

OPINIONS OF FUTURE TEACHERS ON COMPETENCIES FOR WORKING WITH STUDENTS WITH DEVELOPMENTAL DISABILITIES

Esmeralda Sunko¹, & Andriana Marušić²

¹Department of Early and Pre-school Education, University of Split (Croatia)

²Pre-school teacher (Croatia)

Abstract

A significant number of children in relation to educational institutions in the European Union, subjected to inappropriate and discriminatory position, represent the basis of the document *Union of Equality: Strategy for the Rights of Persons with Disabilities 2021-2030* (COM, 2021). At the same time, the social model of inclusion in education (Slee et al., 2019; Sunko, 2021) and articles 2 and 23 of the Convention on the Rights of the Child (1989) advocating equal rights of all children to education, indicate the dichotomy of desired and achieved.

Each individual, whether he/she has certain difficulties or not, differs in his/her abilities, and each of them has their “personal needs”. It is important to note that students with special educational needs are students with disabilities and gifted students. Meeting the diverse needs of students through inclusive practices is often difficult or even impossible for those teachers who have not acquired the necessary skills and knowledge, so it is imperative to empower and support teachers primarily through formal education so that teachers learn to use effective inclusive teaching methods at all levels (Loveys, 2022).

The aim of this research was to determine whether personal experience and student’s attended academic year of the teacher study (N = 304, all academic years) from three Teachers’ Faculties in the Republic of Croatia, correlate with their sense of personal competence, motivation for further professional development, or the need to change the study program.

The results of this research show that students’ personal experiences with children with developmental disabilities (DD) affect the sense of their personal competence for working with children with DD, and that students of all attended academic years are equally motivated to teach children with DD. They also point out the need for additional training, and 84.64% of them emphasize the importance of practice in learning that deals with teaching children with DD. Data suggest that the same percentage of students feel the need to change/adapt the content of the study program accordingly. The main feature and implication of this research is the insight into the development of future teachers’ needs for further higher education for teaching children with DD.

Keywords: *Children’s rights, professional development, school education, teacher skills, values.*

1. Introduction

The right to inclusive education is enshrined in Article 24 of the 2006 UN Convention on the Rights of Persons with Disabilities, guarantees the right to education without discrimination and presupposes that all persons with disabilities can access inclusive, quality and free early, primary and secondary education in their own community. States must also provide reasonable accommodation and individualised support to maximize the academic and social development of persons with disabilities. The *Strategy for the Rights of Persons with Disabilities 2021-2030* (COM, 2021) highlights “non-discrimination and equal opportunities”, with the aim of protecting people with disabilities from any form of discrimination and violence, thus ensuring equal opportunities and access to education and subsequent employment. In 2015, 193 countries around the world committed themselves through the 2030 Agenda to ensure inclusive and equitable quality education by 2030, as stated in the 4th Sustainable Development Goal (UN, 2015). This connected all positive and sustainable key reasons for inclusion as the best social investment in people and humanity.

Certainly, public education policies have influenced the shifts in the education of teachers for inclusion. However, a number of key issues remain that require the knowledge, competencies, and cooperation and solutions of all stakeholders responsible for the success of the inclusive process. The implemented activities would result in a better initial teacher education, more competent to meet the

different needs of students in inclusive educational environments (Global Education Monitoring Report, 2020). Florian and Camadea (2019) emphasize the importance of the Teacher Education 4 Inclusion project (2009-2012) which, although it identified the required skills, knowledge, understanding, attitudes and value system of future teachers, did not produce response models for developing different teacher training programs to work with students in an inclusive classroom. This research is therefore focused on the opinions and attitudes of students of three Teachers' Faculties in the Republic of Croatia on self-perception of their competencies and motivation to work with children/students with developmental disabilities (hereinafter DD) and what future teachers think about how adequate their study programs are in acquiring competencies to work with children with DD.

2. Objectives and hypothesis

The aim of this research was to determine whether teacher education students consider themselves competent to teach students with DD (considering the individual needs of students, level and amount of support, teaching strategies), whether personal experience with children with DD affects the sense of their competences, whether they are generally motivated to work with children with DD, and whether they need to gain additional competencies to work with children with DD. The need to acquire additional competencies would suggest the need to change the content of the study program at the Teachers' Faculties in Rijeka, Split and Zagreb.

The problems of this research dealt with: the relationship between personal experience and assessed personal competence to work with student with DD; the difference in the assessment of competencies between students who had personal experience with children with DD and those students who had no personal experience; the connection of the attended academic year with the motivation for teaching students with DD and the need to acquire additional competencies; the connection of the attended academic year (organisation of teacher faculties in Croatia, in sample) with the opinion on the need to change the content of the study program in order to acquire more competencies for working with students with DD.

From the goals and problems, hypotheses emerged which claimed that - There is a statistically significant high and positive correlation:

H1 – with personal experience of students with children with DD and assessments of personal competence for teaching students with DD, where students with personal experience are assessed as more competent than students without personal experience.

H2 – of the academic year with motivation to teach students with DD and to acquire additional competencies, while students of higher years of study are more motivated to teach students with DD and to acquire additional competencies than students of lower years of teacher training.

H3 - of the academic year with the opinion / attitude of students, on the need to change the content of the study program, where students of higher years of study believe that a greater change of program is needed to work with students with DD, than students of lower academic years.

3. Methodology

The survey was conducted using an online questionnaire completed from 28 October 2020 to 24 December 2020. All participants were guaranteed anonymity and confidentiality of data, and participated in the survey voluntarily.

3.1. Sample

An appropriate sample of groups of students from teacher education participated in the research. A total of 351 students participated, but the final sample consisted of 304 students with coherent answers. In order to achieve heterogeneity and sample size, we focused on all academic years of the Teachers' Faculties in Rijeka, Split and Zagreb. Teachers' faculties in the Republic of Croatia always last 5 years. Representation of individual years of study is shown in Table 1.

Table 1. Representation of each academic year in the sample of teachers from Rijeka, Split and Zagreb.

Academic year	<i>f</i>	%
1st	64	21,1
2nd	40	13,2
3rd	82	27,0
4th	46	15,1
5th	67	22,0
Together	299	98,4
Missing values	5	1,6
TOTAL	304	100,0

3.2. Instrument

The first part of the questionnaire contained questions related to general students' data such as gender, place of study, academic year of study, and whether they had any experience with a child with DD. The second part of the questionnaire referred specifically to the basic students' competencies for teaching students with DD and consisted of 31 items. The task was to assess which number on the Likert-type scale of 5 degrees, best describes how much each statement applies to them. The Likert-type scale of 5 degrees included (1 - *does not apply to me at all*, 2 - *mostly does not apply to me*, 3 - *neither applies to me, nor does not apply to me*, 4 - *mainly applies to me*, 5 - *completely applies to me*). The items referred to the experience of personal competence of students, motivation to teach children with DD, and the position on the need to change / adjust study programs at all three Faculties, in favour of developing competencies for teaching children with DD. In order to verify the constructive validity of the questionnaire on our sample, a series of exploratory factor analyses were performed. Factorisation matrix suitability index Kaiser-Meyer-Olkin was 0.88, and Bartlettov test sphericity proved significant ($p < 0.01$). According to the obtained values, it can be concluded that the sample used in this research is adequate. An exploratory factor analysis was performed, using the principal components method (PC), with orthogonal (Varimax) rotation. Nunnally and Bernstein (1967) suggest that correlations between factors after Oblimin (oblique) rotation be taken into account when deciding which rotation to use. Orthogonal rotations are used when correlations between factors are low. Correlations between the three factors after Oblimin rotation were -0.07 (1st and 2nd factor; *Motivation for teaching* and *The need to change the content of the study program*), -0.40 (2nd and 3rd factor; *The need to change the content of the study program* and *Assessment of personal competence*) and 0.21 (1st and 3rd factor; *Motivation for teaching* and *Assessment of personal competence*), and are not statistically significant. The extraction method was fixed on 3 factors, which explain 47,53 % variance.

4. Results and discussion

After the data collection was completed, they were processed in the Statistical Package for Social Sciences (SPSS), version 20. The results of Pearson's r (, 246) show that there is a statistically significant, positive, but low correlation between the personal experience of students with children with DD and the assessment of personal competence for teaching students with DD (Table 2).

Table 2. The connection between the personal experience of students with children with DD and the sense of personal competence for teaching students with DD.

		A sense of personal competence
Personal experience with children with DD	Pearson's r	-,246**
**. The correlation is significant at the level $p < 0.01$		

To examine the differences in the *Assessment of personal competence* between students who had personal experience with children with DD and those without personal experience, a t-test was calculated for independent samples and a statistically significant difference was obtained ($t = 4.17, p < 0.01$). Students with personal experience were (self)assessed as more competent to work with children with DD ($M = 35.95, SD = 5.44$) than students without personal experience ($M = 31.19, SD = 6.33$). Various researches (Kunz, Luder & Kassis, 2021) support a positive correlation between additional training of students (future teachers) for working with children with DD and assessment of personal competencies, but experience from the personal environment of future teachers brings a lasting impact on the formation of positive values towards children with DD, and consequently greater motivation to acquire better competencies for their teaching. (Frolin, Cedillo, Romero-Contreras, Fletcher & Rodriguez Hernandez, 2010).

From the results of Spearman's rho coefficient (,224) the relationship between the academic year of study and the motivation to teach students with DD, and the acquisition of additional competencies is visible in Table 3.

Table 3. Relation between the academic year of study and the motivation to teach students with DD and the acquisition of additional competencies.

		Motivation
Academic year	Correlation coefficient (Spearman's rho)	,224**
**. The correlation is significant at the level $p < 0.01$		

The same can be related to the research from Vannini (2011) whose results show that a clear desire and motivation for the teaching profession of students is defined between 15 and 19 years of age, and the acquisition of additional competencies in addition to personal experience is greatly influenced by contextual aspects such as GDP, institutional culture, sense of belonging (community, profession, etc.) and relationships with colleagues and teachers (Panadero, Fraile, Pinedo, Rodríguez-Hernández, Balerdi, & Díez, 2022). One-way analysis of variance (ANOVA) was used to examine the differences between students (future teachers) in the motivation to teach students with DD and to acquire additional competencies with regard to the academic year of study. The results of the analysis of variance indicate a statistically significant, but small difference in the motivation to teach students with DD and the acquisition of additional competencies between students, given the year of study ($F = 2.95$, $p < 0.05$), and an insight into the reliability intervals, *arithmetic means* and *post-hoc tests*, no significant difference was noticed between the students of each academic year of study. These results show that Croatia, with its three largest teacher training universities, ranks among the countries to which pre-service and in-service teachers have reported a need for more meaningful and high-quality professional development higher than average, in teaching students with special needs. (OECD, 2019b according to UNESCO, 2020).

From the results of Spearman's rho coefficient (-0.083 , $p = 0.175$) in relation to the academic year of study and the opinion of students on the need to change the study program in favour of acquiring additional competencies for teaching students with DD, no statistically significant correlation was observed. The results thus indicate the need for students of all faculties to change the study program regardless of the length of study. Namely, emphasizing the need of students to acquire additional competencies for work in an inclusive environment indicates a form of personal professional guidance and motivation to indirectly influence the evaluation, modification or adaptation of existing study programs according to their own needs. This indicates a newer paradigm in the education of teachers who, in addition to formal initial education, acquisition of knowledge and skills and professional development as part of an ongoing process, consider it important to include intrinsic motivation to (self) manage their personal professional development (OECD, 2021).

5. Conclusions

The first confirm hypothesis show that students who have personal experience with children with DD (self) assess themselves more competent to work with children with DD than those without personal experience. The second hypothesis was partially confirmed, and although it shows a positive correlation between variables, academic year of study with motivation to teach students with DD and acquisition of additional competencies, no difference in motivation was found with respect to academic year of study. This result raises new research questions about the quantity and quality of competencies acquired during teacher education for the implementation of inclusive education, as well as about areas of competencies that future teachers consider insufficient. The third hypothesis has not been confirmed. Students of higher academic years of study do not indicate a greater need to change the content of the program with regard to working with children with DD than students of lower years of teacher training. Such an opinion can be clearly linked to the new paradigm of teachers in education, and the need for future teachers to regardless of acquired knowledge and competencies to strive to manage personal requirements within professional development and point to the need to change the study program to work in an inclusive environment. Taking into account the results of this research, especially the confirmation of the first hypothesis, the way in which education contributes to the development of inclusive culture and the increasing inclusiveness of education praxis, there is a need to reorganise future higher education curricula to enable all students to acquire additional competencies and practical experience for working with students with DD. This research has clearly shown that future teachers of these Universities have the need and motivation to demand a more coherent approach to their own education, and also to understand the importance and opportunity of initial higher education to acquire additional knowledge and skills to achieve inclusive goals. The adoption of the UN Convention on the Rights of Persons with Disabilities in 2006 and the 4th Sustainable Development Goal 2015 has created a framework that needs to be practically implemented and continuously adapted. The inclusion of children with development disabilities and special needs, is a social process (Sunko, 2021), and teachers' opinions and attitudes are an important part of the educational process and the quality of inclusive practice. It is an imperative to hear them.

6. Implications and Limitations

The advantages and implications of the research conducted in this paper represent an appropriate insight into the always current opinions of future teachers as bearers of inclusive pedagogical practice.

Science directs towards the development of inter-institutional cooperation that includes a *bottom-up* perspective of students as future teachers in an inclusive environment and educational policy makers (Skedsmo & Huber, 2019). The original idea of this paper was to gather a heterogeneous sample of students from all faculties at these three Universities, with a sufficient amount of data for processing. However, due to the insufficient number of responding participants from the two Universities, the analyses could not be carried out adequately, which we consider to be a lack and at the same time a limitation of this research. Statistical analyses were mostly focused on correlation, so the cause-and-effect relationships between variables were not investigated in this paper. It remains within the scope of the proposal for some future research.

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