

# THE INFLUENCE OF THE FEUERSTEIN METHOD IN THE PSYCHOLOGICAL DEVELOPMENT OF PRESCHOOL CHILDREN<sup>1</sup>

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**Abstract:** *Orientated by the new development directions of the education system and the concepts and didactics of the instrumental enrichment program – Basic, we intend to investigate the possibilities to increase the effectiveness of cognitive functions in order to Mental development of preschool children as a result of training aimed at optimizing individuality and positively influencing personality. The pre-school period constitutes a period of utmost importance in the life of the individual. Here the child appropriates the most important psychobehavioral characteristics, completes the preparation for the school. In order to avoid the exclusion of vulnerable categories of children from the educational system and to give them opportunities for social adaptation, Professor Feuerstein elaborated the theory of "the mediated teaching" and operationalized it to serve educational practice in a So-called "instrumental Enrichment Program" (Instrumental Enrichment, IE), which directly targets certain cognitive functions often deficient in people with learning difficulties: the ability to compare structures, search Analogies and differences, modeling capacity and concretization, generalization capacity.*

**Key words:** *Instrumental Enrichment, kindergarten, adaptation, school immaturity, didactic games.*

## 1. Introduction

The influence of the social environment on the mental development of the child is exercised in all possible ways, starting from the time of birth of the child. The environment becomes the source of psychic development by providing the child with circumstances and concrete conditions of life, objects, information and models of conduct. It can act as a barrier or as a factor that favors, facilitates, enhances psychic development. The level of training and education of parents is very important for the development of knowledge functions, for the neuropsychological development of the child (Vrăşmas, 2008; Tăuşan, 2008). The Feuerstein Instrumental Enrichment Basic program, created by Feuerstein, is designed to meet the needs of younger child, as well as the older learner who is severely low functioning and needs a more

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systematic and developmentally based approach. There are three population in need, to which the FIE-Basic is directed. Those earners who (1) require the development and acceleration of basic content and concepts in order to respond to the learning demands of the environments, (2) those for whom such systematic learning will offer prevention of dysfunction or delay ,and (3) restoring or establishing needed functions which were lost or not sufficiently acquired at appropriate times (remediation). The purpose and goal of this FIE program is to affect changes in these critical areas in population of young children.

The FIE-basic is based on the premise that one must adopt an active approach to learning and development, rather than accepting the individual's levels of functioning or waiting for the natural stages of growth. Consistent with the theory of structural cognitive modifiability neuronal, cognitive, and social spheres as necessary and ready targets for the development, prevention, or acceleration of the pace and content of that development. In normally developing children, we can stimulate more efficient and higher levels of functioning, thereby enhancing their development. The educational climate in which the child grows is of great importance for the formation and development of his/her personality. Parents are interested in the progressive development of the child, which is why they directly support the child in psycho-social development – the vocabulary, the formation of skills, the ability, talent, potential difficulties of Child. The game and the FIE-B are made a series of priority objectives for the harmonious growth and development of all aspects of the child. The educational climate in which the child grows is of great importance for the formation and development of his/her personality. Parents are interested in the progressive development of the child, which is why they directly support the child in psycho-social development – the vocabulary, the formation of skills, the ability, talent, potential difficulties of Child. The game and the FIE-B are made a series of priority objectives for the harmonious growth and development of all aspects of the child. Each exercise proposed through the BASIC Instrument Enrichment program, seeks to teach the child to make the appropriate links between objects, phenomena and concepts; use and develop appropriate vocabulary; to define a problem; to formulate a resolution solution; to draw up and apply resolution strategies.

Feuerstein looks at intelligence as a sufficiently extensive process that gives a person the opportunity to alter himself when facing accommodation needs, allowing the person's relationship to be adapted to the environment. Looking at this process as a balance between adapting the individual to the environment and adapting the surrounding world to the individual, Feuerstein brings attention to two of its concepts: cognitive mobility and changing environment. They propose to approach intelligence as something that can be taught-learn, referring to what can be purchased through environmental stimuli. This is achieved by guiding the observation and asking questions; By stimulating the confrontation of objects and events with the aim of discovering the links between seemingly unrelated facts; Stimulating confidence in your own person by understanding that sharing and collaborating with other participants in the activity can contribute to mutual improvement.

The Instrumental Enrichment Program (FIE) aims to increase cognitive change, the ability to adapt its behavior to different situations occurring throughout life (Feuerstein, & Kozulin, 1997; Feuerstein, & Martinez Beltran, 1998).

The personal training that will be carried out along the FIE will contribute to the efficient use of mediation and flexibility concepts used in situations that will cause them to create that active changing environment that young people need to develop.

The aim of the FIE is to correct or potentiate the cognitive functions underlying the human thinking, through a series of activities it carries out.

In the educational field, the role of the adult, be it parent or educator, is fundamental: to help the child learn and develop their learning potential, to facilitate its integration into the social environment, as well as its functioning in the best possible way (Băran-Pescaru, 2004).

All individuals learn by two paths-by direct exposure to the action of environmental stimuli or by the intervention of a mediator. It is not enough to expose the individual to stimuli in order to obtain the change, but it is necessary for an adult to actively interact with intentionality between the subject and the environmental stimuli, assuming his role as mediator. It will surmount specific internal barriers to the child that endanger its learning capacity.

## **2. Research objectives**

The research objectives were:

- a) Identification of the initial levels of psychomotor development and four cognitive functional areas: attention and executive functions, language, sensory functions, visual-spatial processing of children from experimental and control batches.
- b) Experimentation at the level of the Romanian pre-school education of the Basic instrumental enrichment program by controlling functional cognitive areas and psychomotor skills.
- c) Assessing the level of neuro-psychic development of children, in the four areas established, following the application of IE-Basic.
- d) Defining the usefulness of the IE-Basic program in formal or non-formal educational activities

## **3. Research hypothesis**

The application of the Instrumental Enrichment program IE-Basic determined significant changes in neuropsychiatric development and the psychomotor skills of preschool children.

## **4. Procedure**

The research was conducted on a number of 16 preschool children aged 5 to 6 years, enrolled in mass education in Sânpetru, Braşov County. The sample was divided into two groups, an experimental group (8 subjects), respectively control group (8 subjects).

Children who make up the research lot come from the kindergarten with prolonged program Sânpetru, Braşov. Children work independently for about 25 minutes in each activity, this period oscillating depending on the nature of the tasks on the page.

After a short explanation of the theme, students will be asked to resolve individually in a certain time, a task. This activity is followed by a discussion on approaches, following the highlighting of the strategies used and their comparison. The discussion focuses on individual, autonomous resolutions. While students work individually, they need to be monitored to help those who are in difficulty and to encourage those in need. It is recommended to avoid frustrating situations and competition. Students must understand that it is not important to quickly finish the page, but to understand how a task is carried out and how to form and develop certain competences for its execution. A reflection-based activity, even if it is not fully

effective, can be more useful than a hasty one, as it allows the analysis of similar or alternative approaches undertaken.

At this stage, the mediator moves among the pupils, observes the process in which they were involved and notes any source of difficulty. The mediator initiates discussions between pupils focusing on specific issues.

A major purpose of the mediator is to develop the independence and self-confidence of children, learning to check and assess their own work.

Children who managed to complete the task faster than others, were involved in the work of other children, as support. This kind of peer-to-peer tutorial proposed by Professor Feuerstein proves beneficial to both students involved. The Guardian will be considered "learned" and will be encouraged to assist in the process of solving other colleagues without giving them the actual result of the exercise, but only suggestions and strategies used by himself in discovering solutions.

At the end of each lesson, the recap activity occurs. Even if it is short, it must highlight the steps travelled to achieve the goal, any words acquired, the objectives previously fixed and the strategies set for their purchase.

The instruments directly target some often deficient cognitive functions: the ability to compare structures, search for analogies and differences, modeling and concretization capacity, generalization, planning, Abstraction, spatial and temporal orientation, the establishment of analog numerical relationships, serials, etc., visual and numerical memory, graphical representation capability. Through the attractive, unconventional presentation mode, the tools motivate both children and adults to perform exercises and overcome the difficulties of thinking. The instrument that we used were: Organization of dots, Orientation in space, Identifying Emotions, Compare and discover the absurd.

## 5. Results

At the preliminary stage of the research, the purpose of the experimental investigation was the identification of age levels, gender distribution and measurement of the level of neuropsychological and psychomotor development of subjects from the two groups.

By seeking to know the child as potential and possibility of action and evolution, we approached the motor from the perspective of the influence of the psyche on it.

The evaluative stage consisted in the application of the same evidence from the constative stage in order to measure the cognitive level on the four selected core areas: attention and executive functions, language, sensory functions and visual-spatial processing for Children from experimental and control batches.

This action was carried out in order to compare the results of the two participating groups in our study, experimental and control, following the application of children from the experimental group of instrumental enrichment programs.

The high scores recorded by the experimental group in the last-stage tests, the posttest, demonstrate, on the basis of the Protocol of interpretation of the NEPSY subtests, the increased ability to access known names, clearer articulation, Functional phonological processing as an effect of developed auditory-phonologic perception and analysis that have positive influence on language comprehension and learning.

Exercises based on the audital analysis of words and games that demanded the modification of parts of words or the whole word by omission/replacing sounds, as well as the search

activities of sounds given in different words have favored Improvement of phonological ability in the case of preschool in the experimental group. Games of rhyme or pronunciation errors have contributed to a decrease in the number of requests to repeat the words in the task.

And on the execution time of the tasks in the execution games or those requesting access and swift pronunciation of familiar words, a positive change was observed. The rate of execution of pregnancy has become adequate for age, the effort in reupdating the sound-symbol associations being low.

Decreasing impulsiveness in carrying out tasks has resulted in an increase in the speed of execution in favor of precision. Investing the time needed in carrying out tasks, planning and monitoring the execution are other evidence of impulsiveness control that can influence performance.

High preschool scores indicate an increase in skills to process and respond to verbal intakes with increased complexity, a good understanding of responsive language and an increased ability to indicate Sensation in response to the verbal instructions.

The hypothesis formulated in the experiment that the application of the FIE-Basic program would lead to the recording of significant differences between the two batches on the four basic cognitive areas was confirmed.

## 6. Conclusions

The school is recognized as socially central for the formation of the most important resources of society: children. It constitutes the formal scenario that allows for comprehensive education for the development of children's cognitive and aptitudes processes. In the current context, the pedagogical task must be directed beyond the transmission of regular school content; It involves the development of skills and skills that promote the autonomy of thinking and action (Cerghit, 2002; Ciolan, 2008; Tomşa & Oprescu, 2007).

From this perspective, mediated learning is a process of social pedagogical interaction, dialogue, playful, conscious, intentional, systematic, aimed at generating good learning experiences during the transmission of knowledge, allowing Development of human potential in being, making, knowing and living. It is a social process, because it transmits culture, values, norms, implies the intentional and conscious social interaction between the teacher, partner, conscious adult and children to influence the performance of those involved. It is systematic because it responds to the pedagogical intent, which must take into account previous knowledge, learning styles, educational purposes, the teaching context of the Apprentice and the content. Learning mediation involves the interaction in teaching and learning as their constituent elements to lead to the generation of positive learning experiences, the awareness of learning modes and the transfer of what has been learned.

By analyzing the results of research from the earthlings of the effects of mediation, we extract the following:

- 1.The performances in terms of oral language increase prominently by developing the correct pronunciation capacity, enriching the active vocabulary, training of systematic reading skills of images based on spatial organization and Language dialogue.

- 2.The increase in mathematical performance at this age level is due to the increase in manual efficiency globally, associated with the manipulation of objects in the development activities of mathematical concepts.

3. The quality of the practical and artistic-plastics work has increased by streamlining movements in arms and hands. Fewer cases of deviations from the learning task have been recorded by carrying out control and self-control actions. Increasing the level of tasks has increased the independence of children and self-confidence.

Due to the characteristics of age, preschoolers cannot assimilate knowledge through abstract concepts and pure reasoning, but through feelings and participation. Learning mediation becomes the channel of exposure to potential factors for each individual to be able to alter their own cognitive style and basic functions in a stable manner. By encouraging the environment, there is a space in which children can have access to participatory practices and socializing, generating tools that can be used as social constructions that favor the acquisition of new knowledge and experiences (Jurcău, 2000; Neacşu, 2010).

In this way, when the opportunities for participation are favored, they will lead to the construction of more democratic societies with a more critical and social view of the world. Social participation processes do not depend solely on opportunities, the constant intervention and accompaniment of mediation agents is required, as they are provided by intentional situations and guide processes in an articulated manner. Participation generates spaces for socialization and social constructions, which is why it includes not only children, but also other actors indispensable in the development of small ones: teachers, family and caretakers. All these agents mobilize social media and social participation to generate ideas that propose new, family, school and social learning.

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