ABSTRACT

The thesis is focused on the support of communication skills by graphomotorics in the context of comprehensive rehabilitation, on the improvement of the quality of life of people with aphasia after stroke and the support in their families. The main aim of this work is to monitor the development of influence of special pedagogical intervention on strengthening graphomotorics and supporting communication skills. The sub-goals are to design a program of special pedagogical intervention for people after a stroke and evaluation of the effectiveness of a special pedagogical intervention in robotically assisted rehabilitation and distance rehabilitation led by a special pedagogue. We set research questions.

The target group consists of 34 people aged 45 to 75 years, 3-50 months after a stroke, with an affected dominant hand and a diagnosis of aphasia located in follow-up institutional care and outpatient care. For empirical research, we chose an observation, an interview, and an experiment. In the participatory research, we involved the researched person in the role of a researcher. Through exploratory research, we addressed robotically assisted rehabilitation and distance rehabilitation. The research used a record sheet for special pedagogical diagnostics of fine motor skills, a functional communication questionnaire, a non-standardized test aimed at determining the level (quality) of graphomotor performance for a stroke category, a set of graphomotor hand relaxation exercises and a set of words for speech therapy intervention. In robotically assisted rehabilitation, which was included in a special pedagogical intervention, we applied passive mobilization, actively assisted mobilization, bilateral therapy, and interactive games. For the distance rehabilitation were chosen robotic exercises leading to local muscle strengthening and motor learning.

Everything was supported by a speech therapy interventionIn the qualitative research the methods of observation and interviews were used. For the data processing, an interpretative phenomenological analysis, an MS Office Excel analysis and a regression analysis were applied. The results of the research prove that the special pedagogical interventions have a statistically significant effect on the graphomotor skills, the communication skills and the quality of life and, thus, on the integration of people after stroke back into the society.