The attitudes of teachers towards inclusive education in Vojvodina

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The aim of this study was to examine the attitudes of preschool, primary, secondary and high school teachers towards inclusive education of children with special educational needs. In addition, the study established the correlation between these attitudes and gender, education level, teaching experience, formal training in the special education field, and the duration and quality of work experience with children with special education needs. The sample comprised 322 teachers from the Serbian province of Vojvodina. The *My Thinking about Inclusion Scale (MTAI)* (Stoiber, K. C., M. Gettinger, and D. Goetz. 1998. "Exploring Factors Influencing Parents' and Early Childhood Practitioners Beliefs about Inclusion." Early Childhood Research Quarterly 13 (1): 107–131) was used. The results show that, in general, the participants held neutral attitudes towards inclusive education and more positive expectations regarding the outcomes of inclusion. This study also emphasised teaching performance in an inclusive class as a subject of great concern. The high school and preschool teachers as well as the teachers with previous positive experience with working in an inclusive environment reported more positive attitudes towards inclusive education than those from primary and secondary schools and those with negative experiences with the implementation of inclusive practices.

Keywords: inclusive education; attitudes; teachers; special educational needs

Introduction

The social model of disability emphasises the influence of the social attitudes of prejudice and discrimination directed towards individuals with developmental disabilities (Hanh 1985, according to McGowan 1999). Conversely, successful inclusion is considered to be a multidimensional concept, influenced by three factors: attitudes, resources and curricula (Favazza, Phillipsen, and Kumar 2000). Because of known correlations between attitudes and behaviour, special attention has been focused on the study of attitudes. In this context, attitudes are defined as the inner state of a person, predisposing him to favourable responses if the attitude is positive and to unfavourable responses if the attitude is negative, thus influencing his future behaviour (Eagly 1992).

Given the crucial role of teachers in implementing inclusive education (Ainscow 2007; Rose and Howley 2007, 7), positive changes in their attitudes and beliefs should create more possibilities for inclusion of students with special educational needs (SEN). Teachers, who have pathognomonic beliefs, consider that disability is a pathological trait of a student. They relatively rarely interact with students with disabilities, believing that only experts in the field of special education should be involved in their teaching. At the other end of the spectrum are teachers who believe that all students, including those with disabilities, benefit from the learning and instructional opportunities. These teachers spend more time interacting with their students and use diverse teaching strategies (Jordan, Lindsay, and Stanovich 1997).

Teachers with negative attitudes towards inclusive education rarely use teaching strategies known to be successful in such an educational environment (Bender, Vail, and Scott 1995); therefore, students with SEN are less successful in classes taught by the teachers who have more negative attitudes towards inclusion (Ellins and Porter 2005). The teachers' attitudes are significant, even in the case of students with SEN being accepted by their typically developing peers in regular classes. The general attitude of the teacher towards the students with SEN should be positive and accepting, which is one of the conditions for

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encouraging the social interactions of students with SEN in regular classes (Westvood 2003, 87). Students look up to their teachers and fall under the influence of their teachers' opinions. Therefore, because the adult responsibility rests with teachers, they should carefully examine their own behaviour and attitudes related to their interactions with students and the acceptance of individual differences (Salend 1999).

The importance of early inclusion of children with SEN in mainstream preschool programmes stands out at least for three reasons. First, children at this age do not yet have formed impressions and prejudices about certain groups and that minimizes the risk of being teased or rejected. Then, early interaction with children with disabilities increases the likelihood of them being accepted by children of typical development when they get older. Finally, it is believed that the early placement in the conditions prevailing in the "real world" will better prepare children with disabilities for successful inclusion in the "regular/typical" environment (Buysse, Bailey, 1993). In this regard, the attitude of teachers towards inclusive education, as important figures whose authority the children with typical development will respect, are of special importance.

There are two fundamentally different approaches to the inclusion of persons with disabilities in mainstream education. According to one, efforts have been directed towards *the reform of special education system*. This approach is based on the attempt to introduce a number of special programmes and services to mainstream schools, rather than relying on the services of special schools and special classes. The focus of other countries is *to reform the system of mainstream education*, which aims to create a unified education system, sensitive to the characteristics of children with SEN (Vislie, 1995, according to Flem, Keller, 2000). These countries are trying to build a flexible system, able to adapt to the characteristics of all children regardless of their differences. Since the Republic of Serbia can be classified as one of these countries on the basis of its laws and the current practice is still looking for ways to respond to requests by the laws set (to be presented in a chapter "Local Context of the Study"), an overview of the research includes studies dealing with teachers' attitudes towards inclusive education, regardless of the models that these countries adopted. Hence, the term "inclusion" will be used for all programs involving children with and without disabilities (Odom et al., 2004).

The evidence, regarding teachers' attitudes towards the inclusion of students with SEN in mainstream education, as well as the factors affecting them, is often contradictory. Some older American and Australian studies have concluded that regular education teachers neither understand the disability with empathy nor advocate inclusion of SEN students in regular classes (see the overview in Avramidis and Norwich 2002). These results may be explained as the consequence of inclusion's not being implemented by systematic modifications of schools: the teachers are not prepared, and appropriate education and resources are not provided. The teachers often hold more positive attitudes regarding the integration of those children whose disabilities do not require additional teaching or management skills.

A meta–analysis of American studies of teachers' attitudes covering 28 studies from 1958 to 1996 reported that two thirds of examined teachers agreed with the concept of integration in general, but only 40% considered integration to be a realistic goal for the majority of children. It is also significant that no correlation has been observed between positive attitudes towards inclusion and the dates of research, thus suggesting that teachers' attitudes did not change over the studied years (Scruggs and Mastropieri 1996). However, recent research reviews of attitudes towards inclusive education have shown that teachers have mostly negative or neutral beliefs and feelings regarding inclusive education. Some of the authors of the studies under review were inclined to interpret the teachers' attitudes as being more positive, although more careful analysis does not support this interpretation (De Boer, Pijl, and Minnaert 2011).

According to the contact hypothesis (Allport 1954, according to Manetti, Schneider and Siperstein 2001), by participating in inclusive programs, teachers will develop more positive attitudes towards inclusion, which is confirmed by the majority of studies (Avramidis and Kalyva 2007; Cook et al. 2000; Gyimah, Sugden, and Pearson 2009). For example, the results obtained by surveying teachers in the United Kingdom show that teachers who were active in inclusive programs for several years held more positive attitudes than the rest of the investigated sample (teachers with little or no experience) (Avramidis, Bayliss, and Burden 2000a). It was also observed that teachers want their classes to be more inclusive but also believe that everyday life imposes a somewhat different reality (Van–Reusen, Shoho, and Barker 2001). Greek teachers, despite organisational and institutional difficulties, do favour the inclusion of students with SEN, and their attitudes improve when specialised knowledge, further training and incentives for acquiring professional qualifications are offered (Koutrouba, Vamvakari, and Theodoropoulos 2008). The investigation of Italian teachers, after 20 years of inclusive education, is especially interesting. In Italy, the special schools for children with SEN have largely been eliminated from the school system and the overall support for the concept of inclusion is quite strong, but the teachers are less satisfied with available time, training, personal help and the resources available to support inclusive efforts (Cornoldi et al. 1998).

Aside from the researches that address the experiences of inclusion, the studies that examine the relationship of professional training of teachers and their attitudes towards inclusive education are of great importance. The meta–analysis mentioned above (Scruggs and Mastropieri 1996) revealed that although teachers support the general concept of providing help for students with SEN, only one third of the teachers consider themselves to be properly trained to teach such students. In addition, the research that investigated the influence of training on attitudes recorded a greater inclination towards inclusion in teachers who believed themselves to be more professionally competent in the field of special education, regardless of whether the training program was designed to promote inclusive teaching practices (Wilkins and Nietfield 2004). The training of teachers and future teachers significantly increases positive attitudes, willingness to include students with SEN in the class, and knowledge of how to teach students with developmental disabilities (Bender, Vail, and Scott 1995; Walsh et al. 2008). Such training, in addition to providing appropriate knowledge, must provide direct and structured experience with children with SEN in the school environment to develop positive attitudes and readiness to teach such students (Campbell, Gilmore, and Cuskelly 2003; Sprague and Pennell 2000).

However, other studies claim that future teachers, as they progress through their training, change their attitudes and become less supportive of inclusion (Romi and Leyser 2006). A study of attitudes of student teachers in India showed that participants were supportive of the concept of inclusion, but these pro–inclusive attitudes were not based on an understanding of actual facts and practices. The authors believe that those attitudes will evolve after intensive practical experience (Gafoor and Asaraf 2009). Like many experienced teachers, student teachers in Northern Ireland expressed their concerns regarding oversized classes, the availability of resources and a lack of teaching competence. After one year of training, although these Irish student teachers reported professional improvement, many remained concerned (Lambe and Bones 2006).

In addition to the above–mentioned factors, studies also report that teachers with less teaching experience were more often supportive of the inclusion of children with SEN in regular classes (Heflin and Bullock 1999; Marshall, Ralph, and Palmer 2002; Soodak, Podell, and Lehman 1998) as were female teachers (Ahsan, Sharma, and Deppeler 2012; Gyimah, Sugden, and Pearson 2009), those who teach in the lower primary grades (Sharma, Forlin,

and Loreman 2008), and those with higher levels of education (Stoiber, Gettinger, and Goetz 1998).

Local context of the study

Serbia has a long tradition of special education. Until 2000, Serbia belonged to countries with a two–track approach to education (Meijer, Soriano, and Watkins 2003). Serbia had two completely separate educational systems, regular and special education, and the majority of the children with SEN were placed in special schools or special classes with special educators as teachers. The special educators were educated in specialised faculties. After 2000, a pro–inclusive policy was developed, giving rise to several strategic documents: *The Analysis of the Current Situation and Proposals for Reforms of Education for Children with Special Needs* (Serbian Ministry of Education and Sport [SmoEaS] 2003a), *Educational Strategy for Children with SEN* (SmoEaS 2003b), and *The Law on the Prevention of Discrimination against Persons with Disabilities* (RS, "Official Gazette RS" No. 33/06). During this period, inclusive education was still organised in pilot projects with the participation of non–government organisations and corresponding ministries under the patronage of international donors (Radoman, Nano, and Closs 2006).

The Republic of Serbia ratified the Convention on the Rights of the Child in 1990, which contains regulation on the right to education, and The Convention on the rights of persons with disabilities in 2009 (Gajin et al., 2010). The regulations of these Conventions have been included in The Low on the Foundations of the Education System (RS, "Official Gazette RS" No. 72/09). By its adoption inclusive education became not only state policy but also a requirement. In addition to clearly favouring inclusive education, this law provides for adjusting the achievement standards for some students. Additionally, for the first time, teams of educators in regular primary schools gathered for the purpose of inclusive education, supported by individual education programs, teachers' assistants, and personal assistants.

Unfortunately, the practice is still lagging behind the legislation. Although all children with SEN (regardless of the type or severity of disability), whose parents want it, enrol in mainstream schools, the level of service they receive is not always satisfactory. Although "Interdepartmental Commissions", estimating and prescribing additional support on the local level (RS, "Official Gazette RS" No. 76/10), commonly meet the needs of parents, but problems arise in the implementation of these services. The local administration, whose jurisdiction it is, often lacks the resources to fund these services, so they are either absent or occur in an unacceptable form. For example, parents are encouraged to be present as personal assistants, which can have negative effects on the family as a whole (parent, residing with the child at school is usually not employed) and on the child itself (a parent may inadvertently narrow social interaction with peers and limit development of independence of the child). Also, it often happens that the family is the one who funds the work of personal assistants in schools. Teaching assistants are required by law, but rarely employed. When this happens, it is often due to temporary hiring of certified teachers who were unemployed, which is certainly not their life decision and does not contribute to their job satisfaction.

Mainstream schools do not employ special educators, and the role of special schools as resource centres is not yet clearly defined, so children with SEN in mainstream schools often go without this kind of support (sometimes parents engage them to work with their children outside of school). Although the law stipulates that children with SEN can receive support outside the classroom in special cases, this possibility is practically not feasible, because the special classes in mainstream schools were abolished, and other forms of support (e.g. resource rooms) are not provided (RS, "Official Gazette RS" No. 72/09), with the exception of "development groups" in preschool (RS, "Official Gazette RS" No. 18/10).

Teacher training in inclusive education and special education is often short and optional. The teachers have an obligation to commit to professional education programs for a certain number of hours every year, but they do not have to choose programs associated with work in the inclusive classroom. However, anecdotal data indicate (to the author's knowledge serious researches have not yet been conducted) that many parents of children with SEN are not dissatisfied. After decades of segregated education, they perceive the current situation as a temporary phase of the process that will be improved in the future.

Only eight years of schooling are mandatory in Serbia, started at the age of seven. During the first four grades, only one teacher (who graduated from teachers' college) teaches all subjects; thereafter, children are taught by individual subject teachers (every teacher graduates with a specialisation in a particular scientific field but with less pedagogical knowledge than teachers in the lower primary grades). In high schools (three and/or four years), teachers have graduated from institutions that specialise in the corresponding subjects. In preschool education, during the first three years of a child's life, the children are tended by trained nurses, whereas preschool teachers who are educated in a college (or faculty) are engaged for children older than three years.

Vojvodina is an autonomous province in the Republic of Serbia, populated by approximately two million people (Statistical Office of the Republic of Serbia 2011) of several nationalities, including Serbian, Hungarian, Croat, and Romanian. Traditionally, Vojvodina has been considered to be a tolerant environment. Such a multiethnic society encourages inclusion as a desirable and proper model of social development, not simply restricted to educational inclusion oriented towards children with disabilities,

The studies of the attitudes of teachers in Serbia towards inclusive education conducted thus far do not provide clear insight. Most of the teachers (84.4%) hold a supportive attitude towards the idea of students with SEN being included in the system of regular education, but more than half of Serbian teachers (58.5%) believe that the conditions for the inclusion of students with sensory and intellectual disabilities do not yet exist in the present system (Đević 2009). Similarly, there is an attitude of formal acceptance but simultaneous social distance from the children with SEN; teachers also feel that they are not competent to work with SEN students (Stanković–Đorđević 2007). A recent exploratory study revealed that nearly two thirds of teachers in the lower primary grades believe that only children with mild disabilities should be included in regular classes, and only 3.2% of teachers support total inclusion, regardless of the type and level of disability (Kovačević and Maćešić–Petrović 2012). In that study, which was particularly relevant to this work because an identical research tool was applied, teachers in Serbia have expressed uncertainty about the success of the inclusive process, primarily due to lack of support of the experts in the field of special education. Serbian teachers also expressed negative attitudes towards expected outcomes and classroom practices (Kalyva, Gojković, and Tsakiris 2007).

The purpose of the study

The goals of this research are to estimate and compare the attitudes of preschool, primary, secondary, and high school teachers towards inclusive education of students with SEN and to determine the correlation of those attitudes with gender, age, years of teaching experience, education level, formal training in the field of special education, and duration and quality of experience in working with children with SEN.

Hypothesis

Previous studies on teacher's attitudes towards inclusive education predominantly suggest that teachers support the concept of inclusion (Ahsan, Sharma, and Deppeler 2012; Avramidis, Bayliss, and Burden 2000b; Avramidis and Kalyva 2007; Blecker and Boakes 2010; Gyimah, Sugden, and Pearson 2009; Scruggs and Mastropieri 1996). However, the recent review of international research in this field (De Boer, Pijl, and Minnaert 2011), results of previous research in Serbia (Kalyva, Gojkovic, and Tsakiris 2007), as well as the research in neighbouring Bosnia and Herzegovina (Memisevic and Hodzic 2011) report that educators hold neutral, or even slightly negative, attitudes towards inclusive education. Some investigations in developing countries reveal that teachers have clearly negative attitudes towards inclusive education (Agbenyega 2007; Kuyini and Mangope 2011). In accordance with these findings, and taking into account that Serbia has a short tradition of inclusive education, it is expected that the attitudes of teachers in this study will be neutral or even slightly negative.

These findings suggest that the attitudes of educators towards integration become more negative with the increasing age of the children and that educators working with preschool children were significantly more ready to accept integration than teachers of older children (Avramidis and Norwich 2002; Sharma, Forlin, and Loreman 2008). That leads to the expectation that, in this research, preschool teachers would also have the most positive attitudes towards inclusive education, while high school teachers would display the most negative attitudes toward this approach to education.

In the study of gender relations and attitudes of teachers towards inclusive education two types of results are usually found. Some results show no difference between respondents of different gender (e.g. Doulkeridou et al. 2011; Gao and Mager 2011; Gyimah, Sugden, and Pearson 2009; Kajsa, Danermark, and Gill 2010; Kuyini and Mangope 2011; Marshall, Ralph, and Palmer 2002; Todorovic et al. 2011), while other results report more positive attitudes in female participants (Avramidis, Bayliss, and Burden 2000b; Ahsan, Sharma, and Deppeler 2012; Alghazo and Gaad 2004). Given these data and the findings that women prefer volunteer work related to people with disabilities (McConkey et al., 1983, according to Ahlborn, Panek and Jungers, 2008), it can be assumed that female respondents would have more positive attitudes towards inclusive education in this study.

It is believed that in this study, as in some earlier ones (Buysse et al. 1996; Stoiber, Gettinger, and Goetz 1998), a positive influence of educational level of teachers on their attitudes towards inclusive education will be found.

It is often found that teaching experience is also not an important factor in teachers' attitudes towards inclusive education (Batsiou et al. 2008; Gyimah, Sugden, and Pearson 2009; Marshall, Ralph, and Palmer 2002; Kalyva, Gojkovic, and Tsakiris 2007; Van–Reusen, Shoho, and Barker 2001) and that younger teachers and teachers with less working experience hold more positive attitudes regarding inclusion (Heflin and Bullock 1999; Emam and Mohamed 2011; Todorovic et al. 2011). A minority of researchers indicate that more experienced teachers are more supportive of inclusive education (Alghazo and Gaad 2004; Stoiber, Gettinger, and Goetz 1998). It can therefore be assumed that older and more experienced teachers would hold more negative attitudes towards inclusive education.

The majority of the other authors observed the positive influence of formal training education level in the field of inclusive and special education (Avramidis and Kalyva 2007; Batsiou et al. 2008; Campbell, Gilmore, and Cuskelly 2003; Forlin et al. 2009; Koutrouba, Vamvakari, and Theodoropoulos 2008; Romi and Leyser 2006; Van–Reusen, Shoho, and Barker 2001) and this observation presents the outcome expectations of this study as well.

Experience in working with children with disabilities is usually associated with more positive teachers' opinions on inclusion (Avramidis, Bayliss, and Burden 2000a; Avramidis and Kalyva 2007; Ben–Yehuda, Leyser, and Last 2010; Forlin et al. 2009; Gilmore,

Campbell, and Cuskelly 2003; Gyimah, Sugden, and Pearson 2009; Kalyva, Gojkovic, and Tsakiris 2007; Kurniawati et al. 2012; Parasuram 2006; Van–Reusen, Shoho, and Barker 2001). Some researchers have focused their attention, not only on the length of the experience, but also on its quality – positive experience is accompanied with better attitudes towards inclusive education (Batsiou et al. 2008; Bennett and Deluca 1997). These findings suggest that this study will also show that respondents with more experience in working with children with disabilities, as well as those with positive experience, will have a more positive attitude towards inclusive education.

Method

Participants

The research sample consisted of 322 preschool, primary, secondary and high school teachers, selected by a random number generator. The response rate was around 80% for all four groups of participants. The sample was designed to be uniform regarding teaching level: 26.09% were preschool teachers, 25.47% were classroom teachers in primary schools, 23.60% were subject teachers in secondary schools, and 24.84% were high school teachers.

The majority of the sample were females (88.20%), which reflects the gender structure of teachers in Serbia, especially in preschool institutions and the lower grades in primary schools.

The ages of the participants ranged from 22 to 63 years, with a mean age of approximately 41 years (M = 40.70; SD = 9.21). The majority of the sample was the group from 41 to 50 years of age (35.85%), followed by the group from 31–40 years (32.70%); there were significantly smaller numbers of participants older than 51 (16.04%) and younger than 30 (15.41%).

Regarding the participants' education, only 3 high school graduates participated (0.93%). Only 4.97% of the sample held a master's degree, whereas 18.32% of the participants held a college degree. The term *college* is reserved for the purpose of gathering and presenting data because vocational schools are new in the Serbian educational system, introduced by the *Law on Higher Education* in 2005 (Republic of Serbia 2005). The majority of the sample consists of teachers with a bachelor's degree (75.78%).

The majority of the teachers had more than 15 years of work experience (45.03%); only 3.42%, the smallest group in the sample, had less than a year of experience. The percentages of participants in the groups of 1–5, 5–10, and 10–15 years of work experience were well unified and ranged from 15.84% to 18.32%.

The participants without (28.26%) or with negligible (35.71%) formal training in the field of special education dominated the sample. Nearly one–third of the sample reported moderate training (30.75%), whereas only 5.28% had considerable training in special education.

The majority of the participants had never worked in an inclusive class/group (67.08%), 4.66% began their inclusive experience during the year of this study, and 7.46% of the participants had one year or less experience in their careers. Of the group with more than one year of experience in an inclusive class/group, 14.91% had less than five years of experience, 2.17% had 5–10 years of experience, 1.24% had 10–15 years of experience, and 2.48% had 15 or more years of inclusive experience.

Research tools

The *My Thinking About Inclusion (MTAI)* Scale has been used to gauge the attitudes of teachers towards inclusive education of children with disabilities (Stoiber, Gettinger, and Goetz 1998). It comprises 28 items and is divided into 3 components.

The *Core Perspectives* scale (12 items) addresses individual beliefs regarding what is ethically correct and whether inclusion represents the best educational practice for all children without regard to type of disability or whether a child is disabled. Items include 'Students with special needs have the right to be educated in the same classroom as normally developing students' and 'It is feasible to teach children with average abilities and exceptional needs in the same classroom'.

The second part, *Expected Outcomes of Inclusion* (11 items), is related to the participants' expectations of inclusive education. Items include 'The challenge of a regular education classroom promotes academic growth among children with exceptional educational needs' and 'The presence of children with exceptional educational needs promotes acceptance of individual differences in typically developing students'. This section is based on the assumption that expectations are related to behaviour.

The third part, *Classroom Practices* (5 items), examines the influence of inclusion on the work dynamics of a classroom/group and on teaching practices. Items include 'The behaviours of students with special needs require significantly more teacher–directed attention than those of typically developing children' and 'A good approach to managing inclusive classrooms is to have a special education teacher be responsible for instructing the children with special needs'.

The participants assessed their agreement with the statements using a five–point Likert scale (1 = Strongly Accept, 2 = Agree, 3 = Undecided/Neutral, 4 = Disagree, and 5 = Strongly Reject). In addition, for 14 of the 28 items, reverse coding was applied. The responses were subsequently totalled to generate a composite score for each domain with lower scores indicating positive attitudes. To examine the validity of the translation, the standard approach of back translation was used.

In this study, the values of α coefficient, defining the reliability of the MTAI as an entire scale and some of the subscales, are positioned in the range characterised by good reliability (for the entire MTAI scale $\alpha = .880$, for Core Perspectives $\alpha = .743$, and for Expected Outcomes $\alpha = .837$). Only the subscale *Classroom Practices* had significantly lower reliability ($\alpha = .614$). However, the relatively low reliability of this subscale may also be attributed to the small number of items. All coefficients of reliability obtained in this study approximate those reported by Stoiber, Gettinger and Goetz (1998): .915, .804, .850 and .638, respectively.

Data on the most important characteristics of the participants were collected (Kunstmann 2003). The participants were requested to provide information on gender, age, level of education, years of service, teaching grade, duration and quality of experience in an inclusive classroom and formal training in the field of special education.

Data analysis

Statistical analysis was based upon descriptive statistics, and obtained results were compared using one–way ANOVA.

Results

Considering the five–point Likert scale as well as the scoring method (lower score – more positive attitude towards inclusion), attitudes of teachers and educators in terms of values and ethical justification of inclusive education are neutral (mean = 3.06 for the *Core*

Perspectives domain). In the domain of *Expected Outcomes of inclusion*, the respondents indicated a more positive, but still a dominantly neutral position (mean = 2.74), while they were the most cautious regarding the influence of this type of education on the methods and work dynamics in the classroom (mean = 4.07 for the *Classroom Practices* domain) (see Table 1).

All differences between particular domains of the MTAI scale are significant with the level $p < .01$ (see Table 2).

Teaching grade

The results of the one–way ANOVA show significant differences among participants regarding inclusion in the domains *Core Perspectives* (F[3,306] = 5.69, $p = .001$) and *Classroom Practices* (F[3,317] = 7.65, $p = .000$). Although the significance for the Levene's test is .014 for the scale *Expected Outcomes of Inclusion,* the F value was observed to be significant for both Welsh and Brown–Forsythe statistics (F[3,172.081] = 8.407; $p = .000$ and F[3,292.317] = 7.671; $p = .000$, respectively). Therefore, we have performed *post hoc* analyses to determine which groups of participants differ in their attitudes towards inclusive education.

Table 1. MTAI scale regarding grade level.[a]

MTAI scale	Working place	Mean	SD	Min.	Max.
Core perspectives	Teacher/preschool teacher	2.96	0.54	1.58	4.25
	Classroom teacher/ primary school	3.12	0.61	1.83	4.58
	Subject teacher/ secondary school	3.28	0.65	1.58	4.92
	High school teacher	2.91	0.62	1.50	4.58
	Total	3.06	0.62	1.50	4.92
Expected outcomes	Teacher/preschool teacher	2.51	0.60	1.00	3.82
	Classroom teacher/ primary school	2.80	0.65	1.27	4.64
	Subject teacher/ secondary school	3.02	0.72	1.73	4.64
	High school teacher	2.64	0.83	1.00	4.36
	Total	2.74	0.73	1.00	4.64
Classroom practices	Teacher/preschool teacher	4.12	0.72	1.60	5.00
	Classroom teacher/ primary school	4.24	0.65	1.60	5.00
	Subject teacher/ secondary school	4.17	0.64	1.60	5.00
	High school teacher	3.77	0.69	1.40	5.00
	Total	4.07	0.70	1.40	5.00

[a] Scores, ranging from 1 to 5, represent the degree of agreement with each of the statements listed in the subscales. Presented scores represent the average rating of the sample as a whole, as well as certain categories of respondents for each subscale. Lower values indicate a more positive attitude towards certain aspects of inclusive education.

Table 2. The independent-samples *t*-test in comparing the achievement of all participants in the domains of the MTAI scale.

MTAI scale	t	df	Sig.
Core perspectives / Expected outcomes	11.13	310	.00
Core perspectives / Classroom practices	-25.27	311	.00
Expected outcomes / Classroom practices	-28.83	315	.00

The results of Scheffe's post–hoc test show that in the *Core Perspectives* domain, the secondary subject area teachers hold more negative attitudes than both preschool teachers ($p < .05$) and high school teachers ($p < .01$). High school teachers, according to the Scheffe post–hoc test, hold more positive attitudes compared with the other three groups of participants in the domain of *Classroom Practices* ($p < .05$). The Games–Howell post–hoc test showed more negative attitudes of secondary subject area teachers than both preschool teachers ($p = .000$) and high school teachers ($p = .014$) on the *Expected Outcomes of Inclusion* Scale. Preschool teachers have more positive expectations of inclusion when compared with the classroom teachers ($p = .021$).

The majority of the differences observed in this research are moderate, with the values of η^2 in the range of .052 – .072.

Gender

Participants did not differ significantly by gender regarding their attitudes towards inclusion. The exception was in the area of classroom practices when children with disabilities were included: male participants had more favourable attitudes (F [1,319] = 4.639, $p < .05$). The effect size is low ($\eta^2 = .014$) in the domain *Classroom Practices*.

Level of education

In the final analysis of this research, only two groups of participants were investigated: educators with college degree ($n = 59$) and those with at least a bachelor's degree ($n = 260$). Sixteen participants with master of science degrees were combined with the bachelor's degree group. The participants with only a high school degree were excluded from the sample ($n = 3$) in the analysis of variance. No significant difference between these two groups was found regarding particular domains: *Core Perspectives* (F[1,102.951] = 0.712, $p = .401$); *Expected Outcomes of Inclusion* (F[1,313] = 0.011, $p = .915$); and *Classroom Practices* (F[1,316] = 0.110, $p = .740$).

Teaching experience

To study the influence of teaching experience, the sample was divided into four groups: up to 5 years, 5–10 years, 10–15 years, and more than 15 years of teaching experience. Note also that 11 educators with less than one year of teaching experience were combined with the first group of participants.

Significant differences among the groups of educators were not observed. These groups do not differ significantly in their attitudes towards inclusive education, in any of the studied domains of the MTAI scale (*Core Perspectives* – F[3,309] = 0.49, $p = .690$; *Expected Outcomes of Inclusion* – F[3,313] = 0.74, $p = .529$; *Classroom Practices* – F[3,317] = 2.15, $p = .094$).

Formal training in special education

Only 17 participants reported "a lot of training", and this group was combined with the participants who described the formal training acquired during regular education (such as faculty, seminars, and workshops) as "moderate" (n = 99). Therefore, the final analysis of the sample consisted of 3 groups of participants: those without training, those who reported little training, and those who were moderately or very well trained in the field of special education.

The results of the one–way ANOVA show no significant differences among groups with different levels of training regarding inclusive education (*Core Perspectives* – $F[2,310] = 1.145$, $p = .320$; *Expected Outcomes of Inclusion* – $F[2,314] = 0.817$, $p = .443$; *Classroom Practices* – $F[2,318] = 0.882$, $p = .415$).

Amount of experience in inclusive settings

Because of the small number of participants with teaching experience in an inclusive classroom longer than 5 years (19 participants), those participants were combined with the group reporting 1–5 years of teaching experience. A second group was formed from the participants currently employed in inclusive classrooms for less than a year and those who had been employed in an inclusive classroom in the past. The third group, consisting of more than two thirds of the sample, comprised the educators with no working experience in inclusive classrooms or groups at the time of this research.

Statistical analysis (one–way ANOVA) revealed significant differences only in the domain of Expected Outcomes of the MTAI scale ($F[2,314] = 3.846$, $p = .022$).

The analysis performed by the Scheffe *post–hoc* test shows that those participants with less than a year of experience in inclusive work have significantly higher expectations of inclusion outcomes ($M = 2.50$, SD = 0.79) than the teachers without inclusive experience ($M = 2.81$, SD = 0.69) ($p = .048$). No significant differences were registered on this scale between other groups of the sample ($p > .05$).

The quality of experience in an inclusive setting

Among 106 teachers and preschool teachers who reported having experience in an inclusive environment, 18.87% reported a positive experience, 49.06% a partially positive experience, and 24.53% of the participants assessed their experience as partially negative. A completely negative experience was identified by 7.55% participants.

Because only a small number of examined educators with experience in an inclusive classroom or group described their experience as extremely negative (n = 8), this group was combined with educators with experience that was predominantly labelled as negative. Therefore, for further analysis, three groups of educators were established: those who described their experience as negative, those who described their experience as somewhat positive, and those who described their experience as extremely positive.

As expected, the results of the one–way ANOVA showed that educators with different qualities of experience in inclusive groups held different attitudes towards this type of education (*Core Perspectives* – $F[2,100] = 12.384$, $p = .000$; *Expected Outcomes of Inclusion* – $F[2,102] = 10.879$, $p = .000$). Note also that in the case of the *Classroom Practices* scale, the hypothesis of homogeneity of variance was violated; therefore, the Welsh and Brown–Forsythe statistics were applied. Applying the Welsh test confirmed the statistically significant difference: ($F[2,44.936] = 3.487$, $p = .039$) as opposed to the Brown–Forsythe statistics: $F(2,42.284) = 3.118$, $p = .055$). Considering that the Welch test is more powerful and more conservative than the Brown–Forsythe test, post–hoc analysis was also performed. The results of the Games–Howell test did not statistically establish a significant difference on this scale between groups formed from the sample.

The effect size for the differences between group means was high for both, *Core Perspectives* and *Expected Outcomes of Inclusion* scales ($\eta^2 = 0.198$ and 0.175, respectively).

The Scheffe post–hoc test determined that the participants with somewhat positive and extremely positive experiences do not differ significantly. Conversely, the educators with extremely positive experiences with inclusion have significantly better attitudes towards

inclusive education than those with negative experiences, both in the *Core Perspectives* and *Expected Outcomes of Inclusion* domains ($p = .000$). The same type of difference between participants with somewhat positive and negative attitudes towards inclusion was observed ($p < .01$).

Discussion

Generally, teachers have slightly positive expectations when it comes to outcomes of inclusive education. However, in terms of the impact of inclusive education on classroom practices in relation to understanding of inclusion as an adequate approach to working with children with disabilities, they mostly have neutral attitudes.

Considering the long entrenched tradition of special education for children with disabilities in Serbia, these results are not surprising. Many teachers may believe that the needs of these children are adequately met in special schools and classes and may anticipate possible negative effects of their being in regular classes (for example, the feeling of failure, frustration, rejection by their typically developing peers, behavioural problems in the classroom, and a lack of time and resources) (Ben–Yehuda, Leyser, and Last 2010; Freeman and Alkin 2000; Zion and Jenvey 2006). Therefore, the majority of educators do not consider segregated education to be unethical.

In the same vein, many educators do not believe they have necessary special skills to adequately teach SEN students, which raises questions regarding the adequacy of teacher training in the methods and techniques necessary to effectively work in inclusive classes (cooperative learning, co–teaching, peer tutoring, etc.) (Friend et al. 2010; Mitchell 2008; Stenhoff and Lignugaris/Kraft 2007). These data raise doubts regarding the success of this program designed to prepare and strengthen teachers for inclusive education. Wilkins and Nietfield (2004) were faced with a similar dilemma. They found that teachers who did not participate in programmes that focused on promoting inclusion–based classrooms were more prone to create a classroom climate of inclusion than the teachers who attended such programs. However, it must be emphasised that we are focusing on neutral *(Core Perspectives)* and moderately negative *(Classroom Practices)* attitudes and that the majority of surveyed teachers had no experience in inclusive education (nearly 70% of the studied sample). Therefore, their future experience will most likely define whether those attitudes develop in the direction of higher or lower acceptance of inclusion. Such indecision on the part of teachers regarding inclusive education may also be explained by their somewhat positive expectations of inclusive education despite the caution expressed in the other two domains of the MTAI scale.

The most positive attitudes towards inclusive education in this study were expressed by preschool and high school teachers. Preschool teachers had higher expectations of inclusion outcomes than did primary school teachers. In the case of subject area teachers, these features are accompanied by significantly stronger assurance that inclusion represents the best practice in education for all children. However, regarding the teaching process in inclusive classes, even preschool teachers hold a negative attitude not significantly different from that of primary school teachers'. At the same time, this domain is the only one in which the attitudes of high school teachers are significantly more positive than those of preschool teachers, even though the high school teachers express the most negative attitudes on this part of the scale.

The teachers from primary school held more positive attitudes than teachers from secondary school regarding the outcomes of inclusion, which is the only domain in which they did not have more negative attitudes than high school teachers. The clearest difference was observed between the high school teachers and the teachers from the higher grades of

secondary school; high school teachers held more positive attitudes in all the domains of the MTAI scale.

These results are not unexpected. Preschool teachers address social and developmental aspects more than academic skills. These teachers are not expected to assess and rank the children according to acquired knowledge, there is no national testing at this age, and the degree of success at the end of the preschool educational cycle does not influence the subsequent choice of primary school. In addition, preschool teachers have a more flexibly structured school day and are not restricted by time limits and program realisation.

However, two studies conducted in Serbia revealed that preschool teachers accept inclusion theoretically, but demonstrate a lack of readiness to become personally involved in the process. The ability to teach children with disabilities partially depends on the enthusiasm and personal dedication of their teachers (Stanisavljević–Petrović and Stančić 2010; Stanković–Đorđević 2007).

It is more difficult to explain why the trend of holding a more negative attitude towards inclusion dissipates with the end of secondary school. The lessons in high schools are quite demanding, and educators specialise in particular scientific fields rather than in formal pedagogy. Nevertheless, high school teachers have opinions similar to those of preschool teachers and are even more positive regarding inclusive education. It should also be noted that the law that promotes and requires inclusive education in Serbia is relatively new (RS, 'Official Gazette RS' No. 72/09); thus, the children with SEN are mostly still in primary schools. The high school teachers most likely encounter students with mild disabilities who are "easy" to work with and whose problems have been resolved at previous levels of education; this situation obviously affects the teachers' attitudes. However, because of the reality of inclusive education in the few past years, educators in primary schools must now successfully include children with more severe forms of disabilities in regular education classes but without enough support for either teachers or students. This process consequently leads to increased caution towards inclusive education.

Classroom Practices is the only domain in which the gender of the participants is relevant, with male subjects having more positive attitudes. A possible explanation for this phenomenon may be that the female contingent of the sample (275 females) is disproportionately larger than the male contingent (38 males). However, similar although rare results may be observed in the literature (Forlin and Sin 2010). Batsiou et al. (2008) also report that Cyprian male teachers are more supportive of inclusion than their female colleagues possibly because male teachers are more self–confident.

Teaching experience is also not an important factor in teachers' attitudes towards inclusive education. It is possible that two groups of factors contribute to unifying the attitudes of more and less experienced educators. On the one hand, more experienced teachers, who have more professional knowledge and teaching skills, are more self–confident but also more prone to a higher level of professional saturation and less ready to accept change. On the other hand, less experienced teachers may be more prone to change but also less confident in their own professional skills. Therefore, it is possible that neither group is willing to give up on familiar, traditional, non–inclusive education. Kalyva, Gojkovic, and Tsakiris (2007) observed similar results; teachers with less teaching experience were not able to benefit from appropriate training because of the recent establishment of inclusive education in Serbian universities. In addition, the quality and duration of training in the field of special education may be questionable; relevant investigations have still not been conducted on this subject.

A rare study suggests that appropriate training of high school teachers contributes to their feeling of competence (Jablan, Jolić–Marjanović, and Grbović, 2011), which may

explain the results that suggest the lack of influence of educational level and formal training in the field of inclusive education.

Although rarely, there are exceptions in other studies as well, where a significant difference between trained and untrained teachers (Gyimah, Sugden, and Pearson 2009; Todorovic et al. 2011) or between teachers of higher and lower qualifications (Kuyini and Mangope, 2011) was not found. Even with advances in training, some preschool teachers have reported increasing anxiety and have become less supportive of inclusion (Romi and Leyser 2006). Similarly, Forlin et al. (2009) report somewhat confusing results: the teachers with matriculation or diplomas hold more negative attitudes towards inclusive education than pre–school teachers with undergraduate degrees who are completing a postgraduate degree. In addition, preschool teachers with postgraduate degrees hold significantly more negative attitudes that do not change after training. Kuyini and Mangope (2011) reported similar, significantly more positive attitudes towards inclusion in teachers trained in the field of special/inclusive education in Ghana, but not in Botswana. Indeed, the level of education and formal training in special education and work experience influence attitudes towards inclusion, but these factors must be considered in the wider context (the tradition of education in a particular country, how the society relates to the persons with disabilities, etc.). In such situations, the results of research conducted in Serbia are interesting: inadequate curricula, dysfunctional professional training, and the negative attitudes of university teachers towards an inclusive approach to education are listed as basic obstacles in training teachers for inclusive education (Macura–Milovanović, Gera, and Kovačević 2011).

A significant relationship between the experience of working with children with disabilities and teachers' attitudes towards inclusion was not found in this study. Because of similar environmental conditions, two studies conducted in Serbia, dealing with this issue, can be of interest. One of the studies showed that professional experience in working with children with disabilities do not have any significant effect on the formation and change of attitudes of mainstream school teachers towards inclusive education (Rajović and Jovanović 2010).

In another Serbian study, the teachers who participated in programs on inclusive education were more willing to accept students with disabilities than the teachers who did not participate in such programs (Đević 2009). It should be noted that participation in inclusive education projects is mainly voluntary; thus, it could be assumed that those teachers initially held more positive attitudes towards inclusive education. However, one of the less expected outcomes of the research presented here is that the differences in attitudes of teachers with experience in inclusive settings are observed only in the domain of *Expected Outcomes* on the MTAI scale. The teachers with less than one year of experience in inclusive teaching have significantly higher expectations of inclusion than those who have never worked in a class that included SEN students. The expectations of participants with the longest experience in inclusive teaching do not differ significantly from those without this type of experience or from the participants with less than a year of inclusive experience. Having less than a year's experience in inclusive education may have a positive influence on teachers' attitudes, but prolonged experience in this field also affects their opinions.

Obtained results should be assessed considering that teachers with long experience in inclusive teaching acquired their experience when the inclusive approach to teaching was not officially or legally supported; such teachers could only rely on their own motivation, self–teaching and the extremely limited resources available. This circumstance could also diminish their enthusiasm regarding the teaching of students with different abilities. Conversely, teachers with less than a year of inclusive experience have most likely experienced institutional support, making their attitudes more positive. However, it should be emphasised that this advantage is observed only in one domain of the MTAI scale, whereas

the attitudes towards the right to inclusive education and teaching in an inclusive classroom are uniform in all groups examined in this study. This finding confirms the idea that contact with students with disabilities is not enough; such contact must be followed by unambiguous support and the acquisition of appropriate competencies (Scruggs and Mastropieri 1996; Van-Reusen, Shoho, and Barker 2001; Avramidis and Norwich 2002). Accordingly, the results of this study show that a more positive experience is followed by positive attitudes towards inclusive education. Hence, professional contact with children with disabilities will affect the improvement of attitudes towards inclusion only if the conditions are provided for teachers to experience this kind of involvement as pleasant.

Conclusion

This research demonstrates the predominantly neutral attitude of Serbian teachers towards inclusive education. Because inclusive education is just beginning in Serbia, it is yet to be seen whether future experiences will determine teachers' opinions as more positive or more negative. The further training of educators is necessary, especially in practical methods that are applicable in inclusive classrooms. In addition, raising teachers' self–confidence may be a result of their becoming more competent in teaching in an inclusive environment.

In addition to the significance of the workplace, in which preschool and high school teachers reported significantly more positive opinions on inclusive education, the quality of experience in the inclusive classroom was also observed to be a significant factor in this study. Perhaps the creators of educational policy will implement the necessary supportive measures to make children and teachers feel comfortable in an inclusive environment. The result revealed that less work experience in an inclusive environment has a positive influence on educators and their expectations of inclusive education outcomes as opposed to teachers with prolonged experience in inclusive classes.

Recommendations for the Future Research

Since inclusive education in Serbia is at the very beginning of the full implementation, it is important to monitor, from a practical and theoretical point of view, whether teachers' attitudes towards this approach to education evolve, in which direction and which factors are of importance for these changes. This suggests the need for further research, particularly longitudinal.

This study suggests that the positivity of experience in inclusive work is an important factor when it comes to attitudes towards inclusive education. The question that awaits an answer is: what are the factors that contribute to a positive experience of some teachers and to a negative one of others. In this regard it would be useful to examine the relationship between attitudes towards inclusive education and the type and severity of disability of children with whom teachers had direct teaching experience. The level, type and quality of support are yet another factor that may affect the quality of experience of Vojvodina teachers in inclusive environments, and its impact should be examined.

Given the fact that in our study length of teaching experience, level of education of the respondents, as well as the sheer amount of training did not show as a relevant factor in explaining differences in attitudes toward inclusive education, and the attitudes toward teaching in an inclusive classroom showed to be the most negative, it would be important to examine how the quality and type of training of teachers influenced the attitudes towards this approach to education.

It would be interesting to examine the reasons why male teachers had significantly more positive attitudes towards teaching in an inclusive classroom than female teachers,

especially in the context of "feminisation of education" process in the teaching profession, in which women are becoming dominant.

Last but not least, teachers represent only one of the groups whose attitudes are important for the success of inclusive education. It would be valuable to examine attitudes of parents of children with SEN towards inclusive education, attitudes of children with typical development, as well as the children with SEN, so that these data could be used for the correction of existing practices.

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