The first behaviors of affect attunement, and their role in the infant's development

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1. Introduction

• Unit of observation: the baby in the parental dyad, in the situation of pause between breastfeeding's.

2. Goals

•   General: To corroborate the existence of shared affective interaction between mother and baby in the first months of life.

•   Specific: A) To define the moment of temporary emergency of affect attunement in the parental dyad. B) To identify the precursor affective behaviors in the baby.

3. Method

Experimental study on mother-infant dyads with a data diachronic design and resorting to a sequential analysis of observations of affective behaviors in the baby.

3.1. Instruments

We resort to the development of coding schemes in each domain or parameter. The attunement may be defined according to two parameters: A) Communicative Intentionality, which is controlled by the variables: a) Initiatives and b) Responses and B) Affective connection, controlled by the variables: a) Manifest Behaviors and b) Emotional States.

The infant's behaviors, to be measured by the variables, are: A) Facial expressions, with three situations: a) Basic facial expressions, b) Exchanges of glances, and c) Movements of lips and B) Body expressions, with two situations 1a Static positions of the body and b) Dynamic expressions of the, body, with two situations 1) Gestures and 2) Motor movements.

To accomplish this, we carry out A) 12 observation sessions in 4 months and B) 1 pilot observation, out of the experience.

The sessions consist in 30 minutes each one, with two monitors and cameras.

3.2. Sample

The population is 25 neonates, aged 1 to 120 days, from the Neonatology Monitoring Program.

3.4. Procedure

1) Instructions to mothers and health workers. b) Protocol parents and institution.

2) For the observation we take into account: a) Medical report. b) Interviews with mothers. c) heart-beat registration in both mother and baby. d) Observation sessions. We resort to recorded sequences of behavior, and take the beginning and the end, as well as the order, the latency, the frequency, the duration and the intensity of each behavior.

The evaluation of the sample is performed first with: A) The binary classification, 1 or 0 to determine the presence or the absence of behavior, and then with B) The Polynomial equation of structural parameters and variables. We noticed that the variables value show the effect of correction terms. Finally we conclude with the ideographic representation of observational data.

4. Results

We noted that the experiment is under development and still to complete the sample, and coding and processing data.
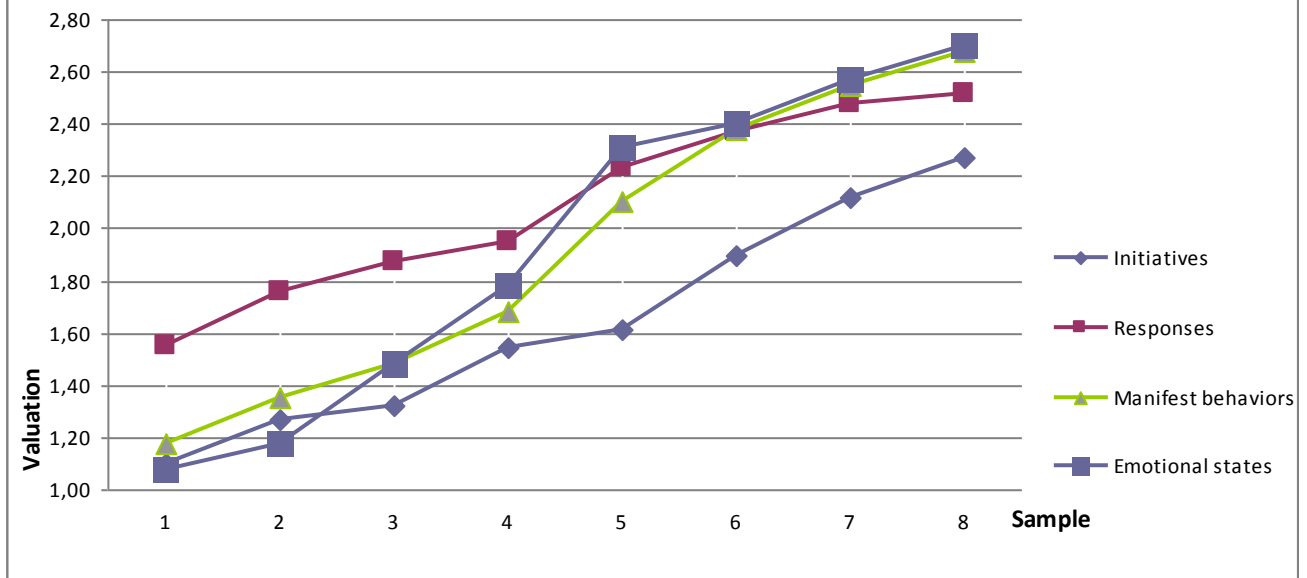
We corroborate the existence of all behaviors analyzed: rhyme, imitation, protoconversation and affect from the baby's birth.

In the comparative analysis, we observe variations in isolated variables, which indicates that there are no significant differences between samples from the 1st and 2nd months. However, the variables are increased by the end of the 2nd month, and their rises begin to be pronounced, intensified by the 3rd and 4th. This fact confirms that the babies show, at the end of the experiment, considerably different profiles from the ones they had in the beginning, regarding shared affective behaviors.

Table 1. Media statistic available of the variables values

Sample / Variables	1° Month		2° Month		3° Month		4° Month	
	1	2	3	4	5	6	7	8
Initiatives	1,10	1,27	1,32	1,54	1,61	1,90	2,12	2,27
Responses	1,55	1,76	1,87	1,95	2,23	2,37	2,48	2,52
Manifest behaviors	1,18	1,35	1,48	1,68	2,10	2,38	2,55	2,68
Emotional states	1,08	1,18	1,48	1,78	2,31	2,40	2,57	2,70

Figure 1. **Sequential longitudinal development of the 8 opportunities**

5. Discussion

There is sufficient information to support the emergence of emotional attunement from early months of life.

We believe there should be further studies to validate results from different environments and cultures.

There is a lack of control in: a) babies with problems such as maternal depression. b) habituation.