

# Attitudes of Early Childhood and Preschool Education Students and Teachers towards Inclusion of Children with Down syndrome

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## Abstract

Inclusion opens up a number of positive views of the wider community towards people with Down syndrome. Children with Down syndrome included in regular educational institutions have the opportunity to become active members of the community and become independent. Teachers are the first experts in early childhood and preschool education after children have left their family home. Their views on inclusion depend on the value system, their immediate experience as well as their professional competences. Yet, for early and preschool education students, the issue of attitude depends largely on their formal education. This study sought to see the difference in attitudes between early childhood and preschool education teachers and students towards the inclusion of children with Down syndrome in kindergartens. The research included teachers from three kindergartens in the City of Split, as well as early childhood and preschool education students at the Faculty of Humanities and Social Sciences in Split. The results are presented through thematic statements grouped by content as follows: personal attitude towards inclusion of children with Down syndrome; inclusion success; knowledge and training; kindergarten and inclusion; and attitudes towards parents of children with Down syndrome. The results showed that there was no statistically significant difference between teachers and students in terms of their attitudes towards inclusion. The results of teachers towards the partial integration of children with Down syndrome are significant. Based on the conducted research, it can be concluded there is a need for additional education

in this field due to the lack of content, in formal and non-formal education of teachers, addressing the issue of the inclusion of children with Down syndrome and children with disabilities in general.

**Keywords:** Down syndrome, early childhood and preschool education teacher, experience, inclusion, lifelong education.

## 1. Introduction

Down syndrome is the most common chromosomopathy characterized by the regular presence of intellectual disabilities at different levels (Bulić, 2013; Weijerman, de Winter 2010, according to Pranjić, Fargo, Arapović, 2016). It is most often accompanied by one or more difficulties of organ systems and language disorders (Ferrera, 1984, according to Pranjić, Fargo, Arapović, 2016). Apart from intellectual disabilities, no organic disability is constantly present in all persons with Down syndrome and cannot be said to be typical of them (Starbuck, 2011; Čulić and Čulić, 2008). Similarities in the physical appearance of people with Down syndrome have for a long time influenced the neglect of remarkable differences in their cognitive development and other psycho-social abilities and skills. The difficulties in good expression and abstract thinking additionally complicate their socialization, which is further supported by recent research findings by Bulić (2013) and Pranjić, Fargo and Arapović (2016).

Inclusion opens up a number of positive views of the wider community towards people with Down syndrome (DS). Not all circumstances of inclusion are unambiguous and self-explanatory, but rather open up a whole range of social experiences and relationships that require active and responsible reflection and action. Alfiev (2000) deductively analyzes inclusion, which involves the creation of emotional bonds, learning, socializing and friendship, employment, and is implemented in all educational institutions in the Republic of Croatia.

Children with DS are just as motivated as all other children to explore, learn, and gain independence for life, despite their cognitive limitations, limitations in adaptive functioning

and failure to meet developmental and sociocultural standards for personal independence and social responsibility. The learning processes of children with DS, as with all other children, depend on their individual potentials, needs and variations in the environment in which they live. According to Zrilić (2011), children with DS in regular educational institutions become active members of the community, prepare for independent living and achieve a better everyday life.

The social model of rehabilitation opens up a number of positive aspects of the relationship between the wider community and children with DS. However, not all circumstances of inclusion are unambiguous and self-explanatory, but they open up a whole range of social experiences and relationships that require active and responsible reflection on prevailing individual and social attitudes and values.

### **1.1 Inclusion of children with disabilities in kindergartens in the Republic of Croatia**

Teachers are the first experts in the education of children of early and preschool age after they leave their family home. Their views on inclusion depend on a value system that can be problematized based on professional competences, i.e. professional knowledge and skills. The basic educational values in kindergartens in the Republic of Croatia include: identity, equality, knowledge and responsibility. The values are determined by public education policies through basic documents – the National Curriculum for Early Childhood and Preschool Education (2014) and the State Pedagogical Standard (2008), which prescribe the number and roles of the staff, the number of children in groups, and other norms. Visković (2018) states that different kindergartens have different strategies and implement different models of communication, leadership, distribution of power and problem solving, attitudes and professional status of kindergarten teachers, which is reflected in the kindergarten culture.

Many studies have analyzed and researched the acceptance of inclusive values in the educational system (Bouillet, Loborec, 2012; Karamatić Brčić, 2013; Kudek-Mirošević, Jurčević Lozančić, 2014). A part of the researches addressed the attitudes of educators towards the inclusion of children with developmental disabilities in general, while other researchers focused on children according to particular types of their difficulties.

Older researches on the attitudes of students, future educators, class and subject teachers of different profiles regarding inclusion of children with disabilities showed mostly negative results, whereupon attitudes towards inclusion were largely dependent on the formal education. The analysis of the then curricula employed by many higher education institutions in the Republic of Croatia showed significant differences in the attitudes of students whose study programs had inclusive values from those who mostly were not exposed to such contents (Sunko, 2006). Vantić-Tanjić and Nikolić (2010) find that the success of inclusion depends as well on satisfying certain conditions, such as quality cooperation with parents and professional team, providing assistants, creating an individualized program, etc. Researches show that the attitudes of educators/teachers towards the inclusion of children with disabilities are generally positive with the availability of additional support both in Croatia and worldwide (Kiš-Glavaš and Fulgosi-Masnjak, 2002; Kostelnik et al., 2004, Acedo, 2008, Zrilić, 2011; Benett, 2012; Kudek-Mirošević and Jurčević Lozančić, 2014; Bentley et al., 2016).

Various studies in the Republic of Croatia in the field of early and preschool education (Kudek-Mirošević and Jurčević Lozančić, 2014) show that educators and teachers with longer work experience accept children with developmental disabilities more, yet regardless of the longer work experience, they do not feel competent enough and feel that they need more professional training. The results of the research show contradictory findings with regard to teacher age. Most researches show that teachers are generally self-assessed as under-qualified and incompetent to work with children with developmental disabilities. For example, Sunko (2010) and Skočić-Mihić (2011) state that there is a statistically significant difference between younger teachers, who have more positive attitudes towards the inclusion, and their older colleagues. On the other hand, the findings of Čorluka (2017) show that younger and older teachers do not differ significantly in their attitudes about preschool inclusion of children with developmental disabilities. Most of the results of older and recent researches, both in the world and in Croatia, show that teachers are self-assessed as under-qualified and incompetent to work with children with developmental disabilities (Booth and Ainscow, 1998 and Boe et al., 2007 according to Kudek-Mirošević and Jurčević Lozančić, 2015; Miloš and Vrbić, 2015). Younger teachers, as well as those with previous experience in working with

children with disabilities, assess themselves as more competent to work with children (SkočićMihić, 2011, Sindik 2013). Results of recent researches by Sunko, Rogulj, and Živković (2018), Bouillet, (2018) show that teachers in Croatia consider the following as aggravating factors for implementation of inclusive values in kindergartens: inconsistent availability of kindergarten assistance, lack of competent educational experts, and insufficient cooperation with parents.

Although children with Down syndrome belong to a group of children with developmental disabilities, here it should be emphasized the attitudes of teachers are positive when it comes to inclusion in regular kindergarten programs. The research by Županić (2016) shows that 87.5% of educators/teachers mostly and completely agree that children with Down syndrome should not be put in special institutions, but in regular kindergartens and schools. Researches regarding the relationship between teacher age and inclusion of children with Down syndrome in regular kindergartens prove to be inconsistent, yet all findings attach great importance to teacher education. Accordingly, the question arises about the level of sensitivity of early childhood and preschool education students and teachers to inclusive values, which is our research problem.

## **1.2 Research problem**

The results of the present researches indicate a lack of systematic education of teachers for inclusive educational practice. However, it is questionable to what extent early childhood and preschool education students are sensitive to the inclusive values of children with DS and whether their formal education influences the formation of positive attitudes towards the inclusion. Therefore, with this research we tried to see if there is a difference in the attitudes between early childhood and preschool education teachers and students about the inclusion of children with Down syndrome in kindergartens.

## **1.3 Research objective and hypothesis**

The aim of this study was to identify the difference in attitudes of teachers with work experience and early childhood and preschool education students on the inclusion of children

with Down syndrome in kindergartens. Following 0-hypothesis was set: There is no statistically significant difference in the attitudes of early childhood and preschool education teachers and students about the inclusion of children with Down syndrome in regular kindergartens.

## 2. Methods

In order to examine teachers' views on the inclusion of children with Down syndrome, we conducted a survey involving early childhood and preschool education teachers and students. The survey included teachers working in three kindergartens in the city of Split during 2017. They were interviewed through a questionnaire. The survey including early childhood and preschool education students was conducted from June to July 2019 through an online questionnaire.

For the purposes of our research, we created a Questionnaire on assessment of teachers' attitudes towards the inclusion of children with Down syndrome. The survey was anonymous, with the purpose of the questionnaire stated in the instructions at the beginning of the questionnaire. The questionnaire consisted of two parts. The first part related to the demographic data of the respondents – age and work experience. For early childhood and preschool education students, the first part of the questionnaire included demographic data of age and year of study. In the second part of the questionnaire, the respondents used Likert scale to determine their degree of agreement/disagreement with statements regarding the inclusion of children with Down syndrome in regular kindergarten, whereupon three levels of agreement were offered: 1 –I disagree, 2 – I neither agree nor disagree, 3 –I agree. The questionnaire contained 24 elements, and the results were processed in the SPSS program.

### 3. Results and Discussion

The results obtained upon questioning the attitudes of early childhood and preschool education teachers and students were analyzed by descriptive statistics and t-test of independent variables. For the purposes of the paper, we singled out the results which show

the difference in the responses of teachers and students, as well as the results where the t-test showed the 0-hypothesis should be rejected. The results were presented through thematic statements grouped by content as follows: personal attitude towards inclusion of children with Down syndrome; inclusion success; knowledge and training; kindergarten and inclusion; and attitudes towards parents of children with Down syndrome.

#### 3.1 1st group: “Personal attitude towards inclusion of children with Down syndrome”

Table 1. Answers on statements - group 1

		N	I disagree		I neither agree nor disagree		I agree		Mean	Std. Deviation
			f	%	f	%	f	%		
Statement 3	Students	34	2	5,9	10	29,4	22	64,7	2,5882	,60891
	Teachers	35	5	14,3	19	54,3	11	31,4	2,1714	,66358
Statement 20	Students	34	20	58,8	12	35,3	2	5,9	1,4706	,61473
	Teachers	35	10	28,6	20	57,1	5	14,3	1,8571	,64820
Statement 21	Students	34	26	76,5	6	17,6	2	5,9	1,2941	,57889
	Teachers	35	14	40,0	20	57,1	1	2,9	1,6286	,54695
Statement 22	Students	34	6	17,6	15	44,1	13	38,2	2,2059	,72944
	Teachers	35	2	5,7	11	31,4	22	62,9	2,5714	,60807

Table2. Group 1 –independent t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Statement 3	Equal variances assumed	,021	,886	2,716	67	,008	,41681	,15344	,11053	,72308
	Equal variances not assumed			2,720	66,787	,008	,41681	,15325	,11090	,72272
S 20	Equal variances assumed	,593	,444	-2,540	67	,013	-,38655	,15217	-,69029	-,08282
	Equal variances not assumed			-2,542	66,963	,013	-,38655	,15205	-,69005	-,08306
Statement 21	Equal variances assumed	,591	,445	-2,467	67	,016	-,33445	,13555	-,60501	-,06390
	Equal variances not assumed			-2,465	66,507	,016	-,33445	,13566	-,60527	-,06364
Statement 22	Equal variances assumed	,729	,396	-2,264	67	,027	-,36555	,16148	-,68786	-,04323
	Equal variances not assumed			-2,258	64,197	,027	-,36555	,16191	-,68897	-,04212

Having analyzed the answers to the statements, we can point out the statement T3 – *I would like to have a child with Down syndrome in my educational group*, for which the results showed a slight difference in arithmetic means. From the response frequencies it is evident that the students gave the answer *I disagree* somewhat more often while the teachers answered *I agree* somewhat more often. According to the frequencies, it can be concluded that the majority of respondents answered they could not assess whether they agreed or disagreed with the statement. Analyzing the result of the independent variables t-test at 95% certainty ( $t = 2,716$ ,  $df = 67$ ,  $sig = 0,008$ ), we can accept the 0-hypothesis and conclude that there is no statistically significant difference in the attitudes of teachers and students towards having a child with DS in their educational group.

For the statement T20 – *In a regular group, children with Down syndrome experience failure more often than in special groups*, the results showed a slightly more positive attitude of students towards the statement as opposed to teachers. Most often, teachers were unable to assess whether or not they agreed with this statement. According to the results of the t-test ( $t = -2,540$ ,  $df = 67$  and  $sig = 0,13$ ), there is no statistically significant difference in the answers and we accept the 0-hypothesis.

In this group of statements, the results showed a difference in answers to the statement T21 – *A child with Down syndrome is not able to participate in regular kindergarten activities*. Students expressed more acceptable views towards this statement ( $f = 26$  – I disagree). The responses of teachers who were mostly unable to evaluate their attitude towards the above are worrying, majority of the answers being precisely like that. Here, it is possible to expect a more positive attitude of teachers towards inclusion and the possibilities of children with DS due to teachers' experience and additional knowledge gained during continuous professional training.

The statement T22 *For children with Down syndrome, it would be good to organize a part of activities in a regular group, and a part in a special institution* showed a smaller difference in arithmetic means of students' and teachers' responses, but t-test ( $t = -2,264$ ,  $df = 67$  and  $sig = 0,27$ ) showed there was no statistically significant difference in the responses of both groups of respondents.

This element shines light on the negative attitude of teachers towards inclusion, although they often declare as such. According to Alfiev (2000), long-term hospitalization and segregation of children into special institutions have been proven to reduce social competence, cause infantilism, depersonalization, and other undesirable behaviors such as aggression, self-destructiveness, stereotypization, etc. Based on the teachers' answers in this research, teachers show little knowledge of the above. We can conclude that work experience did not contribute to building a more positive attitude towards inclusion of children with Down syndrome.

### 3.2 2nd group: "Inclusion success"

Table 3. Answers on statements - group 2

		N	I disagree		I neither agree nor disagree		I agree		Mean	Std. Deviation
			f	%	f	%	f	%		
Statement 14	Students	34	1	2,9	13	38,2	20	58,8	2,5588	,56091
	Teachers	35	0	0	2	5,7	33	94,3	2,9429	,23550
Statement 15	Students	34	0	0	18	52,9	16	47,1	2,4706	,50664
	Teachers	35	2	5,7	7	20,0	26	74,3	2,6857	,58266

Table 4. Group 2 – independent variables t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Statement 14	Equal variances assumed	72,328	,000	-3,727	67	,000	-,38403	,10304	-,58970	-,17837
	Equal variances not assumed			-3,689	44,017	,001	-,38403	,10411	-,59384	-,17422

Statement 15	Equal variances assumed	,288	,593	-1,635	67	,107	-,21513	,13161	-,47781	,04756
	Equal variances not assumed			-1,638	66,203	,106	-,21513	,13134	-,47733	,04708

In the second group of statements concerning attitudes towards the success of inclusion of children with Down syndrome, we can single out the answers for statement T14 *The number of children in an educational group influences the quality of inclusion of children with Down syndrome*, where a smaller difference in the arithmetic means of the responses of the two groups of respondents was shown. According to the response frequencies, we can say the majority of the teachers' answers are in the category of agreement with the above statement, while students are divided, a part of them giving affirmative answers while some of them cannot evaluate their attitude towards the statement. It can be assumed that the lack of teachers' experience is the cause of some of the answers in the category "I neither agree nor disagree". The results of the t-test at 95% statistical significance ( $t = -3.689$ ,  $df = 44.017$  and  $sig = 0.001$ ) show that due to the Levene's test for Equality of Variances  $sig = 0.000$ , we reject the 0-hypothesis and accept the alternative hypothesis according to which we conclude that there is statistically significant difference in attitudes of preschool education teachers and students towards the above statement. The attitude of teachers that the number of children influences the inclusion quality is supported by the long-term deviation in the number of children in educational groups from the State Pedagogical Standard (2008). Namely, in kindergartens in the Republic of Croatia for years there has been a problem with the number of children in preschool institutions, which on the one hand increases the demographic problems, and on the other hand the quality of working conditions becomes questionable. Most often in larger cities where institutions have a higher (around 95%) percentage of children overcapacity leads to non-compliance with standards and thus a lack of other conditions for a quality work (Bouillet, 2018), whereupon the (in)adequate quality of inclusive values implementation can be considered.

For the statement T15 *A teacher needs an assistant for working with children with Down syndrome* the results showed a slight difference in arithmetic means, and according to the response frequencies, we can put most of teachers' responses in the "I agree" category. The hesitancy shown by the greater number of students' responses in the "I neither agree nor disagree" category can be linked to the lack of practical experience.

### 3.3 3rd group: "Knowledge and Training"

Table 5. Answers on statements - group 3

	N	I disagree		I neither agree nor disagree		I agree		Mean	Std. Deviation	
		f	%	f	%	f	%			
Statement 1	Students	34	8	23,5	19	55,9	3	20,6	1,9706	,67354
	Teachers	35	11	31,4	22	62,9	2	5,7	1,7429	,56061
Statement 7	Students	34	1	2,9	5	14,7	28	82,4	2,7941	,47860
	Teachers	35	4	11,4	7	20,0	24	68,6	2,5714	,69814
Statement 8	Students	34	2	5,9	1	2,9	31	91,2	2,8529	,50045
	Teachers	35	7	20,0	8	22,9	20	57,1	2,3714	,80753

Table 6. Group 3 – independent variables t-test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Statement 1	Equal variances assumed	,011	,917	1,528	67	,131	,22773	,14901	-,06969	,52515

	Equal variances not assumed			1,524	64,159	,132	,22773	,14941	-,07073	,52619
Statement 7	Equal variances assumed	8,788	,004	1,541	67	,128	,22269	,14451	-,06575	,51113
	Equal variances not assumed			1,549	60,311	,127	,22269	,14374	-,06481	,51019
Statement 8	Equal variances assumed	23,587	,000	2,967	67	,004	,48151	,16230	,15757	,80546
	Equal variances not assumed			2,986	57,016	,004	,48151	,16124	,15864	,80438

This group of statements includes three statements addressing attitudes about one's own knowledge and professional training. For the statement T1 *I have sufficient knowledge of the needs of children with Down syndrome*, the results of the study showed similar responses by students and teachers. Other statistical indicators (arithmetic mean and t-test) have shown similar results, but we can agree that direct experience in working with children with Down syndrome can contribute to the increased need for further training and lifelong learning. However, this is not evident from the results, thus it is possible to conclude our instrument is not sensitive enough to examine this attitude. Given that the results are inclined towards the responses in the category of “I neither agree nor disagree” and partly towards the view that they are not sufficiently informed, it is possible to conclude that there is a need for further professional development. This is supported by the Strategic Education Plan in the Republic of Croatia 2019 – 2021 (2018), which mentions the achievement of lifelong learning and the pursuit of a knowledge society. The disadvantage of this idea lies in the realization and needs of certain parts of society. Specifically, for teachers of preschool children in the Republic of Croatia, the professional trainings organized by the Education and Teacher Training Agency are valued, while those organized by the non-governmental sector (associations, private

companies, private individuals, etc.) are significantly less valued, if at all.

For the statement T7 *I need additional education to work with children with Down syndrome*, the t-test shows that at 95% statistical significance ( $t = 1,579$ ,  $df = 60,311$  and  $sig = 0,127$ ) due to Levene's test for Equality of Variances  $sig = 0,004$ , we reject the 0-hypothesis and accept the alternative hypothesis according to which we conclude there is statistically significant difference in attitudes of preschool education teachers and students towards the above statement. The positive attitude of the students towards additional education and broadening of the acquired knowledge on this topic should be emphasized.

For the statement T8 *I would like to participate in professional training on working with children with multiple disabilities*, it is necessary to point out the results of teachers' responses, where there is a noticeable difference from the responses of the students of early childhood and preschool education. Specifically, at 95% statistical significance ( $t = 2.986$   $df = 57.016$  and  $sig = 0.004$ ), due to Levene's test for Equality of Variances  $sig = 0.000$ , we reject the 0 hypothesis and accept the alternative hypothesis according to which we conclude that there is a statistically significant difference in attitudes of preschool education teachers and students towards the above statement. The results of the shown teachers' attitudes towards professional training on working with children with disabilities are worrying. This is mostly evident from the answers in the category in which they cannot assess their attitude. In the questionnaire used for the research, questions in the field of multiple difficulties were not presented primarily because of the issue of children with Down syndrome. Yet, based on the results obtained, there certainly is the need to research attitudes towards children with multiple disabilities, among which there also some children with DS.

### 3.4 4th group: “Kindergarten and inclusion”

Table 7. Answers on statements - group 4

	N	I disagree		I neither agree nor disagree		I agree		Mean	Std. Deviation	
		f	%	f	%	f	%			
Statement 16	Students	34	14	41,2	18	52,9	2	5,9	1,6471	,59708
	Teachers	35	6	17,1	20	57,1	9	25,7	2,0857	,65849

Table 8. Group 4 – independent variables t-test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Statement 16	Equal variances assumed	,498	,483	-2,896	67	,005	-,43866	,15146	-,74097	-,13634
	Equal variances not assumed			-2,900	66,689	,005	-,43866	,15124	-,74056	-,13675

We have singled out the statement T16 *Kindergartens sufficiently include children with Down syndrome*. The arithmetic means of the answers show the difference in teachers’ and students’ answers while the t-test ( $t = -2,896$ ,  $df = 67$  and  $sig = 0.005$ ) shows that there is no statistically significant difference in the answers of both groups of respondents. It is necessary to point out a number of teachers’ answers ( $f = 20$ ) in the category where they cannot assess the (dis)agreement with the above statement. The answers are worrying because in the city of Split all kindergartens are inclusive, and children with developmental disabilities have the right to priority enrollment. Similar are the responses of students in the category

where they cannot assess their attitude. The difference is obvious in the positive and negative attitudes. Teachers in large numbers ( $f = 9$ ) agree with the statement as opposed to students who more disagree ( $f = 14$ ) with the above statement. Here, too, we can conclude that, regardless of the long-term intensive work and implementation of inclusion in early childhood and preschool institutions, attitudes are not positive to the extent expected. Certainly it is necessary to follow the topic of inclusion in the context of kindergarten through a long-term research, a more sensitive and comprehensive instrument, and a larger sample. Given the small sample size of this research, it is not possible to make conclusions about such attitude at the population level.

### 3.5 5th group: “Attitudes towards parents of children with Down syndrome”

Table 9. Answers on statements - group 5

Statement	N	I disagree		I neither agree nor disagree		I agree		Mean	Std. Deviation	
		f	%	f	%	f	%			
Statement 23	Students	34	8	23,5	22	64,7	4	11,8	1,8824	,59108
	Teachers	35	3	8,6	23	65,7	9	25,7	2,1714	,56806
Statement 24	Students	34	5	14,7	26	76,5	3	8,8	1,9412	,48873
	Teachers	35	3	8,6	26	74,3	6	17,1	2,0857	,50709

Table 10. Group 4 – independent variables t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper

Statement 23	Equal variances assumed	,013	,908	-2,072	67	,042	-,28908	,13954	-,56761	-,01054
	Equal variances not assumed			-2,070	66,682	,042	-,28908	,13963	-,56780	-,01036
Statement 24	Equal variances assumed	,147	,703	-1,205	67	,232	-,14454	,11995	-,38396	,09488
	Equal variances not assumed			-1,206	66,996	,232	-,14454	,11988	-,38383	,09475

In this group of statements there are two statements that relate to attitudes towards parents of children with DS. Respondents' answers to the statement T23 *Parents of children with Down syndrome are sufficiently aware of their children's needs* show a slight difference in arithmetic means. This difference is reflected in the somewhat more positive teachers' attitude towards the parents. Most of the teachers' and students' answers belong to the category of "I neither agree nor disagree". T-test ( $t = -2.072$ ,  $df = 67$  and  $sig = 0.042$ ) at 95% statistical significance shows that there is no statistically significant difference in the attitudes of both groups of respondents. The more positive teachers' attitudes may be caused by the immediate experience of working with parents. However, most of the answers are in the "I cannot assess" category, which can be explained by the lack of teachers' collaborative experience with parents of children with Down syndrome.

Regarding the statement 24 *Parents' expectations of their children with Down syndrome*, it can be seen many respondents cannot assess their attitude. Such responses may again indicate a lack of experience with parents of children with DS, or a lack of collaboration and partnership between teachers and parents. Most parents of children below the age of 7 use many early intervention services in special institutions, hospitals, social care institutions, or private institutions, therefore some children with DS may not be included in regular kindergartens, which is in contrast to the efforts of the local community, who is the founder of most kindergartens.

## 4. Conclusion

Inclusion of children with DS depends on the attitudes, knowledge and acceptance of the rights of all children, and not only at the declarative level. More recent researches show that teachers generally have a positive attitude towards inclusion of children with developmental disabilities at a declarative level. The results of this study confirm a positive personal attitude, which is in line with recent researches. The research confirms the findings of previous studies in that there is no difference in personal attitudes between younger and older teachers. It is easier for teachers to accept partial integration than inclusion. The answers confirm the opinions and needs of the teachers for a stronger additional support from both assistants and professional services, greater cooperation with parents and fewer children in the group. The obtained results show that the additional need for education is expressed more by students than by teachers, which is not surprising given the greater experience and the greater number of trainings available to teachers. The study shows deficiencies in formal and non-formal education of teachers regarding the inclusion of children with DS and children with disabilities in general. Findings point to the need to develop competencies and enable independent work to students and teachers in pragmatic, operational, professional and managerial strategies for purposes of the inclusion.

The research should further be conducted longitudinally, over longer periods of time and in the future because inclusion is a process, not a momentary goal. The disadvantage of this research is the instrument that needs to be increased in sensitivity. The instrument used in this paper is recommended to be used for all children with developmental disabilities, not just children with DS. Also, in the future, it would certainly be necessary to further expand the sample of the research with regard to the topic and problems addressed in the research results. More frequent monitoring and presentation of results can help to enrich the inclusive approaches to children with DS and children with developmental disabilities in general.

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