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Critical Learning Periods for Self-Esteem Mechanisms of Psychotherapy and Implications for the Choice Between Individual and Group Treatment

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For some years the Psychotherapy Section of the World Psychiatric Association has been oriented towards evolutionary biology. This examination of the interplay between clinical neuroscience, evolutionary genetics and psychotherapy is largely due to the influence of Ferdo Knobloch, a former section chair, and was motivated partly by his belief that psychotherapy, like the rest of psychiatry, should be based on the basic sciences, including evolutionary psychiatry. Also he held firmly to keep the Section open to all, but not dominated by any of the many competing schools of psychotherapy. Knobloch, who is known for his multidisciplinary day hospitals, first in the Czech Republic and later in British Columbia, summarized his work in the very readable *Integrative Psychotherapy* (Knobloch & Knobloch 1979). Other contributions of evolutionary psychiatry to psychotherapy can be found in Stevens & Price (2000) and Wilson & Cory (2007).

Evolutionary psychiatry is based largely on comparative ethology, behavioural ecology, genetics and evolutionary theory. One of the contributions of comparative ethology is the concept of critical or sensitive learning periods. The most extreme example is that of imprinting in precocial birds, in which the chick learns to follow whatever it first sees after hatching. This is normally the mother, but if other objects are substituted, bizarre outcomes are possible, such as cockerels that first follow and then try to mate with cardboard boxes. Critical learning periods are important in learning bird song, and it is well known that cats exposed to mice between 10 and 16 weeks will become good mousers, but if not exposed to a mouse during that time they lose all capacity to chase mice.

Critical learning periods also apply to humans, and one example relevant to psychotherapy is the learning of self-es-

teem [Stevens & Price 2000 (pp. 268–273), Price 2002). Since the early work of Maslow, we have known of the enormous individual variation in self-esteem, such that some people think they own the whole world, whereas others barely think they have a right to exist. This is important for psychotherapy, because most psychotherapy patients suffer from low self-esteem. Our evolutionary orientation suggests to us that there are two critical learning periods for self-esteem, and the choice of type of psychotherapy may well depend on which of the two critical learning periods was responsible for low self-esteem in the individual patient.

One critical learning period is early childhood (about 2 to 5 years). This is when, according to Heinz Kohut, the parents and other adults “mirror the grandiose self” of the child (Siegel 1996). Each little achievement is applauded and the child is surrounded by praise and love. However, as we know only too well from the psychiatric clinic, not all children have this boost to their self-image. Many children exit from childhood feeling that they are fundamentally bad people, or failures, or unwanted, or less favoured than a sibling. Maslow himself was permanently scarred by a remark from his father to the effect that “no woman will ever look at someone with such an ugly face.”

The second critical learning period for self-esteem is adolescence. At this time the influence of parents is reduced or even becomes negative, while the input of the peer group is vital. To be accepted and valued by the peer group leads to high self-esteem. But many adolescents are re-

jected by their peers for various reasons. They may look different in some way, or have disability, or move into an area where the peer group is “full” and does not require newcomers. This rejection by their peers may undermine high self-esteem inculcated by parents, or aggravate low self-esteem developed in early childhood. The negative adolescent experience is clearly expressed in Irvin Yalom’s novel “The Schopenhauer Cure” (New York: Harper Collins 2005), Bonnie is taking part in group therapy and says:

“You all remember me, I’m sure. I was the little fat girl in your grade-school classroom. Very chubby, very clumsy, hair too curly. The one who was pathetic in gym, got the fewest valentines, cried a lot, never had best friends, always walked home alone, never had a prom invitation, was so terrified that she never raised her hand in class, even though she was smart as hell and knew all the right answers” (p 129).

After adolescence, self-esteem is difficult to alter. Of course important life events may have an effect, such as being granted a knighthood, or being black-balled from a desirable club, but on the whole it takes a long time to alter self-esteem, and in the clinic we see lots of successful, happily married people who have problems due to bad experience in early childhood or adolescence.

One contribution of Ferdo Knobloch was his recognition of the value of the “corrective experience”, first suggested by Alexander and French (1946) in which therapy can supply a re-run of an experience which was bad for the patient [Kno-

bloch & Knobloch 1979 (pp 95-100). The Knobochs say, "Candidates for psychotherapy are people not able to arrange corrective experience for themselves By corrective experience we understand partial reexposure to situations which the person was not able to master in the past, but reexposure under more favorable circumstances, so that successful mastery is achieved." (p 96, italics in original)

Ferdo Knobloch was firmly convinced that individual psychotherapy could provide a rerun of the parent/child relationship. Over a long period of treatment by an accepting, attentive and supportive therapist, the patient could overlay the bad early learning experience with a new and positive experience. This is helped by the style of therapy emphasizing the importance of childhood experiences, favouring the idea of the therapist adopting the role of parent, and resulting in the phenomenon of transference. Then the good therapist is able to elevate the patient into something like equality, in the way that a good parent eventually gives adult status to their child.

However, if the low self-esteem dates from negative experiences in adolescence, individual therapy cannot effect a re-run. The parent figure is impotent at this stage. What is required is a re-run with a group of people to represent the peer group. This can be achieved with group therapy, in which the other group members stand in for the adolescent peers, and here the transference is not to the therapist but to the peer group as a whole. The patient ideally leaves the group feeling accepted and valued by the other group members.

From the point of view of evolutionary biology, low self esteem is not so much a disorder as a strategy for dealing with life's problems. Differential parenting and the vicissitudes of adolescence yield an adult population consisting of a mix of "hawks" who always attack and "doves" who always give in, the balance between hawk and dove being maintained in the genome by negative frequency-dependent selection (Maynard Smith 1982). Low self-esteem is mediated by the lower levels of the triune brain (Stevens & Price 2000), but can be replaced by a dove strategy adopted at a higher level. This latter conscious and rational assumption of the dove role is an approach emphasised by many religions and philosophies which teach humility. Here, humility represents a de-escalating strategy of the neocortical or rational brain, whereas low self-esteem is a de-escalating strategy mediated at the paleomammalian and/or reptilian levels of the forebrain. It may well be that group therapy teaches humility as a means of being accepted and valued by the other group members with salutary sociophysiological sequelae.

So far as we know, the considerations outlined above are not currently taken into account by those who assess for psychotherapy and triage patients to either individual or group therapy. Theoretically, it would be possible to test these ideas by having an independent assessment of self-esteem during the triage process and predicting that those patients whose low self-esteem originated in early childhood would do better with individual therapy whereas those whose low self-esteem

originated in adolescence would do better with group therapy.

It might seem that once a critical learning period has expired, it would be impossible to reactivate it for therapeutic purposes. This is an empirical matter, but from the theoretical point of view we could postulate the existence of archetypes (Stevens & Price 2000) for both the parent/child relationship and for the adolescent/peer group relationship. These may be active throughout life and affect relations with older people and with peers, respectively. The basic level of the self-esteem component of the archetypes would be set in early childhood and adolescence, but might conceivably be activated and altered by the unique situation of the therapist/patient relationship, particularly as it occurs in psychoanalysis in which forgotten childhood memories are retrieved and nursery conflicts are analyzed; and in some forms of group therapy in which sensible adult discussion is discouraged by the therapist and the group members are reduced to something approaching teenager status.

Moreover, in the last several decades, innovative work of Kandel and others has shown brain structures and synaptic connections are remarkably dynamic (Etkin et al 2005). Increasingly, research confirms considerable neural plasticity continues across the life span as synapses are modified by diverse environmental factors, including processes of learning and memory.

It is increasingly clear that psychotherapy involves more than talk or even thought – it actually activates and alters

memory and learning. Indeed, events are remembered as both emotional Gestalts (implicit memory) as well as more cogent narratives (explicit memory). Thus, the accounts of past and current episodes of a life offer hermeneutical clues as to the internal mental states of people (Jaspers 1913, Etkin et al 2005, Wahler & Castlebury 2002).

Implicit emotional recollection is an often vivid yet pre-verbal mechanism whereas narrative competence is the ability to understand, remember, reorganize and create complex linguistic structures such as "stories" or "tales". Narrative functions are an important resource for interpreting affectively charged experiences reposing in implicit memory and, so, transform these into explicit memories. Upon conscious recollection and consideration of thoughts and feelings, persons can more easily integrate these toward construction of a coherent recollection of the *dasein* of experience itself, which facilitates true understanding and elaboration – at least of insight and, sometimes, of wisdom (Wahler & Castlebury 2002).

Mental disorders often impact narrative competence, coherence and cogency, as is reported most notably in psychoses, delusional depression and mania. Patients suffering from these disorders sometimes generate bizarre narratives about themselves and the others, i.e., delusions. Jaspers argued that beliefs ought not be deemed delusional due to mere content, but rather due to how a patient holds such a belief. Moreover, he viewed primary delusions as autochthonous, that is, ultimately without any speck of rationality having given rise to their formation (Jaspers 1913).

Likewise ability to anticipate mental states of others, the so-called "theory of mind", is affected both in patients diagnosed with schizophrenia (Janssen et al 2003), and in those diagnosed with a bipolar disorder, even in euthymic phases (Kerr et al 2003). The ability to conceptualize other people's beliefs and intentions is an essential part in understanding and creation of narratives. Such narrative competence is thought to contribute to social cognition allowing the individual to build up a collection of scripts where intentions and beliefs are correctly located (Bruner 1986).

In Post-Traumatic Stress Disorder (PTSD) particularly, patients are unable to properly retrieve specific memories about the traumatic event, and, contemporarily, are upset by the recrudescence of the traumas in the form of flashbacks (Ehlers et al 2004). Other narrative incongruities in PTSD involve confusion about temporal order, and difficulty in accessing important details, both of which contribute to problematic appraisals of the traumatic event. To date, it is unknown whether this defect of narrative competence is a consequence of the disorder itself, or a factor favouring its onset and development. But clearly in PTSD, narrative competence is related to recovery, particularly as the coherence, identification of meaning, and self-evaluation in the building up of a narrative regarding the trauma are concerned (Tuval-Mashiach et al 2004). Psychotherapy, by helping reassert archetypes at the foundation of current self-esteem, also can integrate a more positive narrative of the self from childhood to adulthood.

A line of research that links narrative competence and psychological wellness comes from very specific investigation of linguistic representation of early attachment as conceptualized by Bowlby (1973). Mary Main and co-workers developed these ideas via an interview to investigate the quality of the relationship subjects (adult or adolescent) recall having had with their parents as children (Main 1991). Individual narrative style (particularly when of greater coherence and fluency) is a key factor in assessing the quality of attachment in childhood. The most decisive subfactors in attachment were: orientation, the way of placing the protagonists of a story into the narrative context; structure, the degree of linking events in terms of cause and effect; affection, the presence of emotions and feelings consistent with narrated events; integration, the degree of linking facts with emotional reactions related to them and within the story-telling context (Main 1991, Baerger & McAdams 1999). People having better narrative coherence of their remembrance have a better chance of being psychologically healthy and well-adjusted adults, even despite negative events or emotions related to early memory.

Psychotherapy often involves the putting together of a story. Earlier ideas about the mechanisms of psychotherapy emphasized beneficial effects attributable to a specific kind of relationship patients developed with therapists. These hinged on social interactions that led to specific behavioural changes learned and developed in the course of the therapeutic relationship. However, gradually forming

a story—a more and more coherent story about the past, the present and the future prospects—contributes to both the symptom improvement observed in patients undertaking psychotherapy as well as the actual brain mechanisms that underlie such improvements (Fitzpatrick & Hanly, 1996). It is not yet clear how best to fully disentangle effects of secure attachment such as on the development of a valid narrative competence (via a positive feedback from a reliable parent), or from epigenic factors affecting risk of mental disorders. So too, it is not clear whether narrative competence is a protective factor against psychopathology, or if psychopathology disrupts narrative competence and renders people suffering from a mental disorder less able to express a coherent tale of their past. Indeed, recent studies of persons suffering from PTSD demonstrate that an increase in length of narrative from pre- to post-treatment was related to a better organization of thoughts about the trauma and a decrease of symptoms of depression (Foa et al., 1995). This effect may also be particularly important for patients suffering from affective disorders, as they are likely to have also had deeply upsetting life experiences. Better integration of nega-

tive events into a more textured existential continuum of the subject (dasein), by means of improved narrative competence is a key step in the path toward symptom stabilization and fuller recovery.

Such insights concerning critical learning periods, narrative capacity and the neuroscience entailed in such existential adaptation are rapidly enhancing research that spans neuroscience and psychoanalysis and nearly all types of psychotherapy while also bolstering the scientific foundation of psychotherapy. In practical terms, the sequelae of negative childhood events are perhaps best addressed by individual therapy whereas those due to adversities in adolescence are likely to benefit from group therapy. It is less widely appreciated but quite important to appreciate that such research also directly links psychotherapy to evolution, particularly the emotive and rational capacities and reactivities of highly social species such as *Homo sapiens*. Most patients are able to give a clear account of how they felt about themselves in childhood and adolescence, and these reports should be taken into account in deciding between individual and group therapy as well as in guiding the course of any dynamic therapy.

References

- Alexander F, French TM (1946). *Psychoanalytic Therapy*. New York, Ronald
- Baerger DR, McAdams DP (1999). Life story coherence and its relation to psychological well-being. *Narrative Inquiry* 9:69–96
- Bowlby J (1973). *Attachment and loss: Attachment*. New York, Basic Books
- Bruner J (1986). *Actual minds, possible worlds*. Cambridge, MA, Harvard University Press
- Ehlers A, Hackmann A, Michael T (2004). Intrusive re-experiencing in post-traumatic stress disorder: phenomenology, theory, and therapy. *Memory* 12:403–415

- Etkin A., Pittenger C, Polan HJ, Kandel ER (2005). Toward a neurobiology of psychotherapy: basic science and clinical applications. *J Neuropsychiatry Clin Neurosci* 17:145–158
- Fitzpatrick Hanly M (1996). "Narrative", now and then: a critical realist approach. *International Journal of Psychoanalysis* 77:445–457
- Foa EB, Molnar C, Cashman L (1995). Change in rape narratives during exposure therapy for posttraumatic stress disorder. *Journal of Trauma Stress* 8:675–690
- Janssen I, Krabbendam L, Jolles J, van Os J (2003). Alterations in theory of mind in patients with schizophrenia and non-psychotic relatives. *Acta Psychiatrica Scandinavica* 108:110–117
- Jaspers K (1913). *Allgemeine Psychopathologie: Ein Leitfaden für Studierende, Ärzte und Psychologen*. Berlin, Springer. In: Hoenig J, Hamilton MW (eds) *General Psychopathology, trans.* Chicago, University of Chicago Press, 1963
- Kerr, N., Dunbar, R.J., Bentall, R.P. (2003). Theory of mind deficits in bipolar affective disorder. *Journal of Affective Disorders* 73: 253-259
- Knobloch, F. and Knobloch, J. (1979) *Integrated Psychotherapy*. New York: J. Aronson
- Main M (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) model of attachment. Findings and directions for future research. In: Parkes CM, Hinde JS, Marris P (eds) *Attachment across the life cycle*. London, Routledge (pp 127–159)
- Maynard Smith J (1982). *Evolution and the theory of games*. Cambridge, Cambridge University Press
- Price JS (2000). Subordination, self-esteem and depression. In: Sloman L, Gilbert P (ed) *Subordination and defeat: an evolutionary approach to mood disorders and their therapy*. Mahwah NJ, LEA (pp 165–177)
- Siegel AM (1996). *Heinz Kohut and the psychology of the self*. London, Routledge
- Stevens A, Price J (2000). *Evolutionary psychiatry: a new beginning*. 2nd ed. London, Routledge
- Tuval-Mashiach R, Freedman S, Bargai N, Boker R, Hadar H, Shalev AY (2004). Coping with trauma: narrative and cognitive perspectives. *Psychiatry* 67:280–293
- Wahler RG, Castlebury FD (2002). Personal narratives as maps of the social ecosystem. *Clinical Psychological Reviews* 22:297–314
- Wilson DR, Cory GA (2007). *The evolutionary epidemiology of mania and depression: a theoretical and empirical interpretation of mood disorders*. New York, Mellen Press

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