

Mentaliseringslitteratur: Utveckling & Patologi

Utvecklingspsykologi

- **NY!** [Fulltext via länk] Ahmed, F. S., & Miller, L. S. (2010). [Executive Function Mechanisms of Theory of Mind](#). *Journal of Autism and Developmental Disorders*. Tidig elektronisk publicering.

Abstract

This study examined the relationship between Executive Function (EF) and Theory of Mind (ToM) using the Delis-Kaplan Executive Function System (D-KEFS) and three tests of ToM (Reading the Mind in the Eyes test (RMET), Strange Stories test, and Faux Pas test). Separate regression analyses were conducted, and EF predictors varied by ToM test. No EF domains accounted for significant variance in RMET scores; only estimated IQ scores were significant predictors of RMET performance. Verbal fluency and deductive reasoning were significant predictors of performance on the Strange Stories test, while verbal fluency, problem solving, and gender accounted for a significant variance in the Faux Pas test. Results suggest that the ToM tests each utilized differing cognitive mechanisms.

- **NY!** Barragan, M., Laurens, K. R., Navarro, J. B., & Obiols, J. E. (2010). ['Theory of Mind', psychotic-like experiences and psychometric schizotypy in adolescents from the general population](#). *Psychiatry Research*. Tidig elektronisk publicering.

Abstract

This study examined 'Theory of Mind' (ToM) functioning, its association with psychometric schizotypy and with self-reported psychotic-like experiences (PLEs) and depressive symptoms, in a community sample of adolescents. Seventy-two adolescents (mean age 14.51 years) from Barcelona, Spain, completed questionnaires assessing PLEs, depressive symptoms, and schizotypy. A verbal ToM task and a vocabulary test were administered. The effect of symptomatology, vocabulary ability, age, and gender on task performance was explored. Neither total score on schizotypy nor PLEs were associated with ToM performance. A significant effect of vocabulary on adolescent's performance of both ToM and control stories was found. ToM showed significant negative associations with positive schizotypy, and with one cluster of positive PLEs: first-rank experiences. Positive significant associations between ToM and persecutory delusions and the impulsive aspects of schizotypy were found. Depressive symptoms did not affect ToM performance. Positive schizotypal traits and first-rank symptoms are associated with ToM deficits in adolescents. Results support the trait-(versus state-) dependent notion of ToM impairments in schizophrenia. ToM may be a developmental impairment associated with positive schizotypy and PLEs.

- Cohen, A. S., & German, T. C. (2010). [A reaction time advantage for calculating beliefs over public representations signals domain specificity for "theory of mind"](#). *Cognition*.

Abstract

In a task where participants' overt task was to track the location of an object across a sequence of events, reaction times to unpredictable probes requiring an inference about a social agent's beliefs about the location of that object were obtained. Reaction times to false belief situations were faster than responses about the (false) contents of a map showing the location of the object (Experiment 1) and about the (false) direction of an arrow signaling the location of the object (Experiment 2). These results are consistent with developmental, neuro-imaging and neuropsychological evidence that there exist domain specific mechanisms within human cognition for encoding and reasoning about

mental states. Specialization of these mechanisms may arise from either core cognitive architecture or via the accumulation of expertise in the social domain.

- Ensink, K., & Mayes, L. (2010). [The development of mentalisation in children from a theory of mind perspective](#). *Psychoanalytic Inquiry*, 30, 301-337.

Abstract

For psychoanalysts, a key developmental question is how children's mentalisation capacities develop, that is, how they come to understand the feelings and intentions of others, as well as themselves, and how that understanding is integrated over the course of development into their feelings for and expectations of others. Broadly stated, this question has been the subject of productive lines of inquiry among cognitive and development psychologists. During the past 15 years, investigators from these disciplines focusing on the development of theory of mind have provided us with startling evidence of the abilities of very young children to understand their own behavior, as well as that of others, based on beliefs and desires. Furthermore, they have also presented fascinating observations and experiments suggesting that from early infancy we attribute intentionality to people. The term theory of mind has come to designate a specific domain of inquiry and research for philosophers, cognitive developmentalists, and primatologists, with the broad goal of understanding the ability, which may or not be exclusively human, to predict and explain the actions of self and others based on their knowledge, beliefs, and desires. Our aim in this review is to provide a summary of this body of work.

- Fonagy, P., & Target, M. (1997). [Attachment and reflective function: Their role in self-organization](#). *Development and Psychopathology*, 9, 679-700.

Abstract

The paper traces the relationship between attachment processes and the development of the capacity to envision mental states in self and others. We suggest that the ability to mentalize, to represent behavior in terms of mental states, or to have "a theory of mind" is a key determinant of self-organization which is acquired in the context of the child's early social relationships. Evidence for an association between the quality of attachment relationship and reflective function in the parent and the child is reviewed and interpreted in the context of current models of theory of mind development. A model of the development of self-organization is proposed which has at its core the caregiver's ability to communicate understanding of the child's intentional stance. The implications of the model for pathological self-development are explored, with specific reference to the consequences of maltreatment.

- Fonagy, P., & Target, M. (2005). [Bridging the transmission gap: An end to an important mystery of attachment research?](#) *Attachment & Human Development*, 7, 333-343.

Abstract

The authors provide a context for this special section by arguing that the attachment relationships of infancy fulfil an evolutionary role in ensuring that the brain structures that come to subserve social cognition are appropriately organised and prepared to equip the individual for the collaborative existence with other people for which his or her brain was designed. Processes as fundamental as gene expression or changes in receptor densities can be seen as direct functions of the extent of understanding of mental states provided by the caregiving environment. If the attachment relationship is indeed a major organiser of brain development, it is even more important to understand the processes that underpin the transgenerational transmission of attachment patterns. The

contributions of the papers in the special section to understanding the role of reflective function in the development of attachment and social cognition are reviewed, and the implications for the development of both theory and practice are explored.

- Fonagy, P., Gergely, G., & Target, M. (2007). [The parent-infant dyad and the construction of the subjective self](#). *Journal of Child Psychology and Psychiatry*, 48, 288-328.

Abstract

Developmental psychology and psychopathology has in the past been more concerned with the quality of self-representation than with the development of the subjective agency which underpins our experience of feeling, thought and action, a key function of mentalisation. This review begins by contrasting a Cartesian view of pre-wired introspective subjectivity with a constructionist model based on the assumption of an innate contingency detector which orients the infant towards aspects of the social world that react congruently and in a specifically cued informative manner that expresses and facilitates the assimilation of cultural knowledge. Research on the neural mechanisms associated with mentalisation and social influences on its development are reviewed. It is suggested that the infant focuses on the attachment figure as a source of reliable information about the world. The construction of the sense of a subjective self is then an aspect of acquiring knowledge about the world through the caregiver's pedagogical communicative displays which in this context focuses on the child's thoughts and feelings. We argue that a number of possible mechanisms, including complementary activation of attachment and mentalisation, the disruptive effect of maltreatment on parent-child communication, the biobehavioural overlap of cues for learning and cues for attachment, may have a role in ensuring that the quality of relationship with the caregiver influences the development of the child's experience of thoughts and feelings.

- Jurist, E. L. (2010). [Mentalizing minds](#). *Psychoanalytical Inquiry*, 30, 289-300.

Abstract

This article explores the meaning and significance of the notion of mentalization. Although Fonagy borrows the concept from theory of mind, he develops it in a way that has particular relevance for the integration of attachment theory and psychoanalytic theory. Mentalization is not innate, but has its source in the early relationship wherein the primary caregiver's interpretation of the infant allows the infant's mind to grow and interpret for himself or herself; it is not just cognitive, but is based on cognitive-affective schemas; and it is not just about correct social prediction, but is especially germane to the kind of mindreading that occurs in the context of intimate relationships such as psychotherapy. I introduce a new criticism of the theory of mind literature as ignoring that minds have emotional styles, and I use Balint's distinction between philobats and ocnophils to illustrate this point. Finally, I explicate the concept of mentalized affectivity and propose that it allows us to capture how minds can understand one another in the clinical realm.

- **NY!** Keulers, E. H. H., Evers, E. A. T., Stiers, P., & Jolles, J. (2010). [Age, Sex, and Pubertal Phase Influence Mentalizing About Emotions and Actions in Adolescents](#). *Developmental Neuropsychology*, 35, 555-569.

Abstract

This study examined (1) emotional versus cognitive developmental trajectories and (2) the influence of age-extrinsic factors (i.e., sex and puberty). Using a cross-sectional design, adolescents ($N = 252$) divided into four age-groups (ages 13, 15, 17, 19)

performed two versions of a mentalizing task, about emotions and actions, as well as the Tower task. First, performance on all tasks improved linearly into late adolescence (age 19). Thus no differential trajectories were found for emotional versus cognitive development. Second, girls outperformed boys in mentalizing speed regarding both emotions and actions. In boys, a later pubertal phase was associated with increased mentalizing speed after controlling for age-group.

- McKown, C., Gumbiner, L. M., Russo, N. M., & Lipton, M. (2009). [Social-emotional learning skill, self-regulation, and social competence in typically developing and clinic-referred children](#). *Journal of Clinical Child and Adolescent Psychology*, 38, 858-871.

Abstract

Social-emotional learning (SEL) skill includes the ability to encode, interpret, and reason about social and emotional information. In two related studies, we examined the relationship between children's SEL skill, their ability to regulate their own behavior, and the competence of their social interactions. Study 1 included 158 typically developing children ages 4 to 14 years. Study 2 included 126 clinic-referred children ages 5 to 17 years. Findings from both studies supported the conclusion that SEL skill includes three broad factors: awareness of nonverbal cues; the ability to interpret social meaning through theory of mind, empathy, and pragmatic language; and the ability to reason about social problems. Furthermore, the better children perform on measures of SEL skill and the more their parents and teachers report that children can regulate their behavior, the more competent their social interactions.

- Mitchell, P., Currie, G., & Ziegler, F. (2009). [Two routes to perspective: Simulation and rule-use as approaches to mentalizing](#). *The British Journal of Developmental Psychology*, 27, 513-543.

Abstract

We review evidence relating to children's ability to acknowledge false beliefs within a simulation account according to which our focus is set by default to the world as we know it: hence, our current beliefs assume salience over beliefs that do not fall into this category. The model proposes that the ease with which we imaginatively shift from this default depends on the salience of our current belief, relative to the salience of the belief that is being simulated. However, children do use a rule-based approach for mentalizing in some contexts, which has the advantage of protecting them from the salience of their own belief. Rule-based mentalizing judgements might be faster, cognitively easier and less prone to error, relative to simulation-based judgements that are much influenced by salience. We propose that although simulation is primary, rule-based approaches develop as a shortcut; we thus grow from individuals capable of using only simulation into individuals capable of both techniques.

- Mizen, R. (2009). [The embodied mind](#). *Journal of Analytical Psychology*, 54, 253-272.

Abstract

This paper considers Fonagy et al's concept of mentalization and contrasts aspects of this with aspects of Bion's model of the mind. The author argues that although mentalization adds to our understanding of mind it has limitations; that it may tend to over-emphasize certain types of external interaction between infant and carer and under-emphasize internal psychobiological processes. What is at issue here is the way in which an infant's carers facilitate the development of meaning out of experience. Bion's concept supposes a relatively 'interior' model in which, in important ways, the carer enables the infant to *derive* the meaning of his or her experience, whilst on the other hand Fonagy

et al tend to talk more in terms of the ways in which the carer *endows* the infant's experience with meaning. Reference is made to Fordham's concept of states of 'Identity'. Fordham has pointed out that Freud's model is one in which mind is conceived of as evolving out of an infant's complex identifications with his or her carer(s); Jung's model envisages developmentally early states of identity as the means by which inherent capacities are realized.

- Pardini, M., & Nichelli, P. F. (2009). [Age-related decline in mentalization skills across adult life span](#). *Experimental Aging Research*, 35, 98-106.

Abstract

In the literature, there are few and conflicting reports regarding age-related changes in adult mentalizing abilities: whereas Happe et al. (1998, *Developmental Psychology*, 34, 358-362) showed better performances of elderly compared with young subjects in an advanced theory of mind (ToM) task, Mayor et al. (2002, *British Journal of Psychology*, 93, 465-485) and Sullivan and Ruffmann (2004, *British Journal of Psychology*, 95(Pt 1), 1-18) found an age-related decline. Former studies addressing the issue compared young to elderly subjects and did not investigate earlier changes in middle-aged adults. To shed light on changes in ToM skills along adulthood, the authors used the revised version of the "Reading the Mind in the Eyes Test" (Baron-Cohen et al., 2001, *Journal of Child Psychology and Psychiatry*, 42, 241-251) to compare four groups of people of different ages covering the whole span of adult life. The authors found aged-related decline in ToM skills as early as the fifth decade of life. Awareness of the age-related changes in adult mentalizing is important to differentiate normal aging effects from ToM impairments due to neuropsychiatric diseases.

- **NY!** Qureshi, A. W., Apperly, I. A., & Samson, D. (2010). [Executive function is necessary for perspective selection, not Level-1 visual perspective calculation: Evidence from a dual-task study of adults](#). *Cognition*, 117, 230-236.

Abstract

Previous research suggests that perspective-taking and other "theory of mind" processes may be cognitively demanding for adult participants, and may be disrupted by concurrent performance of a secondary task. In the current study, a Level-1 visual perspective task was administered to 32 adults using a dual-task paradigm in which the secondary task tapped executive function. Results suggested that the secondary task did not affect the calculation of perspective, but did affect the selection of the relevant (Self or Other) perspective for a given trial. This is the first direct evidence of a cognitively efficient process for "theory of mind" in adults that operates independently of executive function. The contrast between this and previous findings points to a distinction between simple perspective-taking and the more complex and cognitively demanding abilities more typically examined in studies of "theory of mind". It is suggested that these findings may provide a parsimonious explanation of the success of infants on 'indirect' measures of perspective-taking that do not explicitly require selection of the relevant perspective.

- Roisman, G. I., & Fraley, R. C. (2008). [A behavior-genetic study of parenting quality, infant attachment security, and their covariation in a nationally representative sample](#). *Developmental Psychology*, 44, 831-839.

Abstract

A number of relatively small-sample, genetically sensitive studies of infant attachment security have been published in the past several years that challenge the view that

all psychological phenotypes are heritable and that environmental influences on child development--to the extent that they can be detected--serve to make siblings dissimilar. Using the twin subsample (N = 485 same-sex pairs) of the nationally representative Early Childhood Longitudinal Study--Birth Cohort, the authors provide evidence that parenting quality and infant attachment security observed at 24 months, as well as their covariation, are a product of shared and nonshared environmental (but not genetic) variation among children. In contrast, genetic differences between infants played a prominent role in explaining observations of temperamental dependency.

- **NY!** Sabbagh, M. A., Hopkins, S. F., Benson, J. E., & Randall Flanagan, J. (2010). [Conceptual change and preschoolers' theory of mind: Evidence from load-force adaptation](#). *Neural Networks*, 23, 1043-1050.

Abstract

Prominent theories of preschoolers' theory of mind development have included a central role for changing or adapting existing conceptual structures in response to experiences. Because of the relatively protracted timetable of theory of mind development, it has been difficult to test this assumption about the role of adaptation directly. To gain evidence that cognitive adaptation is particularly important for theory of mind development, we sought to determine whether individual differences in cognitive adaptation in a non-social domain predicted preschoolers' theory of mind development. Twenty-five preschoolers were tested on batteries of theory of mind tasks, executive functioning tasks, and on their ability to adapt their lifting behavior to smoothly lift an unexpectedly heavy object. Results showed that children who adapted their lifting behavior more rapidly performed better on theory of mind tasks than those who adapted more slowly. These findings held up when age and performance on the executive functioning battery were statistically controlled. Although preliminary, we argue that this relation is attributable to individual differences in children's domain general abilities to efficiently change existing conceptual structures in response to experience.

- **NY!** Samson, D., Apperly, I. A., Braithwaite, J. J., Andrews, B. J., Bodley S., & Sarah, E. (2010). [Seeing it their way: Evidence for rapid and involuntary computation of what other people see](#). *Journal of Experimental Psychology: Human Perception and Performance*, 36, 1255-1266.

Abstract

In a series of three visual perspective-taking experiments, we asked adult participants to judge their own or someone else's visual perspective in situations where both perspectives were either the same or different. We found that participants could not easily ignore what someone else saw when making self-perspective judgments. This was observed even when participants were only required to take their own perspective within the same block of trials (Experiment 2) or even within the entire experiment (Experiment 3), i.e. under conditions which gave participants a clear opportunity to adopt a strategy of ignoring the other person's irrelevant perspective. Under some circumstances, participants were also more efficient at judging the other person's perspective than at judging their own perspective. Collectively, these results suggest that adults make use of rapid and efficient processes to compute what other people can see.

- **[Fulltext via länk]** Schore, J., & Schore, A. N. (2008). [Modern attachment theory: The central role of affect regulation in development and treatment](#). *Clinical Social Work Journal*, 36, 9-20.

Abstract

Over the past decade attachment theory has undergone an intense expansion of both its

original scientific foundations as well as its applications to clinical work. Bowlby's original description occurred during a period of behaviorism and an emphasis on the strange situation and secure base behaviors, which then gave way to a dominance of cognition and an emphasis on attachment narratives and reflective capacities. We will argue that in line with Bowlby's fundamental goal of the integration of psychological and biological models of human development, the current interest in affective bodily-based processes, interactive regulation, early experience-dependent brain maturation, stress, and nonconscious relational transactions has shifted attachment theory to a regulation theory. This emphasis on the right brain systems that underlie attachment and developmental change has in turn forged deeper connections with clinical models of psychotherapeutic change, all of which are consonant with psychoanalytic understandings. Modern attachment theory can thus be incorporated into the core of social work theory, research, and practice.

- Slade, A., Grienenberger, J., Bernbach, E., Levy, D. & Locker, A. (2005). [Maternal reflective functioning, attachment, and the transmission gap: A preliminary study](#). *Attachment & Human Development*, 7, 283-298.

Abstract

The notion that maternal reflective functioning, namely the mother's capacity to hold her baby and his mental states in mind, plays a vital role in the intergenerational transmission of attachment is investigated (Fonagy, Gergely, Jurist, & Target, 2002; Fonagy et al., 1995; Slade, this volume). A parent's capacity to understand the nature and function of her own as well as her child's mental states, thus allowing her to create both a physical and psychological experience of comfort and safety for her child, is proposed. In this study of 40 mothers and their babies, maternal reflective functioning is measured using the Parent Development Interview (PDI; Aber, Slade, Berger, Bresgi, & Kaplan, 1985), and scored for reflective functioning using an addendum to Fonagy, Target, Steele, & Steele's (1998) reflective functioning scoring manual (Slade, Bernbach, Grienenberger, Levy, & Locker, 2004). The relations between maternal reflective functioning and both adult (measured in pregnancy) and infant attachment (measured at 14 months) are examined. The findings indicate that relations between adult attachment and parental reflective functioning are significant, as are relations between parental reflective functioning and infant attachment. A preliminary mediation analysis suggests that parental reflective functioning plays a crucial role in the intergenerational transmission of attachment.

- **NY!** [\[Fulltext via länk\]](#) Sonnby-Borgström, M. (2010). [Hög grad av alexitymi kan ge sämre förmåga till kognitiv empati](#). *Läkartidningen*, 107, 1467-1470.

Abstract

Alexitymi är en dysfunktion i det psykiska fungerandet som kännetecknas av problem med att mentalt representera och finna ord för sina känslor. I populationer bestående av personer med psykosomatiska och psykiatriska diagnoser är alexitymi överrepresenterat. Brister i identifikation och verbalisering av kroppsliga affektiva responser antas medverka till dysfunktionell affektreglering.

Att kunna identifiera sina egna emotioner antas även vara centralt för att förstå andras känslor (empati) och förmågan att skapa nära relationer till andra.

I den refererade studien undersöktes alexitymi i relation till empatisk förmåga, till anknytningsmönster och till ansiktsimitation.

Resultaten visade att personer med högre grad av alexitymi hade svagare imitativa responser i den ansiktsmuskulatur som uttrycker negativa emotioner. De visade sämre

förmåga till inlevelse (empati) och hade otryggare anknytning än personer med lägre grad av alexitymi.

De kliniska implikationerna av resultaten diskuteras utifrån en mentaliseringsbaserad terapeutisk modell.

- **[Fulltext via länk]** Tanaka, E., Tomisaki, E., Shinohara, R., Sugisawa, Y., Tong, L., Watanabe, T., Ondo, Y., et al, (2010). [Implications of social competence among thirty-month-old toddlers: A theory of mind perspective.](#) *Journal of Epidemiology.*

Abstract

Background: The purpose of this study was to examine the relations between children's social competence and initial index of theory of mind at 30 months of age.

Methods: The participants of the study were 322 toddlers and parents/caregivers who were registered with the Japan Science and Technology Agency (JST) project. They completed a five-minute interaction session, which was coded using the Interaction Rating Scale (IRS) as an evidence-based practical index of children's social competence. In addition, the children were asked to complete a diverse-desire task as a ToM (theory of mind) index.

Results: The results showed that the ToM index was related to the total score and subscales of the IRS, such as Empathy and Emotional regulation.

Conclusions: These findings show that the IRS score was related to ToM task performance at 30 months of age.

Utvecklingspsykopatologi

- Arnold, J. E., Bennetto, L., & Diehl, J. J. (2009). [Reference production in young speakers with and without autism: Effect of discourse status and processing constraints.](#) *Cognition*, 110, 131-146.

Abstract

We examine the referential choices (pronouns/zeros vs. names/descriptions) made during a narrative by high-functioning children and adolescents with autism and a well-matched typically developing control group. The process of choosing appropriate referring expressions has been proposed to depend on two areas of cognitive functioning: (a) judging the attention and knowledge of one's interlocutor, and (b) the use of memory and attention mechanisms to represent the discourse situation. We predicted possible group differences, since autism is often associated with deficits in (a) mentalizing and (b) memory and attention, as well as a more general tendency to have difficulty with the pragmatic aspects of language use. Results revealed that some of the participants with autism were significantly less likely to produce pronouns or zeros in some discourse contexts. However, the difference was only one of degree. Overall, all participants in our analysis exhibited fine-grained sensitivity to the discourse context. Furthermore, referential choices for all participants were modulated by factors related to the cognitive effort of language production.

- **[Fulltext via länk]** Bauminger, N., Solomon, M., & Rogers, S. J. (2009). [Predicting friendship quality in autism spectrum disorders and typical development.](#) *Journal of Autism and Developmental Disorders.*

Abstract

The role played by social relationship variables (attachment security; mother-child relationship qualities) and social-cognitive capacities (theory of mind) was examined in both observed friendship behaviors and in children's descriptions of friendships (age 8-

12) with high functioning children with autism spectrum disorders (HFASD) ($n = 44$) and with typical development (TYP) ($n = 38$). Overall, half of the HFASD sample (54.45%) reported maternal attachment security, corroborating data from younger children with ASD. The hypothesized predictors and their interrelations had both direct and indirect effects on friendship for both groups of children, highlighting the importance of these factors in children's friendship development and suggesting both compensatory and amplification mechanisms for friendship qualities. Practical and clinical implications are discussed for friendship support in both ASD and TYP.

- **[Fulltext via länk]** Bigham, S. (2009). [Impaired competence for pretense in children with autism: Exploring potential cognitive predictors](#). *Journal of Autism and Developmental Disorders*.

Abstract

Lack of pretense in children with autism has been explained by a number of theoretical explanations, including impaired mentalising, impaired response inhibition, and weak central coherence. This study aimed to empirically test each of these theories. Children with autism ($n = 60$) were significantly impaired relative to controls ($n = 65$) when interpreting pretense, thereby supporting a competence deficit hypothesis. They also showed impaired mentalising and response inhibition, but superior local processing indicating weak central coherence. Regression analyses revealed that mentalising significantly and independently predicted pretense. The results are interpreted as supporting the impaired mentalising theory and evidence against competing theories invoking impaired response inhibition or a local processing bias. The results of this study have important implications for treatment and intervention.

- **[Fulltext via länk]** Broeren, S., & Muris, P. (2009). [The relation between cognitive development and anxiety phenomena in children](#). *Journal of Child and Family Studies*, 18, 702-709.

Abstract

We examined the relation between cognitive development and fear, anxiety, and behavioral inhibition in a non-clinical sample of 226 Dutch children aged 4–9 years. To assess cognitive development, children were tested with Piagetian conservation tasks and a Theory-of-Mind (TOM) test. Fears were measured by means of a self-report scale completed by the children, while anxiety symptoms and behavioral inhibition were indexed by rating scales that were filled out by parents. Significant age trends were observed for some anxiety phenomena. For example, younger children displayed higher fear scores, whereas older children exhibited higher levels of generalized anxiety. Most importantly, results of regression analyses (in which we controlled for age) indicated that cognitive development, and in particular TOM ability, made a unique and significant contribution to various domains of behavioral inhibition. In all cases, higher levels of TOM were associated with lower levels of behavioral inhibition. In general, percentages of explained variance were rather small (i.e., <6%), indicating that the role of cognitive development in various anxiety phenomena is limited.

- **[Fulltext via länk]** Fonagy, P. (2003). [The development of psychopathology from infancy to adulthood: The mysterious unfolding of disturbance in time](#). *Infant Mental Health Journal*, 24, 212-239.

Abstract

A model for the development of this mechanism is offered as well as evidence for it from five areas: (1) the nature of the association of early attachment and later cognitive functioning, (2) accumulating evidence for the association between secure

attachment and the facility with which internal states are understood and represented, (3) the limited predictive value of early attachment classification, (4) the studies of the biological functions of attachment in other mammalian species, and (5) factor analytic studies of adult attachment scales that suggest the independence of attachment type and attachment quality. The author tentatively proposes that attachment in infancy has the primary evolutionary function of generating a mind capable of inferring and attributing causal motivational and epistemic mind states, and through these arriving at a representation of the self in terms of a set of stable and generalized intentional attributes thus ensuring social collaboration, whereas attachment in adulthood serves the evolutionary function of protecting the self representation from the impingements that social encounters inevitably create. Severe personality pathology arises when the psychological mechanism of attachment is distorted or dysfunctional and cannot fulfill its biological function of preserving the intactness of self representations.

- Fonagy, P., & Luyten, P. (2009). [A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder](#). *Development and Psychopathology*, 21, 1355-1381.

Abstract

The precise nature and etiopathogenesis of borderline personality disorder (BPD) continues to elude researchers and clinicians. Yet, increasing evidence from various strands of research converges to suggest that affect dysregulation, impulsivity, and unstable relationships constitute the core features of BPD. Over the last two decades, the mentalization-based approach to BPD has attempted to provide a theoretically consistent way of conceptualizing the interrelationship between these core features of BPD, with the aim of providing clinicians with a conceptually sound and empirically supported approach to BPD and its treatment. This paper presents an extended version of this approach to BPD based on recently accumulated data. In particular, we suggest that the core features of BPD reflect impairments in different facets of mentalization, each related to impairments in relatively distinct neural circuits underlying these facets. Hence, we provide a comprehensive account of BPD by showing how its core features are related to each other in theoretically meaningful ways. More specifically, we argue that BPD is primarily associated with a low threshold for the activation of the attachment system and deactivation of controlled mentalization, linked to impairments in the ability to differentiate mental states of self and other, which lead to hypersensitivity and increased susceptibility to contagion by other people's mental states, and poor integration of cognitive and affective aspects of mentalization. The combination of these impairments may explain BPD patients' propensity for vicious interpersonal cycles, and their high levels of affect dysregulation and impulsivity. Finally, the implications of this expanded mentalization-based approach to BPD for mentalization-based treatment and treatment of BPD more generally are discussed.

- **NY!** Ostler, T., Bahar, O. S., & Jessee, A. (2010). [Mentalization in children exposed to parental methamphetamine abuse: Relations to children's mental health and behavioral outcomes](#). *Attachment & Human Development*, 12, 193-207.

Abstract

This study examined the mentalization capabilities of children exposed to parental methamphetamine abuse in relation to symptom underreporting, mental health, and behavioral outcomes. Twenty-six school-aged children in foster care participated in this study. Mentalization was assessed using the My Family Stories Interview (MFSI), a semi-structured interview in which children recalled family stories about a happy,

sad or scary and fun time. An established scale of the Trauma Symptom Checklist for Children (TSCC), a self-report measure, provided information on children's symptom underreporting. The Child Behavior Checklist (CBCL), completed by the children's foster caregivers, assessed children's mental health and behavioral outcomes. Children with higher mentalization were significantly less prone to underreport symptoms. These children had fewer mental health problems and were rated by their foster caregivers as more socially competent. The findings underscore that mentalization could be an important protective factor for children who have experienced parental substance abuse.

- **[Fulltext via länk]** Peterson, C. C. (2009). [Developmental and aging aspects: Development of social-cognitive and communication skills in children born deaf](#). *Scandinavian Journal of Psychology*, 50, 475-483.

Abstract

Central to the interface of social-cognitive and communicative development is the growth of a theory of mind (ToM). ToM is mastered by most hearing children and deaf children of signing deaf parents by the age of 5 or 6 but is often seriously delayed in deaf children of hearing parents. This paper reviews recently published research on deaf children's ToM development and presents an original study consisting of eight longitudinal case histories that collectively map late-signing deaf children's ToM performance from 44 to 158 months of age. While five tentative conclusions can be posited from the collective research so far, further investigation of each of these possibilities is clearly needed.

- Sharp, C., Croudace, T. J., & Goodyer, I. M. (2007). [Biased mentalizing in children aged seven to 11: Latent class confirmation of response styles to social scenarios and associations with psychopathology](#). *Social Development*, 16, 181-202.

Abstract

A new approach to the measurement of mentalizing is introduced. Instead of measuring the presence or absence of mentalizing capacity, the current study aimed at developing a mentalizing task that focuses on investigating biases in mentalizing through the use of ambiguous peer-related social scenarios. The response consistency of 659 children was investigated in a community sample of children aged seven to 11. Confirmatory latent class analysis allocated children to three groups on the basis of their responses: an overly positive style (OP), a rational/neutral style (R) or an overly negative style (ON). Children classed as OP showed a greater likelihood of being above cut-off on a population screen for externalizing disorder. Over a two-year follow-up period, the children who were classified as R were most likely to remain so whereas the OP and ON children were found to change group. The results are discussed in the context of social-cognitive research in this age group. Further studies should examine the external validity of the mentalizing task because the results reported here concern only internal construct validity.

- Sharp, C., & Fonagy, P. (2008). [The parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology](#). *Social Development*, 17, 737-754.

Abstract

Recent studies of the relationship between parenting and child development have included a focus on the parent's capacity to treat the child as a psychological agent. Several constructs have been developed to refer to this capacity, for example maternal mind-mindedness, reflective functioning, and parental mentalizing. In this review article,

we compare and contrast different constructs from diverse theoretical backgrounds that have been developed to operationalize parental mentalizing. We examine the empirical evidence to date in support of each of the constructs and review the relevant measures associated with each construct. Next, we discuss the possibility that these apparently diverse constructs may tap into the same underlying neurobiological socio-cognitive system. We conclude by proposing a testable model for describing the links between parental mentalization, the development of mentalizing in children, and child psychopathology.

- Slade, A. (2009). [Mentalizing the unmentalizable: Parenting children on the spectrum](#). *Journal of Infant, Child & Adolescent Psychotherapy*, 8, 7-21.
- **[Fulltext via länk]** Swart, M., Kortekaas, R., & Aleman, A. (2009). [Dealing with feelings: Characterization of trait alexithymia on emotion regulation strategies and cognitive-emotional processing](#). *PLoS ONE*, 4.

Abstract

Background

Alexithymia, or “no words for feelings”, is a personality trait which is associated with difficulties in emotion recognition and regulation. It is unknown whether this deficit is due primarily to regulation, perception, or mentalizing of emotions. In order to shed light on the core deficit, we tested our subjects on a wide range of emotional tasks. We expected the high alexithymics to underperform on all tasks.

Method

Two groups of healthy individuals, high and low scoring on the cognitive component of the Bermond-Vorst Alexithymia Questionnaire, completed questionnaires of emotion regulation and performed several emotion processing tasks including a micro expression recognition task, recognition of emotional prosody and semantics in spoken sentences, an emotional and identity learning task and a conflicting beliefs and emotions task (emotional mentalizing).

Results

The two groups differed on the Emotion Regulation Questionnaire, Berkeley Expressivity Questionnaire and Empathy Quotient. Specifically, the Emotion Regulation Quotient showed that alexithymic individuals used more suppressive and less reappraisal strategies. On the behavioral tasks, as expected, alexithymics performed worse on recognition of micro expressions and emotional mentalizing. Surprisingly, groups did not differ on tasks of emotional semantics and prosody and associative emotional-learning.

Conclusion

Individuals scoring high on the cognitive component of alexithymia are more prone to suppressive emotion regulation strategies rather than reappraisal strategies. Regarding emotional information processing, alexithymia is associated with reduced performance on measures of early processing as well as higher order mentalizing. However, difficulties in the processing of emotional language were not a core deficit in our alexithymic group.

- **[Fulltext via länk]** White, S., Hill, E., Happé, F., & Frith, U. (2009). [Revisiting the strange stories: Revealing mentalizing impairments in autism](#). *Child Development*, 80, 1097-1117.

Abstract

A test of advanced theory of mind (ToM), first introduced by F. Happé (1994), was adapted for children (mental, human, animal, and nature stories plus unlinked sentences). These materials were closely matched for difficulty and were presented to forty-five 7- to 12-year-olds with autism and 27 control children. Children with autism who

showed ToM impairment on independent tests performed significantly more poorly than controls solely on the mental, human, and animal stories with greatest impairment on the former and least on the latter. Thus, a mentalizing deficit may affect understanding of biologic agents even when this does not explicitly require understanding others' mental states.

- **[Fulltext via länk]** Williams, J. H. (2008). [Self-other relations in social development and autism: Multiple roles for mirror neurons and other brain bases](#). *Autism Research*, 1, 73-90.

Abstract

Mirror neuron system dysfunction may underlie a self–other matching impairment, which has previously been suggested to account for autism. Embodied Cognition Theory, which proposes that action provides a foundation for cognition has lent further credence to these ideas. The hypotheses of a self–other matching deficit and impaired mirror neuron function in autism have now been well supported by studies employing a range of methodologies. However, underlying mechanisms require further exploration to explain how mirror neurons may be involved in attentional and mentalizing processes. Impairments in self–other matching and mirror neuron function are not necessarily inextricably linked and it seems possible that different sub-populations of mirror neurons, located in several regions, contribute differentially to social cognitive functions. It is hypothesized that mirror neuron coding for action–direction may be required for developing attentional sensitivity to self-directed actions, and consequently for person-oriented, stimulus-driven attention. Mirror neuron networks may vary for different types of social learning such as “automatic” imitation and imitation learning. Imitation learning may be more reliant on self–other comparison processes (based on mirror neurons) that identify differences as well as similarities between actions. Differential connectivity with the amygdala–orbitofrontal system may also be important. This could have implications for developing “theory of mind,” with intentional self–other comparison being relevant to meta-representational abilities, and “automatic” imitation being more relevant to empathy. While it seems clear that autism is associated with impaired development of embodied aspects of cognition, the ways that mirror neurons contribute to these brain–behavior links are likely to be complex.

- Williams, D., & Happé, F. (2010). [Representing intentions in self and other: Studies of autism and typical development](#). *Developmental Science*, 13, 307-319.

Abstract

Two experiments were conducted to explore the extent to which individuals with Autism Spectrum Disorder (ASD), as well as young typically developing (TD) children, are explicitly aware of their own and others' intentions. In Experiment 1, participants with ASD were significantly less likely than age- and ability-matched comparison participants to correctly recognize their own knee-jerk reflex movements as unintentional. Performance on this knee-jerk task was associated with performance on measures of false belief understanding, independent of age and verbal ability, in both participants with ASD and TD children. In Experiment 2, participants with ASD were significantly less able than comparison participants to correctly recognize their own or another person's mistaken actions as unintended, in a 'Transparent Intentions' task (Russell & Hill, 2001; Russell, Hill & Franco, 2001). Performance on aspects of the Transparent Intentions task was associated with performance on measures of false belief understanding, independent of age and verbal ability, in both participants with ASD and TD children. This study suggests that individuals with ASD have a diminished awareness of their own and others' intentions and that this diminution is associated with other impairments in theory

of mind.

Vuxenpsykiatri

- Bora, E., Yücel, M., & Pantelis, C. (2009). [Theory of mind impairment: A distinct trait-marker for schizophrenia spectrum disorders and bipolar disorder?](#) *Acta Psychiatrica Scandinavica*.

Abstract

Objective: The aim of this study was to critically review the literature in order to determine if Theory of Mind (ToM) impairment can be considered a trait-marker for schizophrenia spectrum disorders and bipolar disorder (BD).

Method: After a thorough literature search, we reviewed the empirical studies investigating ToM impairments in remitted schizophrenia patients, first episode patients, subjects at high-risk (HR) for psychosis and first-degree relatives of schizophrenia patients. Studies investigating ToM impairment in other schizophrenia spectrum conditions, affective psychosis and BD were also reviewed.

Results: ToM abnormalities exist at onset and continue throughout the course of schizophrenia, persist into remission, and while less severe, are apparent in HR populations. Mentalizing impairments are also observed in other forms of psychotic illness and BD.

Conclusion: Mentalizing impairment in schizophrenia spectrum disorders and BD might reflect underlying general cognitive deficits and residual symptom expression, rather than representing a specific trait-marker.

- **[Fulltext via länk]** Crawford, T. N., Livesly, W.J., Jang, K. J., Shaver, P. R., Cohen, P., & Ganiban, J. (2007). [Insecure attachment and personality disorder: A twin study of adults.](#) *European Journal of Personality*, 21, 191-208.

Abstract

This study used 239 twin pairs from a volunteer community sample to investigate how anxious and avoidant attachment are related to personality disorder (PD). Factor analysis showed that self-reported anxious attachment and 11 PD scales from the Dimensional Assessment of Personality Problems loaded onto one factor (emotional dysregulation), and avoidant attachment and four PD scales loaded onto a second factor (inhibitedness). Biometric models indicated that 40% of the variance in anxious attachment was heritable, and 63% of its association with corresponding PD dimensions was attributable to common genetic effects. Avoidant attachment was influenced by the shared environment instead of genes. Correlations between avoidance and corresponding PD dimensions were attributable to experiences in the nonshared environment that influenced both variables.

- Duñó, R., Pousa, E., Miguélez, M., Montalvo, I., Suarez, D., & Tobeña, A. (2009). [Suicidality connected with mentalizing anomalies in schizophrenia.](#) *Annals of the New York Academy of Sciences*, 1167, 207-211.

Abstract

Deficits in social cognition contribute to the severe difficulties in daily functioning of schizophrenic patients, although they have never been connected with suicidality. Theory of mind (ToM) tasks explore basic social abilities and have been found to be defective in schizophrenia. The relationship between ToM anomalies and suicidal history was studied in a sample of 57 stabilized outpatients. Logistic regression analysis showed an association between poor performance on second-order ToM tasks and a greater likelihood of suicidality in schizophrenic patients (OR = 4.02, 95% CI 1.18–13.62), which

was independent of current clinical and neuropsychological status, with the exception of poor premorbid adjustment in infancy and adolescence. We caution against potential biases from mixing cross-sectional ToM scores with lifetime suicidal records and retrospective assessments of premorbid adjustment through repeated testing of patients and their relatives. Hence, the present findings suggest that ToM deficits may contribute to the high risk of suicide in schizophrenia.

- **NY!** Eddy, C. M., Mitchell, I. J., Beck, S. R., Cavanna, A. E., & Rickards, H. E. (2010). [Altered Attribution of Intention in Tourette's Syndrome](#). *The Journal of Neuropsychiatry and Clinical Neurosciences*, 22, 348-251.

Abstract

Core symptoms of Tourette's syndrome are assumed to result from inhibitory dysfunction, which could also impair theory of mind. Here the authors report evidence for theory of mind difficulties: patients exhibit deficits in recognizing faux pas and understanding intentionality.

- Fossati, A., Acquarini, E., Feeney, J. A., Borroni, S., Grazioli, F., Giarolli, L. E., et al. (2009). [Alexithymia and attachment insecurities in impulsive aggression](#). *Attachment & Human Development*, 11, 165-182.

Abstract

The aims of this study were to develop a new measure of impulsive aggressiveness, and to assess whether this measure was associated with deficits in mentalized affectivity and adult attachment styles in a sample of 637 non-clinical participants. Extending Fonagy and Bateman's (2004) hypothesis, the mediating role of poor affectivity mentalization in the relationship between insecure attachment styles and impulsive aggression was also evaluated. Selected insecure attachment styles ($R^2_{adjusted} = .18, p < .001$) and deficits in mentalized affectivity ($R^2_{adjusted} = .25, p < .001$) were significantly associated with impulsive aggressiveness. The overall regression model accounted for roughly 33% of the variance in impulsive aggressiveness. Mentalization deficits significantly mediated the effects of attachment styles on impulsive aggressiveness, although effect size measures suggested that only partial mediation occurred.

- **NY!** Ghiassi, V., Dimaggio, G., & Brüne, M. (2010). [Dysfunctions in understanding other minds in borderline personality disorder: A study using cartoon picture stories](#). *Psychotherapy Research*. Tidig elektronisk publicering.

Abstract

Patients with borderline personality disorder (BPD) are thought to be impaired in their ability to reflect on others' mental states. Only a few empirical studies have explored the idea that impaired mentalizing in BPD is associated with poor quality of parental care or parental separation during early childhood. Fifty patients diagnosed with BPD were examined using a cartoon task. Quality of parental care was assessed using a self-report measure for recalled parental child-rearing style. Patients with BPD did not differ from controls in their mentalizing abilities. In BPD, however, mentalizing correlated inversely with maternal overprotection, lack of emotional availability, and rejection. Moreover, maternal punishment and rejection and parental separation at an early developmental age were significant predictors of poor mentalizing skills in BPD. These findings suggest that the quality of parental care during early childhood plays a role in the development of mentalizing skills in BPD.

- **NY!** Lysaker, P. H., Salvatore, G., Grant, M. L., Procacci, M., Olesek, K. L., Buck, K. D., Nicolò, G., & Dimaggio, G. (2010). [Deficits in theory of mind and social anxiety as independent paths to paranoid features in schizophrenia](#). *Schizophrenia Research*, 124, 81-85.

Abstract

Research suggests paranoia among persons with schizophrenia may be the result of a number of different psychological processes including deficits in theory of mind (ToM) and social anxiety. To test this hypothesis, this study sought to determine whether a group of highly paranoid persons with and without a ToM deficit could be detected and whether the group with paranoia and better ToM might have high levels of social anxiety. To explore this, a cluster analysis was performed on a group of 102 adults with schizophrenia spectrum disorders in a non-acute phase of illness on the basis of ratings of paranoid features using the Positive and Negative Syndrome Scale and levels of ToM deficit using a factor score which summarized four different ToM assessments. Four groups were produced: High Paranoia/Poor ToM ($n=14$); Low Paranoia/Good ToM ($n=22$); Low Paranoia/Low Middle ToM ($n=29$); and High Paranoia/High Middle ToM ($n=23$). Groups were then compared on self report of social anxiety. As predicted, the group with levels of high paranoid features and relatively better ToM performance had significantly higher levels of social anxiety than all other groups.

- **NY!** Lysaker, P. H., Olesek, K. L., Warman, D. M., Martin, J. M., Salzman, A. K., Nicolò, G., Salvatore, G., & Dimaggio, G. (2010). [Metacognition in schizophrenia: Correlates and stability of deficits in theory of mind and self-reflectivity](#). *Psychiatry Research*. Tidig elektronisk publicering.

Abstract

Research suggests that many with schizophrenia experience a range of deficits in metacognition including difficulties recognizing the emotions and intentions of others as well as reflecting upon and questioning their own thinking. Unclear, however, is the extent to which these deficits are stable over time, how closely related they are to one another and whether their associations with core aspects of the disorder such as disorganization symptoms are stable over time. To explore this issue, we administered three assessments of Theory of Mind (ToM), the Beck Cognitive Insight Scale (BCIS), and the Positive and Negative Syndrome Scale at baseline and 6 months to 36 participants with schizophrenia. Correlations revealed the ToM and BCIS scores were stable across the two test administrations and that the ToM tests were closely linked to each other but not to the BCIS. Poorer baseline performance on the ToM tests and the Self-Certainty scale of the BCIS were linked to greater cognitive symptoms at baseline and follow-up, while greater Self-Reflectivity on the BCIS was linked to greater levels of emotional distress at both baseline and 6-month follow-up. Results are consistent with assertions that deficits in metacognition are a stable feature of schizophrenia.

- **NY!** Mehl, S., Rief, W., Lüllmann, E., Ziegler, M., Kesting, M. L., Lincoln, T. M. (2010). [Are Theory of Mind Deficits in Understanding Intentions of Others Associated With Persecutory Delusions?](#) *The Journal of Nervous and Mental Disease*, 198, 516-519.

Abstract

The purpose of this study was to investigate the association of the Theory of Mind ability to infer intentions of others and delusions in patients with schizophrenia-spectrum disorders. In a cross-sectional design, patients with acute persecutory delusions (PD) ($n = 33$), patients with remitted persecutory delusions (PD-rem) ($n = 25$), and non-clinical controls ($n = 58$) completed a movie task, in which they had to infer the characters' intentions and emotions and a false-belief task. Delusions were rated by observers and

by the patients. Patients with PD were specifically impaired in the ability to infer intentions compared with patients with remitted delusions and controls. The ability to infer intentions predicted a significant amount of variance in delusions, even when executive functioning was controlled. Implications for models explaining the development and maintenance of delusions are discussed.

- **NY!** Nietlisbach, G., Maercker, A., Rössler, W., & Haker, H. (2010). [Are empathic abilities impaired in posttraumatic stress disorder?](#) *Psychological Reports*, 106, 832-844.

Abstract

Trauma survivors with PTSD show social interaction and relationship impairments. It is hypothesized that traumatic experiences lead to known PTSD symptoms, empathic ability impairment, and difficulties in sharing affective, emotional, or cognitive states. A PTSD group ($N = 16$) and a nontraumatized Control group ($N = 16$) were compared on empathic abilities, namely the Empathic Resonance Test, Reading the Mind in the Eyes Test, and Faux Pas Test. The Interpersonal Reactivity Index as a self-report measure of empathy and measures of non-social cognitive functions, namely the Verbal Fluency Test, the Five-Point Test, and the Stroop Test, were also administered. The PTSD group showed lower empathic resonance. No clear indications of other impairments in social cognitive functions were found. The PTSD group had significantly higher personal distress. Empathic resonance impairments did not correlate with subjective severity of PTSD symptomatology. This article discusses whether impaired empathic resonance in PTSD trauma survivors is a consequence of trauma itself or a protective coping strategy.

- **NY!** Rothschild-Yakar, L., Levy-Shiff, R., Fridman-Balaban, R., Gur, E., & Stein, D. (2010). [Mentalization and relationships with parents as predictors of eating disordered behavior.](#) *Journal of Nervous & Mental Disease*, 198, 501-507.

Abstract

Our study postulated that deficient mentalization abilities and maladaptive relationships with parents may be risk factors in the genesis of eating disorder (ED). The study examined 34 female inpatients with anorexia nervosa—binging/purging type and 35 matched non-ED controls. Data indicated that anorexia nervosa—binging/purging type patients presented significantly lower mentalization levels and reported significantly lower quality of current relationships with their parents, compared with non-ED controls. The combination of the mentalization and relationship quality variables showed an additive effect for some ED-related symptoms but not others. Moreover, high mentalization reduced ED symptomatology even if relationship quality with parents was deficient. Findings supported the role of low mentalization as a risk factor, and of high mentalization as a protective factor, in the formation of ED.

- Senju, A., Southgate, V., White, S., & Frith, U. (2009). [Mindblind eyes: An absence of spontaneous Theory of Mind in asperger syndrome.](#) *Science*.

Abstract

Adults with Asperger syndrome can understand mental states such as desires and beliefs (mentalizing) when explicitly prompted to do so, despite having impairments in social communication. We directly tested the hypothesis that such individuals nevertheless fail to mentalize spontaneously. To this end, we used an eye-tracking task that has revealed the spontaneous ability to mentalize in typically developing infants. We showed that, like infants, neurotypical adults' ($n = 17$ participants) eye movements anticipated an actor's behavior on the basis of her false belief. This was not the case for individuals

with Asperger syndrome ($n = 19$). Thus, these individuals do not attribute mental states spontaneously, but they may be able to do so in explicit tasks through compensatory learning.

- **NY!** Thakkar, K. N., Park, S. (2010). [Empathy, schizotypy, and visuospatial transformations](#). *Cognitive Neuropsychiatry*, 15, 477-500.

Abstract

Introduction. Adopting another person's visuospatial perspective has been associated with empathy, which involves adopting the psychological perspective of another individual. Both reduced empathy and abnormal visuospatial processing have been observed in those with schizophrenia and schizophrenia-related personality traits. In the current study, we sought to explore the relationship between empathy, schizotypy, and visuospatial transformation ability.

Methods. 32 subjects (16 women) performed a visuospatial perspective-taking task and a mental letter rotation task. Response times and accuracy were analysed in relation to dimensions of self-reported empathy, indexed using the Interpersonal Reactivity Index, and schizotypy, as measured by the Schizotypal Personality Questionnaire.

Results. We found that: (1) greater cognitive and affective empathy were associated with reduced negative schizotypy, and, in men, greater cognitive empathy was associated with reduced positive schizotypy; (2) improved accuracy for imagined self-other transformations in the perspective-taking task was associated with greater self-reported cognitive empathy in women and higher positive schizotypy across genders; (3) faster mental letter rotation was associated with reduced cognitive empathy and increased negative schizotypy in women.

Conclusions. Together, the findings partially support the commonalities in visuospatial transformation ability, empathy, and schizotypy, and posit an interesting link between spatial manipulations of our internal representations and interactions with the physical world.

- **NY!** Ziv, I., Leiser, D., & Levine, J. (2010). [Social cognition in schizophrenia: Cognitive and affective factors](#). *Cognitive Neuropsychiatry*.

Abstract

Introduction. Social cognition refers to how people conceive, perceive, and draw inferences about mental and emotional states of others in the social world. Previous studies suggest that the concept of social cognition involves several abilities, including those related to affect and cognition. The present study analyses the deficits of individuals with schizophrenia in two areas of social cognition: Theory of Mind (ToM) and emotion recognition and processing. Examining the impairment of these abilities in patients with schizophrenia has the potential to elucidate the neurophysiological regions involved in social cognition and may also have the potential to aid rehabilitation.

Methods. Two experiments were conducted. Both included the same five tasks: first- and second-level false-belief ToM tasks, emotion inferencing, understanding of irony, and matrix reasoning (a WAIS-R subtest). The matrix reasoning task was administered to evaluate and control for the association of the other tasks with analytic reasoning skills. Experiment 1 involved factor analysis of the task performance of 75 healthy participants. Experiment 2 compared 30 patients with schizophrenia to an equal number of matched controls.

Results. (1) The five tasks were clearly divided into two factors corresponding to the two areas of social cognition, ToM and emotion recognition and processing. (2) Schizophrenics' performance was impaired on all tasks, particularly on those loading

heavily on the analytic component (matrix reasoning and second-order ToM). (3) Matrix reasoning, second-level ToM (ToM2), and irony were found to distinguish patients from controls, even when all other tasks that revealed significant impairment in the patients' performance were taken into account.

Conclusions. The two areas of social cognition examined are related to distinct factors. The mechanism for answering ToM questions (especially ToM2) depends on analytic reasoning capabilities, but the difficulties they present to individuals with schizophrenia are due to other components as well. The impairment in social cognition in schizophrenia stems from deficiencies in several mechanisms, including the ability to think analytically and to process emotion information and cues.

Assessment

- Burgess, P. W., Alderman, N., Volle, E., Benoit, R. G., & Gilbert, S. J. (2009). [Mesulam's frontal lobe mystery re-examined](#). *Restorative Neurology and Neuroscience*, 27, 493-506.

Abstract

Purpose: Mesulam's (1986) mystery is that some patients with frontal lobe damage may show no cognitive impairment according to traditional office-based assessment procedures, yet nevertheless show marked cognitive handicap in everyday life. Mesulam suggested that "the office setting may introduce sufficient external structure to suppress some of these behavioral tendencies" (p. 322). We ask if it is indeed the office setting that is the problem, or whether it is that traditional assessments do not measure the full range of cognitive functions supported by prefrontal cortex.

Method: Neuropsychological case series study and review.

Results: Traditional methods for assessing cognitive deficits following frontal lobe damage typically do not measure the full range of deficits that can occur. In particular, rostral prefrontal cortex supports functions which are not routinely assessed yet are crucial to competent everyday life performance. These include meta-memory functions (e.g. context and source memory), complex behavioural co-ordination (e.g. prospective memory and multitasking), and mentalizing.

Conclusions: New clinical assessment procedures are required urgently. These could be based, in principle, both on recent experimental findings from cognitive neuroscience, and observation of behaviour outside office settings. These procedures could then be administered in an office setting.

- Fonagy, P., Target, M., Steele, H. Steele, M. (1998). *Reflective Functioning Manual, version 5, for application to Adult Attachment Interviews*. London: University College London.
- **NY!** [\[Fulltext via länk\]](#) Lerner, M. D., Hutchins, T. L., & Prelock, P. A. (2010). [Brief Report: Preliminary Evaluation of the Theory of Mind Inventory and its Relationship to Measures of Social Skills](#). *Journal of Autism and Developmental Disorders*. Tidig elektronisk publicering.

Abstract

This study presents updated information on a parent-report measure of Theory of Mind (ToM), formerly called the Perception of Children's Theory of Mind Measure (Hutchins et al., *J Autism Dev Disord* 38:143–155, 2008), renamed the Theory of Mind Inventory (ToMI), for use with parents of children with autism spectrum disorder (ASD). This study examines the responses of parents of adolescents with ASDs and explores the relationship of parental responses on the ToMI to measures of autistic symptoms and social skills. Descriptive statistics were compared to previous samples; correlations and regressions were conducted to examine the ToMI's criterion-related validity with social skills and ASD symptoms. Results support use of the ToMI with adolescent samples and

its relationship to social impairments in ASDs.

- Maunder, R. G., & Hunter, J. J. (2009). [Assessing patterns of adult attachment in medical patients](#). *General Hospital Psychiatry*, 31, 123-130.

Abstract

Objective

Patterns of adult attachment affect physical health and yet are unfamiliar to many clinicians. The purpose of this review was to derive descriptions of prototypic patterns of adult attachment that are relevant to health care.

Methods

Observations from attachment research using diverse methods to measure adult attachment were reviewed. A synthetic approach was used to integrate these observations into coherent descriptions of prototypic patterns of attachment.

Results

Four patterns of adult attachment (*secure, preoccupied, dismissing and fearful*) are distinguished by prototypic patterns in intimate relationships, affect regulation, use of social support, trait descriptors, mentalization and narrative coherence. These patterns are linked to health care relationships and health outcomes.

Conclusion

Prototypic descriptions of patterns of adult attachment may guide clinicians in appreciating individual differences in interpersonal style that affect the health of patients.

- Meehan, K. B., Levy, K. N., Reynoso, J. S., Hill, L. J., & Clarkin, J. F. (2009). [Measuring reflective function with a multidimensional rating scale: Comparisons with scoring reflective function on the AAI](#). *Journal of the American Psychoanalytic Association*, 57, 208-213.
- Roisman, G. I., Ashley, H., Fortuna, K., Fraley, R. C., Clusell, E., & Clarke, A. (2007). [The adult attachment interview and self-reports of attachment style: An empirical rapprochement](#). *Journal of Personality and Social Psychology*, 92, 678-697.

Abstract

Although 10 studies have been published on the empirical overlap of the Adult Attachment Interview (AAI) and measures of self-reported attachment style, results in this literature have been inconsistently interpreted in narrative reviews. This report was designed as a rapprochement of the AAI and attachment style literatures and includes 3 studies. Study 1 (combined N = 961) is a meta-analytic review showing that by J. Cohen's (1992) criteria (mean $r = .09$), the association between AAI security and attachment style dimensions is trivial to small. Study 2 (N = 160) confirms meta-analytic results with state-of-the-art assessments of attachment security and also examines attachment dimensions in relation to the Big 5 personality traits. Finally, Study 3 is an investigation of 50 engaged couples that shows that developmental and social psychological measures of attachment security predict somewhat distinct--though theoretically anticipated--aspects of functioning in adult relationships.

- Semerari, A., Carcione, A., Dimaggio, G., Falcone, M., Nicolo, G., Procacci, M., & Alleva, G. (2003). [How to evaluate metacognitive functioning in psychotherapy? The metacognition assessment scale and its applications](#). *Clinical Psychology and Psychotherapy*, 10, 238-261.

Abstract

In this article the authors present a method and a scale for the evaluation of the metacognitive profiles of psychotherapy patients. There will be a description of the

metacognitive function and of the alterations that occur to it during treatment. Various hypotheses will then be considered: (1) that the metacognitive function has a modular structure; (2) that for each type of psychopathological condition there is a different metacognitive deficit profile; (3) that to be successful psychotherapy needs to involve an improvement in any deficient metacognitive sub-function. There will then be a presentation of the Metacognition Assessment Scale (MAS) for the assessment of metacognitive deficits during psychotherapy. We shall then describe the first results we have on the application of the scale. Finally there will be an analysis of two patients suffering from Personality Disorders and a demonstration of what metacognitive deficit profile each one has and how it is modified over the course of psychotherapy treatment. The article ends with a discussion of the hypotheses made at the start in the light of the results that have emerged.

- Slade, A. (2005). [Parental reflective functioning: An introduction](#). *Attachment & Human Development*, 7, 269-281.

Abstract

Reflective functioning refers to the essential human capacity to understand behavior in light of underlying mental states and intentions. The construct, introduced by Fonagy, Steele, Steele, Moran, and Higgitt in 1991, and elaborated by Fonagy and his colleagues over the course of the next decade, has had an enormous impact on developmental theory and clinical practice. This paper introduces the construct of parental reflective functioning, which refers to the parent's capacity to hold the child's mental states in mind, and begins with a review of Fonagy and his colleagues' essential ideas regarding the reflective function. Next, the applicability of this construct to parental representations of the child and the parent – child relationship is considered. A system for coding parental reflective functioning, which will serve as the organizing framework for this special issue, is described. Finally, the three papers that make up this special section are introduced.

- Steele, M., & Baradon, T. (2004). [The clinical use of the adult attachment interview in parent-infant psychotherapy](#). *Infant Mental Health Journal*, 25, 284-299.

Abstract

This article provides an illustration of how the use of the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) can be extended beyond the research arena to its use as a clinical instrument in parent–infant psychotherapy. The article is based on the ongoing work of the Parent–Infant Project team at the Anna Freud Centre, London, where psychoanalytically trained therapists routinely administer the AAI early in the therapeutic process. In the first part of the article, we introduce the thinking behind the use of the AAI as a clinical tool and its particular relevance to the field of parent–infant psychotherapy. In the second part, we track the accruing clinical picture built up from a case example of the initial clinical sessions with a father who attended the Parent–Infant Project with his partner and two young children, and from the father's AAI. The discussion of the AAI material illustrates the distinct, yet related, interpretations of the parent–infant psychotherapist and the independent AAI coder as each made sense of the father's interview transcript. The resulting dialogue, between the psychodynamic-clinical and the attachment-research based approaches to the AAI, aims to highlight the added value the interview provides to the clinical understanding and process in parent–infant psychotherapy, which may ultimately help bridge the gap between the research and clinical domains.