Susanne Hörz[1], Wolfgang Mertens[1], Anna Buchheim [2]
[1] Department of Psychology, Ludwig-Maximilians-Universität München, Germany (email: hoerz@psy.lmu.de)
[2] Institute of Psychology, University of Innsbruck, Austria

Changes in Attachment Representations during Psychoanalytic Psychotherapies:
Comparing Adult Attachment Projective and Adult Attachment Interview

Introduction: In this study we examine of how attachment representations can be assessed validly using two different instruments and how they change throughout long-term psychoanalytic psychotherapies. Can unresolved attachment rooted in traumatic experiences be changed through an intense psychoanalytic treatment?

Attachment theory, originating in Bowlby's work (1969; 1973; 1980) has been discussed increasingly in its relation to psychoanalytic theory, developmental models and clinical work (Fonagy, Steele & Steele 1991). Studies on infant attachment styles and the transgenerational transmission of attachment patterns, and also the attachment between therapist and patients have been studied in recent years (Diamond et al., 2003; Slade, 2000). Changes in states of mind with respect to attachment are considered to reflect clinical changes in the patients' lives, for example improved interpersonal relationships. Attachment representations as measures of structural change in psychotherapies have been examined (Levy et al., 2006). The predominant method of assessing attachment used by adult attachment researchers is the Adult Attachment Interview (AAI; George et al. 1985). In this study, the AAI and the recently developed validated Adult Attachment Projective Picture System (AAP; George & West, 2001; George & West, in press, Buchheim, George & West, 2003), are used.

Goals: The goals of this study are
(a) to study the concordance of the AAI and AAP in a clinical sample in the context of psychoanalytic treatment,
(b) to examine changes in attachment representations after 240 hours of psychoanalytic psychotherapy.

Methods: A clinically heterogeneous sample of 21 patients, diagnosed with the Operationalized Psychodynamic Diagnostics (Cierpka et al., 2007; OPD Task Force, 2008), was interviewed both with the AAI and the AAP at the begin of an outpatient psychoanalytic psychotherapy. The AAI is a quasi-clinical interview in which individuals' mental representations concerning early attachment relationships are explored through a series of questions and probes designed to elicit an account of such experiences as separation, physical and psychological hurt, rejection, and trauma. In their accounts, individuals vary in their ability to describe their attachment experiences, and in the extent to which their stories reveal unity or coherence among the network of attachment memories. The AAP is an interview measure that is comprised of a set of eight black and white line drawings developed in the traditional projective tradition to contain only sufficient detail to identify the selected event. Attachment classification using the AAP is based on the analysis of the verbatim transcript of the "story" responses to the seven attachment pictures. The AAP classification system is comprised of a set of coding categories that evaluate three different dimensions of the stories: 1) defensive processes, 2) discourse and 3) content. After 240 hours of 3-times weekly psychoanalytic psychotherapy, the same instruments were given to assess changes in attachment representations. Two independent raters, with high inter-rater-agreement (kappa = .96), blinded for patient and point in time, rated the AAP and AAI interviews.

Results:

Concordance of Adult Attachment Interview (AAI) and Adult Attachment Projective (AAP) at baseline

At baseline, the correspondence between AAP and AAI was high: a concordance rate of 95% was found for classifying individuals as organized versus disorganized (unresolved) with respect to attachment (kappa = 0.90, p<0.001, n=21). Similarly, a concordance rate of 86% was found for the classification of secure versus insecure attachment (kappa = 0.64, p<.002, n=21). **Table 1** shows the concurrent validity of the two instruments using the four-category classification at time 1.

Table 1. Distribution of Attachment Classifications based on AAI and AAP at Time 1

		Adult Attachment Interview (AAI)				
		Secure	Preoccupied	Dismissing	Unresolved	Total
Adult Attachment Projective (AAP)	Secure	**4**	0	0	0	4
	Preoccupied	1	**1**	1	0	3
	Dismissing	1	0	**4**	0	5
	Unresolved	1	0	0	**8**	9
	Total	7	1	5	8	**n= 21**

Changes of attachment representations over time in psychoanalytic psychotherapies.

17 long-term treatments of 240 hours of psychoanalytic psychotherapy were studied. The expected changes in attachment representations (assessed both with AAP and AAI) from disorganized to organized attachment status (29%) and from insecure to secure attachment classification (18%) were found (**table 2**).

Table 2. Association between AAI Attachment Patterns at Time 1 (T1) and Time 2 (T2)

		T1 Attachment (AAI)				
		Secure	Preoccupied	Dismissing	Unresolved	Total
T2 Attachment (AAI)	Secure	3	1	0	**3**	7
	Preoccupied	0	0	1	2	3
	Dismissing	1	0	4	0	5
	Unresolved	0	0	0	2	2
	Total	4	1	5	7	n=17

Figure 1 shows changes in attachment security, assessed by AAP and AAI, and **figure 2** changes in attachment disorganization according to both measures. Overall, there were increases in the percentage of patients now classified as securely attached and decreases in disorganized attachment, both assessed by the AAI as well as by the AAP.
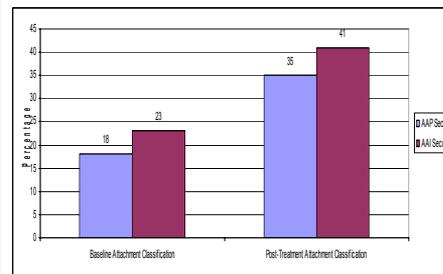

Figure 1. Changes in Attachment Classification: Secure Attachment
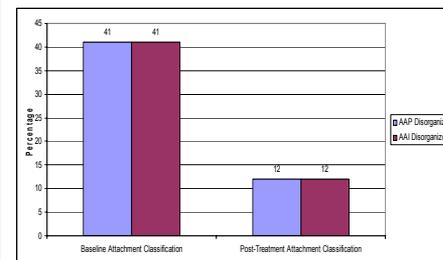
Figure 2. Changes in Attachment Classification: Disorganized (Unresolved) Attachment.

According to the **AAP**, a two-fold increase of patients classifiable as secure took place over time (n = 3, 17.6% vs. n = 6, 35.3%; statistically n.s.: McNemar's χ2 (1, n = 17), p = .453). The decrease in the number of patients classified with unresolved attachment (n = 7, 41.2% vs. n = 2, 11.8%), was non-significant, with a trend toward significance (Mc-Nemar's χ2 (1, n = 17), p = .063). Based on the **AAI**, the secure classifications increased over time (n = 4, 23.5% vs. n = 7, 41.2%; statistically n.s.:McNemar's χ2 (1, n = 17, p = .375)). Also here, the number of unresolved classifications declined from time 1 (n = 7, 41.2%) to time 2 (n = 2, 11.8%), showing a trend in significance (McNemar's χ2 (1, n = 17, p = .063).

Discussion: The use of both representational attachment measures promises to add to the study of changes in attachment representations in clinical samples. Especially in the AAP, the change of attachment dysregulation towards regulation during therapy can be demonstrated using the occurrence of specific individual "linguistic trauma markers" in the narratives and their resolution. The changes of attachment classifications throughout psychoanalytic treatment in our sample using both measures show how psychoanalytic therapy can provide attachment security and emphasize its efficacy in resolving traumatic experiences. The small sample size might explain why no statistically significant results were found, while clinically sensible changes could be established. Future studies need to replicate these findings with larger samples and should combine attachment findings with other clinical measures examining structural change, like reflective functioning or personality organization. Finally, it is of high interest to study the psychoanalytic process and to relate it to attachment and structural changes in order to understand the underlying mechanisms of change.

References: **Buchheim**, A., George, C., & West, M. (2003). [The adult attachment projective (AAP) - psychometric properties and new research results]. Psychotherapie Psychosomatik Medizinische Psychologie, 53, 419-427.
Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at one year of age. Child Development, 62, 891-905.
George, C., Kaplan, N., & Main, M. (1985). The Adult Attachment Interview. Unpublished manuscript. University of California, Berkeley.
George, C. & West, M. (2001). The development and preliminary validation of a new measure of adult attachment: the adult attachment projective. Attachment and Human Development, 3, 30-61.
George, C., & West, M., in press. The Adult Attachment Projective Picture System. New York, NY: Guilford Press
Levy, K. N., Meehan, K. B., Kelly, K. M., Reynoso, J. S., Weber, M., Clarkin, J. F., & Kernberg, O. F. (2006). Change in attachment patterns and reflective function in a randomized control trial of transference-focused psychotherapy for borderline personality disorder. Journal of Consulting and Clinical Psychology, 74, 1027-1040.
Slade, A. (2000). The development and organization of attachment: implications for psychoanalysis. Journal of the American Psychoanalytic Association, 48, 1147-1174.