

Perception of the Frequency and Importance of Peer Social Support by Students with Special Educational Needs in Inclusive Education

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Abstract—Inclusive education of students with special educational needs has been on the increase in the Slovak Republic, facing many challenges. Preparedness of teachers for inclusive education is one of the most frequent issues; teachers lack skills when it comes to the use of effective instruction depending on the individual needs of students, improvement of classroom management and social skills, and support of inclusion within the classroom. Social support is crucial for the school success of students within inclusive settings. The aim of the paper is to analyse perception of the frequency and importance of peer social support by students with special educational needs in inclusive education. The data collection tool used was the Child and Adolescent Social Support Scale (CASSS). The research sample consisted of 953 fourth grade students – 141 students with special educational needs educated in an inclusive setting and 812 students of the standard population. No significant differences were found between the students with special educational needs and the students without special educational needs in an inclusive setting when it comes to the perception of frequency and importance of social support of schoolmates and friends. However, the perception of frequency and importance of a friend's social support was higher than the perception of frequency and importance of a classmate's social support in both groups of students.

Keywords—Inclusive education, peer social support, peer, student with special educational needs.

I. INTRODUCTION

THE number of students with special educational needs receiving inclusive education at kindergartens, elementary and high schools in Slovakia has been growing. Higher-incidence disabilities areas in inclusive settings include learning disabilities, intellectual and developmental disabilities, speech and language impairment and emotional disturbances [1]. The most frequent special educational needs in children and students educated in inclusive settings at various types of schools in Slovakia include learning disabilities, intellectual disabilities, communication disorders, and behavioural disorders. However, the number of children educated in inclusive settings keeps growing also owing to more severe disabilities, such as the autism spectrum disorders

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or multiple disorders. The group of children and students integrated in kindergarten, elementary and high school classes because of socially disadvantaged background which represents a substantial portion of students (see Table I) has been monitored as a separate group by the Ministry of Education, Science, Research and Sports in the Slovak Republic since the school year 2010/2011.

TABLE I
SUMMARY OF INTEGRATED CHILDREN AND STUDENTS WITH SPECIAL EDUCATIONAL NEEDS INTO KINDERGARTENS, ELEMENTARY AND HIGH SCHOOLS IN SLOVAKIA

Categories of special educational needs	2009/2010	2015/2016
<i>Learning disabilities</i>	13049	18153
<i>Intellectual and developmental disabilities</i>	3778	3830
<i>Speech and language impairments</i>	831	1571
<i>Emotional and behavioral disorders</i>	1292	832
<i>Physical impairment</i>	1454	821
<i>Giftedness</i>	580	808
<i>Autism spectrum disorders</i>	190	566
<i>Hearing impairments</i>	496	540
<i>Visual impairments</i>	385	405
<i>Other*</i>	—**	4968
<i>Socially disadvantaged background</i>	-	15055
<i>Total</i>	22055	47549

*Includes students with multiple disabilities, students with health problems, pupils with ADHD and ADD.

**This data has been specified in more detail only recently and includes the above mentioned groups of children and students.

Processed based on the data of the Institute of Information and Prognosis in Education in the Slovak Republic.

The growing number of students with special educational needs in Slovakia reflects the concurrent compliance with the national and international documents the Slovak Republic decided to abide by in the area of inclusive education. Promotion of inclusive principles, compliance with human rights in school, inclusion of students with special educational needs in Slovakia, and prohibition of all forms of discrimination, and particularly segregation, is based on the Act 245/20008 Coll. on education (School Act) [2]. But preparedness for, and implementation of, inclusive education of students with special educational needs continues to stumble over many obstacles. This may be also influenced by the long-lasting tradition of special education in segregated settings in Slovakia. While several European countries, such as Norway [3], Finland, Sweden, Italy [4] started to use integration, and later on, inclusive efforts as early as in the 1970s, other countries, including Slovakia, tend to continue in

the tradition of special education of students with special educational needs in special schools.

One of the most frequent issues of inclusive education in Slovakia is the insufficient preparedness of teachers for inclusive education, lack of skills mainly in the area of individualised education plan development, use of special methods and procedures, and diagnostic skills [5], [6], and unpreparedness of schools for inclusive education of students with more severe, or multiple, disabilities [7], [8]. Žolniová [9] notes that the preparedness of teachers is conditional upon the changing approach in the preparation of undergraduate students.

Preparedness of a teacher and teacher assistant for work with children with special educational needs, the ability to manage an inclusive class, support social interactions, and develop social skills of students with special educational needs in an inclusive class plays a significant role in school success of a student with special educational needs in inclusive settings. Dubayová et al. [10] list student engagement, student's coping strategies, auto-regulation skills, emotional experience, motivation of a student and, last but not least, cooperation of the student with teachers as well as classmates as additional factors having impact on school success/failure of a student with special educational needs. Therefore, social support of students in an inclusive class seems to be important. Referring to Křivohlavý's definition of social support [11], we view social support in the context of inclusive education as the help given by class-mates and close friends to a student with special educational needs in a stress situation. Generally, it is considered as the activity making the stressful situation easier for the student. In the inclusive education process, the social support lent by class-mates and friends is informal and is a key to the successful education of the student with special educational needs.

In this study, we have evaluated the perception of peer social support to students with special educational needs in inclusive education. The frequency and importance of social support of classmates and friends to students with special educational needs in inclusive settings was of particular importance.

II. METHOD

A. Participants

The research sample consisted of 953 4th grade students of elementary schools – 141 (14.80%) students with special educational needs educated in an inclusive setting and 812 (85.20%) students of the standard population. The total sample contained 48.69% of females and 50.37% males, 0.94% participants did not specify the gender. Boys (54.29%) predominated over girls (45.71%) in the research sample (see Table II).

The age was specified for 943 participants (10 lacked the age data). The average wage was 10.1 years. The largest group was the group of 10 years old participants. The youngest of the participants was 9 years old; the oldest was 12 years and 5 months old. Around 2/3 of students were covered by the group

of children aged 9 years and 6 months up to 10 years and 8 months. Median is taken as the mean value (10.100 years) (see Fig. 1).

TABLE II DEMOGRAPHIC CHARACTERISTIC OF STUDY PARTICIPANTS			
	Participants with special educational needs	Participants of the standard population	Total sample
<i>n</i>	141	812	953
<i>Age</i>			
<i>M (SD)</i>	10.163 (0.598)	10.079 (0.517)	10.106 (0.531)
<i>Sex</i>			
<i>Males</i>	76	404	480
<i>Females</i>	64	400	464
<i>Missing information</i>			9

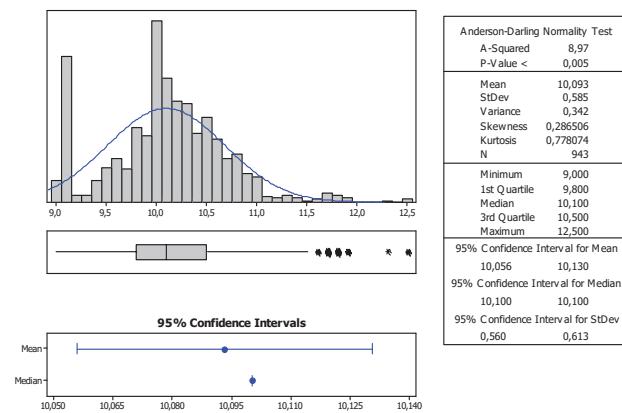


Fig. 1 Age of the participants

As regarding the types of special educational needs, the largest group consisted of students with learning disabilities (36.46%) followed by gifted students (18.44%), and speech or language impairment (8.51%). There also was a 13-member group of participants with a combination of special educational needs, combining mainly learning disabilities and ADHD, or ADD (see Table III). The structure of research participants in terms of special educational needs was similar to the structure of students educated in inclusive settings based on special educational needs in the school year 2015/2016. According to the data of the Institute of Information and Prognosis of Education in the Slovak Republic (see Table I), learning disabilities were dominant, as has already been mentioned. The group of participants also included students with intellectual disability and speech or language impairment and ADHD. Unlike the data in Table I, our group of participants with special educational needs differed because of the presence of students from a socially disadvantaged background. Only one student from the socially disadvantaged background joined the research study.

TABLE III
TYPES OF SPECIAL EDUCATIONAL NEEDS OF PARTICIPANTS

	n	%
<i>Learning disabilities</i>	50	36.46
<i>Giftedness</i>	26	18.44
<i>Speech or language impairment</i>	12	8.51
<i>ADHD</i>	11	7.80
<i>Intellectual and developmental disabilities</i>	10	7.09
<i>Learning disabilities, ADHD</i>	9	6.38
<i>Autism spectrum disorders</i>	4	2.84
<i>Physical impairment</i>	3	2.13
<i>Speech or language impairment, ADHD</i>	3	2.13
<i>Speech and language impairment, learning disabilities</i>	3	2.13
<i>Hearing impairment</i>	2	1.42
<i>Learning disabilities, ADD</i>	1	0.71
<i>Speech and language impairment, ADHD, learning disabilities</i>	1	0.71
<i>Socially disadvantaged background</i>	1	0.71
<i>Missing information</i>	5	3.55
<i>Total</i>	141	100

B. Measures

We used the Child and Adolescent Social Support Scale (CASSS 2000) as a data collection tool in the study. We used the Slovak translation of the Czech version titled CASSS-CZ developed by J. Mareš and S. Ježek [12]. CASSS-CZ contains 60 items graphically structured around five sub-scales called: *My Parents, My Teacher, My Class-mates, My Close Friend, People in School*. Students respond rating each item in two aspects: frequency and importance. Frequency ratings consist of a 6-point Likert Scale from 1 (never) to 6 (always). Importance ratings consist of a 3-point Likert scale from 1 (not important) to 3 (very important). Each subscale corresponds to one of the sources of support (parent, teacher, classmate, close friend, people in school), and consist of 12 items. Subscale scores are calculated by summing the frequency of the 12 items under each subscale (parent, teacher, classmate, close friend, people in school). In addition, the total frequency score can be calculated by summing up all five frequency ratings of subscale scores. The variance of possible values in the CASSS-CZ questionnaire, frequency aspect, was 12 to 72 points in the frequency aspect and 12 to 36 points in the importance aspect in each of the five subscales.

C. Procedure

The research took place at 28 elementary schools in Slovakia in the school years 2013/2014 and 2014/2015. The majority of the elementary schools were town schools. The schools were selected through quota sampling method.

D. Data analysis

Our descriptive statistics focused on the calculation of the following values: frequency, percentage share, mean value, median, standard deviation.

The non-parametric Mann-Whitney U test was used within inductive statistics to compare the results found.

The relations between variables were analysed by way of

correlation analysis (the Pearson correlation coefficient used). Significance level applied to testing was $\alpha=0.05$.

III. RESULTS

A. Evaluation of Social Support in Relation to Classmates and Close Friends

The evaluation of mean values in the frequency and importance aspects in the classmate and close friend subscales did not reveal a statistically significant difference between groups of students from the perspective of their special educational needs (importance – classmate: $p=0.2829$, significance – close friend: $p=0.8722$; frequency: classmate: $p=0.3054$, close friend: $p=0.4943$). However, the students with special educational needs (49.72/51.75) reached slightly lower scores in the frequency aspect than the students of the standard population (51.23/53.613) in both subscales. The evaluation of the frequency of the relationship to class-mates, close friends in the group of students with special educational needs and in the group of students of the standard population was positive, and without statistical significance. As regards the importance aspect, the students with special educational needs showed somewhat lower mean values in the close friend and classmates subscales compared to the students of the standard population (see Table IV).

TABLE IV
MEANS AND STANDARD DEVIATIONS OF SELECTED SUBSCALES OF SOCIAL SUPPORT SCALE PERCEIVED BY CHILDREN WITH SPECIAL EDUCATIONAL NEEDS IN INCLUSIVE SETTINGS

	Frequency Mean (SD)	Importance Mean (SD)
<i>Classmate</i>		
<i>Children with Special educational needs</i>	49.720 (14.24)	26.092 (7.355)
<i>Standard population</i>	51.230 (13.467)	27.143 (6.23)
<i>Close Friend</i>		
<i>Children with Special educational needs</i>	51.750 (16.97)	27.235 (8.261)
<i>Standard population</i>	53.613 (14.493)	27.964 (6.661)

TABLE V
EVALUATION OF SELECTED SUBSCALES OF SOCIAL SUPPORT SCALE BY GENDER

	Frequency	Importance
<i>Classmate</i>		
<i>Children with Special educational needs</i>	0.4573	0.8089
<i>Standard population</i>	0.8495	0.4877
<i>Close Friend</i>		
<i>Children with Special educational needs</i>	0.0985	0.4855
<i>Standard population</i>	0.0009*	0.0133*

*Significant at $\alpha=0.05$ ($p<0.005$).

Assessing selected subscales of social support (classmates and friend) by gender of research participants we have identified statistically significance between females and males only in the group of students of standard population in subscale *Close friend* ($p=0.0006$ for the frequency; $p=0.0113$ for the importance aspect). In the group of students with

special educational needs the differences were not significant in selected subscales of social support (see Table V).

B. Correlation Matrix of the Relationships between the CASSS-CZ Subscales

Assessing the strength of the associations between individual subscales, we noticed that all coefficients in the assessment of the relationship between all five social support subscales in the frequency aspect were statistically significant ($p<.05$) in each of the groups of students researched. They ranged from 0.339 to 0.650 in the group of students with special educational needs, and from 0.431 to 0.694 in the group of students of the standard population for the frequency evaluation.

The strength of correlation was identified based on the correlation coefficient value. The positive correlation and the strength of this correlation allows us to state that the greatest association in the students of the standard population was found between the class-mates and close friend subscales (0.694), while the greatest correlation coefficient value in students with special educational needs was found between the close friend and people in school subscales (0.650) (see Table VI).

TABLE VI

CORRELATION MATRIX OF RELATIONS BETWEEN CASSS-CZ SUBSCALES IN THE FREQUENCY ASPECT (STUDENTS WITH SPECIAL EDUCATIONAL NEEDS AND STUDENTS OF THE STANDARD POPULATION)

	Parent	Teache r	Classmat es	Close friend	People in school
Parent	-	.632	.550	.534	.431
Teacher	.627	-	.604	.536	.482
Classmates	.339	.420	-	.694	.612
Close friend	.462	.367	.566	-	.574
People in school	.373	.507	.475	.650	-

Note: Correlations for the group of participants with special educational needs are below the diagonal.

Correlations for the group of participants of standard population are above the diagonal.

All coefficients are statistically significant at $\alpha=0.05$ ($p<0.005$).

TABLE VII

CORRELATION MATRIX OF RELATIONS BETWEEN THE CASSS-CZ SUBSCALES IN THE IMPORTANCE ASPECT (STUDENTS WITH SPECIAL EDUCATIONAL NEEDS AND STUDENTS OF THE STANDARD POPULATION)

	Parent	Teache r	Classmat es	Close friend	People in school
Parent	-	.763	.721	.665	.571
Teacher	.593	-	.777	.713	.677
Classmates	.690	.620	-	.769	.694
Close friend	.497	.581	.639	-	.704
People in school	.453	.628	.605	.779	-

Note: Correlations for the group of participants with special educational needs are below the diagonal.

Correlations for the group of participants of standard population are above the diagonal.

All coefficients are statistically significant at $\alpha=0.05$ ($p<0.005$).

All coefficients were also proved to be statistically significant ($p<.01$) in each of the groups of students researched in the evaluation of the correlation of relations between the five social support subscales from the importance aspect perspective. They ranged from 0.453 to 0.779 in the

group of students with special educational needs and from 0.571 to 0.777 in the group of students of the standard population. As regards the strength of association, the weakest was observed between the parents and people in school subscales in both groups of students researched (0.453 in students with special educational needs and 0.571 in students of the standard population) (see Table VII).

IV. DISCUSSION

Social support is viewed in our study as the help lent by class-mates and friends to a student with special educational needs in a stressful situation. In the inclusive education process, social support lent by class-mates is one of the key to the successful education of a student with special educational needs. In our research we have evaluated perception and importance of social support from classmates and friends to 4th grade students of elementary schools in Slovakia according the special educational needs.

The evaluation of the frequency and importance values in the class-mate and close friend subscales did not reveal a statistically significant difference between the groups of students from the perspective of special educational needs in the close friend and class-mate subscales. Malecki and Demaray [15] found out that middle and high school level females perceived more support than males on the total score, and close friend and classmate subscales. In our research we have identified significant changes between females and males in subscale close friend in the group of students of standard population. Females of standard population assigned higher number of points in subscale close friend than boys of standard population. In the group of students with special educational needs the differences were not significant between females and males.

Our evaluation of social support from classmates and friends is in line with the research of Moreira et al. [13] and Demaray and Elliot [14]. Students with special educational needs show positive levels of social support, but with less frequency than students of the standard population.

The construct of social support provides an important framework to conceptualize prevention and intervention efforts as multitiered levels in schools. If a social support is deemed a problem wide teacher and support team can use variety of strategies and programs that may help increase student's perceptions of social support and foster positive relationships in schools [16]. Malecki and Demaray [13] provided evidence for the Child and Adolescent Social Support Scale as an appropriate measure of the perceived social support for use with children and adolescents. Mareš and Ježek [12] verified the adaptation of the Czech version and also point out the possible use of this scale for children and adolescents in our conditions.

The Child and Adolescent Social Support Scale may also be used outside the standard population. Since it diagnoses social support on the whole, and also differentiates its partial components, it can also work as a useful diagnostic tool for the teacher in the process of inclusive education and be then used as a base to prepare adequate intervention for a student or

a class in the event of troublesome behaviour, disturbed social relations in a group, etc.

In conclusion, in order to increase the efficiency of inclusive education of students with special educational needs in Slovakia, the issues connected with it have to be analysed in detail, offers of specialised education plans need to be opened at the level of educational institutions, focusing primarily on the efficient strategies of inclusive education, and particularly on the improvement of teacher and teacher assistant preparedness in the area of specific teaching methods and processes, inclusive class management, improvement of peer relations and social interactions which are key to the successful inclusive education of a student with special educational needs, and such a student's social inclusion in society.

Evaluation of the perception of social support of students with special educational needs may lead to interventions promoting the support students are receiving from important individuals in their lives. Furthermore, learning about the construct of social support will help one learn about the possible buffering effects social support may have on the lives of children [13]. It may also increase the school effectiveness of students with special educational needs in inclusive settings.

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