

EDU WORLD 2018
The 8th International Conference

**LANGUAGE AND COGNITIVE DEVELOPMENT. GENERAL
CHARACTERISTICS OF PRE-SCHOOL ORAL LANGUAGE**

Mihaela-Roxana Anghel (a, b)*

*Corresponding author

(a) Doctoral School in Psychology and Educational Sciences, University of Bucharest, Bucharest, Romania, mihaela-roxana.barbulescu@drd.unibuc.ro]

(b) University of Pitesti, Pitesti, Romania, mihaela.roxana.anghel@gmail.com

Abstract

This article aims to investigate the way children acquire and deepen their language, form a verbal behaviour that will later enable them to verbalize their thinking and build communication with others, but also how language development puts its mark on the children cognitive development, influencing both his / her social relationships and the precision and aesthetics of the expression of thought. In order to examine and evaluate young children's verbal conduct and intelligence characteristics, we have conducted a research which included the cumulation of two tests: the first one, The Draw-a-Person test used as a measure of intelligence in children; the second one, The Alice Descoedres test for acknowledging the language psychological age. Starting from the hypothesis that the preschool child's language specificities are largely related to the level of mental development, a condition which explains the variety of styles and different communication potential of children of the same age, we have proposed the following objectives: 1. Analysing the correlation between the level of speech development and the intellectual level of pre-schoolers; 2. Identifying the volume of language specific to the preschool age; 3. Highlighting any existing speech disorders at pre-school age. The results of this applied research highlighted the level reached in the development of language and intellect by preschool children included in the study, as well as outlined the characteristics of the verbal behaviour and intellectual capacities present at this age.

© 2019 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Language, intellect, development, preschool.



1. Introduction

The motivation to approach the subject of language at pre-school age derives from curiosity and personal interest in investigating how children acquire and deepen language, form a verbal behaviour that later allows them to verbalize their thinking and build communication relationships with those in but also how language development impinges on the child's mental development, influencing both his social relationships and the precision and aesthetics of the expression of thought.

The importance of language has often been highlighted by the relationships and dynamics that are established between verbal conduct and the work of psychic processes, in other words, the progress of language learning is made in parallel with the progress of thought, which we have also outlined in this paper, prism of the pre-school period.

A coherent discourse on the role and importance of language development during the pre-school period should highlight not only the overall unity of language but also the dynamics of the links between it and other psychic processes (Chomsky, 2006). This is all the more evident as language is communicated on the one hand, and on the other hand, language is an operative instrument of elaborating thought through which thought becomes verbalizing (Fletcher & Garman, 1988).

Moreover, given that the progress of language learning is attained concurrently with the progress of thinking, then we are entitled to say that, not only in the historical development of man, but also in the ontogenetic development of the psyche, the development of language impinges upon the psychological development of the child (Verza, 1973), influencing both his social relations and the precision and aesthetics of the expression of thought.

2. Problem Statement

Considering that the basis of the relationship between thinking and language (Carroll & Oprică, 1979) is the principle according to which a child can assimilate, to master, only what corresponds to the degree of development of his thinking, then it is obvious that educational methods must be concerned with developing both language and thinking. As Piaget (1988) stated, the acquisition of language is achieved in stages, as a succession of stages corresponding to the cognitive structures ranking (sensory-motor, pre-operator, concrete and formal operator), by interaction with the external reality, by adaptation, assimilation and accommodation, and is correlated with intelligence. The pre-school child actively acquires the language, not only involving skills in all four areas - lexical, grammatical, phonological and pragmatic - (Shore, 1995, p. 13), but also by operating a selection between the means of expression and assimilating only what is necessary and appropriate to his / her thinking (Schaffer & Ionescu, 2005, p. 274). Due to the fact that language is knowledge shrouded in intentions of interpersonal communication (Tomasello, 2009), the widening of the verbal relationships with all the social factors in his / her entourage - family / kindergarten - favours the gradual development of the children's speech, especially since at the age of pre-school children have a curiosity about the knowledge of the objects, their attributes and an interrogative attitude related to the origin and the cause of phenomena, processes, actions. Hence, the dependence of language development on the quality of the surrounding language environment, on the narrower or more developed language code in which the child develops. Thus, if the family speaks a little, briefly, then the

child will acquire an elementary linguistic competence; on the contrary, correct, well-spoken speech will influence the acquisition of increased linguistic competence.

In the development of language, the relationship between social and biological is proving essential, because the biological environment acts by updating the innate potential, which makes the development of language possible.

Being what Pinker (1994) was referring to children as “word vacuums” (Schaffer, 2005, p. 277), the development of expressive language and communication in the kindergarten takes place both in speech-specific activities and in the whole kindergarten program, thus giving the child the optimal possibility of free, verbal expression, in context, of the actions taken, of the motivations personal, etc (Crețu, 2001). Thus, through exercise games to assimilate correct oral expression, through object observation exercises, phenomena, establishing relationships and interdependencies between them and verbal motivation, in order to enrich the active and passive vocabulary, through exercises describing a concrete fact (event) that implies narrative, commentary for the purpose of fluent, coherent, logical communication, mimic and gesture exercises, as well as dialogue played in interpretations of roles known and loved by children by learning the content of the poems taught in the obligatory activities, through pictorial stories, paintings, pictures from books, magazines, albums, etc. - the kindergarten, the educational environment - offers various possibilities for cultivating the language and thinking of the preschool.

Both the development of language and pre-school thinking therefore aim at preparing children for school and establish a close link between the content of the educational-educative work in the kindergarten and the successful integration of children in primary education.

3. Research Questions

Although highly controversial, involving a series of questions whose answers could facilitate our understanding of the development of the human psyche in general, and language, in particular, the topic of acquisition and development of language is one of the subjects of great importance especially with a view to identifying a practical methodology, diagnostics during the pre-school period, during which time the basic psychic human characteristics are formed (memory, thinking, language, affective life, personality).

Children are able to acquire this power and to master it with minimal effort (Bergmann, Hall, & Ross, 2007), in a way that seems miraculous and particularly creative - I would say - if we think of the ability to realize and understand an infinite number of statements, even before they know adding two numbers, and this is happening because the acquisition of language is not only a process of emergence of pre-programmed structures (Bronckart, 1977), but a complex process. It is also known that in order to acquire linguistic competence in communication in a certain language, most learning acts take place in childhood, but the path is prepared through various forms of pre-linguistic communication that engage children since the last months of first year of life.

Taking into account what we said above, here are some general questions from which we started this project:

How does the language acquisition happen?

How do children succeed in acquiring this ability to realize and understand statements in relationship with adults?

Which are the forms of pre-linguistic communication that engage children since the last months of first year of life?

How do they make a statement based on a noun or a verb?

What is the dynamic that links the language and other psychic processes?

The way in which verbal conduct is accomplished depends on the level of intellectual development?

And if so, what is the relationships established between verbal conduct and psychic processes?

4. Purpose of the Study

Taking into account the fact that during the pre-school period the role and the importance of the development of language are emphasized not only by the overall unity of the language but also by the dynamics of the links between it and the other mental processes, this paper therefore aims to outline the fundamental characteristics of the language through the pre-school period. Moreover, given that the progress of language learning is attained concurrently with the progress of thinking, then we are entitled to say that, not only in the historical development of man, but also in the ontogenetic development of the psyche, the development of language impinges upon the psychological development of the child, influencing both his social relations and the precision and aesthetics of the expression of thought.

5. Research Methods

In order to examine and evaluate young children's verbal conduct and intelligence characteristics, we have conducted a research which included the cumulation of several tools for collecting, processing and interpreting data to test the formulated hypotheses:

1. *The Draw-a-Person Test* meant as a form of communication on the basis of which the complicated architecture of oral and written language can be possible. Considering that between verbal conduct and the level of psychological development, between speech and intelligence, there is a close mutual connection, we considered necessary for the children undergoing our investigation to perform a test of intellectual development through the Drawing Test method.

In addition, we also sought to evaluate the functionality and development of language and communication through the following methods specific to the assessment of pre-school language:

2. *The Alice Descoedres Psychological Language Age Test* (Oprea, Nițu, Chiriacescu, & Lungu, 2003) which was applied to each subject in order to identify the psychological age of language.

The psychological age of language is assessed by the way the subject performs certain tasks, at the level of 7 sub-subprojects, subproblems that address the following aspects of children's thinking and language development:

- a) establishing the similarities / differences between different objects or images of objects;
- b) filling gaps in a text;
- c) memorizing and reproducing groups of figures;
- d) naming of materials (without intuitive support);
- e) establishing contradictions without objects or images of them;
- f) the name of 10 colors;
- g) knowing the meaning of verbs by imitating actions.

Thus, by relating the language development age to the chronological age, it can be ascertained that:

- if the psychological age of the language is equal to the chronological age ($V.L. = V.C.$), one can speak of a normal development of the child;
- if the psychological age of the language is higher than the chronological age ($V.L. > V.C.$), one can speak of a higher development of the child;
- If the psychological age of the language is less than the chronological age ($V.L. < V.C.$), it is possible to speak of a poor development of the child.

3. *A Vocabulary Volume Proficiency Test*, aiming to identifying the vocabulary volume of each subject.

4. *A speech defect Test* aimed at identifying and highlighting the possible speech defects of the preschoolers investigated.

Starting from the hypothesis that the pre-school child's language specificities are largely related to the level of mental development, intelligence level, conditioning that explains the variety of styles and different communication potential of children of the same age, we have proposed the following objectives:

1. Analysis of the correlation between the level of speech development and the intellectual level of preschoolers;
2. Identify the volume of language specific to the preschool age;
3. Highlighting any existing speech disorders at pre-school age.

The research was conducted in an urban kindergarten and included 20 preschoolers (11 girls and 9 boys) aged between 3 years and 5 months and 6 years and 5 months. The 20 children undergoing our investigation come from the small group, the middle group and the large group. All the children included in this sample attended the kindergarten in the school year 2016-2017, starting with the first semester less than one, from the small group that was included in the pre-school education, later, ie during the second semester, century.

Of the 20 children, all are part of families with harmonious relationships. Of the 5 children in the small group, 2 have brothers; in the middle group, of the five children, 1 has a higher sister; and of the 10 large group children, 6 have smaller brothers or sisters. From the point of view of the studies, the majority of the parents of the children included in the present study have higher education, some secondary education, all parents have stable jobs and good economic status towards very good.

6. Findings

In the following we will present the results obtained during our study.

According to the Draw-a-Person Test, since intellectual action influences verbal conduct, the higher the psychic intellectual development of the child, with both verbal conduct is manifested in more varied, complex, richer forms, the performances of the children in our study are significantly high.

The analysis of the results obtained by the subjects of the study in the knowledge of the psychological age of the language revealed on one hand aspects of cognitive behaviour (the perception of the attributes of more or less familiar objects, the activity of representation, the activity of memory and thinking, etc.) and, on the other hand, highlighted aspects of verbal behaviour (acquisition of lexical

categories, correct expression of concrete or abstract notions, etc.). She has shown that, according to their chronological age, the subjects have:

- notions arising from the socio-economic conditions in which they lived, known facts from their objective or subjective reality;
- the ability to use some mental operations such as: abstraction, generalization, concretization;
- ability to comprehend (as an activity of thought) the discovery, capture of the links between objects and phenomena;
- ability to use conceptual representations of known objects and phenomena;
- the ability to use the mnemonic function;
- the ability to use language to define the concepts correctly (which is nothing but the connection between objects and the definitions that correspond to them).

Due to the complexity of its subprograms, the proof of knowing the psychological age of language proved to be telling to know the characteristics of the verbal behaviour of the subjects, especially since these characteristics are of particular importance for the learning process, but also for influencing thinking, memory, imagination and other psychological processes and personality traits in particular.

This test was followed by the Vocabulary Volume Proficiency Test to highlight the lexical structure of the children included in this study. The results obtained in this sample translate the vocabulary volume specific to each preschool enrolled in the study, which is an important indicator for the overall characterization of his verbal conduct.

During the trial, we found the preference for certain words from the intuitive sphere and much less towards the verbal-abstract categories. This can be attributed to the richness of the intuitive-action experience, the degree of elaboration of the superior types of activity, the way in which the information was acquired.

The data collected also demonstrates that the number of words used by children with good or higher intellectual development is higher than the number of words used by children with medium intellectual development. At the same time, this extension of the vocabulary is accompanied by a diversification of the number of words, so that the pre-schoolers with a good and superior intellectual maturity coefficient are observed not only from the intuitive-action but also from the abstract one. This highlights once more the degree of elaboration of superior types of intellectual activity.

At the evidence to highlight speech defects, he highlighted dislocation-type articulation disorders (in the form of sigmatism or rhotacism). We have also noticed defects of pronunciation, sound omissions, the presence of parasitic sounds, the repetition of sounds, the difficulty of pronouncing correct articulation of sounds (friction, vibration, velar, etc.). These speech disorders, related to the chronological age of pre-schoolers, express either the level of maturation of the articulation capacity or the level of phono-articulator development, the phonetic hearing and the analytic-synthetic capacity of the cerebral cortex, all still immature developed during this period.

7. Conclusion

The results obtained from the application of the four mentioned tests have allowed us to outline the level reached in the development of language and intellect by preschool children and, at the same time, to

establish a series of evolutionary characteristics of the verbal behaviour, intellectual capacities present at this age, as well as the dynamics of the connections between language and thinking, that is, between verbal conduct and psychic processes.

Taking as a starting point the results obtained by the subjects included in our practical study, we can conclude that studying the characteristics of language at pre-school age is of great importance for knowing the verbal behaviour and intellectual activity of pre-schooler from several points of view, namely:

Firstly, it allows knowledge of other mental processes, such as thinking, imagination, memory, creativity, because the level of language development is a fundamental indicator in assessing the level of intellectual development. As we have been able to observe following the test of intelligence and language testing, the correlation between language and thinking is confirmed by the fact that a high level of intellectual development places its mark on the level of language development. Thus, the degree of intellectual development plays a decisive role in shaping the level of language development (Verza, 1973), both in terms of quantity (diversification, nuance, complexity) and qualitatively (absence of speech defects). At the same time, a high level of language development denotes positive aspects of the content and structure of intellectual activity, for which the assessment of language functionality and development could not be subtracted from an assessment of the content of intellectual activity.

Being a complex and central phenomenon of human psychism, thinking is a process of solving problems that arise in life, in the theoretical and practical work of man. However, problem solving involves the use of already acquired knowledge, the use of the older generalized experience, the mental formulation of hypotheses, the finding of the solution and its testing in practice, then the confirmation or the refutation of the hypothesis is followed. The verbal behaviour of children always expresses, besides other aspects, the content of intellectual activity, which has a certain nature, a certain quality and structure, because thinking is logically structuring, integrating and formalizing reality through language (Păunescu, 1973). In the context of verbal behaviour, intellectual activity is reflected in the sentences and phrases with which the subject operates, in order to make the content of ideas that it wishes to communicate as complete and clear as possible. It is known that the effectiveness of thought is directly related to the accumulated experience of man, to the depth and solidity of knowledge. Just as thinking cannot manifest itself outside of the acts of communication, verbal, nor can language be made beyond the notional thought.

Secondly, the present study has allowed a survey of the way in which the entire psycho-behavioural profile of pre-school children in continuous formation and development is being built, prefigured, modelled and structured. Moreover, during the pre-school period, the language cannot be separated either from the intellectual factors that determine its evolution and development, but also from the extra-intellectual factors, such as personality.

Thirdly, an insight into the level of language development allows an analysis of the subsequent development of each child, both from a social, cognitive and academic perspective. Thus, by developing complex verbal behaviour, the child is in possession of important acquisitions (knowledge and skills) that are involved in building the entire psycho-behavioural profile of the child, giving him opportunities to specifically adapt the demanding environment. The quality of the fundamental acquisitions acquired during this period depends on the level of adaptation and integration of the child in the next stages of his development and development.

All these considerations lead us to affirm that between language and thought there is a permanent interrelation, an exchange of mutual interactions. The way in which verbal conduct is accomplished depends on the level of intellectual development, and in turn, language positively and favourably influences the subsequent psychic evolution, which confirms the hypothesis of our research.

References

- Bergmann, A., Hall, K. C., & Ross, S. M. (2007). *Language files: Materials for an introduction to language and linguistics*. Ohio State University Press.
- Bronckart, J. P. (1977). *Théories du langage: une introduction critique [Language Theories: a critical introduction]*. Bruxelles: Dessart et Mardaga.
- Carroll, J. B., & Oprică, O. (1979). *Limbaș și gândire [Language and thought]*. București: Editura Didactică și Pedagogică.
- Chomsky, N. (2006). *Language and mind*. Cambridge University Press.
- Crețu, T. (2001). *Psihologia Vârștelor [Developmental Psychology]*. București: Editura Credis.
- Fletcher, P., & Garman, M. (1988). Normal language development and language impairment: Syntax and beyond. *Clinical Linguistics & Phonetics*, 2(2), 97-113.
<https://doi.org/10.3109/02699208808985246>
- Oprea, V., Nițu, L., Chiriacescu, D., & Lungu, P. (2003). *Set de instrumente, probe și teste pentru evaluarea educațională a copiilor cu dizabilități [Set of tools and tests for the educational assessment of children with disabilities]*. Asoc. Reninco, București: Editura MarLink.
- Păunescu, C. (1973). *Limbaș și intelect [Intellect and Language]*. București: Editura științifică.
- Pinker, S. (1994). *The Language Instinct: How the Mind Creates Language*. New York: William Morrow.
- Piaget, J. (1988). *Teorii ale limbajului. Teorii ale învățării. Dezbaterile dintre Jean Piaget și Noam Chomsky [Language and learning: the debate between Jean Piaget and Noam Chomsky]*, București: Editura Politică.
- Schaffer, H. R., & Ionescu, T. (2005). *Introducere în psihologia copilului [Introduction to child psychology]*. București: ASCR.
- Shore, C. M. (1995). *Individual differences in language development*. London: Sage Publications.
- Tomasello, M. (2009). *Constructing a language*. Cambridge: Harvard University Press.
- Verza, E. (1973). *Conduita verbală a școlărilor mici: (normali, logopați și debili mintal) [Verbal conduct of small schoolboys: (normal, logopaths and mental debts)]*. București: Editura Didactică și Pedagogică.