Promoting Mobile Learning in the Social Work for Children with Communication Disabilities

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Abstract

The social work for children with disabilities requires an integrated intervention to meet their complex needs. Very often, the communication disorders are associated with other disabilities, and aggravate the child's relationship with parents, peers and teachers, as well as the learning process. The development of mobile learning over the past two decades, as well as the research on its effectiveness, recommends it for use in the social work, especially in working with children with disabilities. The opportunity to experience the use of a mobile tool for communicating with children with disabilities is offered to the social work students through the TESI project: Adaptive Personalized System for Creating Expression Tools in Social Inclusion of Learners and Verbal Communication Disabilities. This project was launched in January 2018 and is an ERASMUS + project, Key Action 3: Support for Policy Reform - Education, Training and Youth, set up by the European Commission and includes four target groups: children with disabilities, their parents, teachers working with these children and future social workers. Our paper presents the needs analysis of the target group of social work students. Their role in the project will be to learn how to use the TESI tool, using it in working with children with communication disorders and promoting m-learning through their colleagues and in their future professional practice, to increase the chances of social inclusion of children with disabilities.

Keywords: *Communication disorders, children with disability, need analysis, m-learning.*

1. Introduction

According to Article 23 of the Convention on the Rights of the Child (1989), „a mentally or physically disabled child should enjoy a full and decent life, in conditions which ensure dignity, promote self-reliance and facilitate the child's active participation in the community". The 2030 Agenda of UNO pledges to leave no one behind, including persons with disabilities and other disadvantaged groups [1]. The same document considers that „ensuring access to assistive technology is crucial to enable independent living of persons with disabilities and their ability to fully participate in society". UNESCO recommends to „promote the creation of mobile content that is relevant to local groups and accessible in local languages" and to „advocate for standards that make mobile hardware, software and content accessible to diverse student populations, including students with disabilities" [2].

The fact that a child's communication capacity is impaired raises barriers to his / her participation in community life and access to quality education. Voice, speech and language impairments are at least as common as dyslexia and ADHD, and considerably more common than autism, and very often they accompany other disabilities such as those listed, plus intellectual impairments, some neuro-motor disabilities [3]. So, it is necessary to raise awareness of this type of disorder.

The effects of these type of disability on social and emotional well-being is very important. As Leonard shows listing the results of many specialized studies, problems with language may limit a child's social well-being. These children are vulnerable at social exclusion, interact with fewer peers and are less well accepted socially, they exhibit poorer social competence, experience greater social stress than typically developing children. Their emotional well-being is also affected, the studies shows symptoms as poor emotion regulation, high rates of anxiety and depression, low self-esteem [3]. These children are also exposed at educational risk. In the last decades, a series of scientific studies have been reveal the effectiveness of m-learning applications in working with children with speech and language disabilities [4], [5].

TESI project: Adaptive Personalized System for Creating Expression Tools in Social Inclusion of Learners and Verbal Communication Disabilities. is an ERASMUS + project, Key Action 3: Support for Policy Reform - Education, Training and Youth, set up by the European Commission and includes four target groups: children with disabilities, their parents, teachers working with these children and future social workers [6].

Taking into account the diversity of the profiles of people on the verbal disorders' spectrum, the project aims to develop a basic training software system (TESI tool) for all cares' and professionals working

with people with verbal disabilities independently of their area of knowledge. It will follow a new educational strategy to qualify and help professionals and cares to support people with verbal disorders in the different contexts and spheres of life and throughout their lifetime.

The software will use expressive objects that will be will be personalized, in order to be used individually or in a group and to assure to these disadvantaged learners the access to interactive learning process in classroom, and a better communication with tutors. As a result, the TESI will enable users to express themselves using visual and audio cues, and will help them create messages and to improve their social integration.

Within the project, a needs analysis was carried out of the target groups consisting of: children with language disabilities, their parents, teachers working with these children, students at social work specialization [7]. This paper presents the results of the needs analysis of the forth target group, the university students.

2. Methodology

The research aims to describe: 1. To what extent are students familiar with the use of mobile devices (own and use such a device).2. To what extent do students want and are able to work with children with speech difficulties. 3. What is their opinion about the use of information technology in communicating with and between people with speech difficulties. 4. Students' desire to develop their working skills with children with speech deficiencies, including by learning the use of computer applications.

We expected students to own and use at least one mobile device such as a laptop, tablet or mobile phone, and tested the hypothesis that the younger students feel more prepared to use mobile applications than the older students.

To achieve these goals, we have carried out a quantitative, descriptive research, using the sociological survey method using the questionnaire, and a univariate exploratory analysis. The questionnaire includes data as age, sex, year of study and eight unipolar Likert scale questions with five points of agreement. The data was processed with IBM SPSS Statistics 20.

The research lot was made up of 100 students at the Social Work, Faculty of Social Sciences, University of Craiova, attending the courses during the week 15-20 April 2019. The number of 100 students was random. The Social Work Specialization prepares future social workers. Some of them will work and interact with children with disabilities, including communication disabilities. Thus, we considered that having information about the use of mobile applications in working with children with disabilities and experiencing the use of such an application will be useful to these students in their future profession.

We chose to apply the questionnaire only to the first and second year students because from them will be selected participants in the target group of the project. They will be yet students in the next academic year, so they will use the mobile application with the children with language disabilities from the other target group.

3. Results and discussion

At the questionnaire answered 89 women and 11 men, aged 19 to 51 years, with a median age of 26.52, with a standard deviation of 9,965. The most part of the subjects has ages between 19 and 25 years (66%), 13% are included in the age group 26-35 years, and one fifth of them are over 35 years old (21%). The massive, unusual presence of students over the age of 35 (See Fig.1) is explained by the fact that these people are already working on positions with social work duties, but do not have specialized studies and the law obliges them to hold a bachelor's degree in social work if they want to keep their jobs.
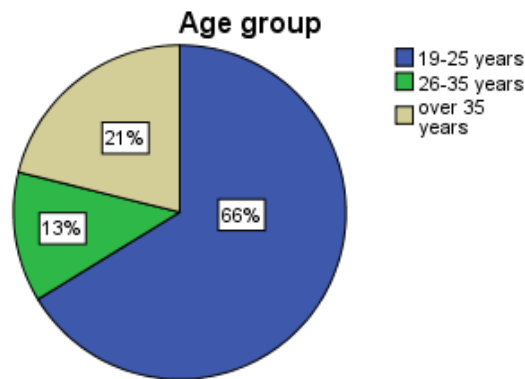
Age group

Fig. 1. Age distribution of the target group.

A number of 58 students are in the first year of study, and 42 students are in the second. All of them own a mobile device and 99 of them utilize them daily, one student, 49 years old, mentions the use less often than weekly.

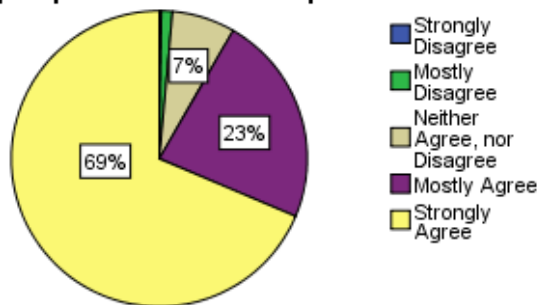## „Computer technology can become a priority in communication with / between people with verbal impairments.”

Fig. 2. Confidence in the project objectives.

A percentile of 93% of students believes that the computer technology can become a priority in communicating with / between people with verbal impairments, which shows a very favorable attitude towards this aspect. (Fig. 2)

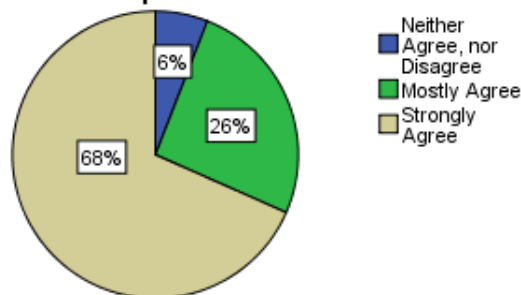## „I am feel prepared for the use of computer technology in my future profession.”

Fig.3. Ability in using mobile technology.

Most of them feel ready to use the computer technology in their future profession (94%). We tested the hypothesis that the younger students feel more prepared to use mobile applications than the older students, but for our group of subjects, insignificantly statistically, we obtained a negligible negative correlation between the two variables: Pearson Correlation = -,114, Sig. (2-tailed) = 0,261.

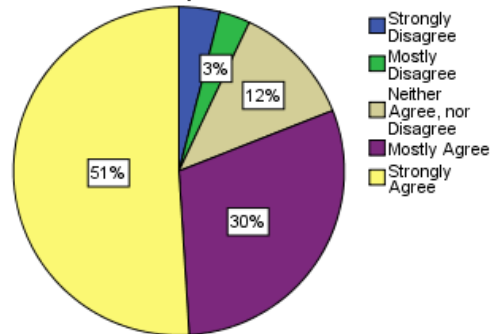**"I want to work with children with verbal impairments."**

Fig. 4. Availability for the project proposal.

The students have a favorable attitude to work with children with verbal impairments (51% Strongly Agree, 30%, Mostly Agree, see Fig. 4), but fewer than one half (26% Strongly Agree, 16% Mostly Agree) from the subjects own the necessary knowledge for this activity (Fig. 5).

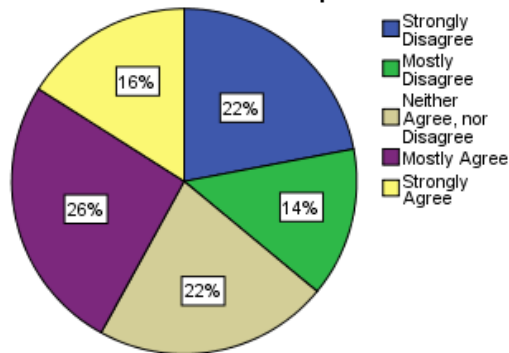**"I have knowledge in working with children with verbal impairments."**

Fig.5. Experience in the project field.

The majority needs training for working with children with verbal impairments (Fig. 6). In the academic curricula, they study a discipline named *The social work with disabled people,* but the disability is approached at general, with types of dysfunctions, categories of handicaps, types of social services and social benefits, but not so detailed knowledge about verbal impairments and about assisting these people. So, the lack of knowledge is correlate with the need for training.

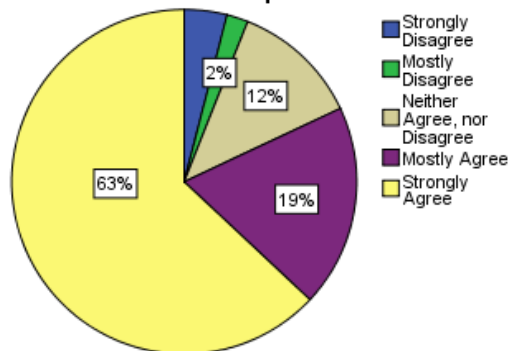**"I need training for working with children with verbal impairments."**

Fig. 6. Necessity for being trained.

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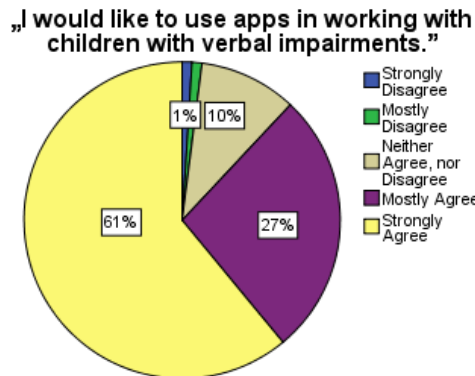A percentile of 88% would like to use apps in working with children with impairments. (Fig. 7)

Fig. 7. Desire to use the project outcomes.

4. Conclusions

The results are statistically significant: all students have mobile devices, use them on a daily basis, show a favorable attitude towards their use in communicating with and between people with disabilities, have the willingness to work with children with language disabilities, and to use applications mobile in working with these children.

This study highlighted the need for further training of future social workers in working with people with verbal impairments, who said they had insufficient knowledge about people with disabilities, but they both want to be better prepared for this, and learn to use specific mobile applications.

The survey reveals that the decision to include students from the social work profile is inspired, they need and want to participate by this project. As social workers, they will advocate the use of m-learning and mobile technology in educating and assisting children with disabilities, hoping to increase their quality of life and their participation in society.

Acknowledgements

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