

The status of the caregiver-infant dyad in the perspective of the most important psychological approaches

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Abstract: This article aims to provide a theoretical reading and methodologies of the development of psychological and neurological studies that have explained the dual bond (caregiver-child) and its place in determining the subsequent development of the individual. We also highlight research that bodes well for the understanding of this duality. because the mother-child bond has always been a subject of research. Many psychologists, doctors and thinkers explain that two currents are currently involved in the study of the mother-child bond: the interactional flow from individual clinical and experimental observations. The attachment flow from ethical "ethological" observations and from large-scale observations of the effects resulting from prolonged separation between mother and child.

Keywords: interactionist; attachmentist; caregiver; Infant; Internal Working Models

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1. Introduction

The mother-child bond is one of the deepest and most influential human connections, profoundly affecting a child's growth and development. The formation of this bond has long been a subject of research for psychologists, psychiatrists, and other scientists. Due to the death of some mothers or the abandonment of their children shortly after birth—often in difficult psychological and social circumstances—relatives or legal guardians often step in to provide care. Numerous studies have proven the effectiveness of such care in protecting and nurturing this vulnerable being, sometimes even surpassing the care provided by biological mothers, who may subject their children to maternal deprivation or poor treatment.

The early stages after birth highlight the importance of interactions and communication around the infant's individual needs, enabling them to respond to each other's cues. Failure to share these needs can lead to unloving bonds and indifferent, emotionless, cold, and uninterested relationships. Based on these findings, it has become relevant to discuss the key psychological characteristics of caregivers—whether biological mothers or substitutes—that foster the child's psychological and emotional development, enabling them to love and trust themselves and others throughout their lives, including in future marital relationships.

In this article, we will explore the key frameworks and theories that explain this bond and examine the explanations that shape this exchange, questioning the nature of the caregiver-child bond and its importance in the individual's future growth. To provide a comprehensive answer, we will present the main explanatory frameworks, which are divided into two primary currents: the interactive current and the attachment current.

2. Method and Tools

A systematic analysis of the research literature, including research documents, analytical reviews and published scientific articles dealing with the mother-child dyadic bond from 0 to 2 years of age, was carried out and included scientific databases such as Science Direct, PsycInfo and EMBASE: Mother-child dyad, attachment, interactions

3. Results and Discussion

3.1. The Interactive Current

The sensory-motor skills and abilities of the fetus in the womb allow for the early emergence of a bond with the mother, shared during her feelings of motherhood and the birth of the child's psychological life. The interactive process between mother and child occurs in an inseparable triad (behavioral, emotional, and imaginative).

3.1.1. Social Interaction

Studies by (Bell, 1968), (Scarr, 1992), and (Wendland, 2001) have highlighted the skills of newborns and their inherently social and interactive nature from the very beginning. The infant acts as a true partner with adults, no longer seen as a passive being shaped by adults but rather as an active participant in bidirectional interactions (Brazelton et al., 1987). The arrival of a newborn is a significant period for parents, marking their transition into a new role and a new family dynamic (Lebovici, 1993).

Numerous studies have been conducted to enhance the quality of parent-infant interactions. Some studies focused on premature and at-risk infants (Affleck et al., 1989; Cole, 2001), while others examined children with developmental disorders (Niccols & Mohamed, 2000). Additional studies tested the effectiveness of specific postnatal interventions, such as the amount of time spent together (Klaus & Kennell, 1993), physical contact (Anisfeld et al., 1990), and social or family support (Jacobson & Frye, 1991).

In the first 4 to 7 hours after birth, the newborn is programmed for "interactive exchange." They expect and need their parents' responses. The newborn may reject a still face, a situation that mimics maternal depression, highlighting the infant's sensitivity to social expectations and disruptions in interactive synchrony.

By 12 hours after birth, the newborn engages in interactive synchrony, aligning with the adult's speech rhythms. Thanks to mirror neurons (Rizzolatti, 2005), a newborn can imitate actions like tongue protrusion within days.

By 4 weeks, the quality of the infant's behavior and attention changes dramatically depending on whether they are interacting with their mother or an inanimate object. By 6 weeks, the social smile emerges, marking the first sign of shared experience and dialogue, evolving from reflexive to social and then to intentional smiles.

By 3-4 months, the child has a rich repertoire of social expressions and good visual maturity, allowing them to initiate, control, and interrupt exchanges. However, a

sufficiently rich interactive context is necessary to maintain the infant's attention and alertness, enabling the emergence of social behaviors.

The publication of the Brazelton Neonatal Behavioral Assessment Scale (NBAS) in 1973 marked the beginning of extensive research in this field (Fabre-Grenet, 2018). This scale assesses newborn behavior (from 3 days to 1 month) in terms of their ability to develop social relationships. It is administered in the presence of parents to awaken their sensitivity to their child's sensory-motor interaction abilities (alert, active, calm, demanding, clear in their requests).

This sensitivity can prevent the establishment of non-harmonious interaction patterns and more serious issues like neglect or abuse (Brazelton et al., 1987). Beyond being an assessment tool, the NBAS has been widely used as an intervention tool with young parents, aiming to raise parental awareness of their child's early skills and enhance the quality of early parent-child interactions.

These studies have demonstrated the positive outcomes of early interventions aimed at enhancing parental sensitivity and the quality of parent-child interactions. However, few studies have focused on the potential consequences of these interventions on parental perceptions of the child. In summary, every child is born with unique characteristics of sensitivity and activity, shaped by the combined influences of genetics and intrauterine experiences, which the mother must learn to adapt to.

3.1.2. Behavioral Interactions:

a. Physical

Physical contact allows the child to develop an early distinction between self and non-self. (Winnicott, 1986) extensively emphasized the importance of "holding" and "handling" in child development, which fosters a sense of security and a "continuous sense of being" in the child. (de Ajuriaguerra, 1974) further highlighted the concept of "tonic dialogue," which refers to the spontaneous, reciprocal physical adjustments that characterize positive interactions (particularly during feeding) and serve as a precursor to later verbal communication. Additionally, (Bachollet & Marcelli, 2010) described the infant as an "emotion reader." When in the arms of their mother (or their primary relational partner), the infant is particularly sensitive to changes in the tension and rhythm of the arms that hold and surround them. Several factors must be taken into consideration here: the tension of the arms, the rhythm of holding, facial expressions, and vocal tone (prosody).

In this regard, the expressions, gestures, and attitudes of the mother toward her infant, in their rhythm and saturated form, help her adapt perfectly to the capabilities of the latter. Imitation (L'imitation) is also an excellent means of communication between the mother and her child from a very early age. Through the emotions and interest, it arouses in the infant, it contributes to cognitive and emotional learning. As for (Stern et al., 2001), he emphasizes maternal creativity (*créativité maternelle*), which allows the mother, during free play, to maintain a state of alertness and attention in her child. This is a state during which the child develops their cognitive, emotional, and sensory skills.

b. Visual:

From birth, the child exhibits a clear visual preference for the human face and can recognize their mother by the age of 5 weeks. Their visual abilities develop rapidly, allowing them to play an active role in visual exchange situations. They can initiate or interrupt these exchanges at will, giving them the meaning that the mother attributes to them. Face-to-face communication and eye contact play a fundamental role in forming early bonds. Mutual gaze holds significant importance in the psychological development of the child, the emergence of maternal feelings in the mother, and the impression of being recognized, elevating her to the status of "mother." From the child's perspective, they participate in creating a distinct self-image through the mother's reflection. The mother acts as a "mirror," as described by (Winnicott, 1975), reflecting back to the child the image of themselves as seen by others. This concept is inspired by earlier works, particularly the mirror stage (Lacan, 1966), which itself was influenced by the works of (Wallon, 1936).

c. Linguistic:

The infant's first cries are a fundamental element in the bonding process, aiming to promote physical closeness with the caregiver. Cries not only express needs but also emotions, serving as an effective means of requesting, initiating, or ending interaction. Freud noted that premature infants' cries elicit more intense and negative reactions than those of full-term infants.

The mother interprets the cries based on her own history, current experience, and sensitivity, attributing specific meanings (anger, pain, hunger, fatigue) and responding accordingly. This interpretation encourages the development of new, richer, and more varied communication methods.

The mother's ability to hear, decode, and stop the cries (adaptive, prompt, and predictable responses) contributes to the child's psychological maturation and sense

of security. Mothers spontaneously use "baby talk," adapting to the infant's auditory abilities, often imitating the child's vocalizations or repeating phrases addressed to them, playing a stimulating role in the child's expressive rhythms.

3.1.3. Emotional Interactions:

During the first six months of their shared history, the mother and child live in a bath of mutual influences, including primary maternal preoccupation, emotional attunement, and social referencing, as outlined below:

a. Primary Maternal Preoccupation:

At the end of pregnancy and during the first weeks after birth, a special psychological organization emerges in the young mother, termed "primary maternal preoccupation" by Winnicott. This corresponds to a biologically programmed state (which can be pathological outside of pregnancy) of heightened sensitivity to the infant's needs and the ability to communicate intensely and intimately with them. This "normal illness" allows the "ordinary devoted mother," through identification, to adapt as precisely as possible to the infant's experience.

b. Emotional Attunement:

Stern describes "emotional attunement" as the subjective experience by which one partner reproduces the quality of the other's emotional states. This allows the mother and child to experience interpersonal communication, giving both partners a sense of deep intimacy.

Emotional attunement manifests through the identification of what the other is experiencing subjectively, explaining how the fantasies parents develop about their infant influence the child's behavior and ultimately shape their own fantasies. Referring to the idea of intergenerational transmission, emotional attunement often occurs across modalities, with each partner translating the other's feelings into another sensory-motor channel.

c. Social Referencing

When the child encounters a new situation, they use the adult as a source of emotional information: they may question the possibility of an action that could pose a risk and act according to the emotional response they perceive (encouragement or fear). This is the phenomenon of "social referencing" (Campos), through which the child seeks emotional information from a significant third party to understand an event that seems ambiguous or beyond their ability to assess.

3.1.4. Imaginative Interactions

(Kreiser & Cramer, 1981) introduced the imaginative dimension of interactions, emphasizing the utmost importance of the (conscious and unconscious) life of each party in this exchange, represented by the mother's imaginative life and the infant's imaginative life.

a. The Mother's Imaginative Life

According to (Lebovici et al., 2009), the mother's "psychic life tree" is shaped by the four children surrounding the birth of the real child, allowing the mother to confront herself through them, thanks to prenatal ultrasound. These children include:

- The Imaginary Child (Fantasy Child): Formed from ancient maternal desires, it evolves during childhood through identification with the mother and is attributed to the mother's Oedipal unconscious, particularly in her desire to have a child from her father.
- The Fantasy Child: A product of the mother's desire for pregnancy, it resides in the conscious and unconscious maternal daydreams that accompany pregnancy.
- The Narcissistic Child: Representing a repository for all the parents' hopes and expectations.
- The Mythical Child: A product of society and the cultural references surrounding it.

These imagined scenarios in the mother's imaginary life during pregnancy partially regulate the interactions that occur between her and the child after birth, including how she looks at him, holds him, talks to him, and responds to his needs. (Lebovici, 1995) refers to these as «anticipations créatrices» (creative anticipations), which are nourished by the imaginary child and the fantasy child, and imbue the care she provides to the real child with a unique character.

Thus, the family history into which this newborn is born can, at times, become a heavy burden that disrupts the establishment of the bond between mother and child, requiring the child to carry a "transgenerational mandate" «mandat transgénérationnel» (Bydlowski, 2008).

b. The Infant's Imaginative Life:

It is challenging to pinpoint the emergence of imaginative life. From 0 to 2 months, the infant is primarily a being of sensations, as described by (Bion, 1962) as "sensory data"—fragments of undifferentiated sensations where the physical and psychological are barely distinguishable. (Pinol-Douriez, 1984) introduces the term "proto-representations," which are sensory, perceptual, and motor simultaneously, where emotional, verbal, and cognitive aspects cannot be separated.

We can speak of early "proto-representations" in the infant's mental life, organized through maternal sensory, perceptual, and emotional care, experienced in structured scenarios of daily life events.

We can speak of drives, as (Tähkä, 1988) wrote, when the organization seeks satisfactions in the external world. This leads it to learn how to obtain pleasure from real satisfactions. When the object does not necessarily become equivalent, the organization works to record it as part of the temporal dimension. However, when it becomes impossible to bear tension, the human mind avoids risking the representation of traumatic situations stemming from frustration or aggression.

The impossibility of transforming such a situation into images requires maintenance between the psychic and the physical. As a result, the object can be experienced as "all good" or "all bad." We can then understand incorporative and projective fantasies as responses to frustrations coming from the outside.

To this extent, the self can maintain its autonomy, particularly by idealizing the object, which allows for the development of ego ideal (the Freudian concept) but also the "ideal self." This concept, whose origin is difficult to trace, undoubtedly allows us to understand the connections between the process of incorporation and the concepts specific to Melanie Klein and beyond.

3.1.5. Interactive Dynamics

Interactions are part of a circular and linear rhythm, marked by repetition and changes, all essential for the infant's cognitive and emotional development. The attention/withdrawal dynamic drives interactive harmony, and the mother must adapt to it. Insufficient stimulation leads to disinterest, while excessive stimulation leads to defensive avoidance. The child needs regular, temporary withdrawal from interaction.

The mother's sensitivity and respect for withdrawal/non-participation phases, based on her own experience and the dyad's unfolding history, ensure the quality and duration of the infant's attention. If the mother cannot see, decode, or respond

to the infant's signals—due to the child's limited expressiveness or the mother's low sensitivity—interactions become disharmonious, risking the infant's disorganization.

Stern observed that mothers who spontaneously use repetitive but not identical behaviors (vocalizations, movements, facial expressions, tactile and motor stimulation) avoid habituation, maintaining the infant's attention and alertness while fostering expectations that guide behavior and enhance memory function.

The successive variations of repeated experiences allow the child to form abstract representations, termed "protonarrative envelopes" by (Stern, 1998). These rhythms of engagement/withdrawal/repetition/surprise/deception, filled with anticipation and memory, provide the child with a sense of continuity and security, enabling positive investment in waiting, cognitive and emotional growth, and the achievement of equilibrium.

Interactive phases are sometimes synchronous and sometimes alternating. Synchrony appears in the dance-like rhythm proposed by (Stern, 1998), where each partner knows the steps and music by heart, developing in tandem. Alternation requires constant adjustments, as illustrated by (Tronick, 2017) "rapid repair" of interaction failures, allowing the child to form organized and repairable representations of interactions with the mother, viewing themselves as active and capable of influencing the interaction's course.

Winnicott's concept of the "good enough mother" highlights that a mother who makes mistakes but knows how to "repair her failures" by adapting as much as possible to the child's needs and responding appropriately—without overanticipating—fosters secure attachment. If the mother's response contradicts the child's expectations (e.g., during the still-face experiment), the child strives to reestablish the "natural" exchange, awaiting maternal readjustment, and may become disorganized if this fails.

3.2. Attachment Theory and Caregiving

3.2.1. Contexts of Emergence

(Spitz, 1945) reports on the effects of emotional deprivation due to sudden separation from the mother revealed symptoms of depression in infants, termed "anaclitic depression." If the separation lasts more than 3–5 months, the depression can become irreversible, potentially leading to the child's death. These findings challenged prevailing ideas, showing that infants cannot survive in an environment devoid of emotional bonds.

Following World War II, Bowlby and Robertson (1951) authored a landmark report for the World Health Organization, "Maternal Care and Mental Health," exposing the harms of institutionalizing young children post-war. They described signs of partial deprivation (excessive need for love, intense guilt, depression) and total deprivation (apathy, silent non-reactivity, developmental delays). Bowlby later identified three stages of reaction to separation: protest (active struggle), despair (withdrawal), and detachment (undifferentiated social engagement).

In 1952, Bowlby and Robertson launched a media campaign advocating for parental visitation rights in hospitals and promoting foster care over institutionalization. Bowlby presented a film to the Psychoanalytic Society, "A Two-Year-Old Goes to Nursery," revealing the dramatic impact of prolonged maternal separation. In 1969, he released "John Goes to Nursery," emphasizing the importance of parental presence in child development.

3.2.2. Behavioral Studies on Young Animals and Their Mothers

(Lorenz, 1937) introduced the concept of "imprinting" after observing that newborn animals follow and stay close to their mothers or any moving object presented at birth. This behavior develops only if the stimulus is provided during a "sensitive or critical period," specific to each species, and serves a survival function. Miller, Postman (1945), and Stellar, Morgan (1943) conducted experiments on rats that hoarded food when frustrated or isolated due to irregular and unpredictable feeding schedules (Soulairac & Lapetite, 1946). They concluded that rats develop strategies to anticipate potential shortages or dangers.

Bowlby drew on these findings to propose that all organisms are innately equipped with a set of survival-oriented behaviors. In his initial formulation of attachment theory, (Bowlby, 2018) identified five instinctive responses that contribute to attachment development: sucking, grasping, following (proximity-seeking behaviors), crying, and smiling (signaling behaviors). These behaviors become integrated and directed toward the attachment figure during the first year of life, forming what he termed "attachment behaviors."

(HARLOW, 1950) experiments with rhesus monkeys supported Bowlby's theory, demonstrating that attachment behaviors are driven by the pleasure of contact, not food (Malaguarnera, 2016). Harlow accidentally separated infant monkeys from their mothers shortly after birth due to an epidemic and observed that the infants developed fixations on objects like blankets or cloths, protesting when

these were removed. Monkeys left in bare cages barely survived a week, while those provided with a cloth-covered wire cone showed significantly improved survival rates.

Harlow repeated the experiment with eight monkeys separated from their mothers at birth, finding that the infants spent more time with the warm, cloth-covered "mother" than the cold, wire "mother," even when both were present. These experiments highlighted two key ideas in attachment theory: attachment is not tied to food satisfaction, and there is a dynamic between secure proximity and exploration.

3.2.3. The Systemic Perspective

a. The Attachment System:

The attachment system is activated when the child perceives a threat, prompting proximity-seeking behaviors toward the attachment figure.

b. The Exploratory System:

(Ainsworth, 1967) was the first to introduce this system, which emerges from the intricate interplay between attachment and exploration. In this framework, the attachment and exploration systems, along with their opposing mechanisms, are activated or deactivated in an inverse relationship. A securely attached child engages in exploration while their attachment system remains at least partially active (in a state of readiness), continuously monitoring the environment for potential threats. Once a threat is perceived, the child activates attachment behaviors and halts exploration.

The attachment figure serves as both a "safe haven" (providing comfort in times of danger) and a "secure base" (enabling exploration). Initially, physical proximity to the attachment figure is necessary for the child to feel secure and explore the external world. Over time, psychological proximity allows the child to explore and regulate their internal world and relationships with others.

(Winnicott, 1958) described the "capacity to be alone" as a developmental milestone, where the child experiences solitude even in the presence of the mother, transitioning from being alone "in the presence of someone" to being "truly alone," confident in the attachment figure's availability if needed.

c. **The Caregiving System:**

(George & Solomon, 1996) argue that a mother "assimilates" her current experience with her child into her past representations (représentations ses). Similarly, caregiving representations are also inspired by the actual experience of providing care to the child: the mother "adapts" her representations to the child's reality and the caregiving context. This means that the information and influences contributing to parental responses are more closely related to the internal regulation of the parental caregiving system than to the behavior or signals emitted by the child. While the child's signals activate the system, the parental response is heavily influenced by their own caregiving system and its representational framework (George & Solomon, 1999). Thus, caregiving is the culmination of the caregiver's attachment experiences, which are influenced by the child's characteristics and the moments shared with them.

As for the qualities of a "good caregiver," (Ainsworth et al., 2015) (as cited in (Schofield & Beek, 2006) identified four dimensions of caregiving aimed at making caregiving therapeutic by establishing the necessary tasks for building a foundation of security. These dimensions are:

- Availability (« disponibilité ») – helping the child develop trust,
- Sensitivity (« sensibilité ») – assisting the child in managing their emotions and actions,
- Acceptance (« acceptation ») – supporting the child in building self-esteem, and
- Cooperation (« coopération ») – enabling the child to feel effective.

Meanwhile, Fonagy emphasizes the importance of recognizing that the child has mental activity and attributing meaning to it (the capacity for mentalization and reflective functioning). If a parent proves unable to respond empathetically to the child's signals and fails to give meaning to their mental activity, this weakens the child's subsequent ability to contain and regulate the intensity and complexity of their emotional experiences. Adapting to the child's rhythms and maintaining emotional availability are also essential.

3.2.4. **The Cognitive Perspective:**

a. **Internal Working Models (Les Modèles Internes Opérants)**

Thanks to what is called procedural memory, the child can internalize sequences of events and then model interactions in the form of representations.

(Bowlby, 1978) grouped these mental representational models under the term Internal Working Model (IWM), which is inspired by the concepts of accommodation and assimilation introduced by (Badra & Mustafa, 2010).

Bowlby distinguishes two stages in the development of IWMs: Initially, the model adapts to the various interactions experienced to form itself. Then, new experiences are assimilated into the existing model, even if the current model of correspondence is incomplete. Once the IWM is formed, new events are interpreted through the filter of past experiences, sometimes in a biased manner.

Internal Working Models impose rules related to the regulation of attention and memory, which either limit or allow access to information related to attachment. (Bowlby & Weil, 1984) introduced the idea of defensive exclusion to describe the mechanism by which information that could destabilize the existing attachment system is excluded from processing and representation. For example, when a child is in distress and does not receive comfort from the attachment figure, these models are used to "evaluate and guide behavior in new situations."

These models relate to the forms of attachment (their availability, accessibility, and reliability). At the same time, the child develops a model of the self, corresponding to the image they have of themselves as deserving of love, and a model of others, reflecting their perception of others as more or less caring and sensitive to their needs. However, self-confidence is nurtured by a sense of security, highlighting the close connection between cognitive development and secure attachment.

From birth, the child constructs Internal Working Models based on attachment behaviors (such as crying and screaming), which aim to communicate with or keep their parents close. Initially expressed spontaneously, these behaviors are later shaped by the responses provided by the adult. Through the assimilation of constants in their interactions, the child develops IWMs, which they modify to create more adaptive behavioral strategies and form expectations about the course of relationships, making them more effective in achieving closeness.

Thanks to the connections made with past experiences, the formation of IWMs allows for faster processing of new information and better preparation for anticipated events. The IWM developed in early childhood influences future attachment relationships, shaping the individual's perceptions and actions within interpersonal relationships. From the first year, the child adjusts their behavior based on the feedback they have assimilated from their parental figures.

b. Conditional Strategies

The works of (Bowlby, 1969) on primary and conditional strategies, along with the contributions of Ainsworth (Cassidy & Kobak, 1988) on the dimensions of avoidance and anxiety, laid the foundation for attachment theorists from the psychosocial perspective to conceptualize conditional attachment strategies. Attachment patterns are formed during the first year of life, and various studies find stability in this classification from 12 to 18 months. From the first months, the child possesses a set of attachment behaviors aimed at increasing proximity to their mother or caregiver. Depending on the effectiveness of these "primary strategies," the child develops anticipatory evaluations regarding the responses of their attachment figure and adapts their behavior accordingly. If primary strategies fail, they develop "secondary strategies": either minimizing the attachment system or maximizing and hyperactivating it.

- **Deactivation Strategies**

Deactivation strategies aim to avoid the distress and frustration resulting from the unavailability of the attachment figure. These strategies come into play when the mother cannot bear the emotional demands of her child, which, instead of encouraging closeness, triggers a desire to distance herself. Deactivation strategies help alleviate the mother's burden. On the child's side, these strategies include denying attachment needs, compulsively relying on oneself, and dismissing or rejecting threats or needs related to the availability of the attachment figure. These strategies are seen as an adaptation to the unavailability of the attachment figure, which is perceived as rejecting attachment needs. According to (Belsky, 1999), deactivation strategies involve inhibiting proximity-seeking, a "desire" to rely solely on oneself to meet needs, and denying needs or avoiding negative emotions.

These strategies play a role in cognitive processes by suppressing awareness of any emotion, thought, or feeling that involves vulnerability, need, or dependence (Mikulincer & Shaver, 2007). This exclusion from awareness affects memories, information processing, and attention, diverting attention to other topics to distance oneself from information relevant to attachment. These strategies also influence the model of the self and others in times of distress and the regulation of negative emotions. According to (Mikulincer & Shaver, 2007), these strategies keep the attachment system under control and may even shut it down.

- **Hyperactivation Strategies:**

Hyperactivation strategies are a response to the inconsistent availability of the attachment figure. (Bowlby, 1969) describes them as an amplification of the primary

strategy of seeking proximity and an attempt to control this inconsistency through coercion or protest (the anger of hope). The child hyperactivates their attachment system when they perceive that satisfaction is only achieved by displaying intense distress. (Cassidy & Kobak, 1988) emphasize the negative self-reinforcement of these strategies, which are occasionally rewarded with success. According to (Mikulincer & Shaver, 2007), these strategies combine abnormal dependence on the relationship with the attachment figure, excessive demands for attention, a desire for closeness that turns into clinginess, coercive and controlling behaviors toward the attachment figure, an amplification of attachment needs, and a diminished ability to find personal solutions to distress.

Information processing prioritizes emotions, often leading to emotional dysregulation (anger, resentment, and depression). This affects the model of the self as helpless and vulnerable and the model of others as disappointing, untrustworthy, or unreliable. These strategies keep the individual focused on seeking love and security, placing them in a state of constant vigilance against any threat, separation, or betrayal.

The acquisition of attachment strategies varies from child to child, as it is an individual adaptive process related to the genetic predisposition for long-term attachment. However, these secondary strategies can be harmful to the child. Deactivation involves suppressing emotions and restricting access to feelings, limiting emotional bonding with others and making the individual insensitive and indifferent even to human connections. Conversely, hyperactivation can lead to anxious dependency, which may become an obstacle in personal relationships and social functioning.

4. Conclusion

The dyadic bond between mother and infant is considered the cornerstone of psychological and emotional development, as it forms the foundation for attachment patterns that determine an individual's ability to regulate emotions and build healthy relationships. According to attachment theory (Bowlby), early interactions develop "internal working models" that regulate attention, memory, and behavior, influencing perceptions of the self and others. The psychosocial perspective (Ainsworth) highlights the role of maternal sensitivity in promoting secure attachment, while the cognitive perspective (Piaget) emphasizes the importance of mental representations in interpreting the infant's experiences. Additionally, the neuropsychological perspective demonstrates how this bond influences brain

development, particularly in stress and emotion regulation areas such as the hippocampus and prefrontal cortex. Finally, recent research shows that the quality of this bond is a strong predictor of long-term mental health, with secure attachment being associated with a reduced risk of psychological disorders and increased emotional resilience.

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