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**INDIVIDUAL PECULIARITIES OF MOTHER'S SPEECH BEHAVIOR DURING  
INTERACTION WITH CHILD OF THE FIRST YEAR OF LIFE**

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*The aim of this investigation – is to determine individual peculiarities of mother's speech while interaction with the child during the first year of life and to show importance of characteristics of mother's speech in child speech development. To obtain the result videotests which included fragments of mother-child interaction were analyzed. Differences in mother's speech behavior and differences in the levels of child speech development in "mother-child" dyads were revealed as the results of investigation.*

It was earlier shown that every mother has her individual way of reaction while interacting with the child [1]. The chosen strategy of behavior may depend on personal characteristics both the mother and the child and it leads to creating personal interaction in the "mother-child" dyad.

The aim of this investigation – is to determine individual peculiarities of mother's speech while interaction with the child during the first year of life and to show importance of characteristics of mother's speech on child speech development.

For analysis of interaction in "mother-child" dyads videotests which included fragments of mother-child interaction at the children's ages of 3, 9, 12 months old for each of the 10 dyads were composed. Each fragment lasted approximately one minute. Criterion of selection of fragments was "face to face" interaction at the age of 3 months, situation "playing" at the age of 9 months and situation "reading a book" at the age of 12 months. Chosen situations are standard model ones for ontogenesis investigations of child's speech and they reflect specificity of mother-child interaction in different ages [2]. The created questionnaire included two sets of questions. One set was about the child speech development and mother's speech and the other one included characteristics of mother's and child's behavior during their interaction [3]. The questionnaire included following characteristics:

- looks at the child face  
/ looks at the mother face (characteristics number 1 can be seen on the scheme 1)
- changes expression (smiles, laughs) of mother  
/ smiling of children (scheme 1, 2)
- attracts child's attention  
/ looks at mother more or on sides (scheme 1, 3)
- active or passive interaction of mother and child (scheme 1, 4)

Characteristics reflecting child speech development are as follows:

- pronounced sounds spontaneously (characteristics number 5 for children can be seen on the scheme 2)
- pronounces sounds as the answer on mother's speech (scheme 2, 4)
- pronounces many (+) / or few sounds (-) (scheme 2, 6)
- pronounces simple sounds (vowel-like sounds and their combinations) (scheme 2, 3.1)
- pronounces complicated sounds (syllable constructions and the first words) (scheme 2, 3.2)

Characteristics of mother's speech were formally divided into four groups (changes inflexion, repetitions, pauses, changes pitch).

The first group:

- changes inflexion (characteristics number 3 for mothers can be seen on the scheme 2)
- emotional (+) / or monotonous speech (-) (scheme 2, 13)

The second group:

- repeating of the same words several times (scheme 2, 5)
- repeating the sounds pronounced by the child (scheme 2, 7)

- pronounces simple words and sounds (scheme 2, 12)

The third group:

- makes pauses between phrases (waits child answer) (scheme 2, 6)

- uses short phrases (scheme 2, 10)

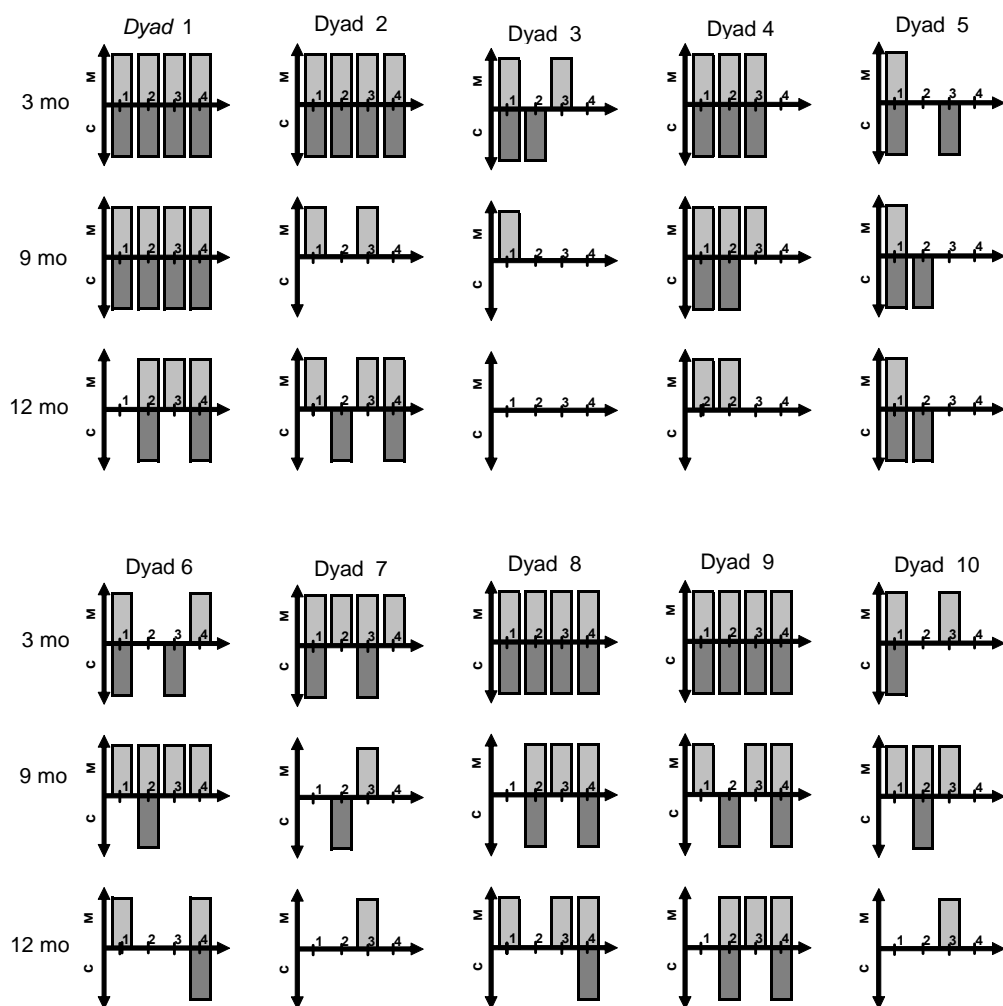
- grammar simple (+) / complicated speech (-) (scheme 2, 11)

The fourth group:

- emphasizes several words with voice (scheme 2, 8)

- makes sound in the words extended (scheme 2, 9)

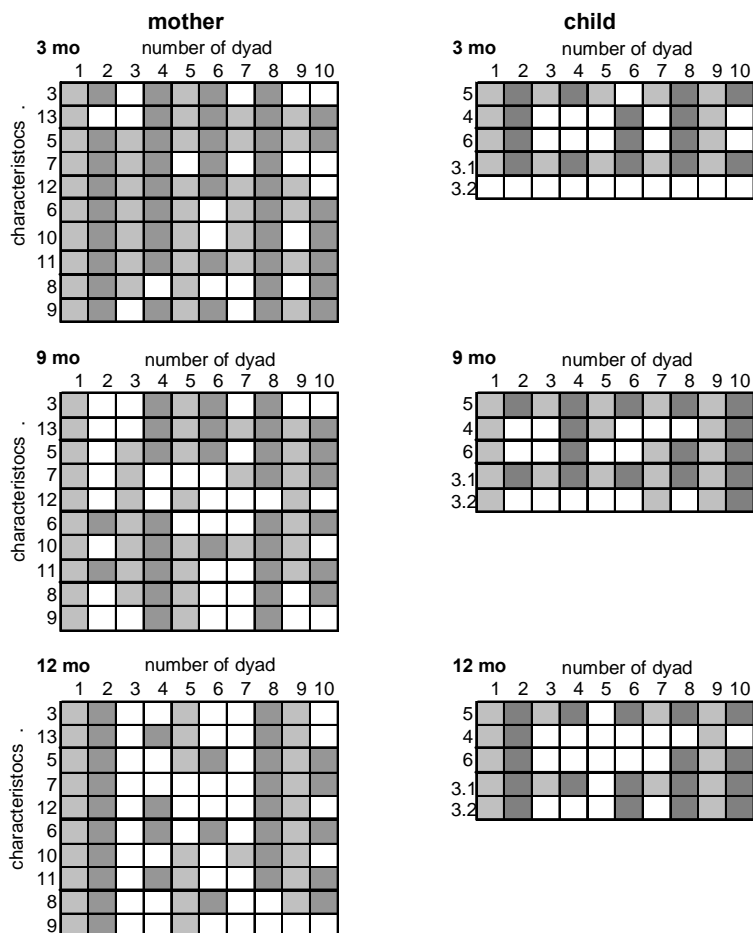
On the basis of achieved results the following schemes were created (schemes 1 and 2).



**Scheme 1.** Characteristics of mother and child behavior in the process of their interaction for 10 dyads at the children's ages of 3, 9 and 12 months old.

Characteristics number 1, 2, 3, 4 can be seen on abscissa (see the description at the top). These characteristics (grey columns) up for mothers and down for children are present on ordinate axis.

Characteristics of behavior create the base for interaction in dyad and promote learning speech material by children.



**Scheme 2.** Characteristics of mother's speech (on the left) and characteristics of child speech development (on the right) for every of 10 dyads (vertical columns) at the children's ages of 3, 9, 12 months old.

Presents of characteristics are coloured grey (see the description at the top).

It was earlier showed that the less characteristics were present in mother's speech the lower was the level of child speech development. It was clearly recognized that there were characteristics for every mother that were absent during the whole period of the first year of child's life [3]. The received results confirm these conclusions that can be right both for different dyads and for each dyad in different ages. Individual peculiarities of speech interaction in "mother-child" dyads were examined as well.

In the first dyad all characteristics for mother and for the child in accordance with child's age (the appearance of compound sounds in 9-12 months) are present.

In the second dyad mother's speech has almost all characteristics at the age of child 3 and 12 months and it is reflected in high level of child speech development in accordance with the age. It can be seen that absence of the majority of mother's characteristics at the child's age of 9 months (besides characteristics number 6 and 10 which are included in the third group) is marked by lowering the level of child speech development at this age.

In the third dyad the first group of characteristics of mother's speech (monotonous speech, without changing inflexion) is absent and there is no sound extending in the words. At the same time the child doesn't pronounce sounds answering mother's speech. The child has small quantity of sounds during the first year of life and he doesn't pronounces compound sounds by the end of the year.

It's interesting to note that in the third and seventh dyads mother's speech hasn't one of the fourth groups of characteristics during the first year of child's life.

In the seventh dyad mother doesn't use the fourth group of characteristics (extending sound in words, emphasizing separate words). The child has no repetitions. By the age of 12 months only simple sound are present in his speech.

In the sixth dyad the child repeated mother's sounds only at the age of 3 months that is only when the mother repeated the sounds pronounced by the child.

The children who repeated the mother's sounds at the age of 3 months (1, 2, 8, 9 dyads) have in their sound repertoire compound sounds by 12 months.

At the age of 3 months high level of child speech development is when the child pronounces many sounds (the children in 1, 2, 6, 8, 9 dyads). Mutual mother's characteristics in these dyads is repeating of the same words several times, pronouncing simple words and sounds, grammar simple speech and extending sounds in the words.

At the age of 9 months in those dyads where the children have syllable constructions and high level speech production (1, 7, 9, 10 dyads) mothers have mutual characteristics 13 (emotional speech), 7 (repeating the sounds pronounced by the child), 10 (uses short phrases). Thus mother's speech has at least one characteristic from every of three groups (three mothers have not all characteristics in the fourth group).

In dyads the children in which at the age of 12 months pronounced many compound sounds (1, 2, 8, 9, 10 dyads), that means high level of speech development, mother's speech at this age was marked by repeating of the same words several times, repeating the sounds pronounced by the child, using pauses between phrases (waiting for child's answer), grammar simple speech.

In dyads (1, 2, 6, 8, 9) if the children at 3 months pronounce sounds answering mother's speech they have high level of speech development (presence of all characteristics) by 12 months. The child from 10 dyad has also high level of speech development. May be in this dyad behavior characteristics at the age of 3 were the reason of low level of speech development for this age (few quantity of sounds).

Active interaction of mother and child (scheme 1) at the age of 3 and 12 months in 1, 2, 8, 9 dyads is reflected that by 12 months the child's speech has all characteristics according to their age.

This research shows that every dyad of the 10 has its own style of interaction and it is reflected both in different set of behavior characteristics and in characteristics of child's speech development and mother's speech. For each age (3, 9, 12 months) characteristics of mother's speech which have the most important influence on the level of child's speech development were determined. They include characteristics of all four groups but the second and third groups of mother's speech characteristics prevail.

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#### REFERENCES

1. Lyakso E.E., Kurazhova A.V., Gaikova Y.S. The individual features of maternal speech linked to the normally developing children during the first year of life // Collections of works of XVII session of RAS «Speech acoustic. M. «GEOS», 2006, p. 71-74 (in Russian)
2. Lisina M.I. Interaction, personality and psychic of children. – M.: edition "Institute of practical psychology", 1997. – 387 p. (in Russian)
3. Muhamedrahimov R.J. Mother and child. Psychological interaction. SPb.: Rech, 2003. 288 p. (in Russian)
4. Gaykova Y.S. Mother-child interaction and early speech development // International congress of prenatal psychology, V.2. – M., 2007, p.97-99 (in Russian and in English)