# Chapter 4 The Psychosocial Impact of ICT Efficiency on Speech Disorders-Treatment

## Iolanda Tobolcea

Alexandru Ioan Cuza University of Iasi, Romania

## **ABSTRACT**

ICT is an important aspect in the field of education, and it involves redefining the role of instructors within the educational context. The aim of this chapter is to capture the psychosocial impact among specialists (instructors/speech therapists) and parents regarding the use and efficiency of ICT in the treatment of language disorders. To this purpose, the authors organized their research into two stages: (1) the construction of a questionnaire that outlines the psychosocial impact of ICT use and ICT efficiency in the therapy of language disorders among specialists (instructors and speech therapists) and parents; (2) the research stage itself, used to capture the specificity of each sample of subjects concerning the object of research. Both the professionals and the parents recognize the benefits of using computer technology as a means for stimulating the children's interest, motivation, and involvement in educational activities, but also as didactic methods that facilitate teaching and strengthen the children's newly acquired knowledge.

#### INTRODUCTION

ICT (Information and Communication Technologies) is nowadays an important aspect in the field of education and it involves redefining the role of instructors within the educational context. The

instructor is no longer the sole source of information; his/her main mission becomes that of facilitating the learning process by selecting and presenting the information in the most diversified ways, and also by promoting the most efficient ways for children to process information.

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The changes that the computerized means bring to education are quite close to those made in the treatment of language disorders. The efficiency of the speech therapist and the instructor is closely related to the ability to use all possible forms of interaction in the context of education through ICT and, correspondingly, to that of mastering the audio-visual and communication means involved. It can be pointed out that the audio-visual techniques, whose virtues have been highlighted by many instructors, can lead to a kind of image verbalism whenever their sole purpose is to favor correlations without using authentic activities. Therefore, preventing the shortfalls of the inadequate use of ICT, the therapist can, through his/ her knowledge and creativity, acquire a valuable aid within the therapy (Tobolcea 2001).

Since the experience of both specialists (speech therapists, instructors) and children with language disorders regarding computer use during speech therapy is rather limited, we considered necessary to broaden the scope of the research and examine the attitudes towards the whole array of multimedia tools used or likely to be used in Romanian speech therapy.

To achieve this goal, several standard stages were followed: elaboration of a questionnaire with open questions, elaboration of a questionnaire with provided options (closed questions), statistical and psycho-pedagogical analyses of the results obtained and final conclusions.

ELABORATION OF A
QUESTIONNAIRE WITH OPEN
QUESTIONS TO HIGHLIGHT
THE PSYCHOSOCIAL IMPACT
OF USING MULTIMEDIA
TECHNIQUES IN THE TREATMENT
OF SPEECH DISORDERS

In elaborating the questionnaire with provided options, a pre-screening was carried out on a sample of 100 subjects, final year students at the Faculty

of Psychology and Educational Sciences, Department of Psychology and Special Education. The questionnaire was developed following extensive discussions conducted by a group of experts, academics and persons with speech disorders. The final questionnaire comprises 8 questions with open answers, trying to cover the broader issue concerning the psychosocial impact of the use and efficiency of computer technology, from the professionals and the parents' point of view. The items considered for pre-screening are given later. In interpreting the answers obtained in the pre-screening phase, we used the categorical and the thematic content analysis.

For the question "What multimedia means can be used in the treatment of language disorders?" it can be noticed (Figure 1) that among traditional tools (voice recorder, tape recorder), modern multimedia tools were also present: software and PC, overhead projector and even home cinema. Also, by analyzing the answers obtained for the next item ("What are the benefits or advantages offered by ICT in correcting language disorders?"), the following advantages of modern technology in speech disorders treatment were identified: diversification of activities within the therapy program, enhancement and preservation of the child's interest in activities, increased involvement of the child in activities, new therapeutic procedures, familiarization with individual activities or activities supervised by an adult, individual study for strengthening the progress made during the therapy sessions and the possibility to practise and receive feedback outside the speech therapy sessions.

The in-group analysis revealed that for instructors, the most important benefits refer to immediate feedback, better results in the formative and educational activities, increased awareness of the child's difficulties and progress quantification; for speech therapists, these are reflected in the increased effectiveness of therapeutic interventions during the treatment of language disorders, as a result of the therapy expansion outside the 21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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