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Development Approaches in the Polish Speech Therapy for the Deaf and Hearing Impaired

SUMMARY

The article focuses on theoretical coverage of the subject literature on the scientific status and development approaches emerging in the Polish speech therapy for the deaf and hearing impaired. The scientific discourse on the tasks of speech therapy for the deaf and hearing impaired allows to discern the duality of this subdiscipline, as it deals with diagnosis and rehabilitation of speech in people with hearing impairment, as well as practice, that is, setting direct actions aimed at changing this reality in a deliberate way. At present, in the Polish speech therapy for the deaf and hearing impaired, there are two developmental approaches: emancipatory and practical, which allow to link theoretical assumptions and practice.

Key words: speech therapy for the deaf and hearing impaired, emancipatory approach, practical approach

INTRODUCTION

The state of development of the Polish speech therapy for the deaf and hearing impaired has been a subject of profound scientific reflection for many years. The Polish speech therapy for the deaf and hearing impaired (Polish: *surdologopedia*, Latin: *surdus* – deaf, Greek: *logos* – word, *paideia* – learning, education) is one of the special speech therapy areas, dealing with the problem of impact of hearing damage on the process of using language and communication in the course of life. The etymology of the word of “surdologopedia” clearly indicates the direction of understanding it as one of the specializations of speech therapy including the theory and practice of speech therapy, characterized by a narrow range of content. From the above definition it appears that speech therapy for

the deaf and hearing impaired has its own distinctiveness, but it is not autonomous. The autonomy of a particular scientific discipline is determined by its subject matter, the subject's progress, the means and results of study, the degree of meta-scientific self-determination, and the organizational and informational state (Kamiński 1992, 253). The autonomy of speech therapy for the deaf and hearing impaired does not stem from its isolated subject matter and its own research methods or substantive and methodological correctness, but from its scientific status, which marks the original areas of scientific exploration within the subdiscipline. Although speech therapy for the deaf and hearing impaired has its own scientific identity, it is not autonomous. Epistemic concepts of other areas of science and disciplines¹ influence its past achievements as a subdiscipline. Speech therapy for the deaf and hearing impaired cannot function in isolation from other sciences and, in fact, accepts the assumptions of medical, social, and humanistic sciences, especially audiology, anatomy, otolaryngology, education and psychology of the deaf and hearing impaired, linguistics, phonetics, and phonology. Its scientific criteria, therefore, have a multidisciplinary dimension. It is necessary to maintain the balance of influences of various sciences so that the interdisciplinary cooperation is complementary and contributes to the independence of speech therapy for the deaf and hearing impaired.

Currently, the scientific discourse on the tasks of speech therapy for the deaf and hearing impaired allows to discern the duality of this subdiscipline, as it deals with diagnosis and rehabilitation of speech in people with hearing impairment, as well as practice, that is, setting direct actions aimed at changing this reality in a deliberate way. The idea of equivalence of theory and practice indicates the need for cooperation of theorists and practitioners to give the right direction for the development of this subdiscipline². The cognitive and instrumental functions of contemporary speech therapy for the deaf and hearing impaired demand a broader scientific perspective, as well as isolating two developmental approaches: emancipatory and practicistic³. In the emancipatory approach, the authors undertake an interdisciplinary discourse, which not only presents specific therapeutic methods and techniques that promote the development of linguistic communication of people with hearing impairment, but also confirms reasonableness and effectiveness of the presented theoretical approaches and speech therapies. The harder and more

¹ According to the Regulation of the Ministry of Science and Higher Education of 8 August 2011, there has been set a list of areas of sciences and arts, as well as scientific and artistic disciplines (Journal of Laws No. 179, item 1065).

² G. Gunia (2006, 13) describes in detail the objectives and tasks of speech therapy for the deaf and hearing impaired. The author emphasizes that the pedagogical dimension of speech therapy for the deaf and hearing impaired accentuates its triple character: as a theory, practice, and art.

³ V. Lechta (1992, 200), discussing changes in the modern speech therapy, stated that since the 1990s, in logopaedics, there have been coexisting two developmental approaches: practical and emancipatory.

complicated the disorder of linguistic communication of people with hearing loss, the more it requires an interdisciplinary and/or transdisciplinary approach. As part of the practicistic current, the authors propose specific procedures in speech therapy to eliminate retardation or impairment of linguistic communication of people with hearing loss. The practice of speech therapy for the deaf and hearing impaired has been and continues to be an open area of research and gives the opportunity to apply research effects.

THE BEGINNING OF DEVELOPMENT OF SPEECH THERAPY FOR THE DEAF AND HEARING IMPAIRED

Science and its subdisciplines are treated as historically variable categories. Therefore, in order to actually understand the meaning of contemporary scientific achievements in speech therapy for the deaf and hearing impaired, it is necessary to return to the point that was the beginning of it. The history of the Polish thought on speech therapy for the deaf and hearing impaired dates back to the beginning of the 19th century. It was then that J. Sistrzyński (1788–1824) noticed the need for actions aimed at improving the damaged hearing system, developing hearing functions and speech of the deaf child. He was a keen proponent of teaching the deaf the “voice speech”. He is recognized as the precursor of the Polish speech therapy for the deaf and hearing impaired, having made a very important contribution to theory and practice. An important place in the history of speech therapy for the deaf and hearing impaired is occupied by his work from 1820, *Teoria Mowy i Mechanizm Mowy z Zastosowaniem do Nauki Czytania dla Wszystkich, a do Nauki Wymawiania dla Głuchoniemych Dzieci, z Dodaniem Uwag nad Sposobem Nauczania Tychże* [Speech Theory and Mechanism with the Use in Learning to Read for All, and in Learning to Pronounce for Deaf Children, with the Addition of Remarks on How to Teach Them]. The work is a pioneering contribution to the development of speech therapy for the deaf and hearing impaired. It provides detailed instructions on speech physiology and the basics of teaching methods for the deaf, as well as interesting classifications of sounds. His second work, *O litografii* [On Lithography], deals with teaching deaf people through school workshops.

Sistrzyński was an advocate of language education for deaf children and adolescents. Taking into account the functional criterion, he divided deafness by distinguishing five degrees of hearing loss and suggested adjusting specific phonation and articulation exercises to the degree of hearing impairment. He considered that one of the most noticeable consequences of hearing impairment was abnormal phonation reflected by a voice defect. Therefore, he undertook a deeper theoretical analysis of this problem, tried to explain the defect mechanisms, and

devised guidelines for their removal or correction. He recommended starting learning to speak at the age of 4 or 5, because, as he stated, it was a critical period for developing speaking skills. He was also the creator of a special system of hand-and-mouth signs (reminiscent of the natural shape of speech organs' positions) for learning the proper articulation⁴. Siestrzyński developed a number of teaching aids and games for learning to speak, such as pronouncing exercises. A particular importance in teaching deaf people to speak was attributed by him to the phenomenon of compensation, especially the activation of the senses: touch and vibration. According to Siestrzyński, the disorder of the multi-sensory basis of perception of reality is adversely affecting the development of deaf children's personalities.

In conclusion, it should be emphasized that Siestrzyński, in his original concept of speech therapy for the deaf and hearing impaired, recognized the content assumptions of medical, social, and humanistic sciences. Already in this initial period of development of the Polish thought on speech therapy for the deaf and hearing impaired, its interdisciplinary character is visible, as well as the interdependence of speech therapy and theory. The author's pragmatic view is expressed in the form of concrete solutions in the field of the language education of the deaf. The scientific implications of Siestrzyński are also a confirmation of the importance of tradition for the contemporary speech therapy for the deaf and hearing impaired over the effectiveness of therapeutic and speech therapy actions for people with different hearing loss, as well as the sense of gradual implementation of the theory to the practice.

THE EMANCIPATORY APPROACH

Under the emancipatory approach, speech therapy for the deaf and hearing impaired is treated as a scientific subdiscipline, which has its own rights and obligations. This law indicates its equality in interdisciplinary or transdisciplinary cooperation, giving the opportunity to describe, clarify, understand and interpret basic categories of speech therapy for the deaf and hearing impaired. Duties include the development of a terminological and methodological background or continuous refinement of the position in the specialization system of speech therapy, which are of a great importance.

For years, there has been a need to define the conceptual and terminological vocabulary that is heterogeneous, ambiguous, and according to the assumed classification criterion, it shows an interdisciplinary approach to hearing impair-

⁴ The idea of Siestrzyński was realised by the Cued Speech method developed by R. Orin Cornett, and in Poland, disseminated by K. Krakowiak (2015b, 231).

ment. According to the current legal status, the “deaf” and the “hard of hearing” terms are officially accepted in Poland⁵. The functional boundary between the deaf and the hard of hearing children is determined by the level of technical abilities to compensate for hearing loss. The terms accepted by the Polish educational law deepen the dissonance between theoretical findings and specific influences of speech therapy for the deaf and hearing impaired. It should be stressed that for many years, audiophonology experts have been aiming at unifying the terminology and basis for diagnosing hearing impairments. This is reflected in the work of the International Bureau for Audiophonology (*Bureau International d’Audiophonologie* – BIAP). It is BIAP’s recommendation to use the term of ‘hearing impairment’ from mild to total⁶. Due to the ability to master speech and language, the criterion of the time when the child has lost his or her hearing will be important for the speech therapist. According to this classification, hearing loss can be of the following types:

- Prelingual, occurring before the time of language mastering, to the age of about 2–3 years;
- Interlingual (perilingual), occurring during the period when the child has begun to learn the language but not yet mastered the whole system of verbal symbols and syntactic relationships that form the grammatical structure of the language, so at the age of 3–5 years;
- Postlingual, occurring when the child has mastered the language, after the age of 5 years (Eckert 2006, 165).

In medical sciences, there is an additional division of prelingual hypoacusis into:

- Congenital, occurring in the prenatal period and present at birth;
- Acquired, formed in the perinatal period or later than in the first year of life (Skarzyński et al. 2000).

In the Polish audiological literature, hearing processing disorders can take the form of central hearing disorders, central hearing impairments, or central auditory processing disorders (Kurkowski 2015, 57). Another attempt to classify the typology of hearing impairment is the logopaedics classification of K. Krakowiak (2015a), based on the diagnosis of the level of aphonemia or dysphonemia, i.e. the absence or limitation of the ability to distinguish and recognize phonemes in the stream of speech

⁵ The terms “deaf” and “hard of hearing” are used in accordance, e.g. with the Regulation of 24 July 2015 of the Polish Ministry of Education on the conditions for the organization of education, upbringing and care for children and youth with disabilities, socially maladjusted and at risk of social maladjustment (Journal of Laws 2015, item 1113).

⁶ The term “hearing impairment” includes those with hearing impairment not only because of the degree but also the type, aetiology or time of occurrence of the impairment (Szczepankowski 1999, 29).

sounds⁷. The proposed classification has a high diagnostic value, because it allows to precisely determine the results of hearing and speech development, thus, adapting the speech therapy to the needs of the child. In the context of the deliberations on the precision and scope of the content of key concepts on the subject of speech therapy for the deaf and hearing impaired, it seems reasonable to define the term “deaf”. This term has its place in the medical, humanistic, and social sciences. The “deaf person” is defined as one who, without technical devices that support the hearing process, is unable to receive (hear and understand) loud speech at the ear. In terms of audiological classifications, deaf people have a significant or profound hearing loss. In past epochs, the terms “deaf” and “deaf-mute” were synonymous. From historical sources it can be concluded that a deaf-mute person was understood to be deaf and mute or completely deaf from birth. The fact that deaf people were treated as mute meant that their disability was not the deafness (because it was invisible), but lack of communication skills in the language of the community (Adamiec 2003). In defence of the term of “deaf-mute”, B. Szczepankowski (1999, 22) emphasized that this term refers to people with profound prelingual hearing loss.

Comparisons of the above classifications demonstrate the link between speech therapy for the deaf and hearing impaired and other scientific disciplines. The historical evolution of the scientific language in speech therapy for the deaf and hearing impaired is the result of changes in various fields of knowledge, and even its dissemination, not only in fields and disciplines, but also in subdisciplines. The problem of development of speech therapy for the deaf and hearing impaired requires going beyond the description of past history and involves a reconstruction of its present assumptions.

PRACTICISTIC APPROACH

Under the practicistic approach, speech therapy for the deaf and hearing impaired is considered as an applied subdiscipline and it meets social needs. Therefore, it can be understood as a logotherapy guide, in which the user can find ancillary instructions to eliminate language retardations or limitations of people with hearing impairment. This is the result of the spread and even the popularization of innumerable publications on the methodology of speech therapy for the deaf and hearing impaired. The penetration of specific methods for speech therapy, devoid of a deeper reflection, into the practice of speech therapy for the deaf and hearing impaired is a threat to the academic achievements and even contributes to symbolophobia in humanities. Underestimating theoretical solutions may result in lowering the quality of cognitive horizons and even locking away from empiri-

⁷ Terms “afonemia” and “dysphonemia” were introduced and defined by B. Ostapiuk (1997).

cal scientific findings. Popularization of theoretical achievements in the field of speech therapy for the deaf and hearing impaired is needed. It is thanks to such means that there is an increase of knowledge, awareness and even sensitization of non-specialists. But it can also be dangerous for science, if there are involved pseudo-experts or pseudo-scientists aiming at a rapid market success.

The real practitioner of speech therapy for the deaf and hearing impaired should be a specialist dealing with the diagnosis and treatment of speech disorders caused by hearing impairment, and have theoretical and practical preparation for the profession. For this group of speech therapists, solid education and craft should always be crucial. The craft means “an ability to do something concrete: a capability of using a set of practical skills in a clearly defined problem area” (Afeltowicz, Sojak 2015, 137). For the real speech therapist-craftsman, the most important is the specific methodology, implemented in accordance with generally accepted principles and methods of speech therapy (Gunia 2006; Muzyka-Furtak 2015). Therefore, much emphasis should be placed on methodological correctness (compliance with adopted rituals or standards in speech therapy) and effectiveness (i.e. levelling linguistic communication disorders of hearing impaired people). If actions of speech therapy for the deaf and hearing impaired are effective, it may happen that the superiority of practice over theory is recognized. In the context of the above thesis (i.e. from the point of view of the practitioner of speech therapy for the deaf and hearing impaired), the following questions will be relevant: How to broaden professional competencies to implement theories in practice and to bridge the gap between practice and theory? Are practical actions secondary to scientific theories? And why? Is the theoretical basis of the implemented action procedures of speech therapy for the deaf and hearing impaired justified? And why? The above list of questions is not, of course, closed, and does not address all the important issues associated with the constant exchange of theoretical knowledge with practical activity. A reflective attitude of the speech therapist for the deaf and hearing impaired to the issue of responsibility for the work is very important. Justifying the need to implement the theory in practice, the speech therapist for the deaf and hearing impaired should know the value of theory, and gradually translate its assumptions into practice.

The task of these therapists is not only to collect information, but to learn the meaning and significance of usefulness of quality of many epistemic concepts that may be applicable in the diagnosis and treatment of speech disorders in people with different hearing loss. The analysis of the subject literature leads to reflection on the essence of the current trends in language education⁸. Criticism

⁸ Krakowiak (2015b, 230) defines language education as a “set of influences that aim to educate a person with full linguistic competence and linguistic proficiency enabling a linguistic organization of knowledge about the world, effortless engagement in conversations, and participation in

of the oralistic approach has led to the need to over-evaluate the used methods, which focused on the development of communication and not just the development of speech. Language mastery is no longer an end in itself, but a skill shaped during the overall stimulation of the cognitive sphere of personality. General assumptions of language education and the review of selected contemporary programs are subject to a constructive analysis in the latest works by K. Krakowiak (2015b), Z.M. Kurkowski (2015), A. Lorenc (2015), A. Lorenc, Z.M. Kurkowski (2015), E. Muzyka-Furtak (2015), A. Pankowska, A. Geremek-Samsonowicz, H. Skarzyński (2015).

Practice is not science, but the area of research inquiry and application of the effects of theoretical concepts, and, therefore, cannot aspire to be a dogmatic knowledge. Many years ago, Krakowiak (1991, 96) emphasized the need for methodological solutions in speech therapy for the deaf and hearing impaired based on broader scientific foundations, especially those that are “grounded in multilateral knowledge of human communication, both linguistic and phonic in the oral form, and using various visual techniques (especially writing), as well as non-linguistic, iconic, and gestural-mimic”. The transposition of theory into practice is not an easy task. Therefore, speech therapy for the deaf and hearing impaired must be oriented to action focused on eliminating direct consequences of deafness (lack of reception of aural stimulus) and stimulating communication and language development, so that the person with hearing impairment can achieve personal, family, and professional aspirations and have a high level of life satisfaction. The problem of practical importance of studies in speech therapy for the deaf and hearing impaired is also a consequence of its cooperation with medical and social sciences. In these areas of knowledge, there are very strong therapeutic aspects referring to studies on etiology and consequences of deafness not only in the development of the linguistic and communicative sphere, but also in the cognitive, social, and emotional spheres.

FINAL REFLECTIONS

The fact that, at present, in speech therapy for the deaf and hearing impaired, there are two developmental approaches allows to look at it as a dynamic category, taking into account the latest complementary research directions. Speech therapy for the deaf and hearing impaired has its own specific core, but it undergoes theoretical and methodological changes in the field of diagnostics, prosthetics, and hearing therapy. Thus, the progressive development of speech therapy for the deaf

the exchange of mental content with the involvement of language”. The author emphasizes that this is an integrated influence that requires not only modifying, compensation, and correction, but also therapeutic actions that require creating of an educational environment.

and hearing impaired is the result of these changes resulting from important issues addressed in the related sciences. As a scientific subdiscipline, it did not achieve such scientific status as other humanistic, social, and medical sciences. According to S. Kamiński (1992, 236), scientific planning is the most effective process when it is “regulatory and harmonizing (and somehow indirect)”. The author emphasizes the importance of achieving aims and directions of researches, and, above all, emphasizes planned conditions, because they should be a base for the science, so that there is dialogue and constructive discussion.

The scientific status of speech therapy for the deaf and hearing impaired as a subdiscipline of speech therapy depends on how its representatives will present their achievements and what will be their level. Its potential will be reflected in studies and theoretical researches, based on empirical analysis and knowledge from other disciplines. An important test of the scientific character of speech therapy for the deaf and hearing impaired are the methods of practicing it, which are closely related to the content and problem of the subject. It seems that this area of scientific knowledge requires assessment and improvement. The basis for the formulation of relevant conclusions are longitudinal, experimental studies, built on “hard methodology”. There is a need to carry out strictly scientific studies that fit into the current developmental and educational needs of deaf and hard of hearing children. The critics’ voices include statements faulting it for arbitrariness, conservativeness of thinking and actions, which do not take into account emancipatory demands of the Deaf people⁹. Assumptions of linguistic education may not be accepted by parents who are native users of sign language, because they do not meet the needs of their Deaf children¹⁰. The speech therapists for the Deaf and hearing impaired should be open to the deaf people’s aspirations to recognize their language and thus, prepared for methodical solutions in the diagnosis and treatment of deaf children, who are not a homogeneous group. This is a problem that requires a critical reflection in the near future and a redefinition of speech therapy for the deaf and hearing impaired. In the context of this reflection, there is nothing left but to agree with the thesis of A. Radziewicz-Winnicki (2008, 64) that “under-

⁹ In terms of terminology, the word “Deaf” (capitalized) refers to cultural issues. Deaf people perceive themselves as members of a cultural minority and they compare their situation, in the majority of the hearing society, to the situation of other minority groups. A Deaf individual reveals a strong identification with the Deaf community; he or she recognizes himself or herself as culturally and linguistically different.

¹⁰ D. Podgórska-Jachnik (2013, 93) addresses the problem of the large diversity of deaf people in terms of sign language communication. The author classifies sign language users into four groups: (1) Native sign language users, for whom sign language is the language of their family home, known from birth or from early childhood; (2) Near native sign language users, who are fluent in sign language and who have been in contact with it for 5 years; (3) Non-native, but proficient users of the language; (4) Beginners to the sign language. From the above, it is clear that different and natural social contexts must be taken into account in the communication process of deaf people.

standing of a given science requires going beyond tradition, logic of development and methodology, and accepting the fact (axiom) of conventionality (as well as conventionality and schematicity) of all undertaken typological decisions”.

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