General public and future teachers' attitudes towards people with disabilities and inclusion

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Abstract: *This article analyzes the context of inclusive processes in the Czech Republic through attitudes of the general public towards people with disabilities, followed by a study on attitudes of future teachers towards people with disabilities and inclusion. We used data from a questionnaire survey, which used modified version of Bogardus scale of social distance (administered to the general public and students of education), measuring social acceptance of selected groups in society. The questions were aimed to provide information about three types of disabilities (physical, intellectual and sensory) and selected issues concerning inclusive education. The analysis looked closely at the level of acceptance in educational settings. Data showed more positive and accepting attitudes in younger and more educated groups of the general population. Further results show that being a student of a program focused on education is a major factor positively influencing social acceptance of people with different types of disabilities and attitudes towards inclusion.*

Key words: *attitudes toward people with disabilities, special education needs, inclusion, disability, Czech Republic*

Introduction

The right to free and accessible primary education has been affirmed by *The Universal Declaration of Human Rights* in 1948. This has been followed by other declarations and international treaties, which developed this right further. Currently, international documents clearly state the right to quality education for all, irrespective of their physical and mental capabilities (*Declaration of the Rights of the Child*, 1959), focus on inclusive education and use of support services (*The Salamanca Statement and framework for Action on Special Needs Education*, 1994).

The latest document focusing on education of persons with special needs is *The Convention on the Rights of Persons with Disabilities* published in 2006, which the Czech Republic signed as late as in September 2009. This document clearly states that persons with disabilities cannot be excluded from any level of education and shall be educated in their local community (Vaďurová, 2013).

Following this international development, the Czech Republic has put into force a number of national provisions focusing on inclusion of persons with disabilities in education, work and social life. It is namely the *National Plan for the Creation of Equal Opportunities for Persons with Disabilities 2010–2014* and the Act no. 561/2004 Sb. on Pre-school, Basic, Secondary, Tertiary Professional and Other Education (the Education Act). This law is the first Czech school act ever not mentioning the possibility to "free" someone from compulsory education and, furthermore, considers individual integration to be the primary form of education for students with SEN (Medu, 2004).

Inclusive education is, therefore, becoming the predominant policy of the country, not only because of legal, but also research support. Study of Dyson et al. (2004) showed that inclusion can have a positive influence on social and interpersonal competences of all students. Further, Jordan et al. (2009) published a research showing that inclusive education has a positive influence on achievement of students with SEN, they achieve higher than their peers in special schools. Dyson et al. (2004) noted that the overall results of the schools were more influenced by the school's resources and capabilities to employ supportive measures than by the number of students with SEN (level of inclusivity). These capabilities of schools are closely linked with capabilities of their teachers and other support staff. As the number of students with SEN in Czech mainstream schools is rising every year (ÚIV), the preparedness of educators is crucially important for successful inclusive education (Vaďurová, 2013).

However, several studies show that teachers do not feel adequately trained (Webb, 2004 in Ross-Hill, 2009) and experienced (Rose, 2001) for inclusive education or worse, their attitude to inclusion is sceptic or negative (Corbett, 2001). The shift towards inclusive education can also be slowed down or hindered by the attitudes of the general public, which are important indicators of social position of people with disabilities. They give us true perspective on the life situation and the degree of inclusivity of the Czech society, as they may be better sources of understanding than formal structures and legal provisions. (Pančocha, Slepičková, 2012).

Studies of public attitudes towards people with disabilities and attitudes of teachers and future teachers towards inclusion and their concerns associated with working in inclusive settings are using variety of methodological strategies. Attitudes are inclinations to react to objects, situations, persons or oneself in a stable manner and are directly linked to interests of every individual. Attitudes have three main components – cognitive (rational), affective (emotional) and conative (leading to an activity). We can further specify attitudes as positive and negative, verbal and non-

verbal, manifested and hidden, strong and weak, compact and loose, conscious and unconscious, group and individual, constant and changeable, etc. (see in Hartl, P., Hartlová, H. 2000; Nakonečný, M. 2000; Říčan, P. 2004). Specific cathegory within the research of attitudes are studies focusing on attitudes of the general public, teachers or other professionals in education in in-service and pre-service situations towards people with disabilities and inclusion. Positive attitudes of teachers towards individuals with special educational needs and inclusion are one of the main factors for successful education in inclusive settings. Negative attitudes towards individuals with disabilities function as hidden barriers specifically for those, who wish to fully participate in a given society. Therefore, we need to form positive attitudes towards inclusion and towards people with disabilities in the general population as well as in pre-service teacher training (in Mukhopadhyay, S., Molosiwa, S. M. 2010).

Methods

The research aimed to analyze attitudes of the general public and future teachers of different subjects towards people with disabilities and inclusion, find out how these attitudes differ within and between these two groups. Two independent studies were conducted within this project and their results were compared. This article presents only partial results of the studies, namely diferences in acceptance of people according to the type of their disability and comparison of results between the general public and student sof education.

In the first study, we administered a questionnaire with the adapted version of Bogardus scale of social distance (Bogardus, 1947), to a representative sample of Czech population aged 15 and more. The questions were aimed to provide information about three types of disabilities (physical, intellectual and sensory). In the analysis we looked closely at the level of acceptance in educational settings. We can expect that due to the historical development of the approach to people with disabilities, younger generations, socialized in the post-communist era, should be accepting individuals with disabilities significantly more than the older generations. We also focused on the connotations of different types of disabilities in the Czech context and their impact on the level of social acceptance. To be able to reach large number of respondents of different age, education and socio-economic status, we used a questionnaire with adapted version of the Bogardus Social distance scale, which measures how much or little sympathy the members of a group feel for another group. The scale is still commonly used method of measuring prejudice. Since its introduction, it has been translated to many languages and used to measure relations towards many different groups in population (for a review see Wark, Galliher 2007).

The Social Distance Scale usually consists of five to seven statements that express progressively more or less intimacy toward the group considered. Typical scale an-

chors are "would have to live outside of my country (7)" and "would marry (1)" (Cover 1995, 403). In this case, a respondent who accepts item "seven" would be more prejudiced than a respondent who marks item "one" or any other item on the scale. Eight statements describing relationships were selected from a number of the original statements. The aim has been to cover three spheres of social life – work life, education and personal relations. We asked the respondents the same questions for each type of disability in the following format: Would you agree that a person with a given type of disability be your: co-worker, superior, subordinate, friend, child's schoolmate, schoolmate, child's partner, neighbor. The respondents could agree with any number of relations offered.

We adapted the scale from the original Bogardus version to fit the current social reality. Three statements presenting the highest social distance, i. e. admitting people with disabilities only as citizens of the country, only as visitors to the country and excluding people with disabilities from the country were not used. They present extreme cases of social distance unlikely to be held by the Czech general public or students. Ryšavý (2003) argues that this kind of changes in the scale are quite common. This can be supported by the results of a public survey conducted by CVVM (2012), which used parts of the scale, and where 93% of respondents accepted persons with disability as their neighbor. The following table shows adaptations made to the original scale.

Scale of social distance, Bogardus 1947	**Adapted version**	**Area of social life in adapter version**
I would willingly admit members of each race:	**Would you agree that a person with a given type of disability be your:**	
1) To close kinship by marriage	I) child's partner	Social relations
2) To my club as personal chums	II) friend	Social relations
3) To my street as neighbours	III) neighbor	Social relations
	IV) child's schoolmate	Education
	V) schoolmate	Education
4) To employment in my occupation	VI) co-worker	Work
	VII) superior	Work
	VIII) subordinate	Work
5) To citizenship in my country	Not used	
6) As visitors only to my country	Not used	
7) Would exclude from my country	Not used	

Figure. 1: Original and adapted version of Bogardus scale of social distance

For the purposes of our study, we administered the widely used Czech version of the scale (Ryšavý, 2003) as the starting point for our adaptations. Full psychometric testing of the adapted scale was not part of this study. We established the face validity of the instrument by comprehensive review of the literature concerning adaptations of the Bogardus scale and by reviewing the scale with four experts from the field of special education and sociology of disability. Next to this, we piloted the instrument and found relatively sound internal consistency of the scale. Cronbach's alpha was 0.712 for the subscale concerning people with physical disabilities, 0.767 for the subscale concerning people with intellectual disabilities and 0.774 for the subscale concerning sensory disabilities. This supported our aim to create a summative index of social distance for the purpose of distinguishing groups of low, middle and high social distance. The index ranging from 0 to 8 (high to low social distance) has been used to compare the general public with students of education in the matter of attitudes towards people with disabilities.

Sample

The data were acquired from a stratified sample of respondents (N = 1797) selected by quota sampling. The data were collected with the support of 303 professional interviewers of Inres social research agency as part of a larger survey Attitudes of the Czech Public towards Health Isuues (Inres, 2011). Concerning the deviation of the sample from the population, we reached 0,2%, deviation of the sample from population age structure, 0,1% deviation of the gender structure and 0,2% diference in case of territorial (regional) structure of the population. The sample may therefore be seen as representative sample of the population of the Czech Republic in the age 15 and higher, stratified according to age, gender and place of residence. The sample of the first study (general population) consisted of 877 (48.8%) of men and 920 (51.2%) women, which is in concordance with the composition of population of the Czech Republic. In the category of age, we followed the same procedure, but for the purposes of data analysis grouped respondents into five age categories: up to 29 years (25% of respondents), 30–39 year (16%), 40–49 years (18%), 50–59 years (16%) and 60 and more years of age (25%). The sample consisted of 12% of people with primary education, 31% with vocational certificate, 41% of respondents had high-school diploma, and 16% had university education.

The second study, carried out in April 2012, used the same instrument as the first one. The sample was chosen intentionally and consisted of 155 students of Masaryk University studying either Special education or other programs focused on education. Next to this, the second study used also modified version of SACIE (Sentiments, Attitudes, and Concerns about Inclusive Education) questionnaire (Sharma, Forlin

a Loreman, 2007) to find out about more complex issues concerning inclusion. Results of the SACIE study were presented in other publications of the authors. Students, who were the respondents of this study either passed an individual course in special education or were studying special education as their major field of study. There were students of several different study programs (Math education. Chemistry education. Art education. Biology education. etc.). There were 78.4% of females (n = 120) and 21.6% of males (n = 33). which is a typical population of students pursuing career in education. Most of the students 78.8% (n = 119) were full-time students. who recently finished secondary education. However. there were also students. who already had a university degree. 21.2% (n = 32). The age of the respondents varied between 20 and 35 years. 49% of respondents were 22 or younger. 32.1% were between 23 and 24. and 19.1% of respondents were 25 and older. 50.7% of students communicates with people with disabilities regularly. while 49.3% are not used to meet and communicate with people with disabilities.

Results

Acceptance of people with disabilities in different relations

The spider chart (fig. 2) represents the structure of attitudes of Czech population within the scope of different types of relations, which were evaluated by the respondents. Each shape represents one of the three disability types we evaluated (physical, sensory, and intellectual). From the point of view of type of disability, the chart clearly shows substantially lower acceptance of people with intellectual disabilities, which are (except neighborhood relations) accepted less than other people with disabilities in all types of relations (school, work, family, etc.). On the other hand, Czechs have the closest relations with people with physical disabilities and are ready to accept them in wider range of relations.

From the point of view of different relations, we see that the people with all types of disabilities are accepted the most within the neighborhood. Over 80% of respondents agree to have a neighbor with a disability. Concerning neighborhood, there are no significant differences between the disability groups. Relatively high acceptance has also been found in the frame of friendship and co-working relation. On the other hand, very low acceptance rate has been found in family relations, specifically acceptance of persons with disabilities as life partners of respondent's own children. Attitudes towards people with disabilities in the educational context lie in between the two above mentioned spheres.

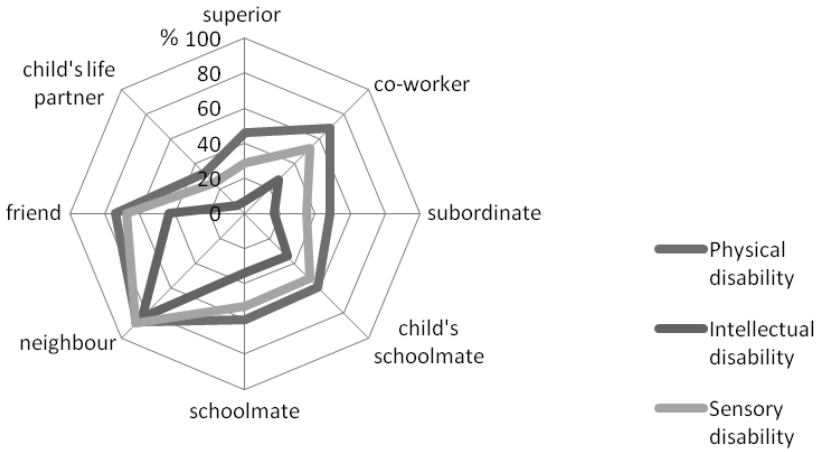

Figure 2: Social distance towards people with disabilities by type of disability and relationship (% of respondents accepting given relation)

Acceptance of a schoolmate with a disability

Statistically significant differences between different subgrups of the general public has been found. Pearson Chi-Square test has been used to find out whether the differences between age groups were statistically significant. Concerning schoolmates with physical disabilities, we found statistically significant difference between the acceptance rate between age groups ($\chi^2 = 87.212$; $p = 0.0001$). By examining the residual levels (observed counts – expected counts). The group below 29 years of age and the group 65+ were the most significantly different. The same procedure has been used to evaluate schoolmates with sensory disabilities. Again a significant difference has been found ($\chi^2 = 77.246$; $p = 0.0001$), with the two outermost age groups adding the most to the differences. Exactly the same were true for the question of schoolmates with intellectual disabilities ($\chi^2 = 54.339$; $p = 0.0001$). We can conclude that age is an important factor in acceptace of a schoolmate with a disability.

Similar tendencies were found as in the previous analysis when analysing the sample according to education level. Except the acceptance level of schoolmates with intellectual disabilities, which has not proven to be statistically significant ($\chi^2 = 5.141$; $p = 0.162$), even though there has been a tendency towards more positive answers in respondents with higher education. Finally, a significant difference has been found between the education level groups concerning acceptance level of schoolmates with physical disabilities ($\chi^2 = 21.650$; $p = 0.0001$) and also sensory disabilities ($\chi^2 = 15.856$; $p = 0.001$).

Acceptance of people with disabilities in different relations – general public vs. students of education

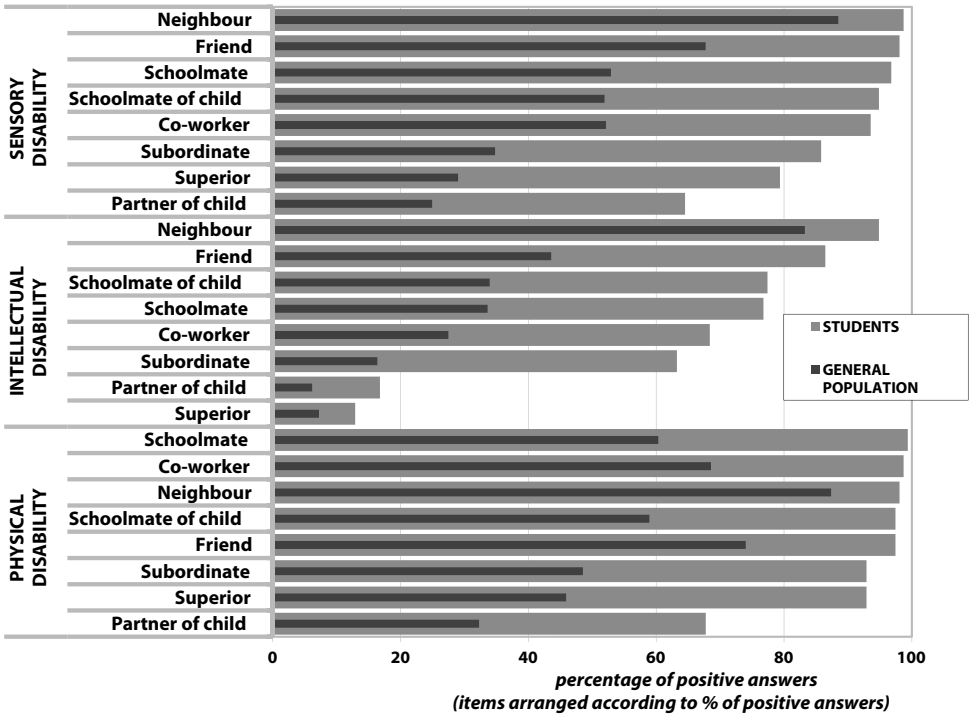

Figure 3: Social distance towards people with disabilities by type of disability and relationship. Comparison of general public and students of education (% of respondents accepting given relation)

Figure 3. shows the differences between general public and students of education in acceptance of different relations with people with disabilities. We can see that students are accepting all types of relations with people with disabilities more than the general public, but the structure of attitudes is similar. For comparison purposes, we created a summative index of social distance. Respondents' scores could vary from 0 to 8 according to the number of accepted relations for each type of disability. This is in accordance with similar studies (Ryšavý, 2003), which proved that the concept is unidimensional and could be summed into an index. We tested our data in all the relevant subscales for normality with the Saphiro-Wilk test ($p = 0.0001$) and also by observing the histograms. The distributions showed negative kurtosis.

For this reason, to compare general public and students, we used the Mann-Whitney U test, which is a non-parametric equivalent of the t-test, as the data were not normally distributed. In agreement with the general population, students accept

people with physical disabilities the most. The general public is accepting on average 5 out of 8 relations (Mdn = 5), while students are accepting 8 out of 8 relations (Mdn = 8).

Statistically significant difference has been found between the general public and students of education concerning their attitudes towards people with physical disabilities ($z = -11.736$ $p = 0.0001$).

Acceptance of people with sensory disabilities is in the general public just a little lower than acceptance of people with physical disability (4 out of 8 relations) and the same has been found in students of education (7 out of 8 relations). Also here statistically significant difference between the general public and students of education has been found ($z = -13.380$ $p = 0.0001$).

The lowest acceptance has been found in general public and students towards people with intellectual disabilities. Most of the general public is willing to accept 2 out of 8 relations (Mdn = 2) and students 5 out of 8 relations (Mdn = 5). Statistically significant difference between these two groups has also been found ($z = -12.874$ $p = 0.0001$). Because the students of education were only 20–35 years of age and the sample of the general population between 15–80 years of age, we decided to control for age and made further comparison between the students and selected subgroup of the sample of general population aged 20–35 (N = 507). Despite the fact that the differences between the groups were smaller, we still found statistically significant differences between students and general public in acceptance levels of people with disabilities.

Discussion

Our analysis of the data obtained from the sample of general public of the Czech Republic focused on the rate of acceptance of people with three types of disabilities in various types of social relations. According to our analysis of social distance we conclude that age and education of a respondent are two important factors for the rate of acceptance. Concerning the differences in acceptance of different types of relations, our research confirmed the pattern found by other studies, where societal attitudes were found more positive in the public sphere (education and employment) but not within family and partnership (Grand et al., 1982; Chen et al. 2002). A person with a disability has been more often accepted as a schoolmate or child's schoolmate by respondents with lower age and higher education. These statistically and practically significant differences could be assigned to socialization of young age cohorts in the democratic political system, after the end of the era of "invisibility" and isolation of people with disabilities and start of processes leading towards inclusion and community participation in all spheres of social life.

Our results show, that being a student of education is an important factor for social acceptance of people with disabilities. The student population and general population show the same patterns in acceptance of people with different types of disability – the lowest acceptance in work and family relations, the highest acceptance of people with physical disabilities and lowest acceptance of people with intellectual disabilities. Students of education declared willingness to accept more relations towards people with disabilities compared to the general public, even when we controlled for the age of respondents. This trend can be interpreted as a result of education in pedagogical field, as well as an effect of future profession. Future teachers tend to have more positive attitudes towards students with different health status and educational needs. Despite this, we can still see low acceptance of people with intellectual disabilities in the area of private relations, work and education.

Both of the studies have several limitations that need to be considered. The first and second study used modified version of Bogardus scale of social distance, which has not been fully psychometrically tested. For this reason, we shall evaluate the results with causion. The original scale itself has been criticized for several reasons. As self-reported attitudinal scale, there is a danger of potential bias by social desirability (Parillo and Donoghue, 2005). Respondents are aware that their attitudes are being measured and they may respond in a way as to provide the interviewer with the attitudes that are supposed to be held according to the current social climate rather than their own attitudes. We may, therefore, see more positive results and thereby threat to the validity of the responses (Antonak, 1995). Especially the second study is further biased by non-random sampling of students and the results shall only with caution be seen as the characteristics of the students' population. Last but not least, all attitudinal studies which use self-reported measures lack direct link between attitudes and concrete behavior of a respondent. From this point of view, we measure only the affective component and partially cognitive component of attitude, missing out the conative part of the story.

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