

Annual Report

2003



LUND UNIVERSITY

Department of Psychology, Sweden

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Edited Books

Apitzsch, E., & Schilling, G. (Eds.). (2003). *Sport Psychology in Europe*. Biel: FEPSAC.

Lindén, J., & Szybek, P. (2003). *Validation of Knowledge Claims in Human Science*. Lyon
Limonest : l'Interdisciplinaire.

The validity is in this volume grounded in a shared perception of research on human action, its conditions and consequences, as a human science rather than “social” or “behavioral” science. Validity is here more than the validity of representations, as research is not a mirror held to nature. The function of research is rather to clear the ground for change. All of the authors have done research connected to endeavours by human subjects to change their situation. Lindén and Sages have been involved in work life research, Beach and Szybek in curriculum research in school and higher education and Polkinghorne in research on psychotherapy and counselling.

Smith, G. (2003). *Att skapa sin värld*. Stockholm: Carlsson.

The title refers to a subjectivistic theory on which this book is based. The theory presupposes that the psychological essence of a person is represented, not by reified traits, but by continuous series of adaptive pulses or perceptgeneses out of which reality is shaped. Eventually these pulses may acquire a typical profile or structure by way of which the person's quintessence can be captured. The theory is outlined in chapter 1 and the instruments used for its empirical application, in chapter 2. Creativity, a central topic in this context, is dealt with at some length in chapter 3. Since perceptgeneses are supposed to go on outside awareness the problem of subliminality is a natural part of the book's agenda (chapter 4). Many of the instruments used to uncover the processes shaping reality are particularly sensitive to anxiety which is the topic of chapter 5. The second half of the book is more personal and hence more polemical, the polemics mainly directed at the remnants of behavioristic thinking still marring many aspects of contemporary psychology. A retrospective illumination of the once fashionable but also controversial perception/personality approach is also included as is a faked interview with two leading representatives of 20th century psychology. The concluding question is what the 21st century psychology should look like.

Book Chapters

Apitzsch, E. (2003). Förändringar i fysisk aktivitet hos en grupp studenter under en tremånadersperiod. In G. Patriksson (Ed.), *Aktuell beteendevetenskaplig idrottsforskning* (pp. 3–16). Lund: SVEBI.

Syftet med denna studie var att beskriva förändringar i det fysiska aktivitetsmönstret – ökad, minskad eller oförändrad fysisk aktivitet – hos en grupp studenter under en tremånadersperiod. I studien deltog 155 studenter. Två av de formulär som ingår i den transteoretiska modellen (förändringsstadier och beteendestrategier) användes.

Slutsatser:

- Om studierna planeras bättre skulle fler studenter vara fysiskt aktiva.
- De organiserade fysiska aktiviteter som erbjuds måste uppfattas som roliga för att fler studenter skall lockas till dem.
- De planer som studenterna har för sin framtida fysiska aktivitet tycks positivt påverka den faktiska aktivitetsnivån.

Apitzsch, E. (2003). Milestones in the history of FEPSAC. In E. Apitzsch, & G. Schilling (Eds.), *Sport Psychology in Europe* (pp. 9–18). Biel: FEPSAC.

The content of this chapter covers the most important events in the 35 year old history of the European Federation of Sport Psychology (FEPSAC).

The following topics are covered:

- The foundation 1969
- Conferences on the occasion of Managing Council meetings
- Anxiety in Sport
- FEPSAC Bulletin
- General Assembly
- FEPSAC Award
- Representatives' meeting
- Position Statements
- European Master's Degree in Exercise and Sport Psychology
- Official journal of FEPSAC
- Sport Psychology at European Championships

Kemdal, A.B. (2003). Attributioner och demokratiska dygder. In M. Gilljam & J. Hermansson (Eds.), *Demokratins mekanismer* (pp. 305–322). Malmö: Liber.

Statsvetenskaplig forskning visar att demokratiska dygder, som delaktighet, kritiskt tänkande och solidaritet värderas högt av svenska medborgare. Medborgarna anser att de själva kommer ganska nära sitt ideal när det gäller att bete sig i enlighet med dygderna. Man tycker alltså att man själv ”lever som man lär”. Däremot anser de inte att andra människor lever upp till de demokratiska idealen lika bra som de själva gör. Dessa resultat förklaras i kapitlet utifrån psykologisk forskning om kausala attributioner, d v s människors förklaringar till egna och andras beteenden. Kausala attributioner styrs av perspektiv, d v s om man ska förklara sitt eget eller andra människors beteende. Man förklarar eget positivt beteende mer med inre faktorer, såsom personlighetsdrag eller intelligens, och eget negativt beteende med yttre omständigheter som brist på tid eller dåligt väder, medan andra människors både positiva och negativa beteenden överlag förklaras med inre faktorer. Därför kan egna ”odygdiga” beteenden, t.ex. fusk med skatten, bortförklaras med yttre faktorer som att skattemyndigheten är dålig på att informera om hur man ska fylla i deklARATIONEN, medan andras odygdiga beteende ses som ett tecken på att de inte värderar dessa dygder lika högt som man själv gör.

Lindén, J. (2003). Validation in the context of discovery and the context of justification in psychological research. In J. Lindén & P. Szybek (Eds.), *Validation of knowledge claims in human science*. Lyon Limonest: l'Interdisciplinaire.

The aim of this chapter is to contribute to the debate by arguing for an approach to validity in which (1) the domain of discovery and the domain of justification are brought together and are seen as being intertwined in a transactional sense, (2) the justification process is seen to be endowed with an experimental and a contextual dimension, and (3) a processual, historical perspective is thus adopted. In developing the arguments a background description of the process of developing a particular qualitative research method, the Diary-in-Group method is provided.

Sages, R. (2003). Truth as unveiling. In J. Linden & P. Szybek (Eds.), *Validation of knowledge claims in human sciences*. Lyon Limonest: l'Interdisciplinaire.

This paper presents an approach to validity and related questions of empirical research starting from and aiming at an understanding of the individual's life-world experience strictly from the point of view of the individual himself and fitting to the theoretical frame of reference for the development of the ontological and methodological reflections of Husserlian phenomenology. I introduce a method of conducting research and analysing protocols that offers students and researchers in psychology and related fields a way of conducting empirical studies founded on different ontological and epistemological premises compared to the traditionally dominant in the positivist way, be it quantitative or qualitative in its methods of data collection and treatment.

Smith, G.J.W. (2003). The role of unconscious processes in the evolvement of creativity. In M. Ferrari & L. Shavinina (Eds.), *Beyond knowledge: Extracognitive aspects of developing high ability* (pp. 27–37). Mahwah, N.J.: Erlbaum.

The pervading assumption of this chapter is that creative functioning depends on an open communication between conscious experiences and preconscious layers of the mind. What is more, in most studies cited, creativity was defined by the test subject's degree of independence of the stimulus for the benefit of personal interpretations. Creative functioning is not only important for the generation of new ideas but also, as shown by an example, for a constructive handling of affects and primitive impulses. The role of situational factors in all this is not well known. It is concluded, however, that outstanding creative accomplishments are more dependent on inner forces than on benevolent outer circumstances.

Smith, G.J.W. (2003). Imagery in a process perspective. In W.G. Quill (Ed.), *Akhter Ahsen's image and maze: Quantum imagery of implicate/explicate orders* (pp. 241–245). The Bronx, N. Y.: Brandon House.

Since many of the data offered in his text, and many of his conclusions, give the indication of agreeing with what is more or less loosely termed process psychology, I would like to try my own hand at drawing a theoretical sketch of how images can be conceptualized within a theory of perception. The sketch agrees basically with what Quill, inspired by Whitehead, takes to be the requirements of a truly psychological theory: that the universe is "understood in terms of individually percipient events occurring over space-time".

Articles in International Journals

Allwood, C.M., Granhag, P.A., & Johansson, M. (2003). Increased realism in eyewitness confidence judgments: The effect of dyadic collaboration. *Applied Cognitive Psychology, 17*, 545–561.

This study investigated to what extent, and under what circumstances, pair collaboration influences the realism in eyewitness confidence in event memory. The participants first saw a short film clip and then confidence rated their answers to questions on its content. A condition (the Individual – Pair condition) where individual effort preceded pair collaboration showed better calibration compared with a condition (the Simple Pair condition) where no individual effort took place. Furthermore, within the Individual – Pair condition, better calibration, and lower overconfidence, were found in the pair phase compared with the individual phase. The eyewitnesses in the Individual – Pair condition made more realistic judgments of the total number of questions answered correctly. In a control experiment no effect on realism in confidence was found when individuals performed the same task twice. The improved realism in the Individual – Pair condition may partly be explained in terms of the increased accuracy and lowered confidence found for such items where the pair members' had given different answers in the individual phase, and by a risky shift effect for such items where they had given the same answer.

Bengtsson, H. (2003). Children's cognitive appraisal of others' distressful and positive experiences. *International Journal of Behavioral Development, 27*, 457–466.

The study presents a theoretical model for understanding how children's cognitive processing of empathy-provoking information is linked to vicariously aroused feelings, and to prosocial and aggressive behavior. Predictions from the model were tested in a cross-sectional sample of second, fourth and sixth graders ($n = 175$) and in a large sample of fourth graders ($n = 124$). Two significant forms of information processing bias were identified: (a) one that enhances the awareness of potential threats towards the self or others, and (b) one that reduces the emotional significance of the stimuli subjected to processing. Children high in empathy and prosocial behavior tended to experience moderate levels of threat and to modulate the emotional significance of empathy-provoking stimuli through cognitive restructuring. Aggressive children tended to use dismissive operations and typically experienced either very low or very high levels of threat. The oldest children differed from the youngest by using more multiple perspective taking and cognitive restructuring.

Björklund, F. (2003). Differences in the justification of choices in moral dilemmas: Effects of gender, time pressure and dilemma seriousness. *Scandinavian Journal of Psychology, 44*, 459–466.

The effects on moral reasoning of gender, time pressure and seriousness of the issue at hand were investigated. In Experiment 1, 72 university students were presented with moral dilemmas and asked what actions the actors involved should take and to justify this. Women were found to be more care-oriented in their reasoning than men, supporting Gilligan's (1982) moral judgment model. Both time pressure and consideration of non-serious as opposed to serious moral dilemmas led to an increase in a justice orientation as compared to a care orientation in moral judgments. In Experiment 2, a similar task was given to 80 persons of mixed age and profession, and the participants' moral reasoning was coded in terms of its being either duty-orientated (duty, obligations, rights) or consequence-oriented (effects on others). Men were found to be more duty-oriented than women, and time pressure to lead to a greater incidence of duty orientation.

Blomé, M., Odenrick, P., & Johansson, C. R. (2003). Computer supported visualization of quality systems developed by network teams. *Applied Ergonomics*, 3 (34), 239–247. [Awarded a prize as best published article in *Applied Ergonomics* in the year 2003].

Bruce, B., Kornfält, R., Radeborg, K., Hansson, K., & Nettelbladt, U. (2003). Identifying children at risk for language impairment: screening of communication at 18 months. *Acta Paediatrica*, 92 (9), 1090–1095.

To investigate the possibility of identifying children at risk for language impairment based on a new screening instrument to assess communication and language skills at 18 months of age. **Methods:** At 18 months, 58 children were assessed with a screening instrument for communication and language consisting of a professional assessment and a parents' questionnaire. Students of speech and language pathology, well trained in child language assessment, carried out the professional assessment, which was based on observations of play behaviour, interaction and expressive and receptive language skills. Of the 58 children, 43 attended a follow-up assessment of language skills at 54 months of age. **Results:** Nine children were considered to be at risk for language impairment at 18 months and 10 children were evaluated as being at risk at 54 months. A significant positive correlation was found between the professional evaluations at 18 months and the language tests at 54 months. Verbal comprehension and pretend play correlated significantly with the results on the language tests. **Conclusion:** A professional screening of communication and language at 18 months of age is worthwhile for predicting problems in language development. The results further show that language comprehension and pretend play rather than expressive skills should be emphasized.

Dackert, I., Jackson, P. R., Brenner, S-O., & Johansson, C. R. (2003). Eliciting and analysing employees' expectations of a merger. *Human Relations*, 56 (1), 705–725.

Elfgrén, C., Gustafson, L., Vestberg, S., Risberg, J., Rosén, I., Passant, U., & Ryding, E. (2003). Subjective experience of memory deficits related to clinical and neuroimaging findings. *Dementia and Geriatric Cognitive Disorders*, 16 (2), 84–92.

The aim of this study was to evaluate cognitive impairment, psychiatric symptoms and cerebral blood flow (CBF) patterns in middle-aged and younger old patients with subjective experience of memory deficits. The study group was heterogeneous with patients fulfilling criteria for dementia as well as patients with mild cognitive impairment (MCI) and with non verified cognitive impairment (non-MCI). Seventy percent of the non-MCI patients reported long lasting experiences of psychosocial stress tentatively causing the memory problems. The MCI patients were subdivided into two groups. MCI type 1 included patients with isolated memory impairment while MCI type 2 included patients with memory impairment together with slight verbal and/or visuospatial impairments. CBF measurements comparing the two MCI groups with the non-MCI group were performed. The MCI type 2 showed reduced cerebral blood flow in the left anterior medial temporal lobe as well as in parts of the posterior cingulate gyrus. The CBF pattern in MCI type 2 concurs with the pathophysiological process of Alzheimer's disease. The results indicate that it is important to make a subdivision of MCI patients regarding the presence of isolated memory impairments or such impairments together with other slight cognitive deficits.

Eklund, M., Bäckström, M., & Hansson, L. (2003). Personality and self-variables: important determinants of subjective quality of life in schizophrenia out-patients. *Acta Psychiatrica Scandinavica*, 108, 134–143.

Objective: To investigate factors determining severely mentally ill patients—self-rated quality of life. The study hypothesized that objective life circumstances, personality, self-variables, and psychopathology would be determinants of quality of life.

Method: A total of 117 individuals with schizophrenia and related disorders were investigated. Structural equation modelling was used to: 1. Investigate if one or more subfactors best described the covariance within each potential determinant and quality of life, 2. Explore the relations between all variables and factors extracted in step 1.

Results: A multi-factorial model indicated that a self-factor and two psychopathology factors worked as mediators of self-rated quality of life, in turn composed of an internal and an external aspect. Personality dimensions and objective life circumstances accounted directly or indirectly for substantial parts of quality of life.

Conclusion: The relative importance of individual characteristics and objective indices was shown. Trait-like properties, such as the self-factor and personality, explained most of the variation in self-rated quality of life.

Johnsson, P., Bäckström, M., Bergh, C., Jönsson, H., Lührs, C., & Alling, C. (2003). Increased S100B in blood after cardiac surgery is a powerful predictor of late mortality. *The Annals of Thoracic Surgery*, 75, 162–168.

Background. Long-term outcome in patients who suffered stroke after undergoing a cardiac operation has been investigated sparingly, but increased long-term mortality has been reported. S100B is a biochemical marker of brain cell ischemia and blood-brain barrier dysfunction. The aim of this investigation was to record the long-term mortality in on-securative patients undergoing cardiac operations and to explore whether increased concentrations of S100B in blood had a predictive value for mortality.

Methods. Prospectively collected clinical variables, including S100B, in 767 patients who survived more than 30 days after a cardiac operation, were analyzed with actuarial survival analysis and 678 patients were analyzed with Cox multiple regression analysis.

Results. Forty-nine patients (6.4%) were dead at follow-up (range, 18 to 42 months); 11.5% (88 of 767 patients) had elevated S100B 2 days after operation (range, 38 to 42 hours). The probability for death at follow-up was 0.239 if the S100B level was more than 0.3 µg/L, and 0.041 if it was less than 0.3 µg/L. The clinical variables independently associated with mortality were preoperative renal failure, reoperative low left ventricular ejection fraction, emergency operation, severe postoperative central nervous system complication, and elevated S100B values, which turned out to be the most powerful predictor.

Conclusions. Even slightly elevated S100B values in blood 2 days after cardiac operation imply a bad prognosis for outcome, and especially so in combination with any central nervous system complication.

Jonsson, A.-C., & Allwood, C.M. (2003). Stability and variability in the realism of confidence judgments over time, content domain, and gender. *Personality and Individual Differences*, 34, 559–574.

This study investigates the influence on the realism of confidence judgments of four different factors, the individual, the knowledge domain (crystallized and fluid intelligence), gender and cognitive style (Need-for-Cognition, NfC). Seventy-nine high-school students

answered questions on word knowledge (WORD) and logical/spatial ability (DTK), both tests were administered on three occasions with two weeks between each trial. After each test question, each individual gave a confidence rating of his or her answer. The results showed some, but not perfect, individual stability. Furthermore, within-subject differences were found between domains (WORD/DTK); the participants showed better calibration and less overconfidence for the WORD-test as compared to the DTK-test. No stable gender differences were found for any of the two tests. Finally, the results show that having high NfC is not associated with better realism in confidence judgments. These results suggest that the realism of confidence judgments is, at least on the distal level, influenced by many different factors.

Lilja, Å., Smith, G., Malmström, P., Salford, L.G., Idvall, I., & Horstman, V. (2003). Psychological profile in patients with stages I and II breast cancer; Associations of psychological profile with tumor biological prognosticators. *Psychological reports*, 92, 1187 – 1198.

We have earlier shown that breast cancer patients with moderately or well differentiated tumors seem to be able to inhibit stress evoked from anger in a successful manner, while those with poorer prognosis do not. We now report a study with an enlarged group of patients, investigating associations between tumor biological factors and psychological profile. 129 patients with Stages I and II breast cancer undergoing adjuvant radiation therapy were interviewed and tested with three projective personality tests assessing attitude to aggression and coping with stress and anxiety. Creative functioning was also tested. Patients with Stage I (smaller) tumors reported a “fighting spirit” attitude toward the disease, but they also showed depressive reaction patterns. Moreover, if the patient could successfully avoid or inhibit the stress from perceiving an aggressive motif in the picture shown in the aggression test, the tumor biological situation was better. Patients who did not inhibit stress reactions on the aggression test and also on the anxiety test had a poorer tumor biological situation. Surprisingly, low speed of tumor cell proliferation (DNA S-phase fraction) correlated with high scores on the creativity test. Successful denial or inhibition of stress evoked by aggression combined with a creative, flexible attitude was associated with a better tumor biological situation.

Londos, E., Passant, U., Brun, A., Rosén, I., Risberg, J., & Gustafson, L. (2003). Regional cerebral blood flow and EEG in clinically diagnosed dementia with Lewy Bodies and Alzheimer’s disease. *Archives of Gerontology and Geriatrics*, 36, 231-245.

This study was undertaken in order to compare regional cerebral blood flow (rCBF) and EEG findings of patients with clinically diagnosed dementia with Lewy bodies (clinDLB) and Alzheimer’s disease (clinAD). Furthermore, within the clinDLB group to compare cases with and without neuropathologically verified Lewy bodies (LBs). When we studied 200 dementia cases in a prospective longitudinal dementia study, 48 had clinDLB and 45 clinAD in retrospective analyses. EEG information was analysed in 34 clinDLB and 28 clinAD patients and cerebral blood flow, measured with the Xe 133 inhalation method, in 26 clinDLB and 25 clinAD. There were no differences in EEG between the clinDLB and clinAD groups or between the cases with and without LBs. The rCBF patterns in the clinDLB and clinAD groups showed similar reductions in the temporoparietal areas. The rCBF in cases with LBs showed heterogeneous pathology. The imaging results in clinDLB and clinAD were strikingly similar. The EEG and rCBF could not differentiate between cases with or without LB. The study illustrates the lack of specific changes of EEG and rCBF in cases with LB pathology.

Muhonen, T., & Torkelson, E. (2003). The Demand-control-support model and health among women and men in similar occupations. *Journal of Behavioral Medicine*, 26 (6), 601–613.

The aim of the study was to investigate the main and the interaction effects of the demand-control-support (DCS) model on women's and men's health in a Swedish telecom company. According to the DCS model, work that is characterized by high demands, low decision latitude, and low support decreases health and well-being. Furthermore, control and support are assumed to interact in protecting against adverse health effects of stress. Earlier studies have failed to consider occupational status and gender simultaneously. Questionnaire data from 134 female and 145 male employees in similar occupations were collected. Correlational analysis supported the main effect hypotheses irrespective of gender. Hierarchical multiple regression analyses indicated that only demands predicted women's health, whereas both demands and lack of social support predicted men's health. However, no interaction effects were found for either women or men. Further studies should probe the relevance of the model while considering gender and occupational status.

Paunovic, N., Lundh, L.G., & Öst, L.G. (2003). Memory bias for faces that are perceived as hostile by crime victims with acute posttraumatic stress disorder (PTSD). *Cognitive Behaviour Therapy*, 32, 203–214.

The present study tested, and found support for, the hypotheses that crime victims with acute post-traumatic stress disorder have: (1) a general memory impairment for faces; and (ii) a memory bias for faces that they perceive as hostile, even when these faces are not arranged to show any hostile face expressions. It is suggested that crime victims with acute post-traumatic stress disorder perform worse on recognition memory due to impaired concentration, and that they allocate their limited attentional resources to the detection of hostility in others in order to avoid being victimized again. This produces a memory bias for perceived hostility even in relatively innocuous everyday interactions with others, which contributes to maintaining the sense of serious current threat that characterizes post-traumatic stress disorder.

Risberg, J., Borjesson, S., & Ljunggren, K. (2003). A new tomographic technique for absolute measurements of white and gray matter blood flow. *Journal of the International Neuropsychological Society*, 9, 323.

The integrity of the white matter is as important as that of the gray matter and white matter pathology has commonly been reported in elderly subjects and in patients with organic dementia. The aim of the present study is to develop and evaluate an improved method for reliable tomographic measurements of absolute white and gray matter blood flow. The new tomographic method (modified Xe-SPECT) is based on an extension of the period of ¹³³Xe inhalation from one to eight minutes followed by 22 instead of four minutes of breathing of ambient air. This gives a markedly enhanced signal from the white matter and better basis for correct quantification of the blood flow. The arrival and clearance of the tracer are recorded by a three head gamma camera system that provides flow maps with a spatial resolution of about one cm. The new method has been evaluated in healthy younger and older (around 70 years) subjects as well as in a group of elderly patients with organic dementia. Our preliminary findings indicate that new and clinically valuable information is obtained by the improved Xe-SPECT method.

Risberg, J., Gustafson, L., Brun, A., Englund, E., & Ryding, E. (2003). Posterior cingulate cortex in familiar Alzheimer's disease: A clinicopathological and brain imaging study. *Journal of the International Neuropsychological Society*, 9, 174.

The degenerative process in Alzheimer's disease (AD) follows a temporal and topographic pattern of early and accentuated involvement of temporal limbic, parietal and posterior cingulate cortices. We have studied a pedigree with four generations suffering from early onset AD linked to a presenilin-1 gene mutation. This family now contains 7 AD cases, neuropathologically confirmed in four cases of three generations. In all four cases the degeneration was most pronounced in the temporoparietal cortex, but also engaged central grey structures such as the claustrum, central thalamic and brain stem nuclei. There was a consistent and severe degeneration in posterior cingulate cortex in contrast to a comparatively spared anterior cingulum. Regional cerebral blood flow (rCBF) was studied repeatedly with 133-xenon inhalation and SPECT methods. The rCBF measurements showed the typical cortical pathology of AD with bilateral decreases in temporoparietal and posterior cingulate cortices, accentuating over time and spreading anteriorly. There was a very good correspondence between clinical, neuroimaging and neuropathological features. Our findings indicate that posterior cingulum is a major locus for functional and structural vulnerability in both familial and sporadic forms of AD, something that might be used for diagnostic purposes together with possible posterior cingulate symptomatology.

Saboonchi, F., & Lundh, L.G. (2003). Perfectionism, anger, somatic health, and positive affect. *Personality and Individual Differences*, 35, 1585–1599.

The associations between perfectionism, anger, somatic health, and positive affect were examined in 184 Swedish adults from a randomly selected population sample. Somewhat unexpectedly, anger was found to be associated with self-oriented perfectionism rather than with socially prescribed perfectionism. With regard to somatic health complaints, both socially prescribed perfectionism and self-oriented perfectionism tended to correlate positively with self-reported somatic complaints, whereas other-oriented perfectionism appeared as a predictor of whether the participants were undergoing medical treatment or not. Finally, the results did not support the notion of self-oriented perfectionism representing a positive, adaptive dimension of perfectionism; on the contrary, this dimension was found to be negatively associated with positive affect.

Salo, I., & Svenson, O. (2003). Mental causal models of incidents communicated in licensee event reports in a process industry. *Cognition, Technology & Work*, 5, 211–217.

The present investigation describes some mental causal models used in incident reports. Some of the models (e.g., single-cause models) are simpler than others (e.g., causal-tree models). The models are also associated with different ways of explaining an incident or accident and with different recommendations for increasing the safety of a system.

In study 1, incident reports from Swedish nuclear power plants known to use human or organisational factors were analysed. The analysis showed that the most frequent model was a simple single-cause model and that the remainder were usually two-step models leading to a reported event. Multiple cause and more complex models were less frequent.

Study 2 analysed all licensee event reports (including those reports not related to human organisational factors) from four reactors assessed by regulators during the year. The results showed that single-cause and two-step accident models were more frequent than more complex models. The analyses also revealed that different detection modes were related to different models.

Torkelson, E., & Muhonen, T. (2003). Coping strategies and health symptoms among women and men in a downsizing organisation. *Psychological Reports, 92*, 899–907.

This study examined how women and men cope with stress during a period of organisational change and how the coping strategies are related to health. Questionnaire responses were obtained from 98 female and male administrators of health care service working in a Swedish governmental County Council during a period of downsizing. In line with earlier studies the results showed women to be more likely than men to endorse the emotion-focused strategies Seeking Social Support and Focus on and Venting of Emotions. Contrary to earlier studies the men did not report using problem-focused strategies more frequently than the women. Additionally, the results from the regression analysis indicated that the reported use of problem-focused strategies did not contribute significantly to the explained variance in health. Instead, the emotion-focused strategy Denial explained a significant proportion of variance in the health problems. No gender differences in reported health problems were found.

Torkelson, E., & Muhonen, T. (2003). Stress and health among women and men in a Swedish telecom company. *European Journal of Work and Organizational Psychology, 12* (2), 171–186.

The aim of the study was to investigate gender differences at managerial and non-managerial level in perceived stress and control and the relationship to health problems. Questionnaires were collected from 281 women and men at both managerial and non-managerial level in a sales department in a large Swedish telecom company. The results showed only minor differences in perceived stress and no differences in perceived control when comparing men and women working at the same level in the organization. Instead the differences in perceived stress and control were found between managers and non-managers. In addition, the study showed both differences and similarities in explaining health symptoms for women and men at the same organizational level. Similarities were found at a non-managerial level but at a managerial level health problems were not predicted by the same factors for women and men. The need to consider organizational level in future studies about stress and gender is addressed.

Westrup, B., Lagercrantz, H., Kleberg A., & Stjernqvist, K. (2003). Evaluating neonatal developmental care. *Journal of Pediatric, 142* (5), 591–592.

Wikström, J., Lundh, L.G., & Westerlund, J. (2003). Stroop effects for masked threat words: Preattentive bias or selective awareness? *Cognition and Emotion, 17*, 827–842.

The single-trial emotional Stroop effect for masked threat words, and its association with anxiety, anger, and depression was studied in a group of men ($n = 24$) and women ($n = 24$) while controlling for possible differential thresholds for threat words vs. neutral words. Stroop interference for masked threat words was found to correlate with trait anxiety, and the effect could not be explained by any differences in thresholds due to valence, neither at a subjective (conscious identification task) nor at an objective (lexical decision task) level of awareness. Jacoby's exclusion task was explored as an alternative measure of conscious awareness, and the results corroborated the conclusion that the Stroop effect for masked threat words was the result of preattentive processes. Unexpectedly, however, the correlation between Stroop interference for masked threat words and trait anxiety was found only among the men.

Articles in Nordic Journals

Allwood, C.M. (2003). De inhemska psykologierna: Ett exempel på forskningens kulturella och sociala beroende. *Vest Tidskrift för Vetenskapsstudier*, 16 (3/4), 65 – 79.

In this article the initiation, development and nature of the indigenous psychologies are characterized. The psychologies in question are those versions of psychology that are, mostly non-western, critical reactions to mainstream psychological research. The heterogeneous and complex nature of the indigeneous psychologies are high-lighted. The enterprise of building a (psychological) science on the concept of cultural identity is discussed and problematized as is the concept of culture.

Muhonen, T., & Torkelson, E. (2003). Genusperspektiv på arbetsrelaterad stress och coping. *Svensk Rehabilitering*, 1, 16–18.

Smith, G.J.W. (2003). Vad menas med personlighet? *Nordisk psykologi*, 55, 23–30.

The concept of personality is scrutinized as used both in common parlance and in more sophisticated frames of reference. Current multidimensional models are criticized for their reliance on self-descriptive questionnaires and for their lack of a hierarchical dimension, differentiating more or less decisive determinants of behavior. A possible psychoanalytic model is viewed with more benevolence but rejected in the end because of associationistic remnants still dominating its meta-theory. Instead a superordinate morel of personality is offered, based on process as its central ingredient.

Svenson, O., & Salo, I. (2003). Om mänskliga beslutsprocesser: Beslutskonflikt, en fråga om värderingar. *Nucleus*, 1, 26–31. Statens kärnkraftinspektion (SKI).

How we initially formulate our decision problems may have a strong influence on our decisions and we often take the presented problems and alternatives for granted. When facing difficult decisions it is important to consider things as: "am I considering the right decision", "are there other decisions with other alternatives that are more relevant", etc. Also when considering a previously made decision, the decision maker ought to question the reasons behind her/his post decision evaluations. In this article decision making is modeled as a process where one decision alternative gradually become differentiated from other alternatives to a degree that makes a decision possible. However, the decision processes do not stop with the decision. The pre-decision phase is followed by a post decision phase characterized by forces working in favor of the previously chosen alternative. Themes with importance for practical decision-making such as selection of alternatives, evaluations, and decision conflicts, are discussed in the article.

Technical Reports

Allwood, C.M. (2003). The selection of the Dissertation Problem for Ph.D. theses in Psychology and Social Anthropology/Ethnology from the Graduate Students' Perspective. *Lund Psychological Reports*, 4 (1). Lund, Sweden: Lund University, Department of Psychology.

In this study doctoral students in psychology and social anthropology/ethnology were interviewed as to their selection of research problem for their Ph.D. thesis. From the perspective of activity theory it is suggested that the research problem can profitably be seen as the object of activity in research. Graduate students' selection of a research problem was analyzed as a process occurring over time, and the results showed that the selection process was characterized by a mutual adaptation of interests between the Ph.D. student and the research community. Different factors appeared to have influenced the selection process at different points in the process, 'external factors' having had a greater influence on the choice process in its early stages, especially for the social anthropologists. In the present study, compared with the anthropologists, the psychologists' selection processes were more clearly directed by the discipline, for example through the availability of research funds. The results suggest that the Ph.D. student often arrived at a research problem by acting opportunistically in an activity system that was partly unknown to them.

Andersson, A. L., Dahlström, B., & Ekvall, G. (2003). Managerial type as related to percept-genetic signs of anxiety and defense in the Defense Mechanism Technique modified (DMTm). *Lund Psychological Reports*, 4 (3). Lund, Sweden: Lund University, Department of Psychology.

The study considers relations in a group of 95 managers, 41 women and 54 men, between managerial type and signs of anxiety and defense in the Defense Mechanism Technique modified (DMTm). Eight managerial types were distinguished, based on ratings of the managers by their subordinates in terms of the Ekvall and Arvonen (1991) leadership style dimensions of employee-centeredness, change-centeredness and production-centeredness. As expected, those classified as "bureaucrats" differed from the other managerial types in less often showing affect anxiety, identity anxiety and separation anxiety. Other findings related to predictions made were that a marked degree of introaggression 1 was typical of "idea-makers", marked repression 3 typical of "idea-makers" and "gardeners", and marked denial through reversal IV typical of "gardeners". Various defenses were also found to be more common in the managers studied here than in a group of university teachers investigated earlier. The Andersson (1991) model of the mind served as a tool for interpreting the results.

Bierschenk, B., & Bierschenk, I. (2003). The manifestation of symmetry between the emergence of consciousness and the development of competence. *Cognitive Science Research*, No. 86. Lund University.

The article presents an experiment in which students, classified according to high and low analytical performance, were given a reading and text production test to determine their sensibility to the structure of an Icelandic saga. This material was used because of its extreme simplicity on the textual surface level, a property suited for studying structure as something beyond the surface. The hypothesis tested is whether the structure mediated through the produced texts pertains to a descriptive dimension, implying analytic sensibility or to a reflective dimension, indicating synthetic sensibility. In advancing the bio-kinetic hypothesis that the complexity and non-linear dynamics of a produced discourse can be approached on the basis of the Agent-action-Objective (AaO) paradigm, it is shown that the

derived [AaO] units rotate. It is demonstrated that a system of [AaO] units has the capacity to assemble textual elements that fit into the structure of a particular text. Discourse (A) has been shown to produce a state space in which the terminus of the global state attractor communicates an inevitable course of events. The other (B) communicates boldness as final outcome. Evidently, significant differences in emergent consciousness are crucially dependent on structural sensibility and the developed learning strategies.

Bierschenk, B., & Bierschenk, I. (2003). Individual growth in competence. *Cognitive Science Research*, No. 87. Lund University.

This article presents the second study in a series that has been designed to manifest the emergence of consciousness and to measure developed competence. Its major aim has been to demonstrate that an invariant formulation of the Agent-action-Objective model and an analysis of its A-O kinematics have the capacity to re-produce contour similarity over time. Within the studied evolutionary-developmental context, the bio-kinematics of the discovered AaO-mechanism has governed the synthesising of information. It has been possible to demonstrate variations in growth as changes in complexity. When the two participating students are compared, differences in their perspectivation, and consequently in their attractor spaces, become apparent. Based on coordinated structural invariants, it has been possible to show that the convoluted spaces of the student, who has followed the analytic-descriptive approach, is concerned with the concrete level of the tested story. On the other hand, the student, who is following a synthetic-reflective strategy, seems to concentrate mainly on the symbolic level. Thus, from the developmental point of view, it has been possible to demonstrate that the AaO-mechanism is tracing embodied growth, which becomes manifest in the differences of the students' ability to adapt to the main idea of the given story.

Bierschenk, B., & Bierschenk, I. (2003). Evolution of growth in the development of competence. *Cognitive Science Research*, No. 88. Lund University.

The article presents the third study of a series that has been designed to manifest consciousness and to measure developed competence. The emphasis of the main hypothesis has been put on the student's ability to adapt to the main idea of a given story and to express his comprehension verbally. In what way the two students of the previous two experiments have been able to accomplish the experimental task, is reflected in the state attractors of the produced fitness landscapes. The student, who has continued to follow the analytic-descriptive approach, has focussed on the conditions relating to a critic of empiricism. Since it has been shown that the process of naming the resulting state attractors provides a sound theoretical basis, it can be concluded that the student has not been conscious of this purpose and consequently been unable to abstract the criticism of empiricism. In contrast, the other student has continued to follow the synthetic-reflective approach. The produced narrative has made evident that this student has been able to abstract the criticism of idealism. It follows that the proper outcome is "rationalism", which is validating that the degree of developed competence can be approached in a direct and obvious manner.

Bierschenk, B. (2003). Embodiment of consciousness. *Cognitive Science Research*, No. 89. Lund University.

The present article is based on the premise that mind is an emergent property of the processes that produce consciousness. Any scientific understanding must necessarily consider the need of an explanation of consciousness. Instead, the non-sense property of traditional scientific modelling appears to hide the phenomenon. In contrast, the explored hypothesis is based on the assumption that the meaningfulness of natural language is the carrier of consciousness. It is assumed that the structural relations, forming the basis of discovery, are

covered by textual surface properties, but are approachable with the introduced novelties of the AaO-model. Further, it is demonstrated that the method has the capacity to reproduce the spaces of a particular verbal statement and to establish its shapes. It has been of crucial importance that a test of the basic experimental space-hypothesis builds on an uncovering of the order parameters that are constraining the production space of a traditional model builder. Finally, it is shown that the presented approach has this capacity and that experimentation with a single statement can be based on the manifestation of the corresponding states of knowing. The significance of the experiment lies in the determination of the involved state attractors of intention and orientation.

Björklund, F., Bäckström, M., Hansson, S.B., Rohner, J.-C., & Westerlundh, B. (2003).

Attitudes to gender, age and sexual preferences in a Swedish setting : Results with the Implicit association test. *Lund Psychological Reports*, 4 (2). Lund, Sweden: Lund University, Department of Psychology.

Brenner, S.-O., Nielsen, K., Pryce, J., Unkel, S., & Weikert, C. (2003). *Change processes in industry. Report on a Knowledge Foundation (KKS) Platform at Kristianstad University*. Work Science Research Bulletin, 6:2003. Kristianstad, Sweden: WHOLE. ISSN 1650-0806.

Kemdal, A.B. (2003). Demokratirelevant forskning inom ämnet psykologi. *Svensk forskning om demokrati, offentlig förvaltning och folkrörelser. En kartläggning av forskningen under perioden 1990–2003 utförd av Vetenskapsrådet på regeringens uppdrag* (pp. 106–119). Stockholm: Vetenskapsrådet.

Inom psykologins ämnesområde finns en växande tendens till att ett nytt forskningsfält kring *politisk psykologi* håller på att etableras i kontakt med den internationella forskningen. Informella nätverk finns även i Sverige. Av relevans för demokratibegreppet förekommer i Sverige forskning inom socialpsykologi, arbets- och organisationspsykologi, rättspsykologi och kognitiv psykologi. Forskningen kan relateras till många olika aspekter och nivåer av demokrati, till exempel valdemokrati, deltagardemokrati och samtalsdemokrati. Forskning är också kopplad till olika demokratiska värden eller dygder, till exempel kritisk rationalism, solidaritet och delaktighet. En del av forskningen handlar om praktiska eller mänskliga förutsättningar för demokrati. Den förekommer inte sällan i anslutning till tvärvetenskapliga samarbetsprojekt.

Larsson, M., & Högberg, B. (Eds.) (2003). *Farvatten och blindskär i barnhabiliteringen*.

Examinationspaper från en påbyggandsutbildning. FoU-rapport. Lund: Forsknings- & utvecklingsenheten, Habilitering & Hjälpmedel, Region Skåne.

Rapporten bygger på examinationspaper från en påbyggandsutbildning för 29 praktiker inom Barn- och ungdomshabiliteringen i Sverige, som genomfördes under 2001–2002 av en nationell arbetsgrupp från aktörer inom barnhabiliteringsfältet. Som examination på kursen skrev deltagarna en reflektion över en aspekt av sin praktiska vardag, där denna problematiserades i termer av sin relationella, sociala, organisatoriska och samhälleliga kontext. Elva av dessa papers vidareutvecklades och samlades av redaktörerna i denna skrift. Tillsammans ger de en beskrivning av några av de huvudsakliga teman som professionella inom denna multidisciplinära verksamhet har att tampas med i sin vardag. Redaktörerna bidrar med en inledning som ger ett sammanhang och en ram, och en avslutande diskussion om huvudteman i skrifterna.

Nettelbladt, U., Radeborg, K., & Sahlén, B. (2003). *Svenska CCC. Enkät för bedömning av språklig och kommunikativ förmåga hos skolbarn*. Lund, Sweden: Lund University, Institutionen för logopedi och foniatri och audiologi.

Nielsen, K., Brenner, S.-O., Unkel, S., & Weikert, C. (2003). *Work and well-being in Skåne: A norm study exploring working conditions and employee well-being in Skåne*. Work Science Research Bulletin, 5:2003. Kristianstad, Sweden: WHOLE. ISSN 1650-0806.

Pryce, J., Brenner, S.-O., Cox, T., Griffiths, A.J., & Weikert, C. (2003). *Using repertory grid as a technique for organisational diagnosis*. Work Science Research Bulletin, 1:2003. Kristianstad, Sweden: WHOLE. ISSN 1650-0806.

Conference Presentations

Allwood, C.M. (2003). Indigenized psychologies: development and some problems. Paper presented at the conference *History of Social Science with special focus on Psychology Annual Meeting of the Swedish Association of the History of Psychology, 18–19 June, 2003*, College of communication, Campus Helsingborg, Lunds universitet

Allwood, C.M., Granhag, P.A. & Ask, K. (2003). The realism of confidence judgments of statements in the Cognitive and Standard Interviews. Paper presented at *Psychology & Law International Interdisciplinary Conference 2003, Edinburgh, Scotland, 7–12 July, 2003*. (In Book of Abstracts p. 43).

The Cognitive Interview (CI) is a well-researched interview method and the research results show that CI, compared with more conventional interview styles, enhances witnesses' memory. However, not much research has been done on the question of how CI affects the realism of eyewitnesses' judgments of confidence in the veracity of their interview statements. In a previous study (Granhag, Jonsson & Allwood, *Psychology, Crime & Law*, in press) we investigated the realism of witnesses' confidence judgments of their own answers to two-alternative questions. These questions were produced by the researchers to test the witnesses' retention of a filmed kidnapping. Our results showed that, in this context, the CI does not appear to affect the realism in witnesses' confidence, and not to inflate confidence in erroneous recall, compared to a Standard Interview (SI). In the present study our ambition was to conduct an ecologically more valid study of the realism of witnesses' confidence judgments. Again, the CI was compared with a SI. The witnesses ($n=58$) returned about two weeks after having been interviewed about their memories of the filmed kidnapping and were, at return, presented with transcribed versions of parts of their interview statements. These were confidence judged by the witnesses. The witnesses also gave an overall judgment of how many of all answered questions they had answered correctly (i.e., a frequency judgment). In our presentation, results will be presented regarding the realism of the witnesses' confidence and frequency judgments in this, compared to our previous research, more ecologically valid study.

Allwood, C.M., & Johansson, M. (2003). Realism in actor's and observers confidence judgments: The effect of considering the actor's arguments and/or confidence. Paper presented at *SPUDM19, Research Conference on Subjective Probability, Utility and Decision Making, Swiss Federal institute of Technology, Center for Economic research, ETH Zentrum, Zürich, Schweiz, 27–29 August, 2003*. Zürich, Schweiz.

The present study investigated the difference between Actors' and Observers' realism in confidence and frequency judgments of general knowledge assertions, and how types of information given to the Observers about the Actors' choice of answers affect that difference in the realism in confidence judgments. In general, compared with the Actors, the Observers showed higher accuracy and higher confidence. When no additional information was given, the Observers showed lower overconfidence than the Actors did. However, this difference did not remain when the Observers were provided with the Actors' conceived best argument for, and/or rated confidence in, the Actors' choice. In addition, Observers provided only with the Actors' arguments showed poorer calibration and higher confidence than those provided with arguments and confidence judgments and those provided with confidence judgments only. These results are discussed in relation to previous calibration research, the unpacking hypo-thesis of Support theory and a version of the information richness hypothesis. The results also showed that the frequency judgment of one's own overall accuracy was lower and less realistic than that of the other's accuracy.

Arvidsson, M., Johansson, C. R., Ek, Å., & Akselsson, R. (2003). Team climate and safety culture in air traffic control. *Proceedings of the XVth Triennial Congress of the International Ergonomics Association, Vol. 5, August 24–29, 2003, Seoul, Korea*, (pp. 368–371). Seoul: Ergonomic Society of Korea.

Arvidsson, M., & Johansson, C. R. (2003). Team climate and situational leadership in air traffic control. In S. Giga, P. Flaxman, J. Houdmont & M. Ertel (Eds.), *Occupational Health Psychology: Flexibility, Quality of Working Life and Health. Proceedings of the Fifth European Conference of the European Academy of Occupational Health Psychology, Berlin, 20–21 November, 2003* (pp. 11–15). Nottingham: The Institute of Work Health & Organisations, University of Nottingham.

Broman, J.E., & Lundh, L.G. (2003). Vicious cycles of sleeplessness: A new scale for insomnia. *Sleep, 26*, A298.

Worries about sleep, negative expectations of sleep, and frustration about sleep loss are assumed to play an important role in the development of insomnia. Eight items designed to measure aspects of vicious cycles of sleeplessness (VCS), on which insomnia patients and controls were found to differ in an earlier study, were used to form a new VCS scale. A sleep questionnaire including the VCS scale was sent to a randomly selected sample of 1400 subjects, aged 20–64 years. The response rate was 78.0%. The scale showed a one-factor structure, and had an adequate internal consistency. Women scored higher than men. Scores were significantly higher in a group of 263 subjects who complained of insomnia than in the others. The scores of subjects complaining of insomnia were fairly normally distributed. It is concluded that the VCS scale shows adequate reliability and is a possible tool for characterizing patients with insomnia. The next step is to administer the scale to a clinical sample, and also to let patients fill out the scale before and after treatment.

Dahl, M., Johansson, M., & Allwood, C.M. (2003). The effect of emotional valence on recollective experience and confidence judgments. Poster presented at *Psychology & Law International Interdisciplinary Conference 2003, Edinburgh, Scotland, 7–12 July, 2003*. (In Book of Abstracts p. 110).

The study investigated the effect of positive and negative emotional valence (I.A.P.S pictures) on recollective experience, using the remember-know paradigm (Tulving, 1985), and confidence judgements. The negative valenced pictures were hypothesised elicit the recollective experience to a larger extent and to entail a higher degree of confidence in the correctness of memory responses than positive valenced pictures. In the acquisition phase of all three experiments four pictures were presented simultaneously, one valenced picture (either positive or negative) and three neutral pictures. Next, in the test phase a recognition test of the valenced pictures followed. Depending on the experiment, the participants made new/old responses and either remember/know judgements of old responses or confidence judgements of the correctness of their new/old responses. The results of Experiment 1 and 2 showed that, compared with "know" responses, the frequency of "remember" responses was significantly higher for negative than for positive pictures. No differences in recognition memory performance were found between negative and positive pictures. The results of Experiment 3 showed that negative pictures was associated with slightly higher accuracy and significantly higher confidence judgements than positive pictures, and that realism in confidence judgements did not differ between the valence types. These results suggest that the emotional valence of witnessed events affect the phenomenological quality and degree of confidence of memorial testimony.

Ek, Å., Arvidsson, M., Akselsson, R., Johansson, C. R. & Josefsson, B. (2003). Safety culture in air traffic management: Air traffic control. *Conference proceedings of the 5th USA/Europe ATM 2003 R&D Seminar, June 23–27, Budapest, Hungary.*

Ek, Å., Akselsson, R., Arvidsson, M., & Johansson, C. R. (2003). Safety culture and organizational climate in air traffic control. *Proceedings of the XVth Triennial Congress of the International Ergonomics Association, Vol. 5, August 24–29, 2003, Seoul, Korea,* (pp. 364–367). Seoul: Ergonomic Society of Korea.

Jönsson, J., & Johansson, C. R. (2003). Safety and communication culture, incident reporting, and incident awareness and knowledge in an airline. *Proceedings of the XVth Triennial Congress of the International Ergonomics Association, Vol. 5, August 24–29, 2003, Seoul, Korea,* (pp. 357–360). Seoul: Ergonomic Society of Korea.

Jern, S. (2003). Vad vill gruppforskningen uppnå? Reflektioner kring ”önskvärda tillstånd”. [What does group research aim at achieving ? Reflections on ”desirable states”]. In S. Hovmark, P. Bergman, B. Edlund, & U. Stoetzer (Eds.). *The Group as a Paradox. Proceedings from a conference on group and social psychology—GRASP, Stockholm University, May 2002* (pp. 7–15). Stockholm: Stockholm University, Department of Psychology .

The aim of the paper is to open a discussion on explicit and implicit values in group research. Proceedings from two national and Nordic conferences on group and social psychology (1998 and 2000) were reviewed and 27 contributions analysed with a simple text critical method. In 13 relevant contributions 24 categories of value based goal statements, as e.g. ’efficiency’, ’work’, ’development and change’, were identified. In the main, underlying values were not discussed or critically examined by authors. Possible differences in values between senior researchers and research students were identified and discussed.

Lundh, L.G. (2003). We need implicit measures of alexithymia. In J. Denollet, I Nyklicek, & A. Vingerhoets. *The Third International Conference on the (Non)Expression of Emotions in Health and Disease.* Tilburg, the Netherlands, October, 19–21, 2003 (p. 101).

Much psychological research makes use of explicit measures (e.g., questionnaires), where the participants are asked to report about themselves. Such measures at best index various aspects of the person’s conscious self-concept. However, there are also implicit measures that are designed to tap similar constructs in a more indirect way (e.g., the Implicit Association Test and the Thematic Apperception Test). In a number of different areas (e.g. memory, motivation, attitudes), explicit and implicit measures of psychological constructs have been found (a) to show at best very weak intercorrelations, and (b) to correlate with different variables, indicating that they measure different things. Although there is less research on explicit vs. implicit measures of alexithymia, the same kind of dissociation can be seen also in this area. It is argued that self-assessment measures like the Toronto Alexithymia Scale (especially Factors 1 and 2 of the TAS-20) are at best valid measures of people’s meta-emotional self-efficacy, that is, an aspect of their conscious self-concept. Relying on the TAS-20 as the measure of alexithymia is therefore likely to be grossly misleading. It is suggested that more effort should be devoted to the development and testing of various kinds of implicit measures of alexithymia.

Lundh, L.G. Changes in the unconscious processing of emotional information in panic patients after cognitive-behaviour therapy. *The Third International Conference on the (Non)Expression of Emotions in Health and Disease*. Tilburg, the Netherlands, October, 19–21, 2003 (p. 127).

Patients with anxiety disorders automatically attend to threat-related stimuli. This is seen not only in an attentional bias for consciously available stimuli, but also in effects of subliminally exposed (i.e., masked) stimuli. The effects of treatment on cognitive biases have been examined in a variety of anxiety disorders, and the results commonly indicate that attentional biases disappear as a function of treatment. There is a lack of knowledge, however, about if this also occurs with subliminally exposed emotional stimuli. In the present study, attentional biases for threat-related information disappear were investigated in patients who underwent cognitive-behavioural treatment for panic disorder with agoraphobia. An emotional Stroop task with three types of words (panic-related words, interpersonal threat words, and neutral words) and two exposure conditions (subliminal, supraliminal) was administered to 23 patients with panic disorder at three occasions: before cognitive-behaviour treatment, after treatment, and at 1-year follow-up. The patients showed no effects immediately after treatment. At one-year follow-up, however, they showed a complete annihilation of Stroop interference for subliminal threat words. This suggests the possibility that biases in the automatic, unconscious processing of emotional information takes time to change, and that such change occurs after rather than during cognitive-behavioural treatment.

Lundh, L.G., & Broman, J.E. (2003). Alexithymia in sleep disorder patients. In J. Denollet, In Nyklicek, & A. Vingerhoets. *The Third International Conference on the (Non) Expression of Emotions in Health and Disease*. Tilburg, the Netherlands, October 19–21, 2003 (p. 100).

The purpose of the present study was to study associations between self-assessed alexithymia and sleep disorders. Five groups of patients with different sleep disorders were compared on the Toronto Alexithymia Scale (TAS-20). The prevalence of alexithymia, as defined by the cut-off score of TAS >60 was 17% among all patients, but differed among the groups: Primary Insomnia (PRI, n = 119) 6.7%, Insomnia related to Another Mental Disorder (IMD, n = 98) 20.4%, Insomnia due to a General Medical Condition (IGM, n = 38) 8.1%, Obstructive Sleep Apnea Syndrome (OSAS, n = 40) 17.5%, and Periodic Limb Movements during Sleep (PLMS, n = 42) 14.3%. The results diverged with regard to the three TAS Factors. On Factor 1 (Difficulties Identifying Feelings) the IMD group scored significantly higher than all the other groups. On Factor 2 (Difficulties Describing Feelings) the IMD and OSAS groups scored higher than the PRI and IGM groups. And finally, on Factor 3 (Externally Oriented Thinking), the OSAS and PLMS groups scored higher than the insomnia groups.

Lundsten, J., & Johansson, C. R. (2003). A phenomenological study of motivation among people with client-related and non client-related jobs. In S. Giga, P. Flaxman, J. Houdmont & M. Ertel (Eds.), *Occupational Health Psychology: Flexibility, Quality of Working Life and Health. Proceedings of the Fifth European Conference of the European Academy of Occupational Health Psychology, Berlin, November 20–21, 2003* (pp. 147–150). Nottingham: The Institute of Work Health & Organisations, University of Nottingham.

Lundsten, J., & Johansson, C. R. (2003). Motivation among people with client-related jobs, with respect to organizational position and age. In S. Giga, P. Flaxman, J. Houdmont & M. Ertel (Eds.), *Occupational Health Psychology: Flexibility, Quality of Working Life and*

Health. Proceedings of the Fifth European Conference of the European Academy of Occupational Health Psychology, Berlin, November 20–21, 2003 (pp. 151–154). Nottingham: The Institute of Work Health & Organisations, University of Nottingham.

Muhonen, T., & Torkelson, E. (2003). Coping with stress at work: An interview study in a downsizing organization. *Proceedings of the Fifth European Conference of the European Academy of Occupational Health Psychology, Berlin, Germany, November 24–27, 2003*.

Torkelson, E., & Muhonen, T. (2003). Stress at work: a qualitative study among women and men in a Swedish telecom company. *Proceedings of Gender and Power in the New Europe, the 5th European Feminist Research Conference, August 20–24, 2003*, Lund University, Sweden.

Rasulzada, F., Dackert, I., & Johansson, C. R. (2003). Employee wellbeing in relation to organizational climate and leadership style. In S. Giga, P. Flaxman, J. Houdmont & M. Ertel (Eds.), *Occupational Health Psychology: Flexibility, Quality of Working Life and Health. Proceedings of the Fifth European Conference of the European Academy of Occupational Health Psychology, Berlin, November 20–21, 2003* (pp. 220–224). Nottingham: The Institute of Work Health & Organisations, University of Nottingham.

Sages, Roger. (2003). La Discrimination Implicite: une perspective suédoise. In *Contacts de cultures, cultures de contacts, IX Congrès International de l'ARIC, 29 June – 4 July, 2003*. ARIC, Amiens.

L'approche phénoménologique induit le chercheur vers une collecte de données aussi libre que possible, évitant toute construction de sens de la part du chercheur tant au niveau des questions que des réponses. Il s'agit d'obtenir, de la part du sujet invité à une participation active à la recherche, un texte exprimé d'une façon aussi libre et spontanée que possible, dévoilant ses vécus de conscience sur la problématique de la recherche.

Dans le but d'obtenir une vision des représentations et processus de discrimination implicite dans les relations interculturelles quotidiennes ainsi que dans les situations d'embauche, une collecte de données sur des échantillons très variés et très larges sera effectuée en Suède. Les résultats sont analysés par les deux logiciels Minerva et Sphinx Lexica.

Sages, Roger. (2003). The Meaning of Europe, a phenomenological study. In *Cultures in Interaction, International Association for Cross-Cultural Psychology, Sixth European Regional Congress*.

How do individuals feel and think themselves on themselves? Our actual multicultural world offer us a unique, natural experiment for a detailed study of this problematic. We will use the Meaning Constitution Analysis methodology for planification of research as it is:

1. Oriented towards meaning, as it is constituted in/by the individual in his daily life activities;
2. Oriented towards a gathering of information about it in a way that distort as little as possible its continuous process of meaning constitution in the individual. Data analysis will be done with the use of the softwares Minerva and Sphinx Lexica. The study is conducted in a Swedish population at a moment where the EU is radically changing and enlarging.

Stjernqvist, K. (2003). Assessment of cognitive development, behaviour and Quality of Life with Vagus nerve Stimulation in children with Epilepsy. *European Association of Child Neurology, October 25–27, 2003*. Taromina, Italy.

Sunding, L., Ekholm, A., Johansson, C. R., & Odenrick, P. (2003). Reframing the problems in the building sector. *CIB W65 Conference, October 2003, Singapore*.

Sunesson, K., Wernemyr, C., Westerdahl, B., Roupé, M., & Allwood, C.M. (2003). Usability and perception of an architectural VR-model of an office building. In D. de Waard, K.A. Brookhuis, S.M. Breker, & W.B. Verwey (Eds.), *Human Factors in the Age of Virtual Reality* (pp. 161 – 172). Maastricht, the Netherlands: Shaker Publishing.

It is important that the costs and effort in making a Virtual Reality (VR) model support its purpose in the specific context in which it is used. The present research aims to clarify which properties in VR-models contribute to improved experience of aspects of the model that are relevant in the use context and which therefore improve the models' usability in the social processes of which they are part. The study explores the practical usability of a VR-model, showing a planned office building in Göteborg, Sweden. The model shows the exterior and interior of the building. Three different office versions were included. The model was shown to employees who were going to have their future offices in the house. The context was a decision-making process, where it would be decided which type of future office they would work in. After viewing the model, the employees filled in a questionnaire concerning their experience of the model's usability in the decision-making process concerning what type office they would work in. In spite of the fact that it did not provide, for example, maximum immersion and control, the results based on data from 99 employees showed that most of the respondents felt that the VR-model was a useful aid in the decision-making process concerning their future workplace. Future research should be conducted on which properties characterize cost-effective, high-usability, VR-models in different specific use contexts.

Wernemyr, C., Westerdahl, B., Roupé, M., Sunesson, K., & Allwood, C.M. (2003). Users' experience of a virtual reality architectural model compared with users' experience of the completed building. In Bártolo, P.J., G. Mitchell, A Mateus, F. Batista, J. Vasco, M. Correia, N. André, P. Lima, P. Novo, P. Custódio och P. Martinho (Eds.), *Advanced research in virtual and rapid prototyping* (pp. 363 – 370). Proceedings of the 1st international conference on advanced research in virtual and rapid prototyping. Leira, Portugal: Escola Superior de Tecnologia e Gestão de Leira.

This research investigated how the employees of a company experienced a VR-model of an office building that was to be their future work place and how that VR-experience compared with the employees' experience of the completed building. About two years after the VR-showings the building was completed and the staff had moved into the building. The results for the employees who saw the VR-presentation for the Semantic environment description scale (SMB) comparing the experiences of the VR-model with the experiences of the completed real building suggested that the experience of the VR-model gave a fairly accurate representation of the experience of the real building. However, the reactions to the VR-model were more appreciative after the VR-show as compared with when the VR-model was compared with the real building.

Dissertations

Ahltorp, B. (2003). *Leadership, a style-oriented approach. Team builders, innovators, networkers and conductors*. Unpublished doctoral dissertation, Lund University.

The purpose of this study is threefold. Firstly it is to explore a style-oriented model for leadership which has proven to be valid empirically. Secondly the purpose is to study if there are any differences between the way managers view themselves compared to how their co-workers view them. Thirdly, the purpose of the study is to explore if the so called classical two-factor model of leadership, established in the forties by the Ohio School and Michigan researchers, is still valid. The two-factor model, consideration and structuring, has in later years been extended to a three-factor model after the work of Ekvall et al, who found that change orientation is a third factor to account for when it comes to describing leadership.

The methods used are questionnaires and interviews as pre-studies and the construction of a 360°-instrument, FLIC (Feed back for Leaders in Co-operation). FLIC was constructed to measure leadership- and communication-styles within the frame of the style-oriented model. It consists of 68 items which form 6 leadership-styles and 3 communication-styles. This study is based on the analysis of the self ratings of 572 managers and their 3722 employees, on average almost 7 co-workers per manager. FLIC was distributed to the managers in different training programs in Sweden during the years of 1996 to 2000. The exploration of the material was performed using a data reduction method, factor analysis.

The results show that the style-oriented model is valid and reliable. The results also show that the FLIC instrument is consistent and reliable. The operationally defined and described leadership-styles are valid and useful. The results also show that the ways managers describe themselves are very consistent with the ways their co-workers see them. Exceptions are that managers tend to overestimate their openness, their empathy, their ability to listen and their readiness to give praise and credit.

Results also show that six factors account for a large amount of the variance in the material. These six factors form two groups: three are production-oriented and three are employee-oriented. The production-oriented factors are structuring (common to the classical factor), change-orientation and networking, which is a new factor. Networking means one-way communication, spending time on external events, getting to know people outside the office, acting as an ambassador and salesmen while building new relationships, all with the purpose to create new business opportunities. The three factors that are employee-oriented are labelled critical communication, empathy and praise. These three factors together form what can be described as 'consideration' or teambuilding.

A final conclusion is that from the six factors found, a tentative four-factor model to describe leadership behaviour can be presented: The confirmation of the already found three factors to account for leadership and the finding of a fourth factor: networking. The four factors can be described as four roles which are more or less obvious for different leaders: The team builder, the innovator, the networker and the conductor.

Hoff, E. (2003). *The creative world of middle childhood: Creativity, imagination, and self-image from qualitative and quantitative perspectives*. Unpublished doctoral dissertation, Lund University.

Four studies on creativity, imagination and self-image in 10-year-old children constitute the basis of this dissertation. A total of 179 participants were involved. Study I investigated two new creativity measurements comprising The Drawing Task, which had its starting-point in a brief story, and The Activity Questionnaire, which included questions about the children's spare time activities. The hypothesis was that there would be a relationship between these tasks and an established test of creativity, The Unusual Uses Test. A qualitative perspective was also undertaken through the use of interviews. Study II aimed at describing aspects of the creative personality in middle childhood and at investigating the relationship between different tests of creativity. In addition to the tests mentioned above, The Creative Functioning Test and the self-image inventory How I Think I Am were also used. Study III scrutinized the relation between creativity, self-image and imaginary companions, and Study IV, using qualitative interviews, analyzed the forms and functions of imaginary companions.

As a whole, this project has contributed to the study of creativity in three ways. First, it has put a more general emphasis on the creativity of middle childhood. Creativity in middle childhood has received little attention in the literature. This project showed that children in middle childhood could be very imaginative and innovative. To learn more about creativity in this age group, creativity was related to self-image estimations and the occurrence of imaginary companions and drawing motifs. Among those children whose self-image was tested, it was difficult to discern one creative personality profile. Children who were well adjusted and accepted among peers as well as those who were maladapted and felt rejected by others were found among the highly creative participants. A relation between creativity and having imaginary companions was found. There was also a link between more elaborated companions and higher levels of creativity. Furthermore, children with imaginary companions had less positive self-images.

Second, the complexity of the creativity concept has been demonstrated. This was accomplished by relating different ways of measuring creativity to one another. These results showed that different measurements were moderately related and may to some extent capture different aspects of creativity.

Third, through qualitative interviews with children, creativity was embraced from a new perspective. The children were given a voice as regards their sources of inspiration, their notions of reality and imagination as well as the forms and functions of their imaginary companions. The invention of imaginary companions was scrutinized as an example of a natural creative phenomenon, in which children demonstrated great variation, elaboration and originality. The imaginary companions were found to provide important assistance to children in their identity formation process.

A fourth aim of the dissertation was to discern possible gender differences. However, the four studies demonstrated very few such differences.

I. Hoff, E. (2000). A Painter's Mystery: A Story as a Starting-Point to Study Creativity in 10-Year-Old Children. Published in Swedish in *Nordisk Psykologi*, 52, 37–77.

II. Hoff, E. V., & Carlsson, I. (2002). Shining Lights or Lone Wolves? Creativity and Self-Image in Primary School Children. *Journal of Creative Behavior*, 36, 17–41. The study is reprinted with permission from The Creative Education Foundation.

III. Hoff, E. V. (2003). Imaginary Companions, Creativity, and Self-Image in Middle Childhood. Manuscript submitted for publication.

IV. Hoff, E. V. (2003). A Friend Living Inside Me: The Forms and Functions of Imaginary Companions in Middle Childhood. Manuscript submitted for publication.

Jansson, J.-Å. (2003). *Perceived self-image, intellectual ability, frontal lobe function, and perceived ward atmosphere among patients with psychosis*. Unpublished doctoral dissertation, Lund University.

These studies were conducted at the Psychiatric Rehabilitation Unit (PRU), characterised by a supportive ego-strengthening psychodynamic approach. The general aim of the thesis was to study how intellectual ability and perceived self-image were related to perceived ward atmosphere among patients with psychosis. The first study described how patients and staff perceived the ward atmosphere at five different times over a two-year period. The main conclusions were that the ward atmosphere was stable over time and that there were few differences between patients and staff, for example, in perceived staff control and anger and aggression. Patients with a schizophrenia diagnosis perceived a lower level of support and autonomy than patients with other psychosis diagnoses. No differences in perceived ward atmosphere with respect to gender were detected. The ward atmosphere complied with the recommendation for patients with psychosis. The second study illuminated that perceived self-control, paranoid symptoms, social competence, and abstract thinking were related to how the ward atmosphere was perceived by the patients. Self-control, a cluster in the SASB model, was related to how patients perceived support, practical orientation, and order and organisation in the ward atmosphere. Social competence assessed by picture arrangement, a subtest in WAIS-R, was related to perceived order and organisation in the ward atmosphere. The main finding in the third study was that two of the clusters in the SASB model, spontaneity and self-control, were related to frontal lobe function. Patients who perceived a low level of spontaneity and self-control had significantly lower frontal lobe blood flow values than healthy controls and vice versa. From the findings it is obvious that patients with a psychosis diagnosis are not a homogenous group, not only with respect to diagnoses, but differ between themselves on brain functioning, intellectual ability, self-image, social functioning, and in the way in which they perceive the ward atmosphere. The clinical application of the results is discussed with respect to the individualisation of treatment strategies.

Persson, B. (2003). *Treatment Evaluation and Screening of Autism*. Unpublished doctoral dissertation, Lund University.

The aims of this thesis were: to review studies of treatment evaluation from the years 1992–2002; to evaluate the Treatment and Education of Autistic and related Communication Handicapped Children, TEACCH, treatment model for adults and children with autism; to develop and evaluate a screening instrument for early detection of autism and other developmental deficits, SEEK.

The instruments used were: the Altman Checklist for Evaluating Medical Research; the Adult and Adolescent PsychoEducational Profile, AAPEP; and the SEEK.

The first study reviewed 79 studies on treatment evaluation. The second study evaluated the TEACCH program in group home and daily work for adults in southern Sweden. The third study evaluated a group home for children in southern Sweden utilising the TEACCH program. The fourth study evaluated a screening instrument for the detection of infants with autism and developmental deficits.

The results showed that treatment of autism is not sufficiently evaluated. Of treatment systems only TEACCH seems to have some evidence.

TEACCH was shown to significantly improve independence and other skills of adults with autism over 2½ years. It can therefore be implied that the functional quality of life increased for the adults.

A group home utilising TEACCH was found to be a relevant alternative for children with autism, mental retardation and severe behaviour problems.

The SEEK instrument approach pointed out a suitable method of early screening of infants with developmental deficits. It needs further development to sharpen its capacity to identify infants with developmental deviancies.

Riddersporre, B. (2003). *To face the Unexpected. Early Parenthood to Children with Down Syndrome*. Unpublished doctoral dissertation, Lund University.

The purpose of this dissertation was to increase—through an empirical investigation—our understanding of early parenthood in relation to children with Down syndrome. My point of departure has been the parents' life-worlds, and I have developed an accompanying working method. Ten families with newborn infants with Down syndrome were followed through regular home visits during the first year of the child's life. Working together with a colleague, I have talked with the parents, listened to their stories, and observed and experienced the interaction between the parents and their children. This working method makes it possible to follow various processes taking place within the family. Frequent descriptions and renderings of parent stories from 125 visits constitute the empirical material that has been analyzed and interpreted. The interpretation has been used to develop concepts that, in turn, permit generalization beyond the group under study. When considered together, these concepts provide a way of understanding parenthood in relation to children with Down syndrome. A central theme of the study is the parents' different ways of relating to their conflicting feelings for the child as well as for parenthood and relationships with family members, friends and professional support people. Starting from the attitudes identified in the investigation resulted in the creation of a simple typology. Parents with an idealizing attitude gave priority to positive emotions and reactions. When negative or problematic aspects were predominant, I have described the parents' attitudes as struggling, whereas those who generally avoided strong feelings have been characterized as having an everyday way of relating. These concepts are directly anchored in the empirical material and, thereby, in the parents' life-worlds. In order to represent my personal understanding of the parents' life-worlds, I have also - based on the empirical data - written narrative reconstructions, that is, short stories in fictional form. What characterizes all parents in the study, regardless of how they dealt with their conflicting feelings, is that they tried to protect their relationship to the child from very strong negative reactions. Parents needed support from the people closest to them, and could become disappointed when such support was insufficient. This dependence was partially transferred to professional contacts, which became crucial to development of the parental role. Idealizing parents perceived that the professionals were treating them well. Those with an everyday attitude were content, whereas the struggling parents often felt they were being misunderstood and offended. This leads to the question of the extent to which parents' own attitudes affect the quality of professional treatment. The manner in which parenthood is reflected by people in private as well as professional networks has consequences for development of the parental identity.

Sand, Å. (2003). *Nursing-Related Qualities, Personality and Work Satisfaction – Assistant Nurses in a Ten-Year Perspective*. Unpublished doctoral dissertation, Lund University.

The personalities and qualities of nursing personnel are considered to be of great importance for their interactions with patients and may also influence work satisfaction. The aim of the thesis was to explore the extent to which different personal qualities and personality factors, with a possible effect on motivation, professional conduct, and coping with anxiety, are represented in a group of assistant nurses (in Swedish undersköterskor),

and how these qualities are related to nursing competence and long-range work satisfaction. A group of 51 female nursing students (mean age 31.8 years) participated in the study. The nursing-related qualities were empathy, sensitivity to non-verbal communication, feelings of discomfort in different nursing situations and work satisfaction. The personality factors were psychogenic needs and defence mechanisms. Relations between base data were explored in papers I, II and III. Paper I: No correlation was found between the degree of affective empathy and the sensitivity to non-verbal communication. Affective empathy, i.e. the ability to share other people's feelings, was negatively related to the presence of the identity defence of not recognising a separate identity. Introaggression was related to an enhanced capacity for apprehending non-verbal expressions. Presence of the mechanism of isolation appeared to be related to a lower degree of sensitivity. Paper II: The degree of affective empathy appeared to be correlated to social needs such as the need for affiliation and the need to help and care for other people. Sensitivity to non-verbal communication was correlated to the non-neurotic dominance factor and to an increased need to help and care for people. Paper III: Subjects with the defence mechanism of repression experienced a lesser degree of discomfort than the rest of the subjects when seeing patients with an amputated breast or an amputated leg. Subjects with an insecure sex identity experienced a higher degree of discomfort in the same situation. Subjects characterised by the defence mechanism of isolation experienced considerably more discomfort than the others in close contact with different bodily excretions. At a follow-up two years later, 43 of the subjects were interviewed, work satisfaction was assessed, and nursing competence was appraised. At a follow-up ten years after completion of nursing school, 33 subjects took part in a telephone interview. Work satisfaction was assessed in 23 subjects still working as assistant nurses. Paper IV: Cluster analysis performed on baseline data resulted in four groups: 'empathic', 'discomfort prone', 'service-minded' and 'dominant'. At the first follow-up, the service-minded had the greatest work satisfaction, with many considered to be 'real jewels'. At the second follow-up eight years later, there appeared to be an overrepresentation of injuries and long-term sick leave in this group, whose members had apparent difficulties in being dominant and asserting own interests. Work satisfaction diminished in all the groups over time. Long-term work satisfaction was positively related to degree of empathy and negatively related to degree of sensitivity to aggressive expressions.

I. Sand, Å. (1993). Relations between sensitivity to non-verbal communication, empathy and mechanisms of defence. An explorative study. *Psychological Research Bulletin*, XXXIII: 5. Lund University.

II. Sand, Å. (1994). Relations between psychogenic needs, empathy and sensitivity to non-verbal communication. An explorative study. *Psychological Research Bulletin*, XXXIV: 4. Lund University.

III. Sand, Å. (1996). Relations between mechanisms of defence and feeling of discomfort in different nursing situations. An explorative study. *Psychological Research Bulletin*, XXXVI: 1. Lund University.

IV. Sand, Å. (2003). Nurses' Personality, Nursing Related Qualities and Work Satisfaction: a 10-year Perspective. *Journal of Clinical Nursing*, 12 (2), 177–187.

Viberg, L. & Viberg, M. (2003). *Nallen i Psykologin. En prospektiv studie med fokus på barns användning av övergångsobjekt. [The Teddy Bear in Psychology. A prospective study with focus on children's use of transitional objects.]*. Unpublished doctoral dissertation, Lund University.

The central issue of the present dissertation is the place and meaning of the concepts transitional object (TO) and transitional phenomenon (TP) as defined by Winnicott, in a normal psychological context. A group of children were followed from age 8 months to 6 years. A prevalence study was carried out by interviewing parents in connection with the child's (n=147) routine check-ups at the Child Care Clinic. The questions regarded the child's use of a TO, pacifier or thumb-sucking and breastfeeding. Fiftyfour percent of the children

used a TO. The use of a TO was related to use of pacifier/thumbsucking and to a breastfeeding period <8 months. When the children (n = 119) were five years old, their developmental level was measured by a school-readiness test. The results were related to the information in the prevalence study about use of TO/pacifier/thumbsucking and breastfeeding. Sex and length of breastfeeding were most strongly related to developmental level: Boys more often deviated from developmental norms. A breastfeeding period of >8 months was a positive factor for development in both boys and girls. Thumbsucking correlated negatively with development and use of pacifier and TO at 12 months correlated positively with developmental level. When the children (n = 73) were five and a half years old, the parents answered a questionnaire about their children's use of a TO and rated their development and behaviour on a number of scales. Children who were breastfed for a long period were rated as more difficult to wean, slept more uneasily and were more dependent on their parents. Pacifier-users were rated as more irritable and difficult to leave in the care of others; thumbsuckers were rated as crying less, sleeping quietly and easy to leave in the care of others; users of a TO were rated as being early in their speech development. It appeared advantageous to the child's development if parents were willing to be "disturbed" by their children. When the children were 6 years old they (n = 21) and their parents were interviewed as to their views on TOs. The children considered that a TO was very important for the child who used one. The children regarded TOs as natural and something which a child could well need e.g. when going to sleep if its parents were absent. For parents, TOs had a normative content. Parents whose children used a TO were more positive to TOs than parents whose children did not use one. The "regression" described in connection with a child's use of a TO/pacifier/thumb was seen as "provoking" by several parents. Children did not "evaluate" their parents way of handling such situations because they regarded the use of a TO as natural. Parents were preoccupied with the idea of whether it was a sign of security or insecurity if their children used a TO and with whether it was themselves or the child who had initiated its use. Breastfeeding would seem to preserve a child's "illusion" of fusion with the mother. Maybe the necessary disillusionment is precipitated too early when the breastfeeding period is restricted to 6 months or less. TOs have no self-evident place in the life of an infant, but TP and transitional relating are necessary conditions for TOs which are used by approximately 50 % of Swedish children.