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INFLUENCE OF TEMPO-RHYTHMIC ORGANIZATION OF SPEECH OF CHILDREN SUFFERING FROM STUTTERING UPON THEIR COMMUNICATION

Abstract. The article presents a theoretical overview of the issue of formation of communicative competence in the development of tempo-rhythmic aspects of speech in preschool children with stuttering. It shows the relationship of these components to each other and presents the views of various researchers on this issue.

Key words: preschool children, stuttering, tempo-rhythmic aspect of speech, communication skills, communication.

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According to some authors (N.A. Vlasova, V.I. Seliverstov), 2-3% of the population suffer from stuttering; in most cases these are preschool children aged 2-5 in whom this form of speech disorder acquires the features of "developmental stuttering" when they get older [4, p. 21; 15, p. 43].

In accordance with the definition of one of the founders of logopedics I.A. Sikorskiy, stuttering is a sudden disruption of speech fluency caused by spasms in one of the groups of speech muscles (articulation, breathing or vocal) which make up one whole [16]. According to the data provided by N.A. Vlasova and E.Yu. Rau, spasms result in violations of the tempo, rhythm and fluency of expressive speech predominantly appearing in

the process of communication [4; 8].

R.E. Levina believes that a speech disorder does not exist on its own; it always presupposes the personality with all its specific features [6].

Many researchers report variously marked psychological peculiarities in stuttering preschoolers: in some children it is shyness bordering on timidity, striving for solitude, speech phobia, and anxiety; in others it is disinhibition, ostentatiously loose behavior, harshness, and rudeness [1; 2; 8; 12, etc.].

T.A. Boldyreva notes that "anxiety associated with the process of speech realization is the most vividly expressed specific personality trait of a stutterer" and that "there is dependence between the level of specific speech anxiety and the level of general anxiety of stuttering people" [3, p. 65].

In recent years, researchers have often addressed psychological peculiarities of stuttering persons to substantiate psychotherapeutic orientation of logopedic work [3; 8; 12; 15, etc.].

Deficiencies of overconcentration on the speech defect in persons with stuttering have been shown in the works of N.A. Vlasova, N.P. Tyapugin, V.I. Seliverstov and others [4; 17; 15].

Yu. B. Nekrasova argued that the stuttering person's awareness of his disorder and the resulting "apprehensive state" [8, p. 40] played the leading role in the structure of stuttering. She believed that the essence of stuttering as a "psychoneurosis" was fearful feeling, fixed idea, phobia and the whole lot of inhibiting emotions in the face of dangers in the past, present and future

E. L. Nosenko saw the essence of stuttering in disorders based on mental affecting processes [10]. He stressed the inseparable connection between the impairment itself (stuttering) and the personality of the stutterer. This connection was characterized by the leading role of stuttering upon the personality development of the stutterer, deformation of communication and, as a consequence, by disharmonic development of the person. With age, correlation between the impact of personality and speech deformation changes towards prevalence of personality changes.

- V. I. Seliverstov states that "overconcentration on one's defect is the basic factor which determines the character and complexity of psychological peculiarities of stuttering people and thus becomes part of the structure of this speech disorder" [15, p. 14].
- S. S. Lyapidevskiy defines speech phobia as "a typical symptom of stuttering" [7]. Logophobia includes obsessive feelings and fear of speech spasms that is enhanced in some situations, in connection

with which stuttering persons develop a response of avoiding certain speech situations and demonstrate the presence of communicative barriers [7, p. 89].

Communication is one of the basic functions of speech. Stuttering impairs it dramatically, which explains the fact that quite a number of works have been devoted to the study of this issue [1; 4; 8; 9; 14, etc.].

Observation of stuttering children aged 4-7 [4; 6; 11; 12; 13; 14; 15; 20] reveal underdevelopment of the skills of group communication and social behavior. Reduced play activity is especially evident. As early as preschool age, stuttering children become accustomed to perform secondary roles. Imitation, typical of preschoolers, is underdeveloped in children with stuttering. These features, if neglected, may stay or even become worse at school age.

Studies of adults with stuttering show that not only psychological components of verbal communication but also means of non-verbal communication both in the plane of self-expression and perception (i.e. interactive and perceptive aspects of communication) are impaired in these persons [8; 16; 17; 18]. T. A. Boldyreva highlights that "interactive and perceptive aspects are underdeveloped; they are inhibited and suffer from personality traits of

the stutterer artificially narrowing communication experience, consciously choosing the position compensating for speech defect. The para-communicative aspect of communication suffers from stuttering indirectly. The communicative aspect is directly connected with speech and is the result of communication development under the conditions of speech disorder. Information exchange has a narrow, one-way character" [3, p. 56].

Describing communication hampered by stuttering, L. Krol'notes that "the stutterer does not like his speech and, as a rule, tries to hide his speech problems from the surrounding people. Conscious and subconscious tendencies of the stutterer are targeted at reducing the speech impairment (at least symbolically) and to localize it" [5, p. 89]. "While observing the non-verbal components of interaction in the process of natural communication, our attention is drawn to the fact that facial expressions and body language of the stutterer often do not reflect his response to the interlocutor but to his own feelings associated with speech problems (i.e. have an auto-communicative nature). And the visual contact with the partner or audience is often severed, many means of expression are not used, and non-verbal components of communication are kind of "in the background". As a result of overconcentration on one's own feelings, perception of the real interlocutor and his responses is also weakened, and contact with him becomes loose as it is not supported by the whole visual volume of communicative behavior. Precision of perception and interpretation of the listener's expressiveness are also lowered due to the fact that observation is, to a large degree, oriented towards possible evaluation of the speaker's utterance but not towards potential dialogue" [5, p. 90].

We believe that the temporhythmic organization of speech is a dynamic system controlled by the speaker which represents a complex of the speech flow properties and is characterized by stable rhythm and variable tempo adequate to the given age.

E. S. Kazbanova and E. Yu. Rau believe that speech disfluency of preschool children is a risk factor of stuttering [13]. L. I. Belyakova and E. A. D'yakova consider child speech disfluency to be is a stage in the development of the speech function in general [2]. Oral speech at this time is characterized by ontogenetic pauses which appear during the period of phrasal speech forphysiological mation, iterations (repetition of sounds and word parts), breathing iterations and exclamations within a word and a phrase.

With time, speech disfluency is reduced, and by school age is manifested in structurally complex utterances in the form of various iterations and pauses (E. Yu. Rau, E. N. Sadovnikova) [14].

Numerous iterations, breathing and sound-syllable casual pauses which appear during emotionally charged communication are characteristic of stuttering on the whole. The difference is that in stuttering they are reinforced and strongly associated with the situation that psychological stress and, which is still more important, are spasmodic, i.e. are accompanied by muscle contraction in various parts of the vocal apparatus: breathing, voice producing and articulatory.

That is why studying issues about influence and interconnection of communicative-psychological peculiarities of preschool children with stuttering on the specificity of the tempo-rhythmic organization of their speech processes is important.

It is worthy of note that violations of tempo and rhythm of oral speech may be also observed in people without stuttering — both adults and children. The psychologist E. L. Nosenko reports that tempo-rhythmic disorganization of speech may occur in communication under the conditions of high responsibility and significance (for example in students during examination), on the background od emo-

tional strain and excitement which automatically leads to quickening speech tempo, distortion of voice timber and appearance of speech dysrhythmia and, as a consequence, to problems of utterance coherence and inadequate realization of the communicative event as a whole [10]. In children, the phenomena of tempo-rhythmic speech disorganization are caused by underdevelopment of the processes of coordination of semantic, articulatory and emotional-regulatory mechanisms in the communicative process of the child in general (R. E. Levina, L. I. Belyakova, E. Yu. Rau, E. S. Kazbanova, etc.) [6; 2; 13].

Some researches focusing on the study of speech tempo-rhythmic processes in stutterers (Yu. B. Nekrasova, I. F. Pavalaki, E. Yu. Rau, Yu. O. Filatova, etc.) single out some features of speech disfluency both in children and adults. These are iterations of one and the same element (sound, syllable, word) associated with the clonic component of speech spasms, and delays and stops in pronunciation caused by the tonic component of speech spasms; deliberate pauses, distortion of pausation in general, embolic-phrasal insertions, speech tricks, etc. [8; 9; 11; 12; 18].

Speech spasmodic condition proper (in the form of various kinds of stuttering) is manifested periodically depending on a number of factors – communicative-situational and communicative-semantic. Communicative-situational factors provoke enhanced stuttering under certain communicative conditions, at moments of emotional strain (speech in an unfamiliar situation, public speech, talking with strangers, with adults, with other children while playing, speech demanding quick verbal response, etc.). They may reduce stuttering up to its complete disappearance in the state of emotional comfort (speech to oneself in a spontaneous game, while communicating with the toys, Communicativeetc.). semantic factors provoke enhanced stuttering when the child uses difficult by degree of independence kinds of speech (story-telling, retelling, and answering questions) in communication. They may reduce stuttering up to its complete disappearance when using easy less independent kinds of speech (reciting poems by heart, pronouncing automated rows, mated reflected elements, singing). According to R.E. Levina, the author of a psychopedagogical classification of speech disorders, increased complexity of speech activity in children is itself accompanied by emotional strain caused by thinking over its content and difficulties of planning the scheme of utterance [6]. This leads to general instability of the neuropsychological apparatus and vegetative dysfunction of the child; stuttering manifestations are reinforced according to pathological conditioned reflex mechanism (Yu. B. Nekrasova, E. Yu. Rau) transforming into stable pathological states (L. Z. Arutyunyan) [8; 9; 12; 1]. As a result, all symptoms of speech disfluency and dysrhythmia are enhanced and complicated in the speech of stuttering persons. They affect the utterance intonation contour, violate the syntagmatic speech division caused by absence of the so-called breathing pauses and other kinds of speech pausation (logical, psychological and hesitation). The communicative purpose of the utterance is not realized because of disorganization of the utterance cohesion, and, as a result, the communicative function of speech on the whole is violated. This is most vividly manifested in the speech of stuttering preschoolers with speech underdevelopment and immature processes of coordination of sense-articulatory and emotional-regulatory mechanisms (E. Yu. Rau) [12].

Alongside verbal elements in the structure of stuttering in children, many authors register specific problems of non-verbal character: uncommunicativeness, negativism and irritability (R. E. Levina, V. I. Seliverstov, N. A. Cheveleva, A. V. Yastrebova, etc.) manifested in reserved speech behavior (posture, look, facial expressiveness, body language) and excessive impulsive-

ness or inhibition of the stuttering child in the process of communication [6; 15; 19; 20].

According to the data provided by E. Yu. Rau and E. S. Kazbanova who study the peculiarities of tempo-rhythmic organization of speech of stuttering preschool children and the conditions of carrying out preventive measures for elimination of speech disfluency, there are a number of genetic and socially determined risks of stuttering:

- disorganization of temporhythmic motor speech processes connected with prevalence of the properties of hyperactivity and hypererethism;
- high emotional reactivity prolonged by the child's readiness for salient expression of his neurotic responses in communication with the surrounding people;
- development of features of impulsive speech behavior in the process of communication and poor speech self-control;
- specific conditions of the communicative-linguistic environment of the child's family education causing development and automation of the speech anxiety reflex connected with activization of indicators of speech disfluency [13].

Thus, it is evident that there is interdependence between formation, development and automation of the processes of tempo-rhythmic organization of speech and not only development of linguistic means of communication (acquisition of arbitrary forms of building utterance) but also development of communication skills in general. The special role of tempo-rhythmic organization of speech in the formation of communicative stereotypes and the urgency of the topic under discussion are also evident.

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