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Attachment and Early Intervention

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Everyone knows that prevention and early intervention in cases of child maltreatment can reduce parents' and children's suffering greatly and save money as well. But how should we intervene - and with whom? In this brief article, I consider these two issues from my 30 years' experience working in prevention and amelioration of mental retardation, abuse and neglect, and mental illness.

Attachment and Child Maltreatment

Infant attachment: Making cognitive and affective meaning of experience

Parental behavior in cases of risk is usually described in terms of what parents do that they shouldn't do or fail to do that they should do. I'm going to begin differently - with parental intentions and then ask how acting on those intentions produces unexpected and unfavorable results (Crittenden, in press).

Attachment theory is a theory about protection from threat. Attachment behavior is infants' contribution to enabling caregivers to protect and comfort them. Although mothers' sensitive responsiveness to infant signals is crucial to infants' safety and security, mothers don't "naturally" know what babies want. Moreover, they have many other demands on their attention and activity. Consequently it is up to babies to signal their needs. Patterns of attachment are infants' strategies for shaping mothers' behavior. When an adaptive strategy is used, mothers should become more competent and infants more safe and comfortable. In some cases, however, the threat is such that the infants' strategy can only accomplish part of this. In cases of risk, strategies can create discrepancies between appearance and reality in which infants (or children) appear more or less at risk than they actually are. These strategies are associated with risk for physical abuse and neglect, sexual abuse, and psychological distress (Crittenden, 1999).

Attachment behavior (e.g., crying, looking, reaching, clinging, calling) attracts the mother's attention. Once she arrives, she picks up the baby and begins trying out remedies for the problem. She expects her baby to stop crying when she provides the needed solution.

But it's not that simple. The way that mothers do this has substantial impact on how their

babies will learn to use their minds. Some mothers think their babies must learn to wait, must learn that they are not the only important thing in life. True enough! We all agree, but when? When should the baby learn that? When can babies learn that? Not in the first months of life. Other mothers think that babies can't wait at all. Others vacillate between these - depending upon how the mother feels or who is guiding her at the moment (Is her husband there? Her mother?)

Cognition and affect. Research has shown that for newborns to learn contingencies, the contingencies must be nearly perfect (Gergely, 2001). Baby cries, mother comes. Each time, every time- without intervening events. The more predictably responsive the mother is early on, the more quickly and firmly the infant learns the relation between his crying and mother's coming. Predictable interpersonal contingencies are one way that infants - that all people - feel connected. Babies whose mothers come quickly and predictably learn sooner what to *expect* of themselves and their mothers than babies whose mothers are less predictable.

But what should the mother do? Surely we can't expect that, without any prior experience with this baby, she will know already what he or she needs. Mothers everywhere do the same thing: they pick the baby up and put him against their chest, on the left where their heartbeat can be felt, and murmur soothing sounds while stoking and rocking the baby rhythmically. This is the sensitive part of Mary Ainsworth's notion of "sensitive responsiveness" (Ainsworth, 1979); in Dan Stern's terms, it is "attunement" (1985). Mothers bring their own rhythms into accord with their babies' arousal and then help to modulate the baby's arousal from aroused crying to calmly alert. When that occurs with regularity, babies *feel* themselves in synchrony with another human. Shared states of arousal are the second way that babies - and all humans - know that they are together with another human.

Babies with sensitively responsive mothers learn two things:
(1) Babies learn that there are predicable contingencies between events. Most important, they learn that their behavior leads to, *causes*, their mothers' response. I call this transformation of temporally ordered stimulation into implicit causal meanings "cognition."
(2) When mothers attune their response to the baby's arousal and then modulate the arousal, babies learn that their feelings are understood and that sharing feelings with another person leads to comfort. This transformation is "affect."
Sensitively responsive mothers enable their babies to make cognitive and affective meaning of experience.

Type B: Balanced and secure. By three months of age, babies need variability (Gergely, 2001). Now they can wait. Call out, say you're coming and the baby will wait - in eager anticipation of a certain event occurring at an uncertain moment. The intense negative arousal of crying alone (a bad feeling) is transformed into the excited expectation (a good feeling) of soon being together. Cognitively and affectively, such favored babies

make meaning out of life and relationships and, in the process, they learn what causes what, how to regulate their own feeling states, and how to communicate with other humans. Such a baby is on the way to being interpersonally secure and intra-psychically balanced with regard to affect and cognition.

Type A: A preference for cognition. Some mothers are highly predictable, but unattuned to their infants. In some cases, the mother rarely comes or comes after such a delay that they baby has already given up hope. When she arrives, the infant is unable to find the contingency. Unsoothed crying escalates quickly until the baby is extremely distressed. Often mothers of these babies think, "He's got to learn to control himself!" He does, but not at this age. Indeed, he can't at this age. Or maybe their attention is preoccupied with other things and they just don't register the baby's need at all. Either way, the baby is left to cry until he exhausts himself and falls asleep.

What has this infant learned? That there is predictably no response to his actions. That when he feels distressed, things get worse and worse and there is no relief except sleep.

Other mothers respond promptly and consistently, but angrily. They speak sharply, touching and picking the baby up abruptly or harshly. The baby feels worse, predictably worse. But if he cries more intensively- as he will - his mother gets more upset. Their negative feelings will escalate in synchrony.

A third group of mothers come promptly and predictably, but instead of soothing their babies, they smile and laugh - as if to deny the baby's feelings. The babies cry more and the mothers smile harder, with sharp teeth displayed in a face filled with fear.

All these babies learn about contingencies: they cause nothing, they irritate other people, they cause others to laugh when they feel bad. The babies learn about affect as well. They learn that displaying aroused negative affect leads to more intense negative affect. By about three months of age, brain maturation enables them to inhibit behavior - and these babies inhibit the expression of negative affect. Life gets better; they are less stressed and so are their caregivers.

Type C: A preference for affect. A third group of mothers responds to their babies' crying, but unpredictably. Sometimes they respond promptly, sometimes after a delay, sometimes even before the baby has really signaled! Sometimes they respond with comforting attunement, but often not. These babies are on a schedule of unpredictable, intermittent positive reinforcement of negative affect. Such a schedule maintains displays of negative affect for long periods of time and at high intensity in spite of positive reinforcement of incompatible behavior, punishment, or attempts to extinguish the behavior. These babies don't know how to predictably affect the contingencies on their mothers' behavior and they feel intensely badly about it. Cognition fails them and affect overwhelms

them. Their increasing arousal distresses their mothers until parent and infant are joined in their inability to regulate their feelings. They neither communicate reciprocally, nor inhibit negative affect. Instead, they are filled with rapidly escalating mixed negative feelings of anger, fear, and desire for comfort.

Child abuse and neglect. Type B babies are generally safe and protected. So are most Type A and Type C babies. Nevertheless, in extreme cases, Type A babies are harmed. Mothers whose own concerns overwhelm them may not perceive their babies' signals. Such mothers protect themselves and *neglect* basic needs of their infants. Other mothers are over-vigilant and over-demanding, expecting their babies to respond like older children; they punish their children's demands severely, *abusively*. Mothers who fear distress and need everything happy, respond incongruently - and thus *psychologically maltreat* their infants. In infancy, there is little the children can do to protect themselves except inhibit the negative affect that leads nowhere and exhausts them. Put another way, Type A babies organize around predictable contingencies and inhibit displays of negative affect that elicit undesirable outcomes from their mothers. Cognitive representations organize - or *dispose* - their behavior.

Mothers of Type C babies are middling in sensitive responsiveness, falling between the mothers of Types B and A infants. They are both too sensitive (alerting when there is no signal) and too insensitive (failing to alert when there is a signal) and also too responsive (over-reacting) and too unresponsive (giving little response). Their babies become highly aroused and feel bad; often this is expressed somatically as problems with eating, sleeping, and attending. Although they spend too little time in the comfort of interpersonal engagement (and sleep) and too much time in distressed arousal, they are not usually maltreated. They learn to act on the basis dispositional representations (DRs) of how they *feel*.

A precarious transition: Me, you, and the rules

In the middle of the second year of life, neurological maturation initiates a major period of psychological change; toddlers use affect in a variety of communicative ways that were not possible in infancy. Concurrently physical maturation in locomotion increases toddlers' exposure to danger. These changes coalesce in the reorganization of toddlers' strategies (Crittenden, 1992).

Type B: We can work it out. Once children can walk, the comforting relationships of infancy become hierarchical relationships in which parents use authority to restrict children and teach them self-protective behavior. This produces conflict between children's desires and their parents' protection. Type B toddlers try to negotiate these differences, but with their limited access to language, they are very dependent upon parents' predicting and preventing struggles. Having fewer rules makes their protective function clearer to children; knowing their function makes children more willing to cooperate. In addition, parents who are predictably firm in enforcing the rules have toddlers who accept the rules. If, in

addition, the parent prevents problems (by removing forbidden objects or distracting the child's attention to safe activities), the child is not overwhelmed by having to remember too many rules and not frustrated by always being reprimanded. Many parents, however, can't manage this and their children shift from Type B in infancy to a more compliant (Type A) or persuasive (Type C) strategy in toddlerhood.

Type C: It's about me! Some toddlers learn to manipulate their parents' feelings by turning protective rules into personal battles. It's about *me!* These toddlers exaggerate their displays of feelings. Angry omnipotence is alternated with disarming displays of tender vulnerability. The displays shape and mold their parents' feelings. As a result, parents are both coerced to do their toddler's bidding and, mindful of the importance of protecting their children, anxious to regain authority. To the extent that the parent forgets the protective function of the rule and focuses on enforcing authority, they enter the toddler's dispute on the toddler's terms. It's about me! No, it is about *me!* The struggle begins and, once begun, few parents know how to resolve it. Their toddlers' intense displays of affect leave them anxiously aroused and with few ways to regulate either their own feelings or those of their toddlers. In moments of intense arousal, toddlers will sometimes be hurt by parents' over-zealous punishment. Rates of physical punishment spike abruptly in the middle of the second year of life - as do rates of injury from punishment (cf. Crittenden, 2004).

Other parents feel as anxiously aroused as their children. This leaves their children feeling unsafe. When parents become distressed, children fear lack of competent protection. They agitate to elicit it, becoming perilously needy. Both groups of toddlers are now *more* at risk than in infancy for maltreatment, in the forms of sudden and unpredictable attacks and negligent failure to enforce safety procedures. A different group of children is at risk for abuse. Their parents, however, being coerced into being more responsive, appear *more* normal than in infancy.

Type A: Internalizing others' rules. Toddlers whose parents are extremely withdrawn (i.e., self-focused, depressed) learn to combine inhibition of negative affect with display of false positive affect that attracts their parents' attention in desirable ways. Their risk of being neglected is reduced by their role reversing, *compulsive caregiving* strategy.

Toddlers whose parents are harshly punitive learn to do exactly as their parents desire, even before it is requested; their *compulsive compliance* protects from the parents' anger. Toddlers whose parents used incongruent positive affect learn to do the same; all appears happy while, in fact, there is no affective synchrony. For these toddlers, there is no chance of coercing the parent because, from the parent's perspective, it's not about the child.

Compulsive children refine the Type A strategy of infancy into a tool for eliciting attentive care from their parents, who now appear less depressed, angry, or insensitively incongruent than when their toddlers were infants. With compulsive strategies, Type A toddlers become *less* at risk for maltreatment than in infancy and more at risk of certain

kinds of psychological distress at later ages.

Preschool-aged children and the uses of language

In the third year of life, children become able to substitute language for non-verbal affective communication. How this is managed is crucial for children's ability to understand the sources of their own and other's behavior as well as for regulation of children's safety.

Type B: When language communicates. Some children are given words that accurately describe their feelings - even when these are negative feelings that express their frustration with their parents. Similarly, they are helped to tell the simple episodes of their daily life - even when these are unpleasant and built around uncertainty. Open and elaborated verbal communication is typical of Type B children. Parents of such children are comfortable with mixed feelings and complex causation and are satisfied with a less than perfect reality.

Type A: Borrowed language and perspectives. Type A children, especially compulsive Type A children, learn to use language to say how things *should* be, how mommy and daddy want life to be. When they tell episodes, their parents help them to see what happened - as the parents' desire it to be recalled. Type A preschoolers learn to tell episodes from the parents' perspective; their own perspectives sometimes fail to find expression in words. The parents of compulsively caregiving children fear rejection by their children and need soothing, reassuring stories of their children's lives. Parents of compulsively compliant children fear mistakes; they need children who do the right thing. Parents of compulsively attentive and performing children believe that appearance is all that matters and they strive to maintain the right appearance. In all cases, children inhibit expression of negative affect, display positive affect and behavior that pleases parents, and tell the stories of their lives in borrowed parental language. Such children become safer, with more safely engaged parents, but are at risk for losing access to their own thoughts and feelings.

Type C: When words don't work. Type C children, on the other hand, diverge in two directions: constant chatter that keeps nothing discrete or clear and silence that hides what isn't understood. In both cases, however, language fails to communicate with clarity. The chatter functions to keep parents focused on the child while failing to clarify exactly why the child needs this attention or how events are causally connected. Silence marks the place where neither the child's nor the parents' perspective can be tolerated by the other. Parents of silent children often have fearful secrets, either in their own endangered past or in their marriage, from which they wish to protect their child. Unfortunately, instead of protecting children, all too often they only confuse the child about why things happen as they do. Ironically, too many and too few words have similar effects: they exacerbate negative feelings and obscure the causal relations between parent and child. In an effort to ensure that they will be protected, some Type C children abandon language as a strategic tool and engage in provocative and risk-taking behavior

The school years: Why did I do that?

Up to about six years of age, children are refining their understanding of the effects of (1) their behavior on others and (2) their feelings on their behavior. This occurs in infancy in implicit, non-verbal ways (i.e., *procedural* and *imaged* memory) and in toddlerhood is transformed into explicit, verbal information (i.e., *semantic* memory and *connotative language*). Later, in the preschool years, the experiences that form the basis for these understandings are encapsulated in episodes, together with language that conveys the affect associated with the experience (i.e., *episodic* memory). That is, by age six, children have many ways of knowing, each of which is a dispositional representation (DR) that can influence their behavior.

To understand the relation between attachment and maltreatment in the school years, one must focus on how children explain their own behavior. This is an integrative process that requires children to examine their own motivations, i.e., their DRs. When all the DRs suggest the same action, there is nothing to examine. The crucial occasions are those in which the various DRs motivate incompatible responses. Which type of DR does a child rely on most often when what he usually does, feels like doing, should do, and recalls doing are in conflict? When children do what they should do, in spite of not feeling like doing so, no one questions them - and the discrepancy among DRs is likely to go unnoticed by all. But when children do what adults think they should not do, they are asked, "*Why did you do what you did when you knew you weren't supposed to*?!! Of course the answer is, "*Because I felt like it and thought you wouldn't find out*." But many parents will punish a child who answers honestly like that. So children learn to deceive both others and, more importantly, themselves about their reasons for behaving as they did. They learn to spout parent-pleasing platitudes that, in fact, had nothing to do with their behavior.

The irony, in both cases, is that the parents themselves rarely understand why they are doing what they do, especially when, as in cases of maltreatment, it has become clear that they should not have done it.

Prevention and Intervention

If all of this is more or less accurate, what can we do to prevent or ameliorate risk to children and their parents? Four conditions are relevant to selecting an intervention strategy: the development of the child, the child's strategy, the parent's strategy, and the extent of the parents' integrative capacity.

Developmentally salient functions. The section above has addressed development by showing that the focus of the parent-child relationship keeps changing and requiring new skills and attitudes from parents. Parents need to be sensitive to infants' competencies and responsive to their perception of threat; they should be cognitively predictable and affectively empathic. That is, parents function as attachment figures in children's ever-changing zone of proximal development (cf., Vygotsky, 1987). Toddlers need protection

within safe limits in a hierarchical relationship with parents that fosters both competence and trust. Preschool-aged children need help finding words to express their feelings and experiences, especially those that are uncomfortable or confusing. Young school-aged children need to explore their varied motivations and the process by which one becomes enacted behavior. Intervention should address these developmental differences in how parent-child relationships function.

Child and parent self-protective strategies. Individuals' self-protective strategies are crucial to understand as well. The Type A compulsive strategies are heavily skewed toward cognitive, logical, reasoning, rule-based processes. Negative affect is minimized and sometimes transformed into false positive affect. The intervention techniques employed should correct this by emphasizing (1) the importance of experiencing feelings, especially negative feelings, and (2) the flexibility and variation that is possible even within a predictable rule structure. Type C strategies are organized around shifting, exaggerated, and manipulative displays of negative affect in a context of uncertain outcomes. Intervention should (1) reduce the emphasis on expression of feelings, (2) turn the focus towards other people's perspectives, and (3) highlight the predictable connections between events and outcomes.

The point is quite simple: Types A and C are psychological opposites that might require opposite interventions. Giving the same intervention to a mixed group might be helpful to those using one strategy and harmful to those using its opposite. For example, prescriptive or information-based approaches might be counter-indicated for Type A parents as might contingency-based behavioral techniques. On the other hand, Type C parents might experience greater negative arousal when imagery, somatic enactments, or episodic recall were emphasized - which, of course, might be very beneficial techniques to use with Type A parents.

Reflective integration. Imbedded in the developmental discussion above was the notion of an array of types of processing of information from preconscious (implicit) to conscious (explicit and verbal) to consciously reflective (integrative). Parents differ in the extent to which their behavior derives from these processes and the extent to which they can use reflective processes. The more dependent a parent is upon implicit processes and the less able to put motivations into words and consider discrepancies and conflict among motivations, the more intense and personally focused must be the intervention offered to them. Indeed, one can suggest a gradient of interventions, each tied to parents' ability to manage the transformation of information to behavior.

Starting with the most competent parents, needing the least intervention, *parent education* in group settings is an appropriate preventive intervention when parents can use and integrate all sources of information, but lack specific information about young children. Given the small, single-generation families that exist today, parent education is relevant to the needs of many first-time mothers. Both the content and the group context can enable

mothers to enlarge their repertoire of possible responses to the babies while helping at-home mothers to feel less isolated.

Parents who are capable of integrating information, but who are stumped regarding some particular problem, may benefit from *short-term counseling* around that problem. In this case, information may be offered, but more importantly the counselor helps the parents to reconsider the problem from new perspectives until a new way forward is discovered. For counseling to be effective, however, parents must have access to both cognitive and affective information, be able to communicate effectively in words, and be skilled and comfortable with critical, integrative reasoning processes.

When parents are relatively verbal, but not skilled with integrative processes, *infant intervention* may be appropriate. When this is done without the infant being physically present, but with videotaped interactions of infant and parent, the parent can learn to (1) observe the baby accurately, (2) explore their own feelings while watching themselves with their babies, and (3) reflect on what they see and feel. Having other mothers present and engaged in the same process can give each mother more practice, including less emotionally arousing practice than with their own baby, as well as enlarging their repertoire of things to do (through observational learning). Having the babies are present will reduce the reflective opportunity for the mothers whereas, if interactions are not videotaped, mothers skewed recall may distort the reflective process.

When parents function primarily on the basis of implicit information and especially if they themselves have been exposed to danger, either when they were young or currently in their adult relationships, *adult psychotherapy* (individual, marital, or family) for the parent might be needed. The focus of such psychotherapy should be identifying the distortions in meaning attribution, bringing all forms of transformation to awareness (making them verbal and conscious), and learning the process of integration of information. Once that is managed (a long-term process in cases of severe distortions), the other forms of intervention (listed above) can be used productively.

Sensitive responsiveness. The point is that sensitive responsiveness in relationships is the topic of prevention and early intervention, is the process of intervention, and is the outcome as well. To be successful, treatment must function in the parents' zone of proximal development. When that includes learning to participate in open and reciprocal relationships in which vulnerabilities can be expressed, addressed, and protected, the intervention itself must become such a relationship. Thus, the more limited the parents' comfort in relationships (and the more skewed their processing), the more important and extensive will be the therapeutic alliance required to enable change. A "one size fits all" intervention will not only fail the most jeopardized parent-infant relationships, it might harm them. We need to select and focus our interventions will care, especially in cases of high risk (remembering that some dyads that appear well functioning have hidden problems). Good screening, thus, becomes an important part of intervention.

Interventions can be organized in terms of sources of information (i.e., cognitive and affective forms of procedural, imaged, semantic, connotative, and episodic memory systems) and their degree of integration (i.e., preconscious, conscious and verbal, reflective and integrative). Selecting an intervention strategy requires assessing both whether the parent has a bias toward Type A or C and also which processing skills have been mastered. Offering an intervention that assumes less bias or greater skills than the individual has can do harm. For example, offering parent education to a not-yet verbal parent with a bias toward cognitive processing can generate new rules and standards that the child must meet. This, of course, is antithetical to sensitive responsiveness. Similarly, offering a Type C parent brief counseling around tantrumming may backfire if the parent's exaggeration of feeling and minimization of their own contribution isn't recognized.

Assessment. Assessment is the key to planning an appropriate intervention. Of course, the assessment must be tied to the strategies, information processing, and integrative functioning offered here. A series of relevant assessments has been developed for this purpose (as well as for research). The CARE-Index is a brief screening tool suitable from birth to about 30 months. The Strange Situation is a diagnostic tool for 11-15 month old infants and toddlers, with the Preschool Assessment of Attachment (PAA) extending the Strange Situation procedure to about 5 years of age. The School-age Assessment of Attachment (SAA) uses verbal representations in the context of content tied to preverbal behavioral DRs. The Transition to Adulthood Attachment Interview (TAAI) and the Adult Attachment Interview (AAI) address the functioning of older individuals, including parents. For dyads with infants and young children who are at substantial risk, both adult and child should be assessed.

Treatment efficacy. The literature on treatment efficacy is consistent in indicating that psychological treatment is effective in less than half of cases and that the approach (psychodynamic, behavioral, cognitive, or family systems) makes little difference in outcome. Cognitive therapy has produced the most empirical data, but even so the results suggest that high reduction in symptoms (about 70%) immediately following treatment yields much lower long-term success (approximately 35%) at a year or more post-treatment (Young, 1999).

Clearly far more work is needed to understand how best to apply the plethora of available treatment approaches to parents and children. At a minimum, however, we should select interventions that (1) address parents' needs and skills and (2) carry little risk of increasing or creating problems. That is, treatment should be sensitively responsive to the unique characteristics of each parent and should be implemented in ways that reduce the possibility of aggravating the situation.

In addition, we should not fool ourselves into thinking that early intervention can inoculate families against future problems. Instead, we should promote services that (1) increase

parents' awareness of how they generate information and select behavior and (2) foster reflective, integrative processing. If that is accomplished early on, simple periodic screening can identify any on-going need for anticipatory guidance, parent education tied to older children's needs, or counseling around specific problems.

The hypothesis offered here is that if the parents' (a) use of biased and limited sources of information and (b) failure to engage in reflective, integration is not addressed early on, the family can be expected to respond to each new developmental challenge in skewed ways that risk escalation of problems. In this case, the family and the treatment services are likely to remain in frequent contact around solving ever-changing crises. We can do much better than this! The Dynamic-Maturational Model of attachment (Crittenden, 1995) is an attempt to integrate information about human adaptation across the life-span and from numerous theoretical perspectives to meet the needs to troubled children and their parents.

Training. The Family Relations Institute in Miami, FL (USA) focuses on development of attachment theory, research on maltreatment and psychological disturbance, and training of researchers and clinicians in a multi-cultural context. Courses are offered on theory as well as for each of the assessments. Advanced seminars apply this information to clinical cases brought by the participants. In most cases, the basic courses are offered outside the USA and in the language of the participants. The exception is the advanced clinical seminars that are offered in locations where a retreat atmosphere can be attained and reflective integrative processes fostered. The Institute also does coding of the assessments for others' research, thus ensuring availability of accurate and unbiased data.

After 30 years of development of attachment theory and assessments, research on treatment efficacy based on attachment principles is becoming central to the work of FRI. In addition, the focus of activity is shifting from basic teaching of theory and assessment to the training of trainers (in those countries where many clinicians have already been trained in the assessment procedures) and creation of an international core of instructors, researchers, and theorists all of whom use and contribute to theory (cf., www.patcrittenden.com).

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These types are based on Ainsworth's patterns of attachment (Ainsworth, Blehar, Waters, & Wall, 1979).

The memory systems referred to here are the work of Endel Tulving and Daniel Schacter (1994), except connotative language which is my own contribution.

The notion of deposition representations combines Bowlby's notion of internal working models (Bowlby 1980), Damasio's neurological dispositions (Damasio, 1994), and Tulving and Schacter's memory systems.

Peter Fonagy and Mary Target have contributed greatly to our understanding of the role of reflection in attachment (Fonagy & Target, 1997).