

## Conference Paper

# The Importance of Primary Prevention Regarding Orientations Given to Babies' Caregivers

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## Abstract

Caregiver orientation is very important to promote neurodevelopment on babies. Considering that relations are the key for this development of superior mental functions, we believe that all caregivers, teachers and parents should be present and paying attention to the children, providing opportunity for an ideal neurodevelopment and humanization. It is important to orientate caregivers so that they can provide qualitative conditions, which integrate affection, conscience and action to promote development to occur according to the potential of the child. We believe that the individual constitutes himself by means of social contact. This work has the goal to approach the theory which orientates, with specific guidelines and practical work, caregivers aiming a better child neurodevelopment. Bonds are necessary for a better and trustful relation. When you are present in a relation nervous connections are promoted and these lead to a more effective motor, cognitive and affective development of the superior mental functions such as memory, attention, language, psychomotricity and executive functions. It uses didactically the following principles of the Social Historical theory of Luria and Vygotsky: mediation, functional units and zone of proximal development. Interactions between the brain and the formation of mental functions require the maturity of the nervous system as well as an active process that emphasizes relations of two or more human beings.

**Keywords:** neurodevelopment, childhood, relation

## 1. Introduction

This work has the goal to talk about the importance of bonds in the construction of the neurocognitive development of babies. We notice that nowadays with a boom on technology and consumerism society has less quality time to share with their beloved. This articles wants to point out some important updated researches that prove the

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importance of significant bonds, love and affection promoting the neurodevelopment to occur on time and promptly. Therefore orientations will be given to help parents and caregivers to facilitate through care and education the development of cognitive functions because relation is the key to significant child development. Vygotsky (1994) states that man constitutes himself within social relations.

Young babies already notice feelings of acceptance and rejection. These experiences stay registered in their minds as lived experiences between them and the world which surrounds. Tronick (1989) in the still face experiment reflects about the sensibility of the baby to capture the behavioral attitude of the mother. If the mother does not have conditions to take care of the baby it is important that another person takes over, because the baby cannot stay long without assistance. 'The fragility of a baby does not admit delays, because the consequences of this distance, created between mother and baby, which can take long, can become irreversible'. (JERUSALIN-SKY e CORIAT, 1983, pg. 80).

Experimental works indicate modifications on the neuroendocrine and behavioral systems of the babies who suffered stress and privation on the beginning of development. Early experiences influence the growth of the brain. Experiences of positive affection related to pleasure and safety cause an increase of sinaptical communications. These studies correlate the mother's depression after delivery to the high level of cortisol on the saliva of babies who suffer from abandonment of mother affection.

Let us take a look at some of these studies which point out that there is an increase on the level of basal salivary cortisol on babies of depressed mothers which cause a decrease on the sinapses and on the serotonin (CUNHA, 2001). Motta (2002) explains that the heart frequency of these babies is considered higher. Jones (2000) affirms that these babies present in their EEG exam more activation of the right frontal region than of the left – indicating emotions which reflect affect deprivation.

Cosolino (2013) mentions that when there is an abuse, negligence or when a child is abandoned what is communicated is that the child has no value and is not accepted as if the world is a dangerous and distrustful place, therefore, it must not be explored. In this way the author emphasizes that the brain grows better within an environment of support and low levels of stress. Affirms that safe relations are the key to healthy growth of the brain as well as emotional regulation that stimulates learning.

Depressed mothers need family, therapeutic and social support so that they can perform their essential maternity which is fundamental to promote the pattern of neurological, neuroendocrinous and psychological development to their babies. This should be a public health important issue because many cases are left unattended

Bowlby (1956) considers that a child experiencing a positive maternity will have an adequate brain structure, will develop a safe system of attachment and will have trust internalized. In this way the child will be able to have a relation with the world in a trustful way, with courage to face the challenges and dangers that will arise while he is brought up... becoming resilient. Resilience suggests flexibility and elasticity to deal with adversities and overcoming them reaching good results.

Leal (2003) points out to the existence of an innate impulse which looks for the reaction on the other person. The baby relates to the other who seems to him like a legitimate and responsive person. Fonseca (2013) mentions that a baby is a social human being and that attachment is the first step to development and to learning.

Actual researches vastly explore this theme and consider it through various points of views. I recently found more than 250 articles published about this theme in the last five years. I will mention in this article just some of the recent researches published. McMahon, C. et al. (2016) in an Australian longitudinal research published in 2016 suggests that women with a better representation of the fetus during pregnancy show a more positive pattern of maternity establishing a more secure relational bond with their babies.

Another longitudinal French research written by Gandiolo and Roskaw (2016) affirm that family bonds are directly associated with co-parenting as well as with the consciousness both parents should have regarding parenting. They conclude that co-parenting is fundamental when considering both individual characteristics and family itself functioning as a whole.

Saunders et al. (2015) focused on their work that healthy bonds are built within dyadic relations. These relations do not depend only upon the emotional qualities and availability of the mother but also upon the emotional quality and availability of the baby. One has a direct influence upon the other.

Murphy et al.(2015) published a research which was based on a group intervention done with people who had suffered trauma in their childhood. The group intervention was based on the development of bonds and showed that it is possible to form safe and protective bonds even after having passed through very bad experiences during childhood. This intervention had the goal of preventing disorganization and helping parents to resignificate past traumas so that they would not pass these problems to future generations. The intervention was based on the following principles which were worked in a group format together with individual psychotherapy: empathic functioning, emotional attunement, affective regulation, naming emotions, intergenerational patterns and soothing.

## 1.1. Orientations

In this moment we will propose some basic orientations to caregivers of babies. Not that the caregiver, specifically the mother, does not instinctively know about these important orientations, but some are not conscientious that these orientations promote brain development and are fundamental to generate significant bonds. Let us take a look to some of them.

Let us start from the beginning – Orientations to couples who wish to conceive a baby:

- No use of alcohol nor drugs
- Live an organized life
- Do physical exercises
- Live in a healthy and tranquil environment
- Eat healthy food (avoid raw meat)
- Avoid contact with street cats and pigeons
- Guarantee a good relation within the couple
- Listen to music which arouses good feelings
- Prepare the ingestion of folic acid together with a doctor
- If necessary do therapeutic practices

Now we will propose some orientations for pregnant or recent delivered parents:

- Pay attention to the initiatives of this baby and respond to them showing that you are present within this dynamic relation.
- Give holding. Hold the baby firmly and safely to pass security.
- Look the baby in the eyes when changing diapers, when breastfeeding and in all occasions when together to create visual, tactile and auditory contact.
- Emphasize the emotions that appear nominating them.
- Be entire and complete in the relation.
- Touch your baby and nominate where you are touching and the tender feelings that emerge.
- Talk to your baby. Establish a relation with him.
- When the baby does a gesture, nominate and do the same gesture back to show that you are with him, following him.

- When the baby emits a sound, baby talk back to the baby, nominate your and his emotions. Communicate in a sensible way with your baby.

These orientations were used to compose a flyer – Enchant yourselves! You will become parents! which was distributed freely in a city close to São Paulo to all pregnant parents. The orientations serve as a guide to promote a better and healthier neuropsychological development to the baby. This initiative could be done in different parts of the world to reach a bigger population. As well as interventions in public squares like the one I was honored to observe in a trip to Cuba. I was able to participate of an important guided relational experience among caregiver and baby which happens daily with no cost in a public square.

## 1.2. Methodology

A research in progress is being done in a city of São Paulo on a kindergarten school. In this experience we suggest interventions to be done within the daily routine which can also be used in other parts of the world. The participants of the experience were divided in two groups:

The participants of this research were divided into: GROUP A and B. In GROUP A, the intervention group, there were 19 babies, half boys, half girls ranging from 2 to 10 months and in GROUP B, the control group, only 17 babies, more girls than boys ranging from 12 to 20 months. The parents, caregivers and educators of both groups received a previous orientation about how the research would proceed and signed the agreement term and answered a previous questionnaire about relational aspects. All the babies passed through the evaluation scale: Schedule of Growing Skills II in March and December. The parents of both groups received a resilience questionnaire on December.

GROUP A received a weekly intervention (during 2017) + weekly parent and caregiver orientations. GROUP B did not receive any intervention. GROUP B's parents and caregiver's only received orientations in December of 2017.

The weekly intervention used on GROUP A was based on the following guidelines:

- Look the baby in the eyes during interaction.
- Use a tender voice and a smile on the face.
- Call the children by their name.
- Name the parts of the body of the baby.
- Repeat the gestures giving names to the actions and intentions.

- Nominate everything the baby does and everything you do to the baby.
- Talk to the baby showing you heard him and that you two are in dialogue.

The intervention group participated of the following routine on a daily basis:

When the baby arrives say: Good morning... (name of child) How are you today? Welcome to this beautiful day here at the kindergarten.

Sing a welcome music with all the babies of Good morning... calling each baby by the name and attributing a motor signal for them, according to their possibility, do together. The day would proceed with free play until all the babies arrived and were fed. Then they would receive their fruit snack and right after start the intervention of the day which could be according to the following possibilities:

Intervention using motor activities:

- Using a Bobath ball – put the baby on top of the ball and roll the baby stimulating the vestibular functions.
- Roll the baby on a round pillow, stimulating the babies with toys so that they have the intention to reach forward.
- Sit the baby on your legs close to your knees and hold him by the hand and go up and down playing, singing and smiling at the baby.
- Put the baby on top of a blanket and push the blanket across the room with him looking at you and also looking to the class.
- Slide the baby on a ramp.

Intervention using auditive activities:

- Use rattles and toys which make different noises.
- Music activities – select a music with associated motor activities. Repeat the music 3 times together with the motor activity to stimulate coordination.
- Story telling activity – select books with big and colorful figures. Tell the story emphasizing the iconic words. Try to do the words with the body in a theatrical way.
- Use a glove with characters to play with the baby and tell a story.

Intervention using visual activities:

- Use a variety of colorful toys. Use pens with colorful lights. Show books and flashcards giving names to the parts of the body, objects, characters, colors, fruits, etc.

Intervention using tactile activities:

- Use of massage balls and toys and rugs with different textures.

After this intervention activity it is time for the gustative and odor activity which composes the lunch. The sleeping time after lunch should be motivated by a calming. When the babies start waking up a free play activity will occur as babies wait for their colleagues to wake up and have their milk. During the afternoon it is important to repeat the intervention activity done in the morning to solidify the information and to make the activity more complex. After this activity prepare dinner with a music which emphasizes the need of eating healthy food. While the babies wait to go home they can do a free play activity and sing a calming music.

On the intervention day it is fundamental to talk to the parents about the activities which were done during that day and emphasize the importance of continuing the activities at home.

As this is a research in progress it still does not have any conclusive results. As seen in the methodology there is a pre and posttest with the use of Schedule of Growing Skills II which will evaluate the functions of the baby plus questionnaires to both parents and caregivers which will be able to prove or not the hypothesis that relational bonds together with intervention activities, including naming the actions and the world around plus talking to the baby with a sweet voice and looking them in the eyes, promote development to occur.

## 2. Conclusion

We believe and suggest, for more profound comprehension of this theme, that more research should be done to evaluate how relational bonds are created cross-culturally and the importance to consider orientation as a very important tool when we think about preparing a person to generate and promote a good and significant relation with a child. We assume that this present research in progress has its limitations because it is a small sample in just one kindergarten school not representing a population in itself. It is an example, seen through a specific point of view, which surely would need to be recreated, expanded and deepened to present reliable results.

Leal (2003) emphasizes that the communication which occurs back and forth is observed in the early years of a babies' life. She considers it is the root of the motor, affective and cognitive development. Within this communication a relation of two or more people is present which builds up the subjectivity of the human being.

Vygotsky (1994) affirms that such instruments, actions and social relations are presented to the child, in first hand, in an interpsychological and social level and, only afterwards, it will occur in an intrapsychological, internal and subjective level through the process of internalization.

Aires (2010) affirms that time with quality promotes brain development and builds up the personality of the baby. The nervous maturity occurs by means of social interaction.

Parents and caregivers serve as mediators, they are responsible for presenting the world to the child. This responsibility involves the way the child will internalize the world because his subjectivity will be built within the relations he has and his experiences in life.

Therefore to avoid stress, neglect and sadness promoting development, based in healthy bond we believe that the most important is not WHAT TO DO but HOW TO DO. Parents and caregivers should establish a good relation with the baby, considering each baby as an unique individual.

Bock (2002) affirms that man transforms and is transformed in a constant process. Relationships involve exchange, in both ways, one constitutes the other, transforms the other, in a process which focuses the best adaption to reality. We recognize that: attention, tenderness and love are main tools in the relation between caregiver and baby providing a better development to occur.

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