)

Abstract:

Typ och Nyckelord: Proceedings

Referens: Eisler, H. (2001). Measurement of subjective time and the Parallel-clock model. *The XIIth Conference of the European Society for Cognitive Psychology*, Edinburgh, September 5-8, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Ek, U. (2000). Emotional reactions in parents and children after diagnosis and treatment of a malignant tumour in the eye. *Child: Care, Health and Development*, 26, 5, 415-428.

Abstract: Retinoblastoma is a rare malignant tumour in the retina. It is usually detected in children before three years of age. In Sweden, six to seven new cases are diagnosed each year. The medical treatment is highly specialized, very effective, with a survival ratio of almost 100%. All cases are referred to a single hospital in Stockholm. Very little has been known about the emotional and psychosocial effects on the parents and the patients themselves. This study includes all children diagnosed in Sweden between 1992 and 1994. The parents and children were included in our longitudinal support programme immediately after the diagnosis was made. The first phase of the project ended in January 1999, when the latest diagnosed children were four years old. This paper deals with the following topics: how the illness was detected and diagnosed, how the parents were handled by the health professionals, the parents' emotional reactions to the diagnosis and treatment and how the children reacted to the disease and its treatment. Children's concepts of illness and acute loss are discussed.

Typ och Nyckelord: Journal tumour, emotional reactions, parents, children

Referens: Ek, U. (2000). *Children with visual disorders. Cognitive development, developmental disorders and consequences for treatment and counselling*. Department of Psychology, Stockholm University. (Doctoral dissertation).

Abstract: The causes of visual impairment and blindness has changed over the years, in Sweden and in other industrialised countries, giving rise to a new population of visually impaired children. Damages to the posterior visual pathway and the brain are now common causes of visual impairment. In contrast, purely ocular diseases or conditions are increasingly rare. In this thesis this changed panorama was explored and cognitive and behavioural outcome in children with ocular vs. cerebral visual impairment was examined in various studies. More cognitive deficits and developmental disorders, such as autism, attention deficit hyperactivity disorders and complex visual perceptual and visual cognitive disorders were found in children with cerebral visual impairment or combinations of ocular and cerebral causes of visual impairment. Children born preterm, now form a considerable part of the population of visually impaired children and are at risk for such disorders. In contrast, children born at term with visual impairment due to causes in the anterior parts of the visual system have an entirely different developmental outcome. Psychological assessment methods, early intervention, counselling of parents and teachers and the education of visually impaired children in mainstream classes should be adapted to correspond with this changing population of visually impaired children.

Typ och Nyckelord: Dissertation visually impaired, children, development, developmental disorders, assessment

Referens: Ek, U., Fernell, E., Jacobson, L., & Gillberg, C. (2000). Relation between blindness due to retinopathy of prematurity and autistic spectrum disorders: a population - based study. In R. Takagi, M. Rutter & E. Schopler. (Eds.), *Advances in Research on Autism and Developmental Disorders*. Seiwa Shoten Publishers, Tokyo.

Abstract: Children with blindness due to retinopathy of prematurity are at great risk of pervasive developmental disorders. This study is a controlled population based study comprising all children born in Sweden with this diagnosis born in Sweden 1980-90. The control group was all children born 1980-90, blind due to a congenital retinal disease. 2/3 of the study group had autistic disorder. In the study group we found strong clinical or imaging evidence for brain damage, with high rates of mental retardation, cp and hydrocephalus.

Typ och Nyckelord: Book (chapter) blind children, prematurity, autism

Referens: Ek, U., Jacobson, L., Fellenius, K., Ygge, J., & Flodmark, O. (2000). Visual and cognitive development in four children with visual impairment due to periventricular leukomalacia and its relation to reading achievement. *Visual Impairment Research*, 2, 1, 3-16.

Abstract: Four children with visual impairment caused by periventricular leukomalacia were followed during two years with regard to their development of visual and cognitive functions, visual-spatial ability and behaviour. The process of learning to read was monitored. The cognitive profiles were uneven, with higher scores on verbal than on visual-spatial sub-tests, which were far below average. Eye movements while reading were recorded. We found some improvement of visual acuity and visual fields with time. After a two-year follow-up, three children were able to read print, but one of them, preferred Braille. One child, who had spastic diplegia, could not read print or Braille, but she typed on the keyboard, with help of synthesised speech. The children had difficulties making eye movements during reading, but they compensated for this by head movements.

Typ och Nyckelord: Journal visual impairment, periventricular leukomalacia, development, reading

Referens: El-Khoury, B.M. (2001). *Classification in a person-oriented context*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: The person-oriented approach and interactionistic holism are mainstream school of thoughts fueling current research on human development. Adopting the person-oriented approach in longitudinal research on human ontogeny has serious implications regarding the choice of methodology. This thesis proposes classification as a framework within which appropriate methods are developed for implementing a person-oriented approach. The thesis consists of an introductory part and four studies. The introductory part reviews central concepts and ideas in Developmental Science, interactionistic holism and the person-oriented approach, which bring into the

foreground the *process* nature of individual development. It also establishes a conceptual correspondence between the meta language employed at the level of the studied phenomena (the individual) and the classificatory language employed at the level of analysis. Study I introduces a method, called I-states as Object Analysis (ISOA), through which individual developmental paths in a domain that do not undergo dramatic developmental changes can be described and analyzed. The study illustrates the type of analysis involved on longitudinal data about school grades at four different ages for 333 boys and girls. Study II discusses a modern view on typology and introduces a *partial* classification approach, called Types at Focus (TYFO), that focuses on the replicability of typical regular patterns over time. The proposed method is illustrated on longitudinal data about internalizing problems at two different ages for 500 girls. Study III introduces a new index for comparison of two classifications of the same set of individuals, called the AWRand index (average weighted Rand index) and a method, called CLUSNUMB, for deciding the optimal number of classes in a hierarchical structure of partitions. Study III illustrates the method on empirical data about adjustment problems for 540 boys at age 13. Study IV presents an empirical study of boys' school adjustment, regarded from both the positive as well as the negative side. Person-oriented methods and strategies were used and the cohort consisted of 517 boys. The data from all four studies were taken from the Swedish longitudinal research program "Individual Development and Adaptation". Broadly speaking, the classification approach proposed in this thesis alongside with some contributed methods was shown to yield meaningful results in the context of the person-oriented approach and to provide basis for further development of methods within this exciting new research paradigm.

Typ och Nyckelord: Dissertation classification, person-oriented approach, methodology

Referens: [Enkvist, J., Edland, A., & Svenson, O. \(2001\). Effects of operator time pressure and noise on manual ultrasonic testing. *Insight*, 43\(11\), 725-730.](#)

Abstract: In earlier studies of manual ultrasonic testing, great variations have been found in operator performance, often attributed to operator fatigue. However, no conclusive findings have been reported. In the present study, twenty operators performed manual ultrasonic inspections of six test-pieces with manufactured flaws. The operators performed the inspections under stress (high arousal - time pressure and noise) and no-stress conditions; one condition the first day and the other the second and last day. According to the Yerkes-Dodson Law there is an optimal arousal level where performance is highest. It was hypothesised that the stress condition led to a level of arousal so high that it would affect the results negatively. However, contrary to the hypotheses it was found that the manipulation *increased* operator performance. Operators with the stress condition day 1 performed better than the other operators (under the no-stress condition). This was interpreted as the 'stress first' (group 1) operators had established efficient performance patterns the first day - affecting also the second day. Operators beginning with stress condition also tended to be more motivated. It was concluded that operator performance is affected by arousal.

Typ och Nyckelord: Journal signal detection, arousal, human performance

Referens: [Enkvist, J., Edland, A., & Svenson, O. \(2001\). Operator Performance in a Blind Test Piece Trial. *Materials Evaluation*, 59,\(4\), 531-536.](#)

Abstract: The task of an operator engaged in non-destructive testing (NDT) is to make a decision concerning the integrity of a component based on diagnostic information. The present study looks at operator performance in a blind test piece trial. The main aim is to improve performance by exploring the underlying factors of operators' successful decisions. A second aim is to find out how to make qualification tests more valid. Sixteen operators performed ultrasonic inspections of four test pieces with the aim to find (implanted) cracks. In addition to these performance demonstration tests (PDT), the operators performed independent ability tests and filled out questionnaires. There was a great variance of inspection performance. The ability tests were not successful predictors of operator PDT performance. The results also show that operators who have a positive attitude towards the procedure and yet trust their gut feeling more than the procedure (in "tricky" situations) have a higher PDT performance. These results emphasize the need for operators to be motivated when performing NDT.

Typ och Nyckelord: Journal human performance, human factors, quality assurance

Referens: [Erdener, C., & Torbiörn, I. \(2001\) International staffing patterns and transaction costs: implications for alliance readiness and firm performance. In J. Genefke & F. McDonald \(Ed 's.\), *Effective Collaboration* \(pp. 132-151\). Chippenham, UK, Palgrave.](#)

Abstract: International staffing decisions have major consequences for the attainment of strategic alliance readiness and firm performance. The chapter presents an analysis of some of the more important implications for strategic management as linked to the management of human resources (HR). In terms of a competence-based HR-strategy a conceptual model extends the relationship between culture, transaction costs and international staffing patterns to emphasise the differential impact of strategy context on the way these variables affect firm performance. Certain risks and benefits associated with staffing decisions are defined and evaluated in relation to the strategy, priorities and objectives of the firm.

Typ och Nyckelord: Book (chapter) international human resource management, transaction costs

Referens: [Ericsson, K., Winblad, B., & Nilsson, L.-G. \(2001\). Human-figure-drawing and memory functioning across the adult life span. *Archives of Gerontology and Geriatrics*, 32,151-166.](#)

Abstract: The main objective was to evaluate changes in the ability to draw the human figure (HFD) across adult life span and to relate these changes to those known existing in memory function. Healthy adults (1000) from each of 10 five years cohorts between 35 and 80 years were recruited randomly from a population in northern Sweden. Each participant was administered a health examination including cognitive testing and a drawing test, and an extensive examination of memory functions. For the drawing variables HFDarch and HFDtot, there was a steady decrease in episodic memory with poor drawers performing at a lower level. For semantic memory up to 65 years of age there is no difference in performance, but thereafter a decrease. Good drawers showed better memory performance than poor drawers do. For priming data both for HFDarch and HFDtot there is an interaction between aging and drawing, such that poor drawers perform at a lower level for the two oldest groups but not for the youngest group. The HFDess is a valuable instrument and can support clinical evaluation as a screening for cognitive decline. The reduction of essential body details was strongly related to dementia progression, and thus as good a predictor of cognitive decline as episodic memory performance. The reduced capacity to perform a complex HFD declines with age and is most pronounced in the oldest age

groups.

Typ och Nyckelord: Journal memory, drawing

Referens: Eriksson Hallberg, U., & Sverke, M. (2001). Burnout: Examining the construct validity of the Maslach Burnout Inventory in a Swedish human-service setting. Paper presented at "New Organizational Challenges for Human Service Work: The VIIth European Conference on Organizational Psychology and Health Care", Stockholm, 11-13 October 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Fellenius, K., Ek, U., & Jacobson, L. (2001). Reading acquisition in children with periventricular leucomalacia. *International Journal of Disability, Development and Education*, 2001, 48, 3, 283-302.

Abstract: Four children with cerebral visual impairment (CVI) caused by periventricular leucomalacia were followed in an ethnographic clinical case study for two years during their process of learning to read in main stream classes. When compared to children with ocular visual impairment children with CVI often exhibit an uneven cognitive profile with visual spatial deficits but good verbal capacities. In order to study reading strategies and preferred reading media (print or Braille) the four children were followed closely in their schools. Considerable differences in reading acquisition and reading strategies could be detected among the four children. Individual factors as well as teaching methods could be reasons for the differences.

Typ och Nyckelord: Journal children, reading, cerebral visual impairment

Referens: Fernaeus, S.-E. (2001). *Word Fluency: Automatic vs. Effortful Retrieval*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: Word fluency (WF) is a function of semantic memory and language abilities that is routinely assessed in neuropsychological testing by asking the test person to produce as many words of a given kind as possible during a limited time period. The present thesis consists of four studies, which all aims at an analysis of performance in WF from a number of aspects: (1) temporal characteristics, (2) factor structure, (3) white matter lesions in the brain affecting WF, (4) differences between diagnostic groups, and (5) patterns of electrocortical activity during WF. The four studies are based on test results from three consecutive samples of 126, 46, and 134 patients, as well as on an experimental study with 21 healthy participants. All data collection was made at the Geriatric Clinic at Huddinge University Hospital by experienced neuropsychologists and speech-language pathologists. The analyses throughout the studies were based on a factor analytic approach, where the aim was to shed light on some current issues in neuropsychology: how to interpret WF data, how to use these data together with EEG and magnetic resonance imaging data to indicate activation and localization, and finally how to interpret results from two types of WF tests, letter fluency (LF) and category fluency (CF).

Study I identified two factors in LF, one related to the initial, and one to the late phase. The initial factor seemed to be related to automatic or speeded processing, whereas the late factor was related to semantic memory in general.

Study II used these factors to investigate possible relationships with white matter lesions in different brain regions, and it was found that anterior white matter hyperintensity was related to the initial factor in LF.

In Study III, substantial differences were found between LF and CF in several respects: temporal characteristics, factor structure, and diagnostic group differences.

In Study IV, relations between LF and EEG patterns were investigated. The main finding was that initial fluency was characterized by high-frequency EEG, whereas late fluency was rather characterized by lower frequencies. Implications for using different types of WF tests, as well as practical considerations, are discussed.

Typ och Nyckelord: Dissertation letter fluency, category fluency, factor analysis

Referens: Finkel, D., Pedersen, N.L., & Larsson, M. (2001). Olfactory functioning and cognitive abilities: A twin study. *Journal of Gerontology: Psychological Sciences*, 56B, P226-P233.

Abstract: A Swedish version of the *National Geographic* Smell Survey (Wysocki & Gilbert, 1989) was completed by 227 twin pairs from the Swedish Adoption/Twin Study of Aging. Twins ranged in age from 45 to 89 years. Quantitative genetic analysis of four measures of olfactory functioning indicated moderate heritability for odor identification and perceived intensity, nonsignificant heritability for odor detection and perceived pleasantness. Bivariate analyses revealed that the relationship between odor identification and measures of verbal ability was primarily genetically mediated. The results provided further support for the hypothesis that odor identification and verbal ability in general tap the same cognitive domain (Larsson, 1997).

Typ och Nyckelord: Journal olfaction, cognition, genetics

Referens: Finkel, D., Pedersen, N.L., & Larsson, M. (2001). Olfactory functioning and cognitive abilities: A twin study. Poster presentation at "The Association for Chemoreception Sciences", Sarasota, Florida, 2001, April 25-30.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Frankenhaeuser, M. (in press). Ancient humans in the newborn millennium: Stress and gender perspectives. In C. von Hofsten & L. Bäckman (Eds.), *Psychology at the Turn of the Millennium*. Hove, UK: Psychology Press.

Abstract: Psychobiological approaches to the study of stressful person-environment transactions in laboratory situations

and natural settings are reviewed. Discussion is focussed on psychological mediators of sympathetic-adrenal medullary and pituitary-adrenal cortical activity under environmental conditions characterized by understimulation, overstimulation and lack of control. The notion of controllability as a major "key to coping" is considered in relation to the job demands inherent in highly mechanized industrial work and in relation to the coronary-prone behavior pattern A. On the basis of a factor analysis of data from 48 subjects participating in five experiments it is argued that challenging but controllable tasks generally induce "effort without distress", in which case adrenaline secretion will rise, whereas cortisol excretion may be actively suppressed. In contrast, uncontrollable tasks tend to induce "effort with distress" accompanied by elevated levels of both adrenaline and cortisol. Attention is also given to aftereffects and cumulative effects of acute stress exposure and their long term consequences for health and wellbeing. Sex differences are viewed in this context, and support for the hypothesis that women cope more "economically" than men is examined.

Typ och Nyckelord: Book (chapter) effort, distress, stress hormones

Referens: Fruhstorfer, H., Harju, E-L., & Lindblom, U. (2001). The significance of A-delta and C fibres for the perception of synthetic heat. *Archives of the Center for Sensory Research*, 6(2), 95-111.

Abstract: Synthetic heat is a perception of strong, but not painful, heat arising when skin is stimulated by an alternating pattern of adjacent cold and warmth. This study attempts to examine the contribution to this perception from different classes of nerve fibres. In 40 subjects changes in synthetic heat and thermal perceptions were studied during a 30-min ischemic nerve block in one reaction-time, and one threshold-determination task. Synthetic heat stimuli were described as hot or warm, but not as painful, and were preceded by a transient cold. Reaction times for synthetic heat stimuli did not differ from those for cold stimuli. Thresholds for synthetic heat and thermal stimuli were similar. During A fibre nerve block the perception of synthetic heat lost the cold component whereas the frequency of hot and warm descriptors did not change. The perception of cold stimuli changed, such that pure cold was replaced by dysesthetic descriptors. Reaction times and thresholds for thermal and synthetic heat stimuli increased equally during the nerve block. It is concluded that the perception of synthetic heat most likely arises from the fusion of signals dependent on the unmyelinated low threshold cold and warm receptors. It is not dependent on A-delta cold fibres, and, according to available evidence, cold or warm nociceptors do not contribute. The possibility of psychological contribution at the perceptual level is discussed.

Typ och Nyckelord: Journal synthetic heat perception, perception threshold, reaction time

Referens: Garpenstrand, H., Longato-Stadler, E., af Klinteberg, B., Grigorenko, E., Damberg, M., Orelund, L., & Hallman, J. (in press). Low platelet monoamine oxidase activity in Swedish imprisoned criminal offenders. *European Neuropsychopharmacology*.

Abstract: Numerous studies report a connection between low platelet monoamine oxidase activity (trbc MAO) and personality traits such as impulsiveness and sensation seeking. Generally, criminal offenders constitute a group of individuals that are high in such temperamental characteristics. In this study, we investigated trbc MAO activity in imprisoned criminal offenders and in controls where the confounding factor of smoking was under control. Radiometric MAO assays were performed in 99 male criminal offenders and in 60 non-criminal volunteers. Offenders had significantly lower trbc MAO activity than controls, i.e., 8.8 ± 3.0 nmol/10¹⁰ platelets/mm and 11.3 ± 5.1 , respectively ($p < 0.0001$). When only smoking individuals were included in the analysis, the difference in trbc MAO was still statistically significant ($p 0.05$). Based on these data, we suggest that trbc MAO is related to mechanisms predisposing for development of specific personality characteristics that in turn increase vulnerability for criminal behaviour. The results also suggest that low trbc MAO activity in criminal offenders is not an artefact of cigarette smoking.

Typ och Nyckelord: Journal MAO, platelet, criminality

Referens: Goslinga, S., Sverke, M., Chirumbolo, A., De Witte, H., Hellgren, J., & Näswall, K. (2001). Atypical work and trade union membership: Union attitudes and union turnover among traditional versus atypical employed union members. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Haines, M.M., Stansfeld, S.A., Job, R.F.S., Berglund, B., & Head, J. (2001). Chronic aircraft noise exposure, stress responses, mental health and cognitive performance in school children. *Psychological Medicine*, 31, 265-277.

Abstract: Previous research suggests that children are a high risk group vulnerable to the effects of chronic noise exposure. However, questions remain about the nature of the noise effects and the underlying causal mechanisms. This study addresses the effects of aircraft noise exposure on children around London Heathrow airport, in terms of stress responses, mental health and cognitive performance. The research also focuses on the underlying causal mechanisms contributing to the cognitive effects and potential confounding factors. The cognitive performance and health of 340 children aged 8-11 years attending four schools in high aircraft noise areas (16-hr outdoor Leq >66 dBA) was compared with children attending four matched control schools exposed to lower levels of aircraft noise (16-hr outdoor Leq < 57 dBA). Mental health and cognitive tests were group administered to the children in the schools. Salivary cortisol was measured in a sub-sample of children. Chronic aircraft noise exposure was associated with higher levels of noise annoyance and poorer reading comprehension measured by standardised scales with adjustments for age, deprivation and main language spoken. Chronic aircraft noise was not associated with mental health problems and raised cortisol secretion. The association between aircraft noise exposure and reading comprehension could not be accounted for by the mediating role of annoyance, confounding by social class, deprivation, main language or acute noise exposure. These results suggest that chronic aircraft noise exposure is associated with impaired reading comprehension and high levels of noise annoyance but not mental health problems in children.

Typ och Nyckelord: Journal children, cognitive performance, aircraft noise

Referens: Haines, M.M., Stansfeld, S.A., Job, R.F.S., Berglund, B., & Head, J. (2001). A follow up study of the

Abstract: Children are a high risk group vulnerable to the effects of chronic aircraft noise exposure. This study examines the effects of aircraft noise exposure on children's health and cognition around London Heathrow airport and tests sustained attention as an underlying mechanism of effects of noise on reading and examines the way children adapt to continued exposure to aircraft noise. In this repeated measures epidemiological field study, the cognitive performance and health of 275 children aged 8-11 years attending four schools in high aircraft noise areas (16-hr outdoor Leq>66 dBA) was compared with children attending four matched control schools exposed to lower levels of aircraft noise (16-hr outdoor Leq<57 dBA). The children first examined at baseline were examined after a period of one year at follow-up. Health questionnaires and cognitive tests were group administered to the children in the schools. At follow-up chronic aircraft noise exposure was associated with higher levels of annoyance and perceived stress, poorer reading comprehension and sustained attention, measured by standardised scales after adjustment for age, social deprivation and main language spoken. These results do not support the sustained attention hypothesis previously used to account for the effects of noise on cognition in children. The reading and annoyance effects do not habituate over a one year period and do not provide strong evidence of adaptation.

Typ och Nyckelord: Journal children, cognitive performance, aircraft noise

Referens: Hallman, J., Persson, M., & af Klinteberg, B. (2001). Female alcoholism: Differences between female alcoholics with and without a history of additional substance misuse. *Alcohol and Alcoholism*, 36, 564-571.

Abstract: The purpose of the present study was to investigate personality traits and platelet monoamine oxidase (MAO) activity, as well as occurrence of personality disorder criteria, family characteristics, and criminal activity as related to misuse pattern in a sample of female in-patients with severe alcohol dependence. In accordance with theoretical assumptions and empirical findings of underlying neurobiological correlates of disinhibition in individuals with double or multiple misuse patterns, the female alcoholics were divided into subgroups with: (1) alcohol as their single drug of misuse (ALC; $n=16$); (2) a history of additional substance misuse (ALC-DRUG; $n=11$). Platelet MAO activity of the female subgroups was studied in comparison to a control group of non-clinical female subjects. Marked differences were obtained between the two subgroups. The ALC-DRUG females scored significantly higher with regard to Karolinska Scales of Personality (KSP) impulsiveness, anxiety-related traits, and non-conformity, displayed higher frequency of depression in first degree relatives, were more frequently involved in criminal activity, and more frequently diagnosed for any personality disorder according to DSM-IV, axis II. Finally, the ALC-DRUG females displayed significantly lower platelet MAO activity than controls. In conclusion, the results support the usefulness of a classification of severe alcoholic female subjects according to having/not having a history of additional substance misuse. The present female alcoholics with a history of additional misuse formed a group of individuals fulfilling the criteria similar for male type 2 alcoholism.

Typ och Nyckelord: Journal alcohol misuse, drugs, platelet MAO activity

Referens: Harju, E.-L. (2001). Cold and warmth perception mapped for age, gender and body area. *Archives of the Center for Sensory Research*, 6(2), 55-76.

Abstract: Reference data on cold and warmth perception at three different body areas is provided based on 24 young (20-30 years) and 24 elderly (55-65 years) healthy women and men. Perception thresholds are determined (method of limits), and perceived intensity is assessed (free-number magnitude estimation) for cold and for warmth at thenar, upper arm, knee, and foot. Inter-individual comparison of perceived-intensity scales for warmth and cold is achieved by a Master Scale procedure with thenar as a reference area. Perception thresholds show gender difference for cold at thenar, and interaction effect of age and gender for heat-pain tolerance at the upper arm. In contrast, perceived intensity of cold and warmth show multiple effects of age, gender and specific body area (also for the nociceptive channels), but perceived quality is normal. For example, at the knee, elderly women's perceived intensity for stimulation in the nociceptive range is elevated for both cold and warmth, as compared to young women and men, and to elderly men. Conversely, at the upper arm, elderly women's perceived intensity for the corresponding nociceptive range is lowered, as compared to young women and young men, and to elderly men. At the foot, both elderly women's and men's perceived intensity of cold and warmth is lowered, as compared to young women and men. The present findings on age differences in perceived intensity of cold and warmth in healthy women and men provide new reference data hitherto lacking in diagnostic work in patients with somatosensory dysfunction and ongoing pain.

Typ och Nyckelord: Journal thermal perception, body area, age, gender

Referens: Harju, E.-L. (in press). Cold and warmth perception mapped for age, gender, and body area. *Somatosensory and Motor Research*.

Abstract: Reference data on cold and warmth perception at three different body areas is provided based on 24 young (20-30 years) and 24 elderly (55-65 years) healthy women and men. Perception thresholds (method of limits), perceived intensity (free-number magnitude estimation), and perceived quality (verbal descriptors) were assessed for cold and for warmth at thenar, the upper arm, the knee, and the foot. Interindividual comparison of perceived-intensity scales for cold and warmth was achieved by a Master Scaling procedure utilizing thenar as a reference area. Perception thresholds showed gender difference for cold at thenar, and interaction effect of age and gender for heat-pain tolerance at the upper arm. In contrast, perceived intensity of cold and warmth showed multiple effects of age, gender, and specific body area (also for the nociceptive channels). For instance, at the knee, elderly women's perceived intensity for stimulation in the nociceptive range was elevated for both cold and warmth, as compared to young women and men, and to elderly men. Conversely, at the upper arm, elderly women's perceived intensity for the corresponding nociceptive range was lowered, as compared to young women and young men, and to elderly men. At the foot, both elderly women's and men's perceived intensity of cold and warmth was lowered, as compared to young women and men. Overall, the perceived quality of perceptions did not differ between groups. The present findings on age differences in perceived intensity of cold and warmth at the upper arm, knee and foot in healthy women and men provide reference data hitherto lacking for diagnostic work in patients with somatosensory dysfunctions and ongoing pain.

Typ och Nyckelord: Journal thermal perception, body area, age, gender

Referens: [Harju, E.-L. \(2001\). *Quantitative and Qualitative Analysis of Touch, Cold and Warmth in Health, Neuropathic Pain and Fibromyalgia*. Stockholm: Department of Psychology, Stockholm University. \(Doctoral dissertation\).](#)

Abstract: The general aim of the present thesis is to examine tactile and thermal perceptual (dys)function by quantitative and qualitative tests of patients with neuropathic pain or fibromyalgia, and to compare results with those of healthy persons. A specific aim is to provide individual data for diagnostic purposes, specific to touch, cold, and warmth (profiles). The first question addressed is whether patients with ongoing pain are able to perform reliably in a scaling experiment. A second question addressed is on the nature of the relation between patient's ongoing pain, and tactile and thermal (dys)function. In Study I-IV patients' spontaneous ongoing pain is scaled, and in psychophysical experiments perception thresholds determined, perceived intensity scaled, and perceived quality assessed. Inter-individual comparability in perceived intensity is achieved by calibrating individual scales of perceived intensity according to the Master Scaling procedure. In Study I, the applicability of the method of Master Scaling is extensively discussed and it is found to be particularly well suited for perceived intensity of touch, cold, and warmth, because of the common frame of reference represented by perceived intensity at the thenar for the modality tested. Study II examines tactile and thermal perception in patients with peripheral or central neuropathic pain, and shows: (a) patients are able to adequately scale perceived intensity; (b) paradoxical heat perception is reported for cold stimulation by five of seven patients with central post-stroke pain (CPSP), but by none of the patients with peripheral lesions; (c) peripheral nerve lesions are modality specific, with tactile and thermal functions independently affected, or, preserved; and (d) ongoing pain and perceived intensity of touch, cold, and warmth are uncorrelated, independent phenomena. Study III examines the effects of age and gender on thermal perception in healthy persons, and shows that elderly and young women's and men's thermal perception varies in relation to body area. Thus, it provides useful reference data for future psychophysical tests. Study IV examines tactile and thermal perception in patients with fibromyalgia syndrome (FMS), and their age-matched controls, and shows: (a) paradoxical heat perception for cold stimulation in all FMS patients but in none of the controls, and (b) normal perceptions of touch and warmth in all patients and controls. Study V examines the effects of an ischemic nerve block on the experimentally induced perceptual phenomenon of "synthetic heat" in healthy persons. "Synthetic heat" has been hypothesized to be a model for CPSP patients' cold-evoked burning pain, however, the results show: (a) A-delta cold specific fibers are not responsible for "synthetic heat" perception, and (b) "synthetic heat" is not described as "painful", only as "hot", results that question the involvement of nociceptors. In summary, the methods applied provide very specific individual profiles of perception of touch, cold, and warmth in health and pain disease. Perception of paradoxical heat for cold stimulation is found in CPSP patients in Study I, and in FMS patients in Study IV, and it is, therefore, suggested as a marker for centrally induced pain mechanisms.

Typ och Nyckelord: Dissertation ongoing pain, cutaneous perception, master scaling

Referens: [Hassmén, P., & Kenttä, G. \(2001\). Factorial validity of two Swedish versions of the Profile of Mood States. In A. Papaioannou, M. Goudas, & Y. Theodorakis \(Eds.\), *International society of sport psychology 10th world congress of sport psychology* \(Vol. 1, pp. 245-247\). Skiathos, Hellas.](#)

Abstract:

Typ och Nyckelord: Proceedings Book (chapter)

Referens: [Hedenborg, M., & Svenson, O. \(2001\). Errors in subtractions: Judged and observed frequencies. *Scandinavian Journal of Psychology*, 42, 87-96.](#)

Abstract: In a first study 10 adults, aged 24-44 years, solved all 105 subtraction problems in the form $M-N=$, where $0 \leq M \leq 13$, $0 \leq N \leq 13$ and $N \leq M$. Each participant solved every problem 10 times and in total there were 10 500 answers. Answers, response latencies and errors were registered. Retrospective verbal reports were also given, indicating how a solution was reached: (1) via a (conscious) reconstructive cognitive process or (2) via an (unconscious) reproductive (retrieval) process. The participants made 291 errors (2.8%) when solving the subtractions in study 1. The rate of self-correction was very high, 92%. In a second study 27 undergraduate students estimated overall error rates, including self-corrected errors for the 105 subtraction problems used in the first study. Judged and actual error rates were compared. The participants systematically underestimated error rates for error prone problems and overestimated error rates for error free problems. The participants were fairly accurate when they predicted problems that were most error prone, with a hit rate of 0.67 for the (18) problems predicted as the most error prone ones. In contrast, predictions of which problems were error free were very poor with a hit rate of only 0.20 of the problems predicted as error free really having no errors in study 1. The correlation between judged error rates and frequencies for actually made errors was 0.69 for answers belonging to reconstructive solutions. In contrast, there was no significant correlation between judged and actual error rates at all for retrieved solutions, possibly reflecting the inaccessibility to consciousness of quick retrieval processes.

Typ och Nyckelord: Journal cognition, subtraction, errors, estimation, probability judgement

Referens: [Heffler, B. \(2001\). Individual learning style and the learning style inventory. *Educational Studies*, 27\(3\), 307-316.](#)

Abstract: According to Experience Learning Theory (ELT) learning is a process. ELT conceives of learning as a four-stage cycle including four learning modes: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation. The Learning Style Inventory (LSI) invented from ELT provides a framework for examining one's approach to learning situations. The aim of the present study was to collect data with the Learning Style Inventory and present a) the test-retest reliability coefficients for the different learning modes, b) the correlation between different learning modes and age, c) gender differences in the learning modes, and d) homogenous groups of students with different learning styles, if there are any. The results showed highly significant reliability coefficients, non-significant correlations between learning modes and age, gender differences in some learning modes, and a cluster analysis found homogenous groups with different learning styles.

Typ och Nyckelord: Journal learning style inventory, reliability, cluster analysis

Referens: [Hellgren, J., Chirumbolo, A., Goslinga, S., De Witte, H., Näswall, K., & Sverke, M. \(2001\). A cross-cultural validation of a job insecurity measure. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.](#)

Abstract:**Typ och Nyckelord:** Proceedings**Referens:**

Hellgren, J., & Sverke, M. (2001). Unionized employees, perceptions of role stress and fairness during organizational downsizing: Consequences for job satisfaction, union satisfaction, and well-being. *Economic and Industrial Democracy*, 22, 543-567.

Abstract:

Although a number of studies have shown that the stress and insecurity associated with downsizing may have detrimental consequences for employee work attitudes and well-being, little is known about the consequences for union attitudes. Using questionnaire data from a Swedish hospital, we investigated the relative importance of downsizing-related variables and factors associated with fair treatment for job satisfaction, union satisfaction and well-being. Downsizing characteristics were negatively associated with job satisfaction and well-being but unrelated to union satisfaction. Fair treatment from the hospital predicted job satisfaction while fair treatment from the union was positively associated with both union satisfaction and well-being. Although there was no evidence that fairness could moderate the negative effects of downsizing stress on outcomes, the results indicate that an active role by unions in the downsizing process may have beneficial consequences not only for members' union attitudes but also for their well-being.

Typ och Nyckelord: Journal downsizing, justice, well-being**Referens:**

Hellström, Å. (2001). Time-order effects for aesthetic preference. In E. Sommerfeld, R. Kompass & T. Lachmann (Eds.), *Fechner Day 2001* (pp. 421-426). Proceedings of the 17th Annual Meeting of the International Society for Psychophysics. Leipzig, Germany: International Society for Psychophysics.

Abstract:

Participants compared successive color patterns (Exp. 1) or jingles (Exp. 2), selecting the preferred one. Results were well described by Hellström's sensation-weighting model, with a greater weight for the second stimulus than for the first. Mean time-order errors were negative, which can be explained as a consequence of this stimulus weighting and of a reference level for aesthetic attractiveness, lower than that of the average stimulus; this level seems to reflect the low aesthetic value of the visual or auditory stimulus background.

Typ och Nyckelord: Proceedings Book (chapter) time-order errors, aesthetic perception, stimulus comparison, Fechner Day**Referens:**

Herlitz, A., Dixon, L., Bäckman, & Nilsson, L.-G. (Eds.). (in press). *New Frontiers in Cognitive Aging*. Oxford: Oxford University Press.

Abstract:

In the search for biological influences on cognition, steroid hormones have proven to be engaging variables in psychological research for over two decades. Hormones have been claimed to influence a variety of cognitive abilities from spatial and verbal abilities to various forms of memory. Hormones and cognition have been compared both within and between men and women. The goal of this chapter is to present the rationale for studying sex hormones in relation to cognition and to review and discuss hormonal influences on cognitive functioning in adulthood and old age. We will focus on the potential role of steroid hormones on sex differences in cognitive function across the adult life span. Testosterone, in particular, will be examined for its possible influence on spatial abilities in both men and women. Additionally, we will address questions regarding the effect on cognition of endogenous estrogen levels in pre- and postmenopausal women, the contribution of hormone replacement therapy (HRT) on cognition in postmenopausal women, and the potentially protective effect of estrogen for the development of Alzheimer's disease. Promising areas for future research will also be highlighted.

Typ och Nyckelord: Book (chapter) sex differences, hormones, estrogen, testosterone, Alzheimer's disease, episodic memory, cognition, spatial**Referens:**

Herlitz, A., & Yonker, J.E. (in press). Sex differences in episodic memory: The influence of IQ. *Journal of Clinical and Experimental Neuropsychology*.

Abstract:

The influence of estimated intelligence (group assessment of WAIS-RS) on sex differences in face recognition, as well as verbal and non-verbal episodic memory tasks was examined in 99 women and 88 men between 20 and 40 years of age. Results showed that men performed at a higher level than women on the WAIS-RS subtest Information, whereas the opposite was true for Digit symbol. Women performed at a higher level than men on the verbal episodic memory tasks and on face recognition, but there were no sex differences on the non-verbal episodic memory task. Estimated intelligence for both men and women was positively associated with most episodic memory measures, the exception being face recognition in women. In face recognition, there was no association to estimated intelligence, suggesting that face recognition performance in women is unrelated to several basic cognitive processes.

Typ och Nyckelord: Journal sex differences, intelligence, episodic memory, cognition**Referens:**

Hillerås, P., Jorm, A.F., Herlitz, A., & Winblad, B. (2001). Life satisfaction among the very old. *International Journal of Aging and Human Development*, 52, 71-90.

Abstract:

The purpose of the study was to measure life satisfaction and the factors believed to influence it. The study involved 105 very old people, 90 years and above, who were not cognitively impaired, living in the inner part of Stockholm, Sweden. In order to assess life satisfaction, the Life Satisfaction Index-B (LSI-B) and Life Satisfaction Index-Z (LSI-Z) were used. Information about life events, activities, personality and social contacts were collected in order to determine their relative influence on life satisfaction. Factors associated with life satisfaction were also investigated in a content analysis to find out what the elderly themselves believe gives them life satisfaction. Results showed that health and an emotionally stable personality were, independently of other factors, the most important factors for life satisfaction among the very old.

Typ och Nyckelord: Journal aging, life satisfaction, personality, ISSN: 0091-4150**Referens:**

Hjortskov, N., Blangsted A.K., Fallentin, N., Ekner, D., Rissen, D., Lundberg, U., & Søgaard, K. The effect of mental and physical stress on the blood pressure response during computer work. In *The*

Abstract:

Typ och Nyckelord: Proceedings

Referens:

Holmberg, G., & Dåderman, A.M. (in press). Bedömning och påföljdsförslag vid § 7-undersökning samt några fallbeskrivningar. [Assessments and recommendations at minor forensic psychiatric investigations and several case-studies.] I G. Holmberg, A.M. Dåderman, B. Jonasson, L.E. Ingerloo, E. Bjerke, A. Carlstedt, J. Ahlner & M. Kristiansson. *Lugnande medel som oroar. [Sedative substances what make us anxious.]* Stockholm: Fritzes.

Abstract:

The extent and character of benzodiazepine abuse was during 2001 investigated among 583 subjects undergoing minor forensic investigation in Sweden, using a structured interview, based on DSM-IV. Flunitrazepam was the single most common substance among the benzodiazepines abused in the study population. In 57% of the 120 subjects who had been affected by benzodiazepines when committing the crime, the drug involved had contained flunitrazepam, most commonly Rohypnol. In order to highlight an important legal issue - the question of whether a psychosis or anterograde amnesia experienced under the influence of flunitrazepam should be regarded as a severe mental disorder, ten cases of Rohypnol abusers are described. All of them showed impulsive violence and anterograde amnesia. Although abuse of benzodiazepines in Sweden is not a mitigating factor when committing crime, intoxication with flunitrazepam compounds (such as Rohypnol) is involved in above-mentioned important legal issue in several cases.

Typ och Nyckelord: Book (chapter) forensic psychiatry, violence, anterograde amnesia

Referens:

Johansson, G. (in press). Stresslandskapets förändrade karaktär. [Transition of the Stress Landscape.] In R. Ekman & B. Arnetz (Eds.), *Stress. Samhället - individen - molekylerna. [Stress. Society - Individuals - Molecules.]* Stockholm: Liber.

Abstract:

This chapter considers current societal and organizational transitions that tend to affect the stress and health of individuals in paid employment. It is claimed that new stressors are substituted for those that characterized the industrial era, whereas stress in terms of a biopsychosocial process remains unchanged. New stressors emerge as a consequence of factors such as globalized economies and rapid diffusion of information and communication technology. Examples of emerging conditions are the fact that work may be performed anywhere and at any time, that increased speed of communication increases work intensity, and that parallel activities and frequent interruptions increases mental work load.

Typ och Nyckelord: Book (chapter) stress, changing worklife

Referens:

Johansson, G. (2001). Work-life balance: The case of Sweden in the 1990s. Special Issue of *Social Science Information*, Editor: A. Rocha Perazzo. Annual Symposium of the European Network of Organisational and Work Psychologists, Paris, March 29-31, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens:

Johansson, G. (2001). Managing Job Stress in Sweden. Book of Abstracts, *10th European Congress on Work and Organizational Psychology*, Prague, Czech Republic, May 16-19, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens:

Johansson, G., & Isaksson, K. (2001). Kompetenz und Relationen nach der vertraglich festgelegten Pensionierung. In G. Aronsson & Å. Kihlbom (Eds.), *Arbeit über 45. Historische, psychologische und physiologische Perspektiven älterer Menschen im Berufsleben*. Dortmund/Berlin: Bundesanstalt für Arbeitsschutz und Arbeitsmedizin.

Abstract:

This book chapter investigates working conditions of employees 55 years and older in a Swedish insurance company. Through an early-retirement schema, the organisation had lost a large number of its 55+ employees - in total constituting ca 10 per cent of its entire staff. The study concerned the remaining group of 144 employees in the same age range. Two-wave panel data, separated by 18 months, were used to investigate long-term adjustment to downsizing in terms of general satisfaction, symptoms of distress, and organizational commitment. Negative reactions at Time 1, such as high levels of distress, decreased level of social support, and reports of increased workload were largely unchanged at Time 2. This pattern was particularly pronounced in the group who would have preferred to retire, but who had not been allowed to do so.

Typ och Nyckelord: Book (chapter) downsizing, survivor reactions

Referens:

Johnson, M. (in press). The importance of self-attitudes for type A - B, internality - externality and health status. *Personality and Individual Differences*.

Abstract:

A subsample of 142 undergraduates with high or low Basic and high or low Earning (by competence and others' approval) self-esteem (SE) differed significantly in Type A and Locus of control scores in a way that suggests a correspondence between the Basic/Earning and Type A/B/internal/external typologies. People high on Earning SE showed Type A pattern and those low on Earning SE showed Type B pattern but were internals or externals depending on their Basic SE level. Further, high Basic/high Earning SE was associated with the "non-toxic" Type A component and good self-reported health, whereas low Basic/high Earning SE was related to the "toxic" Type A component and poor health. The correlations between the variables calculated for the total sample of 409 students supported the results. The implications of the present SE model for the mechanisms eliciting different attitudes to achievements and making different contributions to health risks are discussed.

Typ och Nyckelord: Journal self-esteem structure, achievements, health

Referens: Jonsson, C.-O., Clinton, D.N., Fahrman, M., Mazzaglia, G., Novak, S., & Sörhus, K. (2001). How do mothers signal shared feeling-states to their infants? *Scandinavian Journal of Psychology*, 42, 377-381.

Abstract: The present study examined how mothers signal shared feeling-states to their infants. Affect attunement and imitation were investigated cross-culturally in 39 mother-infant dyads from Sweden (N=22) and the former Yugoslavia (N=17) during the first year of life. Video-recordings of playful interaction between mothers and their infants were analysed using the Affect Attunement Protocol. A significant negative association between imitation and age was found, while there was a significant positive association between affect attunement and age. Single occurrences of affect attunement appeared already at two or three months of age, and by 6 months of age episodes of affect attunement were more common than imitation. Frequencies of imitation and affect attunement were similar cross-culturally and in terms of gender, although there was a significant interaction between age and gender. The results suggest that the signalling of shared feeling-states is not a static process. Mothers do not signal shared feeling-states in the same manner at different ages. Imitation is the most important process during the earliest months, but is superseded by affect attunement earlier than previously thought. The functional implications of this developmental variation are discussed.

Typ och Nyckelord: Journal affect mirroring, affect attunement, imitation

Referens: Jorup, B., & Preisler, G. (2001). *Att göra gemensamt i leken - Om lekens kommunikativa villkor. [Sharing in play - about the communicative conditions of children's play.]* Rapport no 111, Stockholm University: Department of Psychology.

Abstract: Different play theories and communicative aspects of play are discussed. The perspective is interactionistic. Despite different theoretical perspectives, the importance of play for children is unambiguous - that children are given possibilities to imitate, to identify with other human beings as well as other creatures, that they are given time and space for fantasy play, but also possibilities to create a life history, and to enter different social roles. Playing is a domain in which children can experiment with reality and thereby increase their understanding of the world, and thereby create meaning in life.

Typ och Nyckelord: Report play, preschool children, communication

Referens: Jorup, B., & Preisler, G. (2001). *Lekens plats i förskolan för barn med cochlea implantat. [The role of play in preschools for children with cochlear implants. Analysis of playobservations in different educational settings.]* Rapport no 112, Stockholm University: Department of Psychology.

Abstract: In a qualitative, longitudinal study of play in a group of deaf children with cochlear implants detailed analyses of the symbolic-linguistic and social-communicative content of the children's play, with or without adults present, were analysed. Twenty-two children, 2,5-7 years of age, participated. For children attending preschools with hearing children few incidences of mutual play were observed. The most advanced and prolonged roleplays were registered among the children in sign language preschools. The importance of sharing a linguistic code in play with other children, and the role of adults promoting the children's play are discussed.

Typ och Nyckelord: Report deaf, cochlear- implant, play

Referens: Karlsson, T., Börjesson, A., Adolfsson, R., & Nilsson, L.-G. (in press). Successive memory test performance and priming in Alzheimer's disease: Evidence from the word-fragment completion task. *Cortex*.

Abstract: This study assessed the performance of patients with Alzheimer's disease and healthy controls in a successive memory test paradigm. Subjects studied lists of words. Following study, tests of recognition (an explicit memory task) and primed word fragment completion (an implicit memory task) were administered. Since the same words were used in the two tasks, we were able to calculate the degree of dependence between recognition performance and primed word fragment completion. AD patients evidenced impaired recognition memory. In contrast, priming was intact. The pattern of correlation between the two tasks was similar in healthy controls and in AD. Independence between recognition and fragment completion was obtained when recognition preceded the fragment completion task, but not when fragment completion preceded recognition.

Typ och Nyckelord: Journal memory, Alzheimer's disease, age

Referens: Karlsson, T., Börjesson, A., Adolfsson, R., & Nilsson, L.-G. (in press). Multiple memory test performance in normal aging. *Scandinavian Journal of Psychology*.

Abstract: Young and old subjects were investigated to examine whether: a) the effects of priming is influenced by aging; b) there is independence between primed word-fragment completion and recognition performances; and c) the dependence between different tests is influenced by aging. A successive test paradigm, which involved repeated assessment of to-be-remembered words by means of recognition and primed word-fragment completion, was employed. The results show that implicit memory decline with increasing age, and that correlations between different memory tests decrease with age. The outcome suggests that age-related memory decline involves several forms of memory, including primed word-fragment completion and correlations between measures of implicit and explicit memory.

Typ och Nyckelord: Journal memory, priming, age

Referens: Karlsson, T., Johansson, I., Adolfsson, R., Nilsson, L.-G., & Dubuc, S. (in press). A demonstration of a remarkable memory capacity in Alzheimer's disease. *Dementia and Geriatric Cognitive Disorders*.

Abstract: A compelling feature of human memory is its striking capacity. Under certain circumstances, subjects can remember large amounts of information even with brief exposure at study. This investigation shows that this ability is preserved in severely impaired Alzheimer's disease patients, and holds implications for the clinical management of amnesic patients. To this date, demonstrations of preserved learning and memory capacity in

Alzheimer's disease and amnesia have been confined to implicit memory tasks. Since the present results were obtained in an explicit memory task, the finding also holds implications for the understanding of amnesia.

Typ och Nyckelord: Journal memory, Alzheimer's disease

Referens: Kemdal, A.B. (2001). *Perspectives in attitudes and decision making*. Department of Psychology, Stockholm University. (Doctoral dissertation).

Abstract: The general purpose of this thesis was to test the assumption that perspectives (i.e., way of seeing) and attributions (explaining behavior) are related to decision making and to attitudes in a controversial issue. Previous research on perspectives, attributions, attitudes, and decision making and the relationship between these phenomena has found that people make different judgments in decision making and attitudes depending on perspective, e.g. in seeing something from one's own or someone else's point of view, or seeing an event differently before and after its occurrence. In Study 1, participants were interviewed about personal decisions. Cognitions as well as emotions, circumstances and actions were found to be present in the decisions. Before and during the decisions, they were usually seen from the decision makers' own perspective. Seeing oneself from someone else's perspective after the decision was related to feelings of regret and guilt. Study 2 showed that two opposing groups in the animal experiments controversy saw opponents' attitudinal behavior as being less guided by external factors, and more guided by internal factors, compared to one's own group. Both groups could take the opponents' perspective by being able to estimate opponents' own and opponent attributions. Less involved participants made more external and less internal attributions for the group's behavior that shared their own attitude. Study 3 showed that opponent groups as well as less involved participants could estimate the opponent groups' ratings of beliefs and values. A LISREL-analysis supported a model where beliefs, values, and attributions formed a whole. Aspects supporting animal experiments formed one cluster (researchers' perspective) and aspects speaking against animal experiments formed another (animal protectors' perspective). The two perspectives corresponded to a positive or negative attitude towards animal experiments. A main conclusion of this thesis is that people are guided by perspectives that make them focus on aspects that support their favored decision alternative or attitude, but that they also may have the ability to change perspectives, by seeing a decision or attitude from someone else's point of view.

Typ och Nyckelord: Dissertation attitudes, decision making, perspectives, attribution

Referens: Kemdal, A.B., & [Montgomery, H.](#) (2001). Explaining own and others' behavior in a controversial issue: Animal experimentation. *Journal of Social Psychology*, 141, 693-713.

Abstract: The authors investigated how two groups with different attitudes toward animal experimentation - researchers who conducted animal experiments and members of animal welfare organizations who protested against animal experiments - made attributions for the behavior of the opposing group. The two groups showed an actor-observer effect, mentioning more internal causes for the opponents' behavior. Both groups were able to take the other's perspective, resulting in a reversed actor-observer effect. The less involved participants followed the pattern of ratings of the group whose attitudes corresponded to their own. In particular, the participants with a negative attitude toward animal experimentation rated researchers' behavior as more internally caused than did those with a positive attitude. The results illustrated how the participants formed and defended attitudes in a social context.

Typ och Nyckelord: Journal attitude, perspective-taking, attribution

Referens: Kenttä, G. (2001). *Overtraining, staleness, and burnout in sports*. Department of Psychology, Stockholm university (Doctoral dissertation).

Abstract: Intense and frequently performed physical training can result in both adaptation and maladaptation often referred to as overtraining syndrome/staleness or burnout depending on the severity of the condition. In Study I, a new conceptual model was presented generating a holistic understanding of both process and outcome; the concept of Total Quality Recovery was also developed. In Study II and III, the incidence rate and nature of staleness and its relationship with burnout across countries and sports were examined. In Study IV, the utility of right-now mood state responses was explored in order to monitor training and recovery in a naturalistic setting. Too much training (physiologically driven), high levels of psychosocial stress in combination with moderate training loads (psychosociologically driven), and an obvious lack of recovery actions undertaken (poor recovery driven) are major pathways accounting for the majority of stale and burnout athletes. Four core attributes of staleness were identified: performance decrement, mood disturbance, exhaustion, and perceptual distortion. Analogues with staleness, the first three attributes were also suggested as core dimensions of burnout, together with devaluation referring to negative attitudes toward sport and involvement in it. Frequent episodes, or long lasting periods of staleness, may place the athlete at risk of ultimately developing burnout. Self-monitoring of training and recovery is regarded as an important strategy that promotes self-awareness and self-control, which subsequently may enhance continuous adaptation and prevent maladaptive consequences. Promoting continued performance development and short-term peak performance can best be conceptualized as a psychosociophysiological act of balance.

Typ och Nyckelord: Dissertation overtraining, burnout, recovery

Referens: Kenttä, G., & [Hassmén, P.](#) (2001). Monitoring overtraining in athletes: The rocket ship paradox. In A. Papaioannou, M. Goudas, & Y. Theodorakis (Eds.), *International society of sport psychology 10th world congress of sport psychology* (Vol. 4, pp. 161-163). Skiathos, Hellas.

Abstract:

Typ och Nyckelord: Proceedings Book (chapter)

Referens: Kenttä, G., [Hassmén, P.](#), & Raglin, J.S. (2001). Training practices and overtraining syndrome in Swedish age-group athletes. *International Journal of Sports Medicine*, 22, 460-465.

Abstract: Heavy training in combination with inadequate recovery actions can result in the overtraining/staleness syndrome and burnout. Even young and aspiring elite athletes develop staleness. The aim was therefore to determine the incidence and nature of staleness, and its association with training behavior and psychosocial stressors in young elite athletes. A sample of 272 individuals from 16 sports completed questionnaires on

training, staleness, and psychosocial stress and 37% reported being stale at least once. The incidence rate was higher for individual sports (48%) compared with team (30%) and less physically demanding sports (18%). Stale athletes reported greater perceptual changes and negatively elevated mood scores in comparison to healthy athletes. Staleness was distinguished from burnout on the basis of motivational consequences; 41% of the athletes lost their motivation for training, which in turn indicates a state of burnout. Further, 35% of the athletes reported low satisfaction with time spent on important relationships, 29% rated the relationship with their coach as ranging from very, very bad to only moderately good. The results indicate that staleness is a widespread problem among young athletes in a variety of sports, and is not solely related to physical training, but also to non-training stressors.

Typ och Nyckelord: Journal overtraining, burnout, motivation

Referens: Kihlman, T., Kropp, W., Öhrström, E., & Berglund, B. (2001). Soundscape support to health. A cross-disciplinary research program. In R. Boone (Ed.), *Inter-Noise 2001* (vol. 3, pp. 1237-1242). The Hague: Nederlands Akoestisch Genootschap (NAG).

Abstract: The Swedish research programme Soundscape Support to Health aims at developing methods and models and providing tools for predicting and optimising acoustic soundscapes in connection with traffic and city planning, including the production of new dwellings and rebuilding of dwellings in noise polluted areas, with respect to effects on health. The programme started late in 1999 and runs over 4 years. It is a cross disciplinary programme between three departments at three universities. It consists of 8 projects including studies of annoyance, sleep disturbance, soundscape perception, sound propagation in cities and finally town planning with regard to noise. It is financed by the Foundation for Strategic Environmental Research in Sweden.

Typ och Nyckelord: Proceedings Book (chapter) soundscape, health, sound propagation

Referens: Kim, H.Y., Lundh, L.G., & Harvey, A. (in press). The enhancement of video feedback by cognitive preparation in the treatment of social anxiety. A single-session experiment. *Journal of Behavior Therapy and Experimental Psychiatry*.

Abstract: The present study replicates and extends Harvey, Clark, Ehlers, and Rapee's (2000) single-session experiment of video feedback with cognitive preparation in individuals with high social anxiety. Forty participants high on social anxiety were asked to present a speech before a video camera and then received video feedback of their speech. Half of the participants received cognitive preparation prior to the video feedback, whereas the other half only received video feedback. The cognitive preparation procedure asked the participants to (1) predict in detail what they would see in the video, (b) form an image of themselves giving the speech, and (3) watch the video as though they were watching a stranger. All the participants were asked to present a second speech 30 minutes after the first speech to index generalisation effects. Cognitive preparation enhanced the therapeutic effect of video feedback after the first speech, and also showed a robust generalisation effect on the evaluation of the second speech. Before the second speech, the participants underwent an emotional Stroop task with masked and unmasked words; the results showed that Stroop interference for both masked and unmasked social threat words correlated consistently with measures of social anxiety, but not with the preceding or ensuing speech evaluations.

Typ och Nyckelord: Journal social anxiety, cognitive therapy, emotional Stroop task

Referens: Kormi-Nouri, R., Moniri, S., & Nilsson, L.-G. (in press). Episodic and Semantic Memory in Bilingual and Monolingual Children. *Scandinavian Journal of Psychology*.

Abstract: Although bilinguality advantages for children have been reported for different cognitive abilities, much less is known about the relation between memory and bilinguality. In this study, 60 (30 girls and 30 boys) bilingual and 60 (30 girls and 30 boys) monolingual children in three age groups (8.5, 10.5 and 12.5 years) were compared on episodic memory and semantic memory tasks. In episodic memory, children learned subject-performed tasks (with real or imaginary objects) and verbal tasks and retrieved by both free recall and cued recall tests. In semantic memory, word fluency tests were used. Positive effects of bilingualism were found on both episodic memory and semantic memory tasks at all age levels. These findings suggest that bilingual children integrate and/or organize the information of two languages, and so, bilingualism creates advantages for cognitive abilities (including memory). Some sex differences were also found in episodic memory but not in semantic memory. This episodic memory difference was found in children at earlier age level.

Typ och Nyckelord: Journal bilingualism, memory, action memory

Referens: Kormi-Nouri, R., & Nilsson, L.-G. (2001). The motor component is not crucial! In H. Zimmer & R.L. Cohen (Eds.), *Action memory: A specific type of episodic memory?* (pp. 97-111). Oxford: Oxford University Press.

Abstract: This chapter provides a theoretical overview of data and theory on action memory. More specifically, one type of theory is discussed, namely the theory that is stating that the notion of a motor component is essential for explaining the superiority in memory performance for verbal information that has been encoded by means of enactment. It is a finding of long standing that verbal information (e.g., open the book, lift the pen roll the ball) that is encoded by having subjects performing these commands is much better recalled than the same type of information having not been encoded by means of enactment. It is argued in this chapter that the motor component of episodic memory is not crucial for explaining this result.

Typ och Nyckelord: Book (chapter) memory, enactment, action memory

Referens: Lang, S., af Klinteberg, B., & Alm, P.O. (in press). Adult psychopathy and violent behavior in males with early neglect and abuse. *Acta Psychiatrica Scandinavica*, Supplement.

Abstract: Objective: Within a Swedish longitudinal project, possible implications of childhood neglect and/or abuse on adult Psychopathy Check List (PCL) scores and violent offending were studied.

Method: The subjects were males (n=199), recruited from a socially high-risk neighbourhood and grouped on an index variable of victimization, yielding high (n=110) and low victimization (n=89) groups. To highlight a possible comorbidity of all three problems in the same persons, a combined dimensional and categorical (CFA)

approach was applied.

Results: The high victimization subjects exerted significantly more violence, as did also subjects with high PCL scores. Furthermore, in the CFA two significant 'types' were found: One type indicating that 'high' victimization in childhood is closely linked to later 'extensive' violence and 'high' PCL scores at adult age in the same individuals; the other supporting a frequent co-occurring of 'low' victimization in childhood, 'none or minor' later indications of violence and 'low' adult PCL scores.

Conclusion: The results point to possible underlying mechanisms linked to all three problems characterizing the affected subjects.

Typ och Nyckelord: Journal childhood victimization, psychopathy, longitudinal study

Referens: Larsson, M. (in press). Odor memory: A memory systems approach. In C. Rouby, B. Schaal, D. Dubois, R. Gervais & A. Holley (Eds.), *Olfaction, Taste, and Cognition*. Cambridge University Press.

Abstract: The main aim of this chapter is to organize some of the available knowledge on the behavioral and psychological manifestations of odor memory using a memory systems approach. Research focusing on human memory suggests that memory is not a single or unitary faculty of the mind. Instead, it may be conceived of as a variety of distinct and dissociable processes and systems, which are subserved by particular constellations of neural networks that mediate different forms of learning. According to the five-fold classification system proposed by Tulving and colleagues, non-declarative and declarative classes of human memory may be decomposed into five interrelated memory systems, which have been evolved both phylogenetically and ontogenetically in a determined order. In this chapter it is proposed that different olfactory functions may be conceptualized within the system theory and examples of the various expressions of olfactory memory as related to each memory system are: procedural memory (odor conditioning, aversions), perceptual representation system (PRS; odor priming), semantic memory (familiarity, hedonics, odor identification), working memory (odor discrimination), and episodic memory (episodic odor recognition). Also, neuropsychological evidence together with some brain-imaging evidence supporting that various olfactory functions draw on different neural correlates are considered.

Typ och Nyckelord: Book (chapter) odor memory, memory systems, brain imaging

Referens: Larsson, M. (2001). Sex differences in recollective experience for olfactory and verbal information. Oral presentation at the symposium "*Olfactory Cognition*", Stockholm University, August 21.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Larsson, M., Finkel, D., & Pedersen, N.L. (2001). Olfactory functioning and cognitive abilities: A twin study. Poster presentation at "*The 3rd International Conference on Memory*", Valencia, Spain, July 16-20.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Larsson, M., Nyberg, L., Bäckman, L., & Nilsson, L.-G. (in press). Effects on episodic memory of stimulus richness, intention to learn, and extra-study repetition: Similar profiles across the adult life span. *Journal of Adult Development*.

Abstract: The ability to benefit from various kinds of cognitive support in episodic memory was studied in a population-based sample of healthy adults aged 35 to 80 years (N=1000). The participants studied pictures of faces of 10-year old children with made-up firstnames and surnames. They were specifically instructed to remember the faces and the surnames. After study, an implicit name stem-completion test was administered, followed by face- and name recognition memory tests. There was a negative age effect across all task variables. The effect of stimulus richness was examined by comparing recognition performance for faces and surnames, and a stimulus effect favoring faces was seen across age. The effect of intention to learn was investigated by contrasting recognition performance for surnames and firstnames, and an age-invariant positive effect of intentionality was observed. The effect on recognition performance of completing stems with studied surnames was addressed by measuring the degree of association between completion and recognition performance. In all age groups, a significant association was observed, suggesting that extra-study repetition of surnames had a positive effect on recognition performance across the age span. Overall, the results are in agreement with the views that (a) age-related episodic memory deficits are highly generalizable, and (b) effects of cognitive support on memory are typically of equal size across the adult life span.

Typ och Nyckelord: Journal aging, episodic memory, face recognition

Referens: Larsson, M., Öberg, C., & Bäckman, L. (2001). Predictors of odor identification in young and old age. Poster presentation at "Poster presentation at "*The Association for Chemoreception Sciences*", Sarasota, Florida, April 25-30.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Lewin, C., & Herlitz, A. (in press). Sex differences in face recognition: Women's faces make the difference. *Brain and Cognition*.

Abstract: Sex differences favoring women have been found in face recognition tasks as well as in verbal episodic memory tasks. Women's higher face recognition performance was hypothesized to be related to either their higher verbal ability or to their superiority in recognizing female faces, rather than faces in general. Results showed that whereas there were no differences between men and women in the recognition of male faces, or in verbal

ability, women performed at a higher level than men in the recognition of female faces. Verbal ability did not influence women's face recognition performance. Potential explanations for this pattern of data, such as sex differences in interest and prior knowledge, are discussed.

Typ och Nyckelord: Journal sex differences, episodic memory, face recognition, cognition

Referens: Lewin, C., Wolgers, G., & Herlitz, A. (2001). "Sex differences favoring women in verbal but not in visuospatial episodic memory." *Neuropsychology*, 15(2), 165-173.

Abstract: Sex differences favoring women have been found in a number of studies of episodic memory. This study examined sex differences in verbal, nonverbal, and visuospatial episodic memory tasks. Results showed that although women performed at a higher level on a composite verbal and nonverbal episodic memory score, men performed at a higher level on a composite score of episodic memory tasks requiring visuospatial processing. Thus, men can use their superior visuospatial abilities to excel in highly visuospatial episodic memory tasks, whereas women seem to excel in episodic memory tasks in which a verbalization of the material is possible.

Typ och Nyckelord: Journal sex differences, memory

Referens: Li, S., Lindenberger, U., & Sikström, S. (2001). Aging Cognition: From neuromodulation to representation to cognition. *Trends in Cognitive Sciences*, 5 (11), 479-486.

Abstract: Basic cognitive functions, such as the abilities to mentally activate, briefly represent, maintain, focus, and process information, decline with age. To obtain an integrative understanding of cognitive aging phenomena at the neural, information-processing, and behavioral levels requires a paradigm shift towards cross-level theoretical and empirical orientations. We review empirical data at different levels and computational theories proposed to enable their integration. A theoretical link is highlighted, relating deficient neuromodulation with noisy information processing resulting in less distinctive cortical representations. These less distinctive representations might be implicated in working memory and attentional functions underlying various behavioral manifestations of cognitive aging deficits.

Typ och Nyckelord: Journal cognitive aging, neuromodulation, dopamine

Referens: Li, S., & Sikström, S. (2001). Aging and neuromodulation. *International conference on memory. ICOM-3*, Valencia, Spain, July 15-20, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Lundberg, U. (in press.) Psychophysiology of Work: Stress, endocrine response and work-related upper extremity disorders. *American Journal of Industrial Medicine Supplement*.

Abstract: Background: Mental stress may induce muscle tension and has been proposed to contribute to the development of work related upper extremity disorders (WRUEDs) by driving low threshold motor units into degenerative processes by overload.

Methods and Results: Measurements of perceived stress, catecholamines, blood pressure and heart rate are associated with stress induced elevation of trapezius EMG activity. In repetitive tasks, where WRUEDs are common, psychophysiological arousal is generally high both during and after work. A possible explanation of the high prevalence of WRUEDs among women could be that women often are performing repetitive tasks and are exposed to additional stress from unpaid work.

Conclusion: It is concluded that both physical and psychosocial work conditions may contribute to WRUEDs by inducing physiological stress and muscle tension.

Typ och Nyckelord: Journal mental arousal, sustained muscle activity, repetitive tasks

Referens: Lundberg, U. (in press.) Gender, multiple roles and physiological reactions. In S. Wamala & J. Lynch (Eds.), *Gender and Social Inequalities in Health*. Studentlitteratur, Stockholm.

Abstract: Women's employment is associated with positive as well as negative health consequences. However, women generally report more health problems than men and the prevalence of women's stress-related health problems has increased in recent years. This gender difference has been linked to women's changing roles and greater participation in the paid work force, without a corresponding reduction in unpaid work (household chores, child care etc.), which have contributed to more role conflicts and a greater total workload. Additional factors contributing to elevated stress levels in women are that women more often than men are involved in repetitive work and have less influence and control over their paid work, which according to wellknown stress models may increase the health risks. Furthermore, women usually are paid less than men which according to the Effort-Reward Imbalance model contributes to additional stress. Physiological stress responses consistently show that fulltime employed women, compared with men having the same job, have elevated stress levels off work and a greater spill-over of stress between work and home conditions. The elevated stress levels off work have been associated with women's traditional primary responsibility for household chores and childcare. Gender difference in health are particularly pronounced for musculoskeletal disorders among white collar workers, for example neck and shoulder pain. Since white collar workers use a very small fraction of their muscular strength at work, this difference cannot be explained by differences between men and women in terms of muscular capacity. A more likely explanation is that women more often than men are performing repetitive tasks and have less possibilities for rest and recuperation off work. New models have been proposed in order to explain the development of muscle disorders in light physical but psychologically stressful work conditions, where lack of time for rest and recovery seems to play a key role. In order to reduce health gaps between men and women, greater possibilities for both women and men to combine their different roles in life - occupational career, marriage, child care etc. - without exposing themselves to health risks, must be provided. Influence and control over the planning and pace of work, and a new allocation of work functions between men and women, are necessary steps to reach this goal.

Typ och Nyckelord: Book (chapter) workload, sex differences, stress responses, health

Referens: [Lundberg, U.](#) (in press). Samspelet individ, samhälle, livsstil och biologi. [Interaction between the individual, society, life style and biology.] I R. Ekman & B. Arnetz (Eds.), *Molekylerna - individen - organisationen - samhället. [Molecules - individual - organization - society.]* Liber Förlag, Stockholm.

Abstract: This chapter (in Swedish) is focused on the possible mechanisms linking psychosocial conditions in modern society to major health problems. It is concluded that the dominating health problems today are caused by a complex interaction between the psychosocial and physical environment, individual characteristics, life style factors and biological reactions to stress. Some models proposed to explain these mechanisms are presented and discussed.

Typ och Nyckelord: Book (chapter) stress, social conditions, health, physiology

Referens: [Lundberg, U.](#) (2001). Stress - Introduction. In R. Kadefors & L. Sandsjö, *The 2nd PROCID Symposium - Prevention of Muscle Disorders in Computer Users: Scientific Basis and Recommendations* (pp. 62-63). Stockholm: National Institute for Working Life.

Abstract:

Typ och Nyckelord: Proceedings Book (chapter)

Referens: [Lundberg, U.](#), Forsman, M., Zachau, G., Eklöf, M., Palmerud, G., Melin, B., & Kadefors, R. (in press). Effects of experimentally induced mental and physical stress on trapezius motor unit recruitment. *Work & Stress*.

Abstract: Mental stress may induce muscle tension and has been proposed to contribute to the development of musculoskeletal disorders. Prolonged activity of low threshold motor units may cause metabolic disturbances, degenerative processes and pain. The present experiment was aimed at investigating if the same motor units are activated by mental stress as by physical demands. Seventeen subjects were exposed to mental stress tests (mental arithmetic, Stroop color word) and physical demands (reference contraction, force ramp contraction) in the laboratory. In addition, they were exposed to the cold pressor test. Bipolar intramuscular electromyographic (EMG) activity was measured in the trapezius muscle and an automatic classification program was used for motor unit action potential decomposition. Overall muscle activity was measured by bipolar surface EMG and heart rate was recorded as an indicator of stress. The mental stress induced significant increases in muscle activity ($p < 0.05$) and in heart rate ($p < 0.05$). In 12 out of 14 subjects, one or more motor units were found to be active in physically as well as in mentally induced muscle contraction. The results indicate that mentally induced stress may contribute to keep low threshold motor units active, also in the absence of physical demands. Considering the hazardousness of prolonged motor unit activity, it was concluded that lack of mental rest is an important risk factor for the development of muscular pain.

Typ och Nyckelord: Journal EMG, heart rate, muscle activity, mental stress, motor unit activity

Referens: [Lundberg, U.](#), Forsman, M., Zachau, G., Eklöf, M., Palmerud, G., Melin, B., & Kadefors, R. Effects of experimentally induced mental and physical stress on trapezius motor unit recruitment. In *The 2nd PROCID Symposium - Prevention of Muscle Disorders in Computer Users: Scientific Basis and Recommendations*, Kadefors R, Sandsjö L. Stockholm: National Institute for Working Life 2001, pp 215-218.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Lundberg, U.](#), & Melin, B. (in press). Stress in the development of musculoskeletal pain. In S. Linton (Ed.), *Avenues for the Prevention of Chronic Musculoskeletal Pain and Disability*. Elsevier Science.

Abstract: In this chapter, the role of psychosocial stress in the development of musculoskeletal disorders (MSD) is described. Today, a large body of evidence shows that physical conditions alone cannot explain the development of musculoskeletal pain in the modern work environment. The decrease in physical work demands during the 80's and 90's has been accompanied by an increase in mental demands. In occupations with a high prevalence MSD, psychophysiological stress levels are usually high and new models have been proposed in order to explain how low but sustained levels of muscle tension, induced by mental and/or physical conditions, may develop into pain syndromes. In modern society, with increasing focus on a high work pace, competitiveness, efficiency, lean production, downsizing etc., lack of time for rest, recovery, and recreation is likely to play an even more important role than the magnitude of stress or physical effort during work. Considering the very pronounced gender differences in MSD as well as in many other symptoms, where women consistently report more health problems than men, political actions to create equal opportunities for women and men to combine a stimulating occupational career with a meaningful and creative family life seem necessary. In addition, organizational changes and a new allocation of unpaid work responsibilities seem important to reduce stress and health problems in women. In view of the dramatic costs and individual suffering associated with MSD, actions contributing to reduce these health problems are likely to be particularly cost-effective.

Typ och Nyckelord: Book (chapter) muscle tension, psychological factors, gender differences

Referens: [Lundh, L.G.](#) (2002). Cognitive methods in the treatment of insomnia. In T. Scrimali & L. Grimaldi (Eds.), *Cognitive psychotherapy toward a new millenium*. London: Kluwer Academic Publishers.

Abstract: The role of cognitive treatment methods in insomnia is discussed in terms of Lundh and Broman's (2000) model of insomnia as an interaction between sleep-interfering processes and sleep-interpreting processes. Dysfunctional sleep-interpreting processes can be addressed by means of psychoeducational methods, socratic questioning, and behavioural experiments. Sleep-interfering processes of cognitive arousal, it is argued, can be addressed by means of a meta-cognitive observation exercise, that is incompatible with sleep-interfering processes of rumination and worrying.

Book (chapter) insomnia, cognitive therapy

Typ och Nyckelord:

Referens: Lundh, L.-G., Berg, B., Johansson, H., Kjellén Nilsson, L., Sandberg, J., & Segerstedt, A. (in press). Social anxiety is associated with a negatively distorted view of one's own voice. *Cognitive Behaviour Therapy*.

Abstract: According to cognitive models of social anxiety, negatively distorted self-images have a central role in the development and maintenance of social anxiety. In the present study, the association between social anxiety and the perception of one's own voice was investigated in a sample of 17 undergraduate students. The participants were asked to recount a story aloud in front of a tape recorder, and then to rate their voice characteristics on a Voice Evaluation Questionnaire (VEQ). Independent observers (speech therapy students) were then asked to listen to the tape recordings and to rate the participants' voice characteristics on an equivalent version of the VEQ. Two alternative hypotheses were contrasted: a skill deficits hypothesis, and a cognitive distortion hypothesis. The results supported the cognitive distortion hypothesis. High social performance anxiety was associated with an underestimation of one's voice qualities, as compared with the independent observers. It is suggested that sound-tape feedback with cognitive preparation should be tested as a method for correcting the negatively distorted voice perception that is associated with social anxiety.

Typ och Nyckelord: Journal social anxiety, voice perception, cognitive distortion

Referens: Lundh, L.G., & Czyzykow-Czarnocka, S. (2001). Priming of the emotional Stroop effect by a schema questionnaire. An experimental study of test order. *Cognitive Therapy and Research*, 25, 281-289.

Abstract: Forty persons were administered an emotional Stroop task with separation-related words and neutral words, together with the abandonment scale from Young's (1990) Schema Questionnaire (SQ). Half of the participants were administered the SQ abandonment scale prior to the Stroop task, and half were administered it after the Stroop task. The results showed that priming by the SQ abandonment scale produced Stroop interference for unmasked separation words. This suggests that attentional bias is influenced by priming, and that it may be methodologically important to control possible priming factors when administering Stroop tasks and other measures of attentional bias.

Typ och Nyckelord: Journal emotional Stroop task, attentional bias, priming

Referens: Lundh, L.G., & Hindmarsh, H. (2002). Can meta-cognitive observation be used in the treatment of insomnia? A pilot study of a cognitive-emotional self-observation task. *Behavioural and Cognitive Psychotherapy*, 30, 239-242.

Abstract: Meta-cognitive observation is a kind of cognitive activity that may serve to interrupt worry, rumination, and other kinds of sleep-interfering cognitive processes. In a pilot study, forty individuals recorded their sleep on a sleep diary during one week (the baseline week) and were then administered a meta-cognitive observation task to use at bed-time during a second week ("the treatment week"). Consistent with the hypothesis, the participants showed a decreased sleep latency during the treatment week as compared with the baseline week, and also an increased total sleep time and an improved sleep efficiency. The lack of a control group (i.e., a group who kept a sleep diary for both weeks, without any meta-cognitive observation task), however, precludes any definite conclusion with regard to the effects of the meta-cognitive observation task. It is suggested that meta-cognitive observation tasks should be tested in controlled studies.

Typ och Nyckelord: Journal insomnia, meta-cognition, cognitive therapy

Referens: Lundh, L.G., Johnsson, A., Sundqvist, K., & Olsson, H. What does the Toronto Alexithymia Scale really measure - deficiencies in emotional awareness, or perfectionistic standards for emotional communication? *Tenth Biennial Meeting of the International Society for the Study of Individual Differences*. Edinburgh, 7-11 July, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Lundh, L.G., & Simonsson-Sarnecki, M. (2001). Alexithymia, emotion, and somatic complaints. *Journal of Personality*, 69, 483-510.

Abstract: Alexithymia, by definition, involves difficulties in identifying and describing emotions, and has been assumed to be associated with somatization, i.e., a tendency to express psychological distress in somatic rather than emotional form. Empirical research so far, however, has produced no convincing evidence that alexithymia is more associated with somatic complaints than with emotional complaints, or that alexithymia correlates with somatic complaints when negative affect is controlled for. In the present study, alexithymia as measured by the TAS-20 showed no association with somatic complaints in a community sample of 137 individuals when trait anxiety and depression were controlled. Alexithymia did correlate negatively with positive affect, and positively with negative affect - the former association, however, was much more robust, whereas the latter association was found mainly on subjective trait measures of negative affect (as distinct from state measures, and more objective trait measures derived from daily recordings during an eight-week period). It is suggested that the association between alexithymia and lack of positive affect deserves more attention in future research.

Typ och Nyckelord: Journal alexithymia, somatic complaints, emotion

Referens: Lundh, L.G., & Simonsson-Sarnecki, M. (in press). Alexithymia and cognitive bias for emotional information. *Personality and Individual Differences*.

Abstract: The relationship between alexithymia (TAS-20) and cognitive bias (attentional bias and implicit memory bias) for illness words and negative emotion words (masked and unmasked) was investigated in a community sample of 120 individuals. Attentional bias was measured by the emotional Stroop task, and implicit memory bias was measured by a perceptual identification task. No significant correlation was found between alexithymia and any measure of cognitive bias. Group comparison between high-TAS and low-TAS scorers, however, showed that the high-TAS scorers were significantly slower on colour-naming unmasked illness words than

unmasked negative emotion words.

Typ och Nyckelord: Journal alexithymia, attentional bias, somatic anxiety

Referens: Lundh, L.G., & Wikström, J. Individual differences in cognitive bias for emotional information - the role of emotional valence and cognitive level. *Tenth Biennial Meeting of the International Society for the Study of Individual Differences*. Edinburgh, 7-11 July, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Lundh, L.G., Wikström, J., & Westerlund, J. (2001). Cognitive bias, emotion and somatic complaints in a normal sample. *Cognition and Emotion*, 15, 249-277.

Abstract: Cognitive bias (Stroop interference and implicit memory bias) for masked and unmasked threat words (illness words and negative emotion words) was investigated for its associations with emotion (anxiety, anger/aggression, and positive affect) and somatic complaints in a randomly selected community sample of 138 individuals. Because measures of cognitive bias are inherently bipolar, the data were tested for both linear and curvilinear trends. Cross-sectional analysis showed that the associations between somatic anxiety and Stroop interference for unmasked threat words were better described in terms of curvilinear than linear models, and that degree of somatic complaints was associated with Stroop facilitation for masked threat words. Longitudinal analysis showed that Stroop interference for masked threat words predicted lack of positive affect during an ensuing eight-weeks daily recording period. Implicit memory bias was found to be negatively associated with measures of anger/aggression, both in the cross-sectional and longitudinal analyses. We suggest that: (a) cognitive bias should be treated as a bipolar construct in future research; (b) the phenomenon of Stroop facilitation for threat words deserves further exploration; and (c) more research should address the question about the relationship between cognitive bias and other emotions than anxiety (e.g., positive affect and anger).

Typ och Nyckelord: Journal cognitive bias, emotion, somatic complaints

Referens: Lundh, L.G., & Öst, L.-G. (2001). Attentional bias, self-consciousness, and perfectionism in social phobia before and after cognitive-behaviour therapy. *Scandinavian Journal of Behaviour Therapy*, 30, 4-16.

Abstract: Attentional bias for threat words (as measured by the emotional Stroop task), self-consciousness, and perfectionism was studied in 24 patients with social phobia before and after cognitive-behaviour treatment. 18 of the patients (i.e., 75%) were classified as treatment responders on the basis of reduced scores on social anxiety. The treatment responders showed a significant reduction in attentional bias for social threat words, in public self-consciousness, and in perfectionism. The non-responders showed an equal reduction in perfectionism; as they had a much higher level of perfectionism before treatment, however, their change only amounted to a lowering of their level of perfectionism to the level that characterized the treatment responders before treatment. The treatment responders, on the other hand, reduced their level of perfectionism to that of non-clinical samples.

Typ och Nyckelord: Journal social phobia, perfectionism, attentional bias

Referens: Magnusson, C. (2001). *Life-course characteristics associated with early onset of sexual intercourse in females*. Department of Psychology, Stockholm University (Doctoral dissertation).

Abstract: The dissertation treats early onset of sexual intercourse among adolescent females from a broad life-course perspective. Its main focus is on the structures and processes involved in the early onset of sexual intercourse in the contexts of personal relationships, well-being, self-perception and adjustment. Data are based on four cohorts of females. The first comes from the Swedish longitudinal research program "Individual Development and Adaptation" (IDA), which encompasses all 522 Grade-8 girls (15-years old) from a municipality in central Sweden in 1970. The second belongs to a project designed to investigate adolescent behavioral problem, and includes all 567 Grade-8 girls in a single Swedish municipality in 1996. The third covers 30 females with documented sex-related gynecological problems who had attended a youth clinic during adolescence, plus a matched control group. The fourth consists in a representative sample of 90 females within the so-called "Solna Project" who were followed regularly from birth up into mid-life (age 38). Results from Cohort 1 show that sexuality has quite similar developmental implications in the lives of adolescent girls now as it did 26 years ago. Findings from Cohort 2 demonstrate that a majority of girls with early sexual onset experienced their adolescent sexuality as negative, and suffered from recurrent and varied gynecological illnesses in young adulthood. Girls in a "multi-problem situation" were found to be most affected, with respect to both internalizing and externalizing maladjustment. Early sexual activity in itself is not a deviant behavior, but the situation is different when problem behavior and sexuality co-occur. Results from Cohort 3 show that the developmental process differs between subgroups of girls according to whether or not there is such co-occurrence. The combination of early sexuality and problem behavior was found to have negative implications in adolescence and adulthood. Examination of the girls in Cohort 4 girl suggests that the timing of the acquisition of adult roles is embedded in developmental processes that extend far back into the life of both the young female and her parents. Early sexual onset was found to be associated with both childhood problems (externalizing problems of the child and strained mother-child relations) and future difficulties (adult life situation related to leaving home early, setting up a family at an early age, low education, and social-adjustment problems).

Typ och Nyckelord: Dissertation early onset of sexual intercourse, adolescent female, longitudinal study

Referens: Magnusson, C. (2001). Adolescent girls' sexual attitudes and opposite-sex relations in 1970 and in 1996. *Journal of Adolescent Health*, 28, 242-252.

Abstract: The aim of this study is to describe changes in adolescent girls' sexual attitudes and relationships with boys between 1970 and 1996, particularly girls who had early sexual transitions. The study includes two cohorts. The first is from the Swedish longitudinal research program, "Individual Development and Adaptation" (IDA). This cohort includes all 8th grade girls (15-year-olds) in a mid-Swedish community in 1970. In 1996, the same

instrument was administered to all 8th grade girls (15-year-olds) in the same community. These girls make up the second cohort. Results showed that girls were thinking and feeling similarly about sexual matters in 1970 and 1996. Furthermore, the same factors correlated with early sexual transition in both cohorts, and the correlations were of about the same magnitudes. This suggests that sexuality has quite similar developmental implications in the lives of teenage girls now as it had twenty-five years ago. There were, however, differences in the prevalence of opposite-sex relations. Compared with girls in 1970, girls in 1996 had had fewer sexual relationships and had postponed their sexual transition.

Typ och Nyckelord: Journal adolescent girls, sexual attitudes, sexual relations

Referens: [Magnusson, D.](#) (2001). The holistic-interactionistic paradigm: Some directions for empirical developmental research. *European Psychologist*, 6, 153-162.

Abstract: This article asserts the claim for linking methods to phenomena - and not vice versa - in research on individual development. It is argued that proper application of theory, design, and methodological tools in studies of specific problems requires strict consideration of four basic features of developmental processes: (1) the holistic-interactionistic nature of such processes, (2) individual development as a process of adaptation, (3) developmental change as transformation, and (4) synchronization and coordination of operating elements in developmental change. The research strategy and methodological consequences of this claim are discussed.

Typ och Nyckelord: Journal processes, phenomena, statistical models

Referens: [Magnusson, D.](#) (2001). *Models and Methods in Developmental Research*. Celebration of the 100th Anniversary of the Foundation of the Department of Psychology at the Humboldt-University in Berlin.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Magnusson, D.](#), & Mahoney, J.L. (in press). A holistic person approach for research on positive development. In L. Aspenwill & U. Staudinger (Eds.), *Psychology of Human Strengths*. Washington, DC: APA.

Abstract: After a period during which the focus of much developmental research has been concerned with negative aspects of individual development and functioning, an increasing number of researchers point to the need to investigate positive aspects. It is argued in this chapter that research in this new field has to build on an analysis of general principles and mechanisms working in individual developmental processes. Basic characteristics of such processes, of particular importance for research on positive development, are reviewed and methodological implications discussed.

Typ och Nyckelord: Book (chapter) positive development, holistic perspective, person approach

Referens: [Magnusson, D.](#), & Mahoney, J.L. (2001). *A holistic person approach for research on positive development*. Reports from the project IDA, No. 76.

Abstract: After a period during which the focus of much developmental research has been concerned with negative aspects of individual development and functioning, an increasing number of researchers point to the need to investigate positive aspects. It is argued in this report that research in this new field has to build on an analysis of general principles and mechanisms working in individual developmental processes. Basic characteristics of such processes, of particular importance for research on positive development, are reviewed and methodological implications discussed.

Typ och Nyckelord: Report positive development, holistic perspective, person approach

Referens: Mahoney, J.L., Stattin, H., & [Magnusson, D.](#) (2001). Youth recreation centre participation and criminal offending: A 20-year longitudinal study of Swedish boys. *International Journal of Behavioral Development*, 25, 509-520.

Abstract: This study assessed whether participation in Swedish youth recreation centres ("Fritidsgårdar") is related to long-term criminality assessed from late childhood to mid adulthood. A prospective, longitudinal investigation of a representative cohort of 498 boys from a medium-sized Swedish community was employed. A pattern-analysis identified five configurations of boys who showed different profiles of social and academic competence at the age of 10. The configurations were compared with respect to juvenile and adult criminality for boys who did, and who did not, make the decision to participate in a youth recreation centre at age 13. Results showed that participation in youth centres was nonrandom. Boys with a multiple problem profile of both social and academic problems in school at age 10 showed more frequent participation in recreation centres at age 13. The frequency of criminal offending increased for all configurations of boys who became involved in a recreation centre. Frequent participation in youth centres was linked to high rates of juvenile offending and persistent offending (i.e., registered for one or several offences both as a juvenile and as an adult). These findings held after controlling for individuals, family, and economic factors prior to involvement in the youth centre. The limitations of the findings and their implications for social policy are discussed.

Typ och Nyckelord: Journal youth centers, person approach, prevention

Referens: Maitland, S.B., Nyberg L., [Herlitz A.](#), Bäckman, L., & [Nilsson L.-G.](#) (2001). The structure of declarative memory: Sex differences and measurement equivalence in the Betula Study. *The Gerontologist*, 41, 223-224.

Abstract: We examined sex differences in the covariance structure and latent means of a 6-factor, second-order model of declarative memory. Episodic and semantic memory were each comprised of two first-order factors: recognition/recall and knowledge/ fluency, respectively. Participants were 530 women and 425 men, aged 35 - 80 years, from the Betula Project in Umeå, Sweden. Metric invariance of first and second-order factor loadings and error terms across sexes was accepted, as indicated by consensus of a variety of fit indexes. Second-order factor means showed an advantage for women in episodic memory and semantic memory. At the first-order

factor level, women outperformed men in both recall and recognition; for semantic memory, there was a female advantage for fluency but not for knowledge. These findings corroborate previously observed patterns of sex differences in memory functioning in a sex-invariant model of declarative memory.

Typ och Nyckelord: Journal memory, sex differences

Referens: Melin, B., Rissén, D., Sandsjö, L., Dohns, I., & Lundberg, U. Psychobiological factors, stress reactions and musculoskeletal disorders among female cashiers before and after a work reorganisation. In *The 2nd PROCID Symposium - Prevention of Muscle Disorders in Computer Users: Scientific Basis and Recommendations*, Kadefors R, Sandsjö L. Stockholm: National Institute for Working Life 2001, pp 226-232.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Montgomery, H.](#) (in press). Den dubbla tvåsidigheten: Om perspektiv och värderingar. [The double twosidedness: On perspectives and values.] In H. Montgomery & B. Qvarsell (Eds.), (2001). *Perspektiv och förståelse* [Perspectives and understanding (pp. 152-176). Stockholm: Carlssons.

Abstract: A theory is outlined - the perspective model - on how perspectives are related to evaluations. Perspectives are assumed in identifications (i. e. roles that people enact), which in turn are associated with interests that influence how the world is perceived and evaluated. According to the perspective model, people cannot clearly distinguish between values and facts. Evaluations are always dependent on how different facts are emphasized or de-emphasized. This means that the same set of facts can be seen as mainly positive or negative depending on the perspective - evaluative two-sidedness. The perspective model may also shed light of another kind of twosidedness - attributional two-sidedness. That is, depending on the perspective the causes of people's behavior may be attributed to factors in the external situation or to factors internal to the target person. It is discussed how evaluative and attributional twosidedness are related.

Typ och Nyckelord: Book (chapter) perspectives, values, attribution

Referens: [Montgomery, H.](#) (2001). Reflective versus nonreflective thinking: Motivated cognition in naturalistic decision making. In E. Salas & G. Kleins (Eds.), *Linking expertise and naturalistic decision making* (pp. 159-170). Mahwah, NJ, USA: Lawrence Erlbaum Associates.

Abstract: It is proposed that there are two types of decision making: reflective and nonreflective decision making. Reflective decision making is characterized by (a) moving perspectives, (b) accuracy motivation and (c) being driven by facts that are attended to by the decision maker. In contrast, nonreflective decision making is characterized by (a) a fixed perspective, (b) defense motivation and (c) by being driven by other facts and motives than those attended to by the decision maker. Thus, in nonreflective decision the gap between what the decision maker believes drives his/her decision making is greater than in nonreflective decision making. The role of experience in reflective and nonreflective decision making is discussed. The framework is illustrated by data from a naturalist

Typ och Nyckelord: Book (chapter) reflective, decision making, financial credits

Referens: [Montgomery, H.](#) (in press). The Psychology of Economic Forecasting: A Possibility for Cooperation between JDM and NDM theories? In B. Brehmer, R. Lipshitz, & H. Montgomery, H. *How professionals make decisions*. Mahwah, NJ: Lawrence Erlbaum Associates.

Abstract: Data on actual and forecasted GNPs made by professional economists for Sweden during the time period 1970-2000 were analyzed with respect accuracy and psychological mechanisms underlying the forecasts. Correlations between actual and forecasted GNPs were relatively high in a short time perspective (one year ahead). However, a number judgmental biases (optimist, anchoring and adjustment, and availability bias) were identified in the forecasts, which suggests a possibility to correct economic forecasts for such biases in order to improve their accuracy.

Typ och Nyckelord: Book (chapter) naturalistic decision making, forecasting, economics

Referens: [Montgomery, H.](#), & Qvarsell, B. (Eds.). (2001). *Perspektiv och förståelse. [Perspectives and understanding.]* Stockholm: Carlssons.

Abstract: The contributors to this book discuss how people's understanding of themselves, of others, and of the external world is dependent of the perspective and also how the perspective influences people's understanding. Examples of questions addressed in the book include: How are perspectives anchored? How are perspectives understood from different theories of science? How is the perspective issue related to the issue of objectivity versus subjectivity? These questions are related to studies in a number of areas in education and psychology, such as learning, problem-solving, interpersonal conflicts and negotiations. Several contributions involve children's perspectives and perspectives on children.

Typ och Nyckelord: Book (chapter) perspectives, understanding, children perspective

Referens: [Nilsson, L.-G.](#) (in press). Memory systems of the brain [Minnessystemen i hjärnan]. *Medikament*.

Abstract: This is a popular science description of how memory for a long time was conceived of as one single entity and how memory is conceived today as consisting of several separate but interaction memory systems. These systems are procedural memory, perceptual representation system, semantic memory, short-term memory, and episodic memory. The properties of each of these memory systems are described.

Typ och Nyckelord: Journal memory, memory systems

Referens: [Nilsson, L.-G.](#) (in press). Memory function in normal aging. *Acta Neurologica Scandinavica*.

- Abstract:** Basic findings obtained on memory functions in normal aging are presented and discussed with respect to five separate but interacting memory systems. These systems are: episodic memory, semantic memory, short-term memory, perceptual representation system, and procedural memory. All available evidence from cross-sectional research shows that there is a linear, decreasing memory performance as a function of age for episodic memory. Longitudinal studies suggest, however, that this age deficit may be an overestimation by showing a relatively stable performance level up to middle age, followed by a sharp decline. Studies on semantic memory, short-term memory, perceptual representation system, and procedural memory show a relatively constant performance level across the adult life span although some tasks used to assess short-term memory and procedural memory have revealed an age deficit. Disregarding the mixed results for these latter two memory systems, it can be concluded that episodic memory is unique in showing an age deficit. Episodic memory is also unique in the sense that it is the only memory system showing gender difference in performance throughout the adult life span with a significantly higher performance for women.
- Typ och Nyckelord:** Journal memory, age
- Referens:** Nilsson, L.-G. (2001). Psychology in Sweden. In A.E. Kazdin (Ed.), *Encyclopedia of Psychology*. New York: Oxford University Press.
- Abstract:** The history of psychology in Sweden is described. The basic evolution of the field in Sweden is described; its current status and future directions are discussed. The role of the psychologist in the country, the research traditions, the major figures, societies, associations, and journals are described.
- Typ och Nyckelord:** Book (chapter) psychology, history
- Referens:** Nilsson, L.-G. (2001). Organization and recall. In N.J. Smelser & P.B. Baltes (Eds.), *International Encyclopedia of Social and Behavioral Sciences*. New York: Pergamon Press.
- Abstract:** This paper reviews research on the role of organization in recall. Different types of organization (primary, secondary) are defined. The historical roots of this area of research are discussed. Various research issues (experimenter-based organization, subject-based organization) are presented and discussed. Different measures of measuring the degree of organization in recall are described. Finally, the role of the concept of organization in current memory research is discussed.
- Typ och Nyckelord:** Book (chapter) memory, recall, subjective organization
- Referens:** Nilsson, L.-G. (in press). Individual differences in memory function. In M. Fajkowska-Stanik (Ed.), *Readings in individual differences of psychology*. Warsaw: University of Warsaw Press.
- Abstract:** Theoretical and methodological issues are discussed as the basis for a discussion of individual differences in memory function in general and the role of genetic markers for individual differences in memory function in particular. Research on the role of two genetic markers related to the immune system, complement factor C3 and haptoglobin, and one genetic marker, ApolipoproteinE, considered as a risk factor for Alzheimer's disease are discussed. Data from an ongoing longitudinal study are used to illustrate that the two markers of the immune system are strongly associated with performance in episodic memory tasks.
- Typ och Nyckelord:** Book (chapter) memory, genetic marker, ApoE
- Referens:** Nilsson, L.-G. (in press). The role of genetics in understanding memory. In C. Von Euler & E. Hjelmquist (Eds.), *Dyslexia and literacy: A tribute to Ingvar Lundberg*. London: Whurr Publishers.
- Abstract:** The point of departure for this chapter is a study Ingvar Lundberg I did several years ago on reading. We used information from church examination records, 250 years old, to predict reading performance in individuals living today. Reasonably good fit between prediction and the results obtained triggered me to examine the role of genetics in understanding memory. The overall question in this chapter is, to that extent the use of genetic markers in understanding memory processes is a fruitful future research path. It is concluded that dissociations between episodic and semantic memory follow a theoretical meaningful pattern when the analysis is based on healthy adults as subjects
- Typ och Nyckelord:** Book (chapter) memory, reading, genetics
- Referens:** Nilsson, L.-G. (2001). Human memory. In G. Youngs & T. Ohsako (Ed.), *Creative and inclusive strategies for life-long learning* (pp. 69-80). Hamburg: UNESCO.
- Abstract:** This chapter presents and discusses different theoretical concepts regarding human memory and related brain structures of importance for considerations of life-long learning. Illustrative examples are taken from the ongoing Betula Study on memory, health, and aging.
- Typ och Nyckelord:** Book (chapter) memory, learning, age
- Referens:** Nilsson, L.-G., Bäckman, L., Cruts, M., Edvardsson, H., Nyberg, L., Van Broeckhoven, C., & Adolfsson, R. (in press). Memory development in adulthood and old age: The Betula prospective cohort study. In P. Graf & N. Ohta (Eds.), *Lifespan Development of Human Memory*. Philadelphia: The MIT Press.
- Abstract:** This paper summarizes the findings of the Betula project to date. There is one section of the paper describing the data in relation to memory systems. The core findings are described and discussed, namely age deficits in episodic memory tasks, no age deficits in priming, and no age deficits in semantic memory when level of education is taken into account. Another section of the paper describes the age effect in general cognition tasks (Block design and Mini Mental State Examination). In a third section the influence of gender and attention on episodic memory is described and discussed. In a final section of the paper, the role of three genetic markers on memory is described and discussed. These genetic markers are: complementary factor C3, haptoglobin, and apolipoprotein E.
- Typ och Nyckelord:** Book (chapter) memory, genetic markers

- Referens:** Nilsson, L.-G., & Kormi-Nouri, R. (2001). What is the meaning of a memory-systems approach? In H. Zimmer & R.L. Cohen (Eds.), *Action memory: A specific type of episodic memory?* (pp. 136-143). Oxford: Oxford University Press.
- Abstract:** This paper discusses a memory-systems approach suggested by Engelkamp (in press) to account for various empirical phenomena related to the enactment effect, showing a higher memory performance for items encoded by means of enactment. Two main conclusions are being made. First, it is stated that this memory-systems view is not completely compatible with the memory-systems view proposed by Tulving. Second, it is concluded that the systems view proposed by Engelkamp cannot account for all aspects of the enactment effect.
- Typ och Nyckelord:** Book (chapter) memory, action memory, enactment
- Referens:** Nilsson, L.-G., & Söderlund, H. (2001). Aging, cognition, and health. In M. Naveh-Benjamin, M. Moscovitch & H.L. Roediger, III (Eds.), *Perspectives on human memory and cognitive aging: Essays in honour of Fergus Craik*, pp. 253-264. Psychology Press.
- Abstract:** This paper presents a review of data on the effect of the interaction between aging and health on cognitive function. The paper describes and discusses findings in relation to various diseases, laboratory indices of health and life style variables. In a considerable portion of the paper, data from the Betula project are discussed. This presentation is organized on the basis of subjective ratings of health and on objective measures of health.
- Typ och Nyckelord:** Book (chapter) memory, cognition, health
- Referens:** Nilsson, L.-G., Van Broeckhoven, C., & Adolfsson, R. (2001). Genetic Contributions to Individual Differences in Memory Performance. *European Psychologist*, 6, 264-271.
- Abstract:** Potential effects of genetic markers on individual differences in cognitive performance are discussed in general terms. Research on the role of two genetic markers related to the immune system, complement factor C3 and haptoglobin, and one genetic marker, ApolipoproteinE, and the interaction with environmental conditions of cognitive support at memory encoding and retrieval are discussed in particular. Data from an ongoing longitudinal study are used to illustrate that the two markers of the immune system are strongly associated with performance in episodic memory tasks, although there is no association to semantic memory. Cross-sectional data reveal a relatively weak association between ApolipoproteinE and memory performance. Preliminary analyses of longitudinal data reveal a somewhat stronger association between this genetic marker and some aspects of episodic memory performance.
- Typ och Nyckelord:** Journal genetic markers, episodic memory, ApoE
- Referens:** Nilsson, M.E. (2001). Perception of traffic sounds in combination. *Archives of the Center for Sensory Research*, 6(3), 1-32. (Doctoral dissertation).
- Abstract:** The main objective of this thesis is to explore the relationship between total and source-specific loudness of combined traffic sounds. For this purpose, sound identification and loudness of singular and combined road traffic, aircraft, and train sounds were assessed in psychoacoustical experiments. It was found that the traffic sounds were sometimes misidentified with respect to source even when presented alone. As a rule, easily identifiable traffic sounds remained easy to identify when heard simultaneously in combination although their source-specific loudness was partially masked, when the combination involved another equally loud or louder traffic sound. For the first time, the relationship was explored between total loudness ($_{tot|ab}$) and source-specific loudness of traffic sounds heard *within* combined sound ($_{a|ab}$, $_{b|ab}$). For this purpose, a general loudness integration model was utilized: $_{tot|ab} = (_{a|ab} + _{b|ab})^{1/n}$, in which different values of the constant n define arithmetic summation ($n=1$), Euclidean summation ($n=2$), and the strongest component principle ($n=\infty$). For simultaneously presented traffic sounds, empirically determined n -values were found to range from 2.5 to 2.9. Corresponding n -values for source-specific loudness of traffic sounds heard alone ($_{a|a}$, $_{b|b}$) ranged from 4.1 to 4.2. Thus, total loudness of simultaneous traffic sounds was less than the arithmetic sum of source-specific loudnesses (heard within combined sound or alone) but greater than the maximum source-specific loudness. Conversely, for traffic sounds presented partially or completely separated in time, source-specific loudness was sometimes greater than total loudness. In fact, such "compromise" outcomes were mainly observed for unequally loud and time-separated sounds. This finding agrees with the idea that total loudness was "averaged" over the total duration of the combined and time-separated sound components whereas source-specific loudness of the louder (or softer) sound component was only "averaged" over the partial time period during which it was heard. Although total loudness of completely time-separated traffic sounds was found to adhere to the general loudness integration model, individual differences in assessment strategy gave estimates corresponding to a value of the constant n clearly greater than 1 for some participants and close to 1 (arithmetic summation) for others. Based on theoretical and empirical explications, this thesis concludes that a perceptual model for total loudness of combined traffic sounds should account for (a) masking of source-specific loudness, (b) the loudness integration principle, (c) perceptual integration time of source-specific loudness, and (d) individual differences in loudness assessment strategy.
- Typ och Nyckelord:** Journal Dissertation combined sound, total loudness, source-specific loudness
- Referens:** Nilsson, M.E. (2001). Loudness integration of successive and simultaneous traffic sounds. *Archives of the Center for Sensory Research*, 6(3), 105-117.
- Abstract:** The purpose of the present experiment was to explore underlying principles in total loudness judgments of combined traffic sounds. Two singular traffic sounds at various levels were presented successively or simultaneously in combination with an ambient sound of constant level and duration. Nine participants scaled these combined sounds with regard to total loudness, utilizing the method of free-number magnitude estimation. Systematic individual differences were found for the total loudness of successive traffic sounds. For six participants, scales of total loudness were inconsistent with a model of arithmetic summation of traffic sound loudnesses; three participants conformed with the arithmetic summation model. For all participants, total loudness of simultaneous sounds was largely determined by the loudest sound in the combination. The temporal pattern of the combined sounds influenced total loudness. In general, two traffic sounds were assessed as louder when presented successively than when presented simultaneously.

Typ och Nyckelord: Journal combined sound, loudness integration, individual differences

Referens: Nilsson, M.E., & Berglund, B. (2001). Effects of noise from combinations of traffic sources. *Archives of the Center for Sensory Research*, 6(1), 1-59.

Abstract: A critical review is presented of models proposed for assessing annoyance of combined noises, especially road-traffic and train noise. The empirical support of the proposed models is also scrutinized. A General Perceptual Model (GPM) of total annoyance accommodates the great majority of proposed models of total annoyance of combined noise: $_{tot}l_{ij} = (_{n}l_{ij} + _{j}l_{ij})^{1/n}$, where $_{tot}l_{ij}$ stands for long-term total annoyance of the combined noise (e.g., road-traffic and train noise), $_{i}l_{ij}$ stands for long-term source-specific annoyance of noise source i (e.g., road-traffic noise), $_{j}l_{ij}$ stands for long-term source-specific annoyance of noise source j (e.g., train noise), and n is a constant. Source-specific annoyance may be assessed directly in existing multi-source situations. When using the GPM for prediction, its input variables have to be based on functions relating source-specific annoyance to predicted noise exposure. Such functions are typically based on data on source-specific annoyance in single-source situations. This means that "perceptual independence" has to be assumed, that is, a noise source in a single-source situation is assumed to be equally annoying as it is in a multi-source situation. The GPM with a constant of $n=2.5$ is our recommended model for predicting total annoyance from source-specific annoyances. An illustration is given of how to apply the recommended model to the monetary costs of noise. The model postulates that a reduction of noise exposure from a single source may not be as cost effective in the multi-source situation as it is in the single-source situation. This means that a cost-effective reduction in noise exposure must involve a reduction of the noise exposure from both sources, provided both noises are distinctly annoying. A tentative procedure for considering other health effects of combined noise is proposed in which a safety factor is applied to the total annoyance of combined noise derived from the GPM. In selecting these safety factors for other health effects than annoyance, we have adhered to the guideline values recommended by the WHO in year 2000.

Typ och Nyckelord: Journal combined sounds, prediction models, cost of noise

Referens: Nyberg, L., Petersson, K.M., Nilsson, L.-G., Sandblom, J., Åberg, C., & Ingvar, M. (2001). Reactivation of motor brain areas during explicit memory for actions. *NeuroImage*, 14(2), 521-8.

Abstract: Recent functional brain imaging studies have shown that sensory-specific brain regions that are activated during perception/encoding of sensory-specific information are reactivated during memory retrieval of the same information. Here we used PET to examine whether verbal retrieval of action phrases is associated with reactivation of motor brain regions if the actions were overtly or covertly performed during encoding. Compared to a verbal condition, encoding by means of overt as well as covert activity was associated with differential activity in regions in contralateral somatosensory and motor cortex. Several of these regions were reactivated during retrieval. Common to both the overt and covert conditions was reactivation of regions in left ventral motor cortex and left inferior parietal cortex. A direct comparison of the overt and covert activity conditions showed that activation and reactivation of left dorsal parietal cortex and right cerebellum was specific to the overt condition. These results support the reactivation hypothesis by showing that verbal-explicit memory of actions involves areas that are engaged during overt and covert motor activity.

Typ och Nyckelord: Journal brain imaging, memory, motor cortex

Referens: Näswall, K., De Witte, H., Chirumbolo, A., Goslinga, S., Hellgren, J., & Sverke, M. (2001). Who feels insecure in Europe? Predicting job insecurity from background variables. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Näswall, K., Sverke, M., & Hellgren, J. (2001). Tryggare kan ingen vara? Metaanalys av relationen mellan anställningsotrygghet och välbefinnande. [No one can be safer? Meta analysis of the relationship between job insecurity and well-being.] *Arbetsmarknad & Arbetsliv*, 7, 179-193.

Abstract: Along with an increased flexibilization of working life, people worry more about losing their job. Such an experience of job insecurity, just like actual unemployment, seems to manifest itself in decreased well-being. The present article presents the results of a study summarizing the existing research on job insecurity and well-being. The results show that job insecurity generally has a negative relation with mental well-being as well as physical. The study identifies groups which may be more vulnerable to the experience of job insecurity, and gives some direction as to how the most negative consequences can be alleviated.

Typ och Nyckelord: Journal meta-analysis, job insecurity, well-being

Referens: Oldenburg, C., Lundh, L.G., & Kivistö, P. (2002). Explicit and implicit memory bias, trait anxiety, and repressive coping style. *Personality and Individual Differences*, 32, 107-119.

Abstract: Individuals with high trait anxiety, low trait anxiety, and repressive coping style were compared on explicit and implicit memory for physical threat words, social threat words, positive words, and neutral words. The results replicate earlier findings to the effect that bias indexes correlate within memory type (implicit and explicit memory, respectively) but not within word category across memory type, suggesting that explicit and implicit memory bias represent two separate forms of emotional processing. Neither explicit nor implicit memory bias, however, was found to be associated with trait anxiety, or with repressive coping style -although an earlier finding of a negative association between anger/irritability and implicit memory bias was partly replicated. On the other hand, repressive coping style was found to be more associated with explicit than implicit memory performance in general (i.e., independently of the valence of words), which suggests the hypothesis that repressors, as compared with high and low trait-anxious individuals, have a general tendency to process information more at an explicit than an implicit level.

Typ och Nyckelord: Journal memory bias, trait anxiety, repressive coping style

- Referens:** Paunovic, N. (in press). Prolonged exposure counterconditioning (PEC) as a treatment for chronic post-traumatic stress disorder and major depression in an adult survivor of repeated child sexual and physical abuse. *Clinical Case Studies*.
- Abstract:** Prolonged Exposure Counterconditioning (PEC) was tested as a treatment for chronic posttraumatic stress disorder (PTSD) in an adult survivor of repeated child sexual and physical abuse. PEC utilizes imaginal reliving of very pleasurable life moments in order to weaken traumatic conditioned emotional responses (CERs). A higher-order conditioned stimuli (CS) is used as a traumatic CER elicitor. Prolonged imaginal reliving of pleasurable CSs is used as a counterconditioner to the traumatic CERs. A statistical technique for analyzing single-case designs based on classical test theory was used to evaluate the client's progress in treatment. Results showed that PEC effectively decreased the client's PTSD symptoms, depression, and anxiety. In addition, the client's negative cognitions became considerably more positive. Also, the client lost his comorbid conditions of chronic major depressive disorder and social phobia. Finally, other clinically observed symptoms improved markedly which are described in the paper. All results were maintained at a 3-month follow-up.
- Typ och Nyckelord:** Journal PTSD, prolonged exposure counterconditioning
- Referens:** Paunovic, N. (2001). *Cognitive-behavioral treatment and theory in posttraumatic stress disorder*. Department of psychology, Stockholm University. (Doctoral dissertation).
- Abstract:** The present dissertation contains four empirical studies. The first two investigated the efficacy of cognitive-behavioral (CBT) treatments for posttraumatic stress disorder (PTSD) by randomizing patients to two different groups. The last two are experimental studies that tested parts of the cognitive theory of PTSD. The first study examined the preventive efficacy of a CBT intervention in crime victims with acute PTSD. The second study investigated whether CBT is a more effective treatment than exposure therapy (E) for chronic PTSD in refugees. The third study tested whether acute PTSD in crime victims is characterized by attentional and memory biases for threat-related material by using a combined emotional Stroop, implicit memory and explicit memory task. The fourth study investigated whether acute PTSD in crime victims is characterized by a recognition bias for emotional faces in a face recognition task. The results from the first study showed that CBT can be an effective preventive treatment for crime victims with acute PTSD and that a chronic course of this disorder can be hindered. A group that received CBT improved significantly more than a wait-list control group on a broad range of measures including PTSD symptoms, depression, anxiety, quality of life and social adaptation. The second study found no differences between CBT and E in the treatment of chronic PTSD in refugees. However, both treatments led to significant improvements on a broad range of measures including PTSD symptoms, depression, anxiety, quality of life and cognitive schemas. The results from the third study showed that acute PTSD in crime victims is characterized by an attentional and memory bias for threat-related material. A supraliminal Stroop interference and an explicit memory bias were found for trauma words, but no preattentive and implicit memory bias. Methodological limitations of the study preclude definitive conclusions of the results. The fourth study found a recognition bias for faces rated as hostile during an encoding task by crime victims with acute PTSD. In conclusion, the present thesis found that CBT interventions can be effective treatments for acute and chronic PTSD, that CBT is equally effective as E, and that acute PTSD is characterized by a conscious attentional bias towards threat-related material and a memory bias for both verbal and facial threat-related stimuli.
- Typ och Nyckelord:** Dissertation PTSD, cognitive-behavior therapy, cognitive theory
- Referens:** Paunovic, N., Lundh, L.G., & Öst, L.-G. (in press). Attentional and memory bias for emotional information in crime victims with acute posttraumatic stress disorder (PTSD). *Journal of Anxiety Disorders*.
- Abstract:** A combined emotional Stroop, implicit memory (tachistoscopic identification) and explicit memory (free recall) task with 3 types of words (trauma-related, positive, and neutral) and 2 exposure conditions (subliminal, supraliminal) was administered to 39 crime victims with acute posttraumatic stress disorder (PTSD) and 39 age- and sex-matched controls. PTSD subjects showed supraliminal Stroop interference for trauma-related words and a similar effect on positive words. A specific explicit memory bias was found for trauma-related words among the PTSD subjects, but no preattentive bias on the subliminally presented words, nor any implicit memory bias. Findings suggest that acute PTSD subjects have an attentional and memory bias for threat-related material. Methodological limitations of the study are reviewed, and it is proposed that further studies are needed in order to elucidate whether acute PTSD Ss display a preattentive and implicit memory bias for trauma-related material.
- Typ och Nyckelord:** Journal bias, emotional information, PTSD
- Referens:** Paunovic, N., & Öst, L.-G. (2001). Cognitive behavior therapy vs exposure therapy in the treatment of PTSD in refugees. *Behaviour Research and Therapy*, 39, 1183-1197.
- Abstract:** The present study investigated the efficacy of cognitive-behavior therapy (CBT) and exposure therapy (E) in the treatment of post-traumatic stress disorder (PTSD) in refugees. Sixteen outpatients fulfilling the DSM-IV criteria for PTSD were randomized to one of the two treatments. Assessor and self-report measures of PTSD-symptoms, generalized anxiety, depression, quality of life and cognitive schemas were administered before and after treatment, and at a 6-month follow-up. The patients were treated individually for 16-20 weekly sessions. The results showed that both treatments resulted in large improvements on all the measures, which were maintained at the follow-up. There was no difference between E and CBT on any measure. E and CBT led to a 48 and 53% reduction on PTSD-symptoms, respectively, a 49 and 50% reduction on generalized anxiety, and a 54 and 57% reduction on depression. The results were maintained at the 6-month follow-up. The conclusion that can be drawn is that both E and CBT can be effective treatments for PTSD in refugees.
- Typ och Nyckelord:** Journal cognitive behavior therapy , exposure therapy , PTSD
- Referens:** Posse, M., Backenroth-Ohsako, G., Håkanson, C.-E., & Hällström, T. (2001). Alexithymia and psychiatric symptoms in a population of nursery workers. A study using the 20-item Toronto Alexithymia Scale. *Social Behaviour and Personality*, 29(5), 491-502.
- Abstract:** This study investigated alexithymia in a sample of professional nursery workers in Huddinge community,

Sweden. In a previous study in general practice it was found that alexithymia, in a mixed population seeking medical advice, was associated with higher age, male gender, low education and the personality trait suspicion and distance as well as undetected depression. The choice of a professional female population allowed alexithymia to be studied in a refined way without the impact of some of the confounding elements of previous studies. The six variables investigated apart from alexithymia were feelings of well-being, symptoms of somatic and psychic anxiety, depressive symptoms, gastro-intestinal symptoms, and level of social dysfunction. The prevalence of alexithymia was 7.9%. Fifty percent of the items assessing somatic anxiety and 28.5% of those assessing depressive symptoms were related to high TAS-20 scores in this healthy all-female population. The feeling factor of TAS-20, difficulty in identifying and expressing feelings, accounted in this study for the majority of relations to the other variables whilst the third factor, externally oriented thinking, remained independent and mainly unrelated to the other measured variables. It has been hypothesised that a deficit in the cognitive processing and modulation of emotions may leave alexithymic individuals prone to states of heightened sympathetic arousal. Confirmation of these theories was found in this study where subjects expressing high levels of vegetative and visceral symptoms of anxiety also scored high for alexithymia and depressive symptoms.

Typ och Nyckelord: Journal Alexithymia, gender, well-being

Referens: [Rissén, D., Lundberg, U., Melin, B., Sandsjö, L., & Dohns, I. \(in press\). Psychophysiological stress reactions, trapezius muscle activity, and neck and shoulder pain among female cashiers before and after introduction of job rotation. *Work & Stress*.](#)

Abstract: The aim of this study was to evaluate the effects of the introduction of a job rotation model among supermarket cashiers, with respect to psychophysiological stress reactions, muscle activity of the trapezius muscle, and musculoskeletal symptoms of the neck and shoulders. Thirty-one female cashiers were investigated before and after job rotation was introduced. Before the reorganization the participants were only performing cash-register work at the checkout counters. After the reorganization they shifted between cash-register work and work in different departments in the supermarket. At follow-up, the participants had a significantly lower diastolic blood pressure, and surface electromyography (EMG) showed a significantly decreased muscle activity in the trapezius muscle on the left-hand side. Musculoskeletal symptoms of the neck and shoulders were only partly changed, and there was no change in prevalence of pain, which was around 70%. From questionnaires, but not from self-ratings during work, it was found that the introduction of job rotation had been experienced as positive in several regards, although the perceptions of stress and hurry were the same at follow-up.

Typ och Nyckelord: Journal job rotation, psychophysiological stress, electromyography, musculoskeletal disorders, cashier

Referens: [Rosén, A.-S. \(2001\). Att bli ett 'jag' ... \[Developing a 'self'.\] In B.E. Andersson \(Ed.\), *Ungdomarna, skolan och livet \[The young, the school, and life\]* \(pp. 187-196\). Stockholm: HLS Förlag.](#)

Abstract: In this chapter some findings from a cross-disciplinary longitudinal study are reported. A sample of close to 1,200 girls and boys from grades 7, 9, and 11 participated in a study of adolescent personality development along a socialisation-related dimension. Self or ego development can be described as the changing organisation of the individual framework within which one perceives self and others in an interpersonal world. Loevinger's method for assessing developmental level was used. Main findings from the first year of the study were: the mean score in the test increased with each grade as expected; girls reached more advanced levels of development at least two years ahead of boys; there was no systematic effect of school or class within school; among SES variables level of parents' education related to adolescent development attained; boys and girls with an immigrant background did not differ in developmental level from others of the same sex and grade.

Typ och Nyckelord: Book (chapter) adolescents, ego development, Loevinger, socialisation

Referens: [Rosén, A.-S. \(2001\). Ungdomars livsprojekt i psykologiskt perspektiv. \[Life projects in adolescence from the viewpoint of psychology.\] In B.E. Andersson \(Ed.\), *Ungdomarna, skolan och livet \[The young, the school, and life\]* \(pp. 197-218\). Stockholm: HLS Förlag.](#)

Abstract: This chapter presents an overview of recent theories and empirical findings obtained from research in social psychology and personality on adolescent youth's life tasks, life projects and developmental tasks. These terms refer to problems of an everyday nature to be resolved by the individual in his present situation and circumstances. This gives rise to seemingly goal-directed activation and, for an individual, has both behavioural and emotional consequences.

Typ och Nyckelord: Book (chapter) adolescents, developmental tasks, life projects, socialisation

Referens: [Rosén, A.-S. \(2001\). Tonåringens inställning till skolan och personliga läggning - finns där några samband? \[Adolescent attitudes to school and personality - are there any associations?\] In B.E. Andersson \(Ed.\), *Ungdomarna, skolan och livet \[The young, the school, and life\]* \(pp. 197-218\). Stockholm: HLS Förlag.](#)

Abstract: On the dimensions of a questionnaire for measuring attitudes toward school and school experiences eight groups were obtained in a cluster analysis. Participants were about 1,000 students in grades 7, 9, and 11. The groups differed in the patterns of satisfaction expressed, with girls generally more positive than boys, regardless of grade. On a set of interpersonal scales based on trait terms students in clusters expressing satisfaction with school described themselves in positive terms but those with dissatisfied or unhappy attitudes presented themselves in bleaker terms. Increasing with age, boys tended to see themselves as higher in dominance and girls in nurturance.

Typ och Nyckelord: Book (chapter) adolescents, school attitudes, interpersonal traits

Referens: [Rosén, A.-S. \(2001\). Hur formas ungdomars individuella utveckling i dagens skola? \[Individual development and the school context.\] In A. Agell \(Ed.\), *Fostrar skolan goda medborgare? Ett mångvetenskapligt perspektiv på eleven, skolan och samhället \[Will the school system contribute to good citizenship? A multi-disciplinary perspective on pupils, school, and society\]* \(pp. 211-229\). Uppsala: Iustus Förlag.](#)

- Abstract:** In the curriculum for the Swedish compulsory school system it is underscored that the major role of the schooling is the socialisation of the young. The social milieu of the school is expected both to foster good citizenship and to assist in bringing out personal characteristics of responsibility, consideration, and self-esteem. Level of personality development attained along a socialisation-related dimension was tested in about 1.000 students from grades 7 and 9 in compulsory school and grade 2 in upper secondary school. They were followed up two or three years later. Generally, girls scored about two years ahead of boys. At the follow-up, boys in the oldest age group were approaching the girls. The lowest scoring students in all grades at the first time of testing were dissatisfied with school. They showed the largest gain at the follow-up but were still lagging behind the others. There were no effects on developmental change from community, school or class within school in compulsory schools. In upper secondary school there were differences associated with the programme chosen.
- Typ och Nyckelord:** Book (chapter) adolescents, socialisation, personality development
- Referens:** [Rosén, A.-S.](#) (2001). Ego development in adolescence and young adulthood. In *Abstract Book of the ISSID*, p. 51. The 10th Biennial Meeting of the International Society for the Study of Individual Differences, Edinburgh, Scotland, 7-11 July, 2001.
- Abstract:**
- Typ och Nyckelord:** Proceedings
- Referens:** [Rönnlund, M., Lövdén, M., & Nilsson, L.-G.](#) (2001). Adult Age Differences in Tower of Hanoi Performance: Influence from Demographic and Cognitive Variables. *Aging, Neuropsychology and Cognition*, 8, 269-283.
- Abstract:** We examined performance in a five-disk version of the Tower of Hanoi (TOH) puzzle, assumed to reflect executive functioning, in population-based samples ranging in age from 35 to 85 years (N=2798). Univariate analyses revealed significant age effects across three TOH measures as reflected by an age-related increase in moves to solution, a gradual slowing of performance, and an increase in rule violations with advanced age. The age-related influence was eliminated, or reduced considerably, when controlling for demographic and cognitive background variables. Across the dependent measures, Block Design and a measure of episodic memory (recall) were the consistent predictors. No effects of education were detected, while significant gender differences, favoring males, were observed for two TOH measures. Taken together, results suggest that age-related deficits observed in TOH performance may reflect age-related impairments in a visuospatial as well as an executive task component.
- Typ och Nyckelord:** Journal Tower of Hanoi, executive functions, age
- Referens:** [Saboonchi, F., Kenttä, G., & Hassmén, P.](#) (2001). Dimensions of perfectionism and burnout in student athletes. In A. Papaioannou, M. Goudas, & Y. Theodorakis (Eds.), *International society of sport psychology 10th world congress of sport psychology* (Vol. 3, pp. 315-317). Skiathos, Hellas.
- Abstract:**
- Typ och Nyckelord:** Proceedings Book (chapter)
- Referens:** [Salo, I., & Svenson, O.](#) (2001). Constructive psychological processes before and after a real-life decision. In C.M. Allwood & M. Selart (Eds.), *Decision Making: Social and Creative Dimensions* (pp. 137-151). Dordrecht: Kluwer Academic Publishers.
- Abstract:** This study was an attempt to investigate the time window needed for attractiveness restructuring of attributes in conflict. This was achieved in a longitudinal study ranging over three months. The decision problem used was related to the participants' "real-life" decisions. Second, it was an attempt to describe restructuring of the importance of attributes. Expected regularities in terms of attractiveness restructuring could not be found in the overall results. Instead, the results revealed that attributes in conflict were restructured such that initial disadvantages were turned into advantages during the time of the study. This implies that restructuring of attributes with conflicts is a time consuming process. This result was supported by two other studies, within the Diff Con framework (Svenson & Hill, 1997; Svenson & Shamoun, 1997). The results also indicated that the importance of attributes was degraded during the period of the study, and that the degradation was greatest among attributes in conflict. This was a new, important empirical finding for Diff Con research. The results were discussed in the context of creativity and decision making in the social world.
- Typ och Nyckelord:** Book (chapter) decision making, conflict, creativity
- Referens:** [Salo, I., & Svenson, O.](#) (2001). *Human factors in maintenance: Development and research in Swedish nuclear plants*. SKI-Report 01:40.
- Abstract:** The present report investigated previously completed, ongoing, and planned research and development projects focusing human factors and maintenance work carried out at Swedish nuclear power plants and SKI. In addition, needs for future research and development works were also investigated. Participants from all nuclear power plants and SKI were included in the study. Participants responded to a set of questions in an interview. The interviews also generated a list of future research and development projects.
- Typ och Nyckelord:** Report maintenance performance, human factors, quality assurance
- Referens:** [Shamoun, S., & Svenson, O.](#) (in press). Value conflict and post-decision consolidation. *Scandinavian Journal of Psychology*.
- Abstract:** The primary goal of the present study was to investigate how the mental representations of value conflicts are restructured after a decision. A value conflict exists if a chosen alternative is less attractive than a non-chosen alternative on one important attribute when a decision is made. In order to follow up earlier field studies with no experimental control over value conflicts, the present study induced value conflicts in the laboratory. This was done through associating the more attractive of two alternatives with a smaller probability of success. The

first hypothesis was that consolidation of value conflict attributes should follow the same pattern when the conflict is controlled experimentally as in earlier studies of real-life decisions. The second hypothesis was that consolidation should be weaker in a non-consequential laboratory study than in the earlier real-life studies. The third hypothesis was that stronger (that is value conflict on more important attributes) value conflicts lead to greater consolidation effects than weak value conflicts. The results showed that participants with value conflicts consolidated the value conflicts in the same way as in real-life decisions with the difference that also less important attributes were consolidated in the present study. However, the consolidation effects were not so strong that they caused advantage reversals on a conflict attribute as in the earlier field studies with real outcomes and consequences (Svenson & Hill, 1997; Salo & Svenson, 2001). There was no relationship between strength of conflict and consolidation. The fact that no advantage reversals were registered leads to questions about the ecological validity of laboratory studies of non-consequential decision making.

Typ och Nyckelord: Journal decision making, post decision consolidation processes, value conflict decisions

Referens: Sharafi, P., Hedman, L., & Montgomery, H. (2001). *Autonomous thinking and flow experience in interaction with information and communication technology*. Reports from the Department of Psychology, Stockholm University, No. 864.

Abstract: A general review about human's interaction with Information and Communication Technologies (ICTs) is presented. The cognitive ability in adapting to new technology strongly influences the way individuals meet their needs or requirements. Such kind of cognitive ability is basically considered to be the function of motivation and evaluative judgment and different perspective in the social context. Intentional and self-determined /intrinsicly motivated behaviors and their impacts play a significant role in adaptation to complex and unfamiliar situations which often is the characteristics of the current high-technology. Intrinsic motivated individuals learn faster, have more control of the internal and external conditions of the given moment, show more creativity and cognitive flexibility, manage more complex tasks and experience the enjoyment of facing different challenges. People's attitude toward different objects in their individual and social experiences are formed out of their perspective they hold in relation to the objects they encounter and their perspective contribute to the decision they make about approaching or avoiding certain objects. A balance between the degree of challenges and the person's skills are the determining factors for flow experience and enjoyment of any activity and in interaction with ICTs.

Typ och Nyckelord: Report autonomy, flow experience, motivation

Referens: Sikström, S. (in press). Forgetting curves: Implications for connectionist models. *Cognitive Psychology*.

Abstract: Forgetting in long-term memory, as measured in a recall or a recognition test, is faster for items encoded more recently than for items encoded earlier. Data on forgetting curves fits a power function well. In contrast, many connectionist models predict either exponential decay or completely flat forgetting curves. This paper suggests a connectionist model to account for power function forgetting curves by using bounded weights and by generating the learning rates from a monotonically decreasing function. The bounded weights introduce exponential forgetting in each weight, and a power function forgetting results when weights with different learning rates are averaged. It is argued that these assumptions are biologically reasonable. Therefore power functions forgetting curves are a property that may be expected from biological networks. The model has an analytic solution, which is a good approximation of a power function displaced one lag in time. This function fits better than any of the 105 suggested two-parameters forgetting-curve functions when tested on the most precise recognition memory data set collected by Rubin, Hinton, and Wenzel (1999). Unlike the power-function normal used the suggested function is defined at lag zero. Several functions for generating learning rates with a finite integral yield power function forgetting curves; however, the type of function influences the rate of forgetting. It is shown that power-function forgetting curves cannot be accounted for by variability in performance between subjects because it requires a distribution of performance that is not found in empirical data. An extension of the model accounts for intersecting forgetting curves found in massed and spaced repetition. The model can also be extended to account for the faster forgetting rate in item recognition compared to associative recognition in short but not long retention intervals.

Typ och Nyckelord: Journal power law, forgetting curves, connectionist models

Referens: Sikström, S. (2001). The variance theory for the mirror effect. *Psychonomic Bulletin and Review*, 8, 408-438.

Abstract: The mirror effect depicts a rather general empirical finding showing that for two classes of stimuli the class with the higher hit rates also has a lower false alarm rate. In this article, a parsimonious theory is proposed to account for the mirror effect regarding specifically high and low frequency items, and the associated received operating curves. The theory is implemented in a recurrent network where one layer represents items and the other represents contexts. It is shown that the frequency mirror effect is found in this simple network if the decision is based on counting the number of active node in such a way that performance is optimal or near optimal. The optimal performance requires that the number of active nodes is low, only nodes active in the encoded representation are counted, the activation threshold is set between the old and new distributions, and a normalization that is based on the variance of the input. Due to the interference caused by encoding the to-be recognized in several pre-experimental contexts the variance of the input to the context layer is greater for high than low frequency items, which yields lower hit rates and higher false alarm rates for high than low frequency items. Although initially the theory was proposed to account for the mirror effect with respect to word frequency, subsequent simulations showed that the theory also accounts for strength-based mirror effects within a list and between lists. In this case, consistent with experimental data, the variance theory suggests that focusing attention to the more difficult class within a list affects the hit rate but not the false alarm rate, and not the standard deviations of the underlying density, leading to no mirror effect.

Typ och Nyckelord: Journal mirror effect, neural network, ROC

Referens: Sikström, S. (in press). Habituation during encoding of episodic memory. In J.A. Bullinaria (Eds.), *Proceedings of the Neural Computation Workshop 7*. Brighton: World Scientific Press.

Abstract: Habituation is the fundamental property that the efficiency of neural cells diminishes over repeated stimulation. A model for how habituation influences episodic tests is suggested. During encoding or presentation of stimuli, habituation causes changes in activity, which influences the degree of synaptic plasticity. Fast habituation occurs during the short time intervals of presentation of single items and slow habituation during long time

intervals over the presentation of a list of items. Item habituation causes more efficient encoding at the beginning of the presentation of an item, whereas list habituation improves encoding at the beginning of the lists as seen in the primacy effect. The rate of habituation increases with the frequency of items. The habituation model makes specific predictions of how performance depends on study time, serial position, and frequency of items. The model is supported by a set of experimental data.

Typ och Nyckelord: Proceedings Book (chapter) habituation, study time, frequency

Referens: [Sikström, S. \(2001\)](#). Habituation and the primacy effect. *Proceedings of the SCI2001/ISAS 2001*, Orlando, Florida.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Sikström, S. \(2001\)](#). Habituation and frequency effects. *The second international conference on neural networks and artificial intelligence, ICNNAI'2001*, Minsk, Belarus, October 2-5, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Sikström, S. \(2001\)](#). Habituation predicts interaction effects between study time, primacy, and frequency in free recall. *Neural Computation Workshop 7, NCPW7*, Brighton, UK., September, 17-19, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Sjöberg, A., & Sverke, M. \(2001\)](#). Instrumental and ideological union commitment: Longitudinal assessment of construct validity. *European Journal of Psychological Assessment*, 17, 98-111.

Abstract: Previous research has identified instrumentality and ideology as important aspects of member attachment to labor unions. The present study evaluated the construct validity of a scale designed to reflect the two dimensions of instrumental and ideological union commitment using a sample of 1,170 Swedish blue-collar union members. Longitudinal data were used to test seven propositions referring to the dimensionality, internal consistency reliability, and temporal stability of the scale, as well as postulated group differences in union participation to which the scale should be sensitive. Support for the hypothesized factor structure of the scale and for adequate reliabilities of the dimensions was obtained not only once, but also replicated eighteen months later. Tests for equality of measurement model parameters and test-retest correlations indicated support for the temporal stability of the scale. In addition, the results were consistent with most of the predicted differences between groups characterized by different patterns of change/stability in union participation status. The study provides strong support for the construct validity of the scale and indicates that it can be used in future theory testing on instrumental and ideological union commitment.

Typ och Nyckelord: Journal organizational commitment, union commitment, construct validity

Referens: [Skaldeman, P. \(in press\)](#). Converging or diverging views of self and other: Judgement of relationship quality in married and divorced couples. *Journal of Divorce and Remarriage*.

Abstract: Seventy married or divorced males and females rated their own and their partner's or ex-partner's perceived ability for love and communication. Both married and divorced persons experienced that their (ex-)partner showed more lack of love than they did themselves. However, both partners saw themselves and their partner as experiencing the same degree of problems in the relationship. There were no clear differences in perceived speaking skills between self and partner and between married and divorced couples. On the other hand, there was a strongly significant tendency for divorced persons to see their partner as less able listeners than is true for oneself. It was concluded that the extent to which there is a self-other discrepancy in perceived listening skills seems to be a dividing line between married and divorced couples.

Typ och Nyckelord: Journal marital adjustment, self and other

Referens: [Skaldeman, P. \(2001\)](#). Kontrovers och konflikt: Övertygelse, retorisk argumentation och perspektivetablering. [Controversy and conflict: How conviction, rhetoric argumentation and perspectives affect conflict resolution.] In H. Montgomery & B. Qvarsell (Eds.), (2001). *Perspektiv och förståelse [Perspectives and understanding]* (pp. 200-223). Stockholm: Carlssons.

Abstract: Conflicts are part of daily life. Through media, film, television and radio, we are on a global scale exposed to a wide variety of political, social, economic and cultural conflicts. On a person to person basis we also experience different types of conflict in marriage, families, at work and in other social situations. In order to better understand conflict the chapter discusses how the tendency to be convinced, the tendency to argue for one's conviction and the tendency to establish given perspectives on a situation, affect the outcome of conflict resolution. Concepts like «perspective», «point of view», and «interpretation» all suggest that information can be viewed from different directions and thereby be subjectively interpreted in different ways. From a cognitive point of view, most conflicts have a root in that the parties conceive the situation from a given perspective that is opposed to the view of the other party. A central tenet in most conflicts is that each party is convinced that their own view is more correct or true than the opposite party's view. Arguments are used both to convince oneself and to convince the opponent. In order to convince somebody else one must be convinced oneself. Models for different types of conflict strategies are also presented and described in the chapter.

Typ och Nyckelord: Book (chapter) conflict resolution, rhetorics, perspective-taking

Referens: Skaldeman, P. (2001). *Interpersonal Perception in Close Relationships: Shared and Private Worlds in Spouses' Perceptions of Each Other*. Department of psychology, Stockholm University. (Doctoral dissertation).

Abstract: The purpose of the dissertation was to investigate shared and private views in spouses' perception of each other by means of survey-data. The views concerns areas such as values, love, personality-traits, emotions, communications-strategies and meta-perspectives on Self and partner. The dissertation is based on four studies and an introduction to the field of research.

Study 1 investigated the importance and the attainment of different life-values for married and divorced couples. Factor analysis revealed five value-dimensions: coordination, personal satisfaction, altruistic values, emotional values and communication. For all dimensions, except for emotional values, divorced persons experienced less value attainment than did married persons. Importance ratings tended to be on the same level for both married and divorced persons. The results indicated that both married and divorced persons wanted approximately the same objectives from their marriage, but divorced persons are less successful in attaining these objectives.

In Study 2, the congruence or incongruence of value-profiles for married and divorced couples was studied. Married persons and males perceived more value-congruence between their own and their partner's values than was true for divorced persons. Divorced persons perceived their value-systems to develop in different directions.

Study 3 examined how married or divorced males and females experienced their own and their partner's ability for love and communication. Both married and divorced persons experienced that their partners expressed less love than they did themselves. However, both spouses saw themselves and their partner as experiencing the same degree of problem in the relationship. The divorced persons also saw their partner as less able listeners than was true for themselves.

In Study 4, the theoretical construct of spouses' shared realities was examined. Results indicated that within couples there was a common "temperature" (uniformity in the evaluative level or ratings of traits and emotion of oneself and the partner) that varied across partners in line with how much spouses loved each other. It was concluded that the thesis was revolving around two closely related themes: Shared or private realities and the evaluation of Self and partner, which in turn reflects love.

Typ och Nyckelord: Dissertation close relationships, social cognition, shared reality

Referens: Svenson, O. (2001). Accident and incident analysis based on the accident evolution and barrier function (AEB) model. *Cognition, Technology and Work*, 3, 42-52.

Abstract: This contribution presents a model and a description of how to conduct incident and accident analyses using the Accident Evolution and Barrier Function (AEB) method. This method enforces human factor experts and other experts to cooperate in a conjoint process leading to the analysis. An accident is modelled as a sequence of interacting malfunctions and errors in human and technical systems leading to an accident. Coupled with most links in the chain there are possibilities to arrest the evolution through *barrier functions* (e.g., a physical barrier function) serving to stop the sequence of events. The barrier functions are executed by *barrier function systems* (e.g., a computer-controlled lock). Organisational systems are analysed in parallel or directly after having modelled an accident evolution. The analysis of an accident involves several steps and issues, such as deciding about when to stop going further back in the chain, in what detail to model and barrier function analysis to eliminate or decrease the risk of another accident. The paper also contains material of interest for analysts using other methods of accident analysis.

Typ och Nyckelord: Journal accident analysis, human factor, incident analysis

Referens: Svenson, O., & Salo, I. (2001). Latency and mode of error detection in a process industry. *Reliability Engineering & System Safety*, 73, 83-90.

Abstract: Licensee event reports (LERs) from an industry provide important information feedback about safety to the industry itself, the regulators and to the public. LERs from four nuclear power reactors were analyzed to find out about detection times, mode of detection and qualitative differences in reports from different reactors. The reliability of the codings was satisfactory and measured as the covariance between the ratings from two different judges. The results showed differences in detection time across the reactors. On the average about 10% of the errors remained undetected for 100 weeks or more, but the great majority of errors were detected soon after their first appearance in the plant. On the average 40% of the errors were detected in regular tests and 40% through alarms. Operators found about 16% of the errors through noticing something abnormal in the plant. The remaining errors were detected in other ways. There were qualitative differences between the LERs from the different reactors reflecting the different conditions in the plants. The number of reports differed by a magnitude 1:2 between the different plants. However, a great number of LERs can indicate both higher safety standards (e.g. a greater willingness to report all possible events to be able to learn from them) and lower safety standards (e.g. reporting as few events as possible to make a good impression). It was pointed out that LERs are indispensable in order to maintain safety of an industry and that the differences between plants found in the analyses of this study indicate how error reports can be used to initiate further investigations for improved safety.

Typ och Nyckelord: Journal event reports, latent conditions, system failure, error detection

Referens: Svensson, L., Larsson, Å., & Öst, L.-G. (in press). How children experience brief-exposure treatment of specific phobias. *Journal of Clinical Child & Adolescent Psychology*.

Abstract: The purpose of this paper was to study how 56 children who had received brief exposure treatment for specific phobias experienced the treatment. It was also investigated whether there was a relation between the children's reported experiences before, during and after the treatment and therapy outcome. Results indicated that the treatment was experienced as something positive, and the large majority of the children appreciated the pace and degree of control during treatment, as well as the therapist and the treatment outcome. The response patterns didn't differ between genders, diagnostic groups, treatment or age groups. The therapy outcome of the children was not found to differ according to the children's pre-treatment expectations and feelings during the treatment, neither according to the children's evaluations of the pace of the treatment and the therapist. However, children's reports about their feelings upon termination of the treatment and the satisfaction with the treatment differed significantly depending on the treatment outcome. Results and

tentative explanations of these are discussed and implications for future lines of research are suggested.

Typ och Nyckelord: Journal children, brief-exposure treatment, specific phobias

Referens: [Sverke, M. \(2001\)](#). Strategic vs. reactive implementation of downsizing in Swedish hospitals: Alpha, beta, and gamma change in employee reactions. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Sverke, M. \(2001\)](#). Bolagisering av sjukvård: Hur påverkas attityder och produktivitet? [Hospital corporatization: How are attitudes and productivity affected?] Paper presented at *Svenska Läkaresällskapets Riksstämma*, Stockholm, 28-30 november 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Sverke, M.](#), [Goslinga, S.](#), [Chirumbolo, A.](#), [De Witte, H.](#), [Hellgren, J.](#), & [Näswall, K.](#) (2001). How does job insecurity affect union members? Exit, voice, and loyalty reactions in five European countries. Paper presented at the *Tenth European Congress on Work and Organizational Psychology*, Praha, Czech Republic, 16-19 May, 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: [Sverke, M.](#), & [Hellgren, J.](#) (2001). Exit, voice, and loyalty reactions to job insecurity in Sweden: Do unionized and non-unionized members differ? *British Journal of Industrial Relations*, *39*, 167-182.

Abstract: Although job insecurity has received growing recognition in connection with the transformation of working life, little is known about how unionization affects its consequences. Data from Swedish health-care employees indicate that job insecurity primarily is related to coping strategies in the exit and voice domains. Union members were less inclined to make use of the exit and voice options as compared to their non-unionized co-workers, but more typically expressed loyalty to the organization. The collective support derived from union membership may make individual voice expressions less important, a finding which has to be replicated in countries with lower unionization rates.

Typ och Nyckelord: Journal job insecurity, labor unions, employee attitudes

Referens: [Sverke, M.](#), & [Hellgren, J.](#) (in press). The nature of job insecurity: Understanding employment uncertainty on the brink of a new millennium. *Applied Psychology*.

Abstract: This paper focuses on the nature of job insecurity and addresses conceptual as well as methodological issues affecting our understanding of its consequences. A review of the literature suggests that a great deal of theoretical and empirical work is needed to capture the nature of job insecurity, develop psychometrically sound measures of the different aspects, and arrive at valid conclusions regarding the effects of insecurity. First, job insecurity is defined as a subjectively experienced stressor which may be divided into different dimensions. Second, the multiple aspects of job insecurity may have divergent consequences or at least be differentially related to potential outcomes such as work-related attitudes, job performance, physical health, mental well-being, and job-induced stress symptoms. Third, given that most studies on job insecurity have been cross-sectional, a lot of work remains before we know how, or if, insecurity contributes to changes in such outcomes. Fourth, there are a number of plausible factors that may moderate the relationships between job insecurity and its potential outcomes. Addressing these issues in theoretical as well as empirical work is necessary, we argue, to improve the understanding of both what job insecurity is and what it may imply for the individual.

Typ och Nyckelord: Journal job insecurity, employee attitudes, well-being

Referens: [Sverke, M.](#), [Hellgren, J.](#), & [Näswall, K.](#) (in press). No security: A meta-analysis of job insecurity and its consequences. *Journal of Occupational Health Psychology*.

Abstract: Job insecurity has received increased attention in connection with the flexibilization of working life. Meta-analytic techniques were used to estimate how this subjectively experienced threat of involuntary job loss relates to its postulated outcomes. Consistent with the conceptual framework on this work-related stressor, the results indicate that job insecurity has detrimental consequences for employee job attitudes, organizational attitudes, health, and, to some extent, for their behavioral relationship with the organization. Moderator analyses suggest that these relationships may be under-estimated in studies relying on single-item measures of job insecurity, and that the behavioral consequences of insecurity are more detrimental among manual, as compared to non-manual, workers. Theoretical and methodological implications of the findings are discussed, and suggestions for future research are addressed.

Typ och Nyckelord: Journal meta-analysis, job insecurity

Referens: [Sverke, M.](#), [Hellgren, J.](#), & [Näswall, K.](#) (2001). Vad vet vi om anställningsotrygghet och dess konsekvenser? Slutsatser från två decenniers forskning. [What is known about job insecurity and its consequences? Conclusions from two decades of research.] *Nordisk Psykologi*, *53*, 91-108.

Abstract: The present article takes into account theoretical and empirical issues which influence our understanding of job insecurity, a phenomenon which has received more attention along with the increased flexibilization of working

life. The main purpose of the article is to contribute to the understanding of the influence job insecurity has, and show areas where more research is necessary. We base our discussion on a definition of job insecurity as a subjectively experienced stressor, which reflects the perception that one's present employment is threatened. Our literature review shows, firstly, that there may be different aspects of job insecurity with, to some extent, different consequences for work related attitudes and well-being. Secondly, given that the present knowledge of the concept to a great extent is based on cross-sectional studies, more longitudinal research is needed before we know if and how job insecurity is related to changes in attitudes and well-being. Thirdly, we identify factors which may moderate the relation between job insecurity and its assumed consequences. We maintain that further theoretical as well as empirical research is needed in order to increase our understanding of what job insecurity is and what consequences it can have for the individual.

Typ och Nyckelord: Journal job insecurity, employee attitudes, well-being

Referens: Sverke, M., Hellgren, J., Näswall, K., Chirumbolo, A., De Witte, H., & Goslinga, S. (2001). *European unions in the wake of flexible production: Technical report on the data sets used in a SALTSA project*. SALTSA Report 2001:1. Stockholm: National Institute for Working Life & SALTSA. (ISSN 1404-8485)

Abstract: Over the past decades, organizations in most industrialized countries have involved in restructuring, layoffs and "right sizing" in their attempts to reduce labor costs and improve competitiveness. For employees, such "flexibilization" often involves more intermittent employment relations or a perception of uncertainty concerning the continued existence of one's job. Both contingent work and job insecurity have been found to associate with negative work attitudes and a lack of subjective well-being, but little is known about how such negative consequences can be mitigated. The present paper provides information on a European comparative project with the overall aim of shedding light on the labor unions' roles in addressing the consequences of the intensified flexibilization of the labor market. The project is based on data from Belgium, Italy, the Netherlands, and Sweden. This technical report describes the samples and measures used in the respective data sets, examines the psychometric properties of the measures, and presents descriptive statistics. The results reported here provide a solid foundation for more substantial and comparative research within the project.

Typ och Nyckelord: Report job insecurity, unions

Referens: Sverke, M., Sjöberg, A., & Chaison, G.N. (2001). Medlemsaktivitet efter fackliga sammanslagningar: När Beklädnads och Fabriks blev Industrifacket. [Membership participation after union mergers: When the Swedish Clothing Workers Union and the Swedish Factory Workers Union Became the Industrial Workers Union.] *Arbetsmarknad & Arbetsliv*, 7, 113-127.

Abstract: Mergers have become an increasingly used structural reform for labor unions as environmental changes have led to membership decline, financial difficulty, and the lack of scale in operations. However, despite a growing merger trend, much more is known about why and how unions merge than about the impact of mergers on the members. The literature suggests that mergers may have detrimental effects on union democracy because large, consolidated unions lead to centralization which discourages membership participation. This study employs a quasi-experimental design to analyze the potential effects of an amalgamation between two Swedish blue-collar unions on the members' participation in union activity. The results show that participation need not be lost among the many and complex issues of governance and administration that are resolved in an amalgamation. There were no changes in members' levels of participation in administrative, occasional, or supportive activities from the pre- to the post-merger period. Moreover, relative to the comparison union, members of the merged unions were more inclined to remain in the union after the merger. While the results can partly be explained from the national context of union mergers and the careful implementation of the merger, the implication of the study is that an open and vigorous discussion of membership participation and a merger plan that assigns a high priority to participation can produce results that defy common assumptions about mergers.

Typ och Nyckelord: Journal union mergers, union participation, organizational restructuring

Referens: Söderlund, H., Nyberg, L., Adolfsson, R., Nilsson, L.-G., & Launer, L.J. (in press). High Prevalence of White Matter Hyperintensities in Normal Aging: Relation to Blood Pressure and Cognition. *Cortex*.

Abstract: The occurrence of cerebral white matter hyperintensities (WMHs), and their associations with blood pressure, episodic memory, and other cognitive tasks, was examined in a population-based sample of 123 individuals between 64 and 74 years old. Magnetic Resonance Imaging (MRI) detected subcortical and periventricular hyperintensities in 90% and 67% of the cases, respectively. Subcortical WMHs were related to elevated diastolic blood pressure measured ten years earlier, and periventricular WMHs were related to elevated diastolic blood pressure measured five and ten years earlier. Subcortical hyperintensities were weakly associated with impaired motor speed, but this association was not significant. Periventricular WMHs had a negative effect on episodic memory, although the relation was not linear. Collectively, the notion that white matter hyperintensities impair cognitive function did not get strong support in this Swedish sample.

Typ och Nyckelord: Journal memory, white matter hyperintensities, MRI

Referens: Thunholm, P. (in press). Social Desirability in Personality Testing of Military Officers. *Military Psychology*.

Abstract: The tendency among Swedish military officers to answer in a socially desirable way when taking some personality tests was investigated. Subjects were 216 army, navy, and airforce captains. The test used for measuring social desirability was the Marlowe-Crowne Social Desirability Scale (M-C SDS) (Crowne & Marlowe, 1960) and a subset of those test items. Data revealed a strong tendency among the officers to answer in a socially desirable manner compared to earlier data from testing with the M-C SDS and compared to data from a sample of Swedish students of economics. M-C SDS correlated significantly with all three of the personality tests used. It is suggested that the comparably strong tendency to answer in a socially desirable way could be due to in part a need for many subjects to "look good" and in part due to difficulties to apply a 5-step Likert scale to the items of the M-C SDS.

Typ och Nyckelord: Journal social desirability, military officers

Referens: Torbiörn, I. (In press). Olikhet som möjlighet - om icke-problem, förtroende och substitution i

kulturmöten. [The potential of diversity - on non-problems, substitution and trust in intercultural encounters.] *Ledmotiv*, No. 1, 2002. Centre for Advanced Studies in Leadership.

Abstract: Adopting a proactive perspective, focussing on what makes intercultural contact unproblematic rather than problematic, a generalised encounter stripped of most assumptions or restrictions is assumed. From it social psychological preconditions for non-problematic outcomes in the situation are derived. Mechanisms of psychological substitution within and between actors emerge as central here. The potential for unproblematic outcomes are then revised as various preconditions of the situation are reintroduced, such as time and process, degree of cultural difference between actors, purpose, power and social setting. Implications are discussed concerning, in particular, what measures may favor necessary substitution and the formation of relational trust in heterocultural leadership and team-building.

Typ och Nyckelord: Report intercultural communication, heterocultural teams, leadership

Referens: Torbiörn, I. (2001) A proactive model of intercultural communication and trust: Implications for leadership in heterocultural contexts. *Crete Research Colloquium*, Cranfield, UK, June 14-15 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Trygg, L., Dåderman, A.M., Wiklund, N., Wirsén Meurling, A., Lindgren, M., Lidberg, L., & Levander, S. (2001). Projektiva test inom rättspsykiatri medför risker för rättssäkerheten. Endast metoder med god empirisk förankring bör användas. [Using projective tests in forensic psychiatry may lead to unreliable conclusions.] *Läkartidningen*, 98, 3118-3123.

Abstract: The use of projective and psychometric psychological tests at the Department of Forensic Psychiatry in Stockholm (Huddinge), Sweden, was studied for a population of 60 men, including many patients with neuropsychological disabilities and multiple psychiatric disorders. The results showed that the use of projective tests like Rorschach, Object Relations Test, and House-Tree-Person was more frequent than the use of objective psychometric tests. Neuropsychological test batteries like the Halstead-Reitan Neuropsychological Test Battery or Luria-Nebraska Neuropsychological Battery were not used. The majority of patients were, however, assessed by intelligence scales like the WAIS-R. The questionable reliability and validity of the projective tests, and the risk of subjective interpretations, raise a problem when used in a forensic setting, since the courts decisions about a sentence to prison or psychiatric care is based on the forensic psychiatric assessment. The use of objective psychometric neuropsychological tests and personality tests is recommended.

Typ och Nyckelord: Journal projective tests, psychometric tests, forensic psychiatry

Referens: Wahlin, Å., Bäckman, L., Hultdin, J., Adolfsson, R., & Nilsson, L.-G. (in press). Reference values of serum levels of vitamin B12 and folic acid in a population-based sample of adults between 35 and 80 years of age. *Public Health Nutrition*.

Abstract: Objectives: To examine folic acid and vitamin B12 status in a group of 1000 persons sampled from the community of Umeå, Sweden, and aged 35, 40, 45, 50, 55, 60, 65, 70, 75, or 80 years. Reference data for folate and age stratified reference data for vitamin B12 are presented, together with an examination of potential confounders.

Measurements: All subjects participated in extensive health examinations and interviews, and laboratory blood testing was performed.

Results: A series of exclusion criteria were applied, and data from 961 subjects were analyzed. Vitamin B12 levels were found to decrease with increasing age, whereas folate levels remained constant across the age span studied. None of the vitamins were found to vary with sex, education, smoking or alcohol consumption, Body Mass Index, prescription-free vitamin supplements, levels of haemoglobin, or mean cell volume of erythrocytes. Further, none of these factors were associated with the age-related decrease of vitamin B12 levels.

Conclusions: The offered reference ranges should be used only in order to rule out deficiency. For B12 levels, the age of the subject should be considered such that, for elderly persons in particular, values above the medians should be considered as indicative of normal vitamin status.

Typ och Nyckelord: Journal vitamin B12, folic acid, aging

Referens: Van Gestel, S., Forsgren, T., Claes, S., Del-Favero, J., van Duijn, C.M., Sluijs, S., Nilsson, L.-G., Adolfsson, R., & Van Broeckhoven, C. (in press). Selective genotyping supports a role for dopamine and serotonin systems in novelty seeking and harm avoidance. *Molecular Psychiatry*, 44, 19-26.

Abstract: A northern Swedish population of 2446 healthy individuals was screened using the Temperament and Character Inventory (TCI). The 5% extremely high and low scoring individuals on the temperament dimensions of Novelty Seeking (NS) and Harm Avoidance (HA) were selected for genetic analysis. Four candidate genes were tested, coding for dopamine D4 receptor (DRD4), serotonin transporter (5-HTT), dopamine transporter (DAT1) and tyrosine hydroxylase (TH). Polymorphisms were tested for association with the dimensions of NS and HA. A positive association between NS and DAT1 and between HA and 5-HTT was detected in the total group of high versus low scoring individuals. After stratification of the extreme groups for gender, associations were found in females for NS with DAT1 and TH, and for HA with 5-HTT and DRD4. In males, associations were found for NS with 5-HTT and TH, and for HA with DRD4. In addition an epistatic effect was observed between NS, DAT1 and DRD4 and between HA, 5-HTT and DRD4.

Typ och Nyckelord: Journal temperament, dopamine, serotonin

Referens: Willén, H., & Montgomery, H. (2001). Desiderare e avere figli: effetti sulla realizzazione e sull'impronta dei valori. [The impact of wish for children and having children on attainment and importance of life values]. In S. Zappala & G. Sarchielli (Eds.), *Prospettive di psicologia economica. Le decisioni sul denaro nella vita quotidiana delle famiglie [Perspectives on economic psychology*.

Abstract:

We examined the perceived role of children for future or actual fathers and mothers in Sweden. Issues related to motives and effects of having or not having children were described in terms of external variables, the strength of the wish to have a child, and the importance and attainment of human values were investigated. 383 husbands and wives completed a questionnaire which assessed background information, attainment of values relevant for quality of life in general and the family domain especially, and the importance of the same values with respect to life satisfaction. Results showed that the wish for a child appears to be dependent on the external aspects of the family situation, such as current number of children and duration of marriage (negative relationships in both cases). LISREL-analysis indicated that wish for a child increased the attainment of a wide variety of human values (especially for males), which in turn increased the importance of these values.

Typ och Nyckelord: Book (chapter) having children, decision making, human values

Referens:

Wångby, M. (2000). Somatic complaints in girls: a longitudinal perspective. *Scandinavian Journal of Behaviour Therapy*, 29, 22-36.

Abstract:

This report presents results from a study of the *dimensionality* and *longitudinal stability* of some common self-reported somatic complaints in teenage girls. Data were supplied by the Swedish longitudinal research program "Individual Development and Adaptation". At four age levels (age 10, 13, 15 and 16) a representative sample of approximately 500 girls filled out questionnaires on various adjustment problems including some typical somatic complaints. A separate dimension of somatic complaints was identified at each age level through factor analysis of the questionnaire data. Correlational stability of somatic complaints was not high until middle adolescence. At this age fairly *stable patterns* of somatic complaints were also found at the individual level; different somatic complaints were not found to be interchangeable. The results support the interpretation of girls' somatic complaints as a single, meaningful dimension in late childhood and adolescence. This dimension may be hypothesized to constitute a psychological process, somatization, manifesting itself in fairly stable patterns at the individual level in middle adolescence.

Typ och Nyckelord: Journal somatic complaints, teenage girls, longitudinal

Referens:

Wångby, M., & Stattin, H. (2001). *Self-perceived psychological health among Swedish teenage girls. 1. Adjustment problems in a 1996 school cohort*. Reports from the project Individual Development and Adaptation, No. 75. Department of Psychology, Stockholm University.

Abstract:

This is the first report from a research project aimed at studying change and stability over the past decades in self-perceived psychological health among Swedish teenage girls. Data are taken from a survey among all children in Grade 8 (approximately 15 years of age) in the Swedish town Örebro in 1996, performed by professor Håkan Stattin. This survey was a replication of an earlier survey among all girls in Grade 8 in Örebro in 1970 carried out by Karin Crafoord, Licentiate of Philosophy, and professor David Magnusson. Data were collected with the Symptom Questionnaire that was developed for the first survey by Crafoord and Magnusson. The most common type of problems reported by the girls was physical symptoms, and it was more common for the girls to report at least one of these symptoms than none. Emotional disturbances and disturbances in self-esteem were also fairly common, whereas antisocial problems were less frequent. The frequencies of disturbances in girls' relations to others suggested that these relations in most cases function well, especially the girls' relations to peers. It was not uncommon for the girls to feel anger and to quarrel with mother and father, but perceptions of negative feelings from parents were rare.

Typ och Nyckelord: Report teenage girls, adjustment problems, self-reports

Referens:

Zettergren, P. (2001). *Peer rejection and future school adjustment*. Stockholm: Department of Psychology, Stockholm University. Reports from the project IDA, No. 73. (Licentiate thesis).

Abstract:

The present thesis concerns the school adjustment, academic performance, and health in preadolescence (age 12) and adolescence (age 15) of boys and girls (N=90), who in middle childhood (age 10 and 11) were long-term rejected, popular, or of average popularity in their school class. Data were taken from the Swedish longitudinal research program IDA, "Individual Development and Adaptation". Self-reports, reports from teachers and parents, school marks, standardized achievement tests, intelligence scales, and school health cards were used as follow-up instruments. School dropout rate for boys was also included (dropout from school is predominantly a male problem). Rejected children of both sexes experienced their school situation as more negative and felt less comfortable at school than other children in preadolescence according to both self-report and reports from parents. In adolescence neither boys' nor girls' peer status groups differed significantly from each other in self-reported general attitudes towards school and the schoolwork. Thus, it seems that rejected children have come to like school better in adolescence than they did in preadolescence in spite of other findings of this project that point to continued school problems for rejected children in adolescence. In preadolescence, rejected girls, and to a lesser degree also boys, judged their overall relationship with the teacher as bad. At the same time period, the teachers, on their hand, preferred the rejected children of both gender less and found them more troublesome compared to average and popular children. Peer rejection seems to precede and/or occur alongside distortions in the contact between the teacher and the child. Peer rejection was related to poorer academic performance in both preadolescence and adolescence, which indicates that the academic difficulties of rejected children are a long-standing problem. Furthermore, the intelligence level of rejected adolescent boys and girls were short of the standards of children from the other status groups. The academic achievement and intelligence measures of popular boys and girls were mostly of superior standard in both preadolescence and adolescence compared to the other groups, which indicated that high peer popularity is linked to high academic standards. Mental health problems and physical health problems, as noted on the school health cards in preadolescence, were more frequent in rejected children, especially in boys. The school dropout rate of rejected boys was much higher than that of other boys, which indicates that at least some rejected boys in higher grades find school unbearable to such an extent that they become school dropouts. In conclusion, although there are some gender differences, peer rejection seems to be associated with later school and health problems for both boys and girls in the school years from at least preadolescence to midadolescence. Interventions are needed at an early stage to put an end to this negative development for peer rejected children. The causality problem was discussed in connection to different models.

Typ och Nyckelord: Dissertation Report school adjustment, adolescence, peer rejection

Referens:

Åberg, C., & Nilsson, L.-G. (2001). Facilitation of source discrimination in the novelty effect.

Abstract:

It has been demonstrated experimentally that recognition of novel items is more accurate than recognition of already familiarized items. Tulving and Kroll (1995) proposed that this effect is due to novelty detectors in the brain giving processing priority to novel information. Recently, Dobbins et al. (1998) suggested that the effect is due to source discrimination problems. In the present two experiments attempts were made to facilitate source discrimination by having different orienting tasks and materials in the familiarization and in the critical presentations. Degree of familiarization was manipulated by varying number of presentations one, two or three times. The results in Experiment 1 showed that the novelty effect increased linearly as a function of presentations in the familiarization phase. In the second experiment the difference between familiar and novel items was even more pronounced. Enactment at encoding was added as a manipulation during familiarization. The results of Experiment 2 showed that the novelty effect did increase linearly for items with nonenacted encoding (in which the familiarization and the critical phase were more similar) but not for enacted encoding. All subjects reported experiencing source discrimination difficulties in both experiments despite the measures taken to diminish them. It seems safe to conclude that source discrimination difficulties are a part of the novelty effect.

Typ och Nyckelord: Journal recognition, SPT

Referens:

Öberg, C., Larsson, M., & Bäckman, L. (in press). Differential sex effects in olfactory functioning: The role of verbal processing. *Journal of the International Neuropsychological Society*.

Abstract:

We investigated the impact of sex across a number of olfactory tasks. Thirty-six men and 35 women ranging in age from 19 to 36 years were assessed in six different tasks: absolute sensitivity for n-butanol, intensity discrimination, quality discrimination, episodic recognition memory for familiar and unfamiliar odors, and odor identification. No sex differences were observed in the tasks tapping sensory acuity (i.e., odor sensitivity, intensity discrimination, and quality discrimination) or in episodic memory for unfamiliar odors. By contrast, women outperformed men in the tasks involving verbal processing (i.e., memory for familiar odors and odor identification). Interestingly, statistical control of odor naming eliminated the female superiority in episodic odor memory for familiar odors. This outcome suggests that women's superiority in episodic odor memory is mediated by their higher proficiency in odor identification.

Typ och Nyckelord: Journal olfaction, sex, verbal processing

Referens:

Öberg, C., Larsson, M., & Bäckman, L. (2001). Episodic odor recognition - The influence of subjective experience. Poster presentation at "The Association for Chemoreception Sciences", Sarasota, Florida, April 25-30.

Abstract:

Typ och Nyckelord: Proceedings

Referens:

Ögren, M.-L. (2001). *Group supervision. Learning psychotherapy in a small group format*. Doctoral thesis. Department of Humanities, Informatic and Social Science. Karolinska Institutet.

Abstract:

Group supervision in psychotherapy is today, in Sweden as well as internationally, a common form of supervision. Nevertheless, few systematic studies have been carried out in this field. There is an increasing demand for a more thorough understanding of the specific factors involved in group supervision.

This thesis aimed at illuminating some aspects of the learning process in psychodynamically oriented group supervision: the experience of the role as supervisee and supervisor, likewise the experience of group climate and foci of content and, further, their relation to attained psychotherapeutic skill.

To this end four studies were carried out using 1) a standardised method SYMLOG to illuminate and compare role patterns, 2) an explorative study to illuminate the experience of the group's inner life, 3) a modified Swedish version (MSES) of the Buckley Self Evaluation Scale to explore the experiences of attained skill after group supervision, and finally 4) a newly constructed questionnaire (TAC) to illuminate foci of content of the supervision and, further, the experience of group climate. Supervisees' as well as supervisors' points of view have been taken into account; although the experiences of the supervisees have constituted the foreground.

According to SYMLOG self-ratings made by supervision groups in two psychotherapy training programmes at different levels, there were no differences in role patterns between supervisees at different training levels, whereas the differences between the supervisors and the supervisees, independent of training level were highly significant. Evidently, it was just as difficult to find one's voice and role in a supervision group at an advanced level as at a basic training level.

Concerning the experiences of the supervision group, explored in two studies on a basic training level, both supervisees and supervisors reported that individual supervisee factors, as well as factors related to the group composition, exerted a decisive influence on the experiences of the group climate. The importance of interventions on a group level adjusting the group climate was emphasised. Group dynamics were central and remained as an intense experience long after the termination of the supervision.

Using MSES self evaluation scale for assessment of attained psychotherapeutic Skill, and Change of skill after supervision, three domains of skill were interpreted: Containing emotionally loaded therapeutic issues, Mastery of working alliance, and Psychodynamic understanding. There were significant increases in Skill in all these dimensions, and significant positive Changes of skill. When supervisors evaluated Change of skill they tended to give higher ratings than the supervisees. Significant correlations of slightly more than medium size between supervisor and supervisee ratings of Change were obtained. Skill, according to ratings in the dimension of Mastery of working alliance made by supervisees after supervision, was related to group supervisor.

Themes of group supervision content (Part A) as well as the group climate (Part B) were assessed using the questionnaire TAC. Four factors were interpreted in Part A: Group processes, Psychodynamic processes, Professional attitudes, and Theoretical aspects, and two factors in Part B: Openness and creativity and Insecurity and competition (the latter factor was omitted due to a low Alpha level). The focus on Psychodynamic processes received the highest and over time increasing ratings and, moreover, showed a broad effect on the experience of attained skill. Professional attitudes were also considered to be a basic theme. The foci on Group processes and Theoretical aspects had a positive and negative effect, respectively, on the Skill factor Containing emotionally loaded therapeutic issues. The prevalence of these two foci was related

to group supervisor. The Group climate factor, Openness and creativity, did not seem to affect the supervisees' experiences of attained skill. However, the evaluations of Openness and creativity of the final supervision period differed due to group supervisor. Study 3 and 4 were carried out on an extensive sample of supervisees and supervisors on a basic level training programme from three Swedish universities.

Typ och Nyckelord: Dissertation group supervision, supervisee, supervisor, group climate, psychotherapeutic skill, focus of contents, role

Referens: Öhrming, J., & Sverke, M. (2001). *Bolagiseringen av S:t Görans: En proaktiv organisering. [Hospital corporatization: Proactive organization.]* Lund: Studentlitteratur.

Abstract: Emergency care and emergency hospitals are part of the most compounded service system in society. This fact has received increasing attention given the context of one of the largest problems in the area of health care - the total costs and financing - which gave rise to several reforms in the county councils in Sweden during the 1990s. Perhaps the most radical measure was the corporatization (1994), and later the privatization (1999), of S:t Görans Hospital in Stockholm. The example of S:t Görans has been considered successful to the degree that it has been followed by new corporatizations, and starting in 2001 the greater part of emergency health care is expected to be run within corporations. Despite this there is almost no literature analyzing this unique development. The present book examines the development (1994-1999) in S:t Görans Hospital and Södertälje Hospital (the administration) respectively - two emergency hospitals in Stockholm with different forms of operation, varying history, and differing pre-existing conditions to utilize the possibilities that became available during the 1990s. The book deals with the effectiveness of health care, and focuses on uncertainty as one of the major working conditions within health care. The book also describes the uncertainty experienced by the managers, and contrasts this to uncertainty felt by doctors, nurses, and assistant nurses, as well as explains the central importance of "sense making" in health care.

Typ och Nyckelord: Book (chapter) organizational restructuring, health-care, sense-making

Referens: Öhrming, J., & Sverke, M. (in press). Andemeningen är bra, men...: Kvalitetsfrågans betydelse för vårdens arbetsmiljö och organisation. [The intention is alright, but...: The impact of quality management for work environment and organization in hospitals.] In E. Bejerot & H. Hasselblad (Eds.), *Kvalitet utan gränser: En kritisk belysning av kvalitetsstyrning. [Quality without limits: A critical evaluation of quality management]*. Lund: Academia Adacta.

Abstract: Along with an increased orientation towards markets and quasi-markets there is a gradual restructuring of healthcare. In this context the issue of quality has gained increased significance. However, issues of quality, quality management and quality work in health care cannot be understood in isolation, but must be put in a greater context. Quality work is in this chapter seen as one of the means to try to deal with the uncertainty that is associated with the production of healthcare services. We describe how the inherent uncertainty of healthcare has been treated with a "more strictly bound system" during the last decade, with the aim of increasing control of healthcare production by means of different managerial mechanisms. Quantitative and qualitative data are used to investigate how the issue of quality has been handled in one public stock company hospital and one traditional hospital, and how uncertainty in healthcare is experienced and dealt with in different ways by managers and healthcare staff. The chapter is closed by a discussion of the significance of quality work for the organization of healthcare.

Typ och Nyckelord: Book (chapter) health care, quality, sense-making

Referens: Öhrming, J., & Sverke, M. (2001). Transition into privatization: A longitudinal study of two Swedish emergency hospitals. Paper presented at "New Organizational Challenges for Human Service Work: The VIIth European Conference on Organizational Psychology and Health Care", Stockholm, 11-13 October 2001.

Abstract:

Typ och Nyckelord: Proceedings

Referens: Öst, L.-G. (in press). Applied relaxation. In M. Hersen & W.H. Sledge (Eds.), *Encyclopedia of Psychotherapy*. New York: Academic Press.

Abstract: Applied relaxation is a coping technique consisting of a series of steps which teaches the patient to reduce the time it takes to become relaxed; from 15-20 min to 20-30 sec, and to apply this skill in naturally occurring anxiety situations. The treatment usually takes 8-10 weeks to complete and clinical experience and research show that 90% of the patients acquire the skill of relaxing rapidly. While first developed for non-situational anxiety disorders, AR has successfully been applied to other anxiety disorders, as well as various psychosomatic and somatic disorders, e.g. headache, pain, epilepsy, tinnitus, dyspepsia, and cancer. A summary of the randomized clinical trials shows that AR is significantly more effective than control conditions, and as effective as various well-established treatment methods with which it has been compared. Follow-ups on average 11 months after the end of treatment show that not only have the treatment effects been maintained, but also on average there is a further improvement.

Typ och Nyckelord: Book (chapter) applied relaxation, anxiety

Referens: Öst, L.-G. (in press). Applied tension. In M. Hersen & W.H. Sledge (Eds.), *Encyclopedia of Psychotherapy*. New York: Academic Press.

Abstract: Applied tension is a coping method specifically developed for the treatment of blood-injury phobia (and to some extent injection phobia). This method specifically focuses on the original physiological responses, which are characteristic of blood phobic, i.e. the biphasic pattern with an initial increase and then, a rapid decrease in blood pressure. The first step of AT consists of teaching the patient an effective tension technique, which leads to an increase in blood pressure. The patient is taught to tense the arms, the chest, and the leg muscles, and by assessing the patient's blood pressure the therapist can demonstrate that the tension really increases blood pressure. The second step is to expose the patient to various blood-injury stimuli (slides of wounded people, blood donation, and thoracic surgery) so that he/she can practice applying the tension as soon as they experience the very first signs of a drop in blood pressure. Randomized controlled trials show that AT is an

effective treatment for blood phobia and the effects are maintained at follow-up one year later. applied tension, blood phobic

Typ och Nyckelord: Book (chapter)

Referens: Öst, L.-G., Alm, T., Brandberg, M., & Breitholtz, E. (2001). One vs. five sessions of exposure and five sessions of cognitive therapy in the treatment of claustrophobia. *Behaviour Research and Therapy*, 39, 167-183.

Abstract: Forty-six patients fulfilling the DSM-IV criteria for claustrophobia were assessed with behavioral, physiological, and self-report measures. They were randomly assigned to four conditions: (1) one-session (E1); or (2) five-sessions of exposure (E5); (3) five-sessions of cognitive therapy (C5); and (4) Wait-list for 5 weeks. The first condition consisted of a single 3 h session of massed exposure, and condition 2 and 3 of 5 h of gradual treatment, which was done individually by very experienced therapists. The results showed that treatment was significantly better than the wait-list condition, and the three treatments did equally well with no differences between them. At post-treatment 79% of treatment patients vs 18% of the wait-list controls had improved to a clinically significant extent. When the three treatments were compared 80% in the E1-group, 81% in the E5-group, and 79% in the C5-group were clinically improved. At the 1 year follow-up the corresponding figures were 100%, 81%, and 93%, respectively. The implications of these results are discussed.

Typ och Nyckelord: Journal exposure therapy, cognitive therapy, claustrophobia

Referens: Öst, L.-G., Svensson, L., Hellström, K., & Lindwall, R. (2001). One-session treatment of specific phobias in youth: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 69, 814-824.

Abstract: Sixty children, age 7-17, who fulfilled DSM-IV diagnosis for various specific phobias were randomized to: 1) One-session exposure treatment alone, 2) One-session treatment with a parent present, or 3) Wait-list control group for four weeks. After the waiting period the wait-list patients were re-randomized to the active treatments. The patients' phobias were assessed with behavioral approach test (approach behavior, experienced anxiety, and physiological reactions), while general anxiety, depression, phobic tendencies, and anxiety sensitivity were assessed with self-report inventories. Assessments were done pre, post, and at 1 year following treatment. Results showed that both treatment conditions did significantly better than the control condition, while the treatment groups did equally well on most measures, and the effects were maintained at follow-up. The implications of these results are discussed.

Typ och Nyckelord: Journal one-session treatment, specific phobias, youth

Referens: Öst, L.-G., & Treffers, P.D.A. (2001). Onset, course, and outcome for anxiety disorders in children. In W. Silverman & P. Treffers (Eds.), *Anxiety Disorders in Children* (pp. 293-312). Cambridge: Cambridge University Press.

Abstract: The way children acquire anxiety disorders, the age of onset, the course and outcome of various anxiety disorders in children and adolescents are described. The general conclusion that can be drawn is that anxiety disorders in childhood (with or without comorbid depression) lead to a higher risk of various adjustment problems and anxiety disorders in young adulthood.

Typ och Nyckelord: Book (chapter) anxiety disorders, children

Referens: Östberg, P., Bogdanovic, N., Fernaeus, S.-E., & Wahlund, L.-O. (2001). Jargonagraphia in a case of frontotemporal dementia. *Brain and Language*, 79(2), 333-9.

Abstract: Jargonagraphia is known to occur after discrete brain lesions but not in primary degenerative dementia. We report a patient with frontotemporal dementia who developed jargonagraphia and nonfluent aphasia. Written output was graphically preserved but consisted of short words intermingled with abstruse neologisms. MRI showed predominant right frontotemporal cortical atrophy accompanied by white matter hyperintensities in the right anterior subcallosal periventricular region. Diagnosis and MRI were corroborated by extensive neuropathological findings obtained 8 months later. The agraphia in this case is discussed with reference to both specific macroscopic and microscopic pathoanatomical lesions. We suggest that jargonagraphia can appear in frontotemporal dementia depending on the localization of lesions.

Typ och Nyckelord: Journal frontotemporal dementia, agraphia, white matter lesions