

Regular teachers' representations of school inclusion in Macedonia: a multivariate study

Viviana Langher*, Andrea Caputo*, Maria Elisabetta Ricci*, Goran Ajdinski**

Abstract

This paper aims at exploring regular teachers' cultural models of school inclusion, in terms of shared representations regarding inclusive education and relationships with children with disabilities and special educators within inclusive settings. An ad hoc questionnaire was administered to a convenience sample of 80 Macedonian regular teachers recruited from three schools placed in Skopje. Multivariate statistical techniques were performed in order to detect both some groupings of participants sharing the same response patterns (cluster analysis) and the main factors (multiple correspondence analysis) accounting for the overall variability. Some supplementary variables (age, gender, years of tenure and reference school) were also used to test their association with clusters. Results show four different groupings of regular teachers who respectively express: a vision of inclusion limited to peer social relationships and avoidant attitude towards students with disability (23.7%), a low perceived usefulness of inclusion and substantial disengagement towards it (38.2%), a more realistic conception of inclusion and demand for support provided by special educators (11.8%), a self-referential tendency in managing inclusion without detecting any resource in students with disabilities or within the school context (26.3%). No supplementary variable was significantly associated with detected clusters. Three latent factors were identified which explain the overall variability and deal with regular teachers' view about: school inclusion, children with disabilities and impact of inclusion on the teaching quality. A multidimensional context-oriented approach in studying representations of school inclusion is sustained in order to overcome fixed and universal attitudinal constructs unable to account for cultural variability.

Keywords: regular teachers; representations; school inclusion; multivariate statistical techniques.

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Special schools' advocates (Kauffman & Hallahan, 2005) claim that the learning environment needs to be highly differentiated, with all of the staff concentrated on the individual needs of child, differentiated by kind of deficit. Such a setting would be reasonably achievable only in special schools, because all these demands cannot be met in regular schools. It is questionable whether special schools approach satisfies educational and social needs of children with special education needs (SEN). Full inclusion advocates (Lipsky & Gartner, 1996; Stainback & Stainback, 1996) assert that special education in special school is a model enrooted in the culture of protection, which considers the person with disability as needing tutoring, not a socially active person, and envisages scarce possibility of his/her growth and development in terms of social autonomy, especially for mentally impaired persons. Didactic exercises provided in special schools are seen as routines with no concrete aim, severed from the real stimulations and demands a real environment would provide. In inclusive approach, children with and without disabilities, share the same environment and are in relationship together; sometimes they achieve the same educational aims, sometimes they work together to achieve different academic aims. The inclusive approach, hence, put the school organization and management in a more fluctuant pattern: less routines, more flexibility fulfilling the necessity to accommodate to a very composite set of demands due to the heterogeneity of the individuals participating in the class.

Full inclusion requires active, facilitating teaching strategies to promote development among pupils with SEN, and in absence of such strategies they can experience rejection, loneliness and poor academic results (Gibb, Tunbridge, Chua, & Frederickson, 2007; Margalit & Al-Yagon, 2002; Nota, Ferrari, & Soresi, 2005). Given the complexity of the processes encompassed, the support of a trained teacher is essential in successfully accomplishing this didactic task. Furthermore, teachers' attitude towards school inclusion is considered crucial when it comes to the point to implement inclusive education in schools, whose effectiveness is based, among others, on teachers' skills and motivation to support the inclusive shift.

Regular teachers' attitudes towards inclusive education have been investigated so far (Dukmak, 2013), showing that regular teachers can be unsupportive (Minke, Bear, Deemer, & Griffin, 1996), skeptical, worried about possible negative effects on the ordinary didactics (Florian, 2012), ambivalent towards both inclusive practices and children with disabilities (Zoniou-Sidri & Vlachou, 2006), or favorable (Villa, Thousand, Meyers, & Navin, 1996). Some variables seem to be crucial, such as an appropriate training in special needs, the availability of supporting professionals, the work load, the amount of pupils in the class (Avramidis, Byliss, & Burden, 2000; Opdal, Wormenaes, & Habayeb, 2001; The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000).

Special education in Macedonia

According to the State Statistical Office of the Republic of Macedonia (2013) in school year 2012-2013, there are forty-four special primary schools in Macedonia. These schools are attended by about 900 students, who represent 0.5% of the whole school population in the referred year. Students with disabilities in regular schools are not reported in the mentioned publication, so it is impossible to calculate the exact incidence of pupils with disabilities in regular schools, apart the official statistic published in 2004 (Republic of Macedonia State Statistical Office, 2004), which counted about 500 students educated in special classes in regular schools. It is possible that this 0.5% (up to 1%) of students with disabilities detected by the State Statistical Office represents an underestimation of pupils with disabilities, considering the European average which is estimated around 5%. It could indicate that a certain amount of children with disabilities do not attend any school, nor special neither regular. The number of secondary special schools is considerably lower than the primary schools: only four for the whole Macedonian territory, attended by less than 300 students.

In Macedonia there is a common and consolidated opinion that inclusion of children with disabilities in mainstream schools depends on the type of disability (Alghazo & Gaad, 2004; Qaraqish, 2008): there are children with disabilities who can fit the regular school system and others that cannot (Zoniou-Sidri & Vlachou, 2006). The latter are considered to be protected in special schools which can assure them the best developmental conditions.

Ajdinski (2004) underlines the necessity for cooperation with families so that they can accept to enroll their children with disabilities in mainstream schools, and to prepare them to share the same environment, the

same class, with children without disabilities. He also concludes that there is no alternative to special schools for children with severe disabilities, hearing and visual severe impairments, or multi-handicaps. The Author (2004) also affirms that on one side there are not sufficient social, cultural, economic supports to include children with disabilities in regular schools; on the other side, special schools can be used as resource centers for research, treatment, rehabilitation, education of children with disabilities; as well as centers to train professional to be employed in work with persons with disabilities.

An intense academic, scientific, political discussion, which went on in the last decade, gave birth to the first law reform towards the systematization of inclusive education. In 2008, the national law n. 103, article 6 (Law on primary education, Official Gazette of the Republic of Macedonia 103/2008) stated the right for the parents of children with disabilities to enroll their children in regular schools, when the conditions permit it. Inclusive education is not mandatory, special schools still exist, but it seems that parents of children with disabilities demand inclusive education more than it used to happen in previous years. On the other side, not each regular school in the territory is ready to enroll children with disabilities, in terms of didactic supports, overcoming of architectural barriers, and, crucially, presence of special educators in the regular schools to support regular teachers. The coexistence of two opposite tendencies (one towards inclusive education, the other one towards the conservation of the status quo, i.e. regular and special education) is still affecting local policies for education, as well as opinions, attitudes, collusive representations, local culture in the schools and other environments. It is quite controversial whether each child with disability can be included in regular schools, or whether it depends on the severity of disability, obviously inclusion to be provided only for slight forms of disability.

In the current context, regular school teachers seem to play a crucial role: the success of inclusive education often depends on them, considering that special teachers are not, currently, mandatorily enrolled in regular schools.

Aim of the study

In order to better understand the function of regular teachers in inclusive processes, based on the relationship between individual and context, it is important to comprehend their cultural models (Carli & Paniccia, 2003), in terms of collusive dynamics, i.e. shared emotional and symbolic components, through which they represent school inclusion. In this perspective, the construct of “collusion” refers to the emotional sharing of affective symbolizations of objects within a context and represents the link between individual models and cultural systems of social coexistence. By social coexistence we mean the symbolic component of human relationships based on shared rules which allows people to exchange and live together. Indeed, cultural models do not specifically deal with common sense, in terms of cognitive evaluations, beliefs or stereotypes; rather they include affective meanings which people attribute to reality or social events, and symbolic processes which regulate interpersonal relationships. In this sense, cultural models shape social representations because affective symbolizations that people experience in daily interaction and communication consent to enhance consensus and stability in representations among individuals participating within the same context. Therefore, this paper aims to explore the cultural models which organize regular teachers’ representations about school inclusion.

Method

Participants

The research study adopts a convenience sample composed of 80 Macedonian regular teachers who completed the questionnaire on a voluntary basis. Participant recruitment was achieved from three schools placed in Skopje. The majority of the participants were female (84.8%), their mean age was 42.10 years (SD = 8.99) and their years of tenure ranged from 1 to 35 (Mean=17.8; SD=8.83).

Materials

In order to investigate regular teachers' attitudes and collusive settings towards inclusion, we set an ad hoc questionnaire exploring some topics concerning inclusive education, possible problems and resources, their subjective experience of inclusive exposure, expectations on relationships with children with disabilities, with special educators, within inclusive settings.

This questionnaire was constructed based on both the local scientific literature, as above reported, and some interviews with stakeholders (academic teachers, regular school managers, school teachers). In detail, these interviews allowed the detection of specific topics to be further explored, which are summarized as follows:

- Inclusive education can be considered as a right both for both parents and children with disability, but with several limitations;
- Good results due to inclusive education would be possible only with children with mild disabilities, but also with children having severe pathologies not affecting their cognitive development (for example deaf children, or blind children);
- Children without disabilities are regarded as a possible resource, meaning that they could show solidarity and prosocial behaviors towards their classmates with disabilities;
- Some critical points are perceived with regard to school inclusion which refer to: the absence of special educators in inclusive schools (who are not mandatory by law); the scarce financial support to schools for inclusive education; the lack of adequate training for regular teachers to teach children with disabilities in inclusive classes; the low approval of parents of students without disabilities about the coexistence of pupils with and without disabilities in the same classes.

The ad hoc questionnaire used in the present study examines a complex set of representational dimensions regarding the topics detected, able to identify the specific cultural and symbolic components of participants in the research. This methodology favors the study of relationship between the participants' responses, through the use of multivariate statistical techniques, in order to formulate hypotheses about the meaning of collusive representations in terms of symbolic and relational processes affecting regular teachers' attitudes towards school inclusion.

The questionnaire is made up of two sections. The first one aims at taking some subjects' defining characteristics. In more detail, four characteristics are categorized and used as supplementary variables because of their potential relevance for the present study: gender, age, years of tenure and school where teachers worked. This last variable is considered only to verify whether the participants' responses are influenced by their reference school thus revealing a potential bias in the study results. The second part of the questionnaire explores the regular teachers' representations about the process of school inclusion, its perceived usefulness and potential problems, with regard to both its implementation in Macedonia and current experiences carried out abroad. It includes a total of 58 items requiring a response on a four-point Likert scale (strongly disagree, disagree, agree, strongly agree) which refer to several aspects concerning regular teachers' representations about: regular and special education, school inclusion, students with disabilities and the role of regular teachers, students without disabilities, special educators and families in the inclusive process.

Data analysis procedures

The SPSS 17.0 package was used for statistical analysis. Distributional properties of the items are inspected to examine the normality of data. The first stage of data analysis is the multiple correspondence analysis (MCA), which is a factor analysis procedure carried out on qualitative variables, on both nominal and ordinal scale, which allows the summarization of the variability of responses by identifying latent factors. The large number of factors taken into account is determined by both the percentage of variance explained by each of them and the work of clinical interpretation (Ercolani, Areni, & Mannetti, 1998). This is followed by cluster analysis (CA): Groups of participants are identified with the character of maximum uniformity among participants themselves and maximum heterogeneity with respect to other groups. Thus, each cluster is characterized by all modes of response that occur in most participants in that cluster. In this regard, SPSS provides the attribute importance charts which inform the interpretation of the cluster (Norusis, 2004), based

on chi-square value that compares the observed distribution of values of a variable within a cluster to the overall distribution of values. Large values of the statistic for a cluster indicate that the distribution of the variable in the cluster differs from the overall distribution. The critical value line that is drawn provides some notion of how dissimilar each cluster is from the average. If the absolute value of the statistic for a cluster is greater than the critical value, the variable is probably important in distinguishing that cluster from the others (statistically significant at 95%). At first we proceeded with the interpretation of each cluster and its association with the specific supplementary variables taken in the research, then with the interpretation of factorial axes from the analysis of the specific positions of clusters within the factorial plane.

Results

The study participants showed the following characteristics assumed as supplementary variables (Table 1). At first, 7 items out of the total of 58 were eliminated because their skewness and kurtosis didn't fall in the range from +2 to -2, indicated by statistical convention for data which are normally distributed. Then MCA was performed on the remaining 51 variables. The first three factors were identified which explained 80% of the total variance (Table 2). This allowed the identification of the dimensions at the base of data structure, namely a reduced number of "latent" dimensions summarizing the interdependence relations of the original variables. According to this solution, the CA has revealed an optimum allocation of four groups. This is a technique that, in relation to factors, allows the segmentation of the sample into clusters including study participants who shared more similar characteristics to each other than to those in other clusters.

Table 1. *Supplementary Variables of the Study Participants (n=80)*

Gender		
<i>Male</i>		<i>Female</i>
15.2%		84.8%
Age class		
≤ 35	<i>36 - 45</i>	> 45
29.1%	35.4%	35.4%
Years of tenure		
≤ 10	<i>11 - 20</i>	> 20
26.3%	32.9%	40.8%
School*		
<i>A</i>	<i>B</i>	<i>C</i>
33.7%	35%	31.3%

* The name of the three schools where teachers worked were anonymized, respectively as school A, B, C.

Table 2. *Variance Accounted for the First Three Factors*

Component	Cronbach's Alpha	Total (Eigenvalue)	Variance Accounted For	
			Inertia	% of Variance
1	0.922	8.489	0.369	36.9
2	0.888	6.622	0.288	28.8
3	0.728	3.297	0.143	14.3
Total		18.408	0.800	80
Mean	.833	6.136	0.267	26.7

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Note. Mean Cronbach's Alpha is based on the mean Eigenvalue.

In Table 3 the discriminating variables (item description and related response value) which contributed to the formation of each cluster are shown: 12 for cluster 1, 4 for cluster 2, 13 for cluster 3 and 14 for cluster 4.

Table 3. *Variables contributing to the formation of each cluster (item description and related response value)*

Item	Cluster 1	Cluster 2	Cluster 3	Cluster 4
If school inclusion will be practiced in our Country, its effectiveness will be determined by both special educators and regular teachers	–	–	–	Strongly disagree
As regular teachers we are not well prepared to promote socialization within a class including students with disabilities	Agree	–	Strongly agree	Strongly disagree
School inclusion is an opportunity for students without disabilities to learn living with diversity	Agree	–	Strongly disagree	Strongly agree
School inclusion is possible with every kind of disability	Agree	–	–	Strongly agree
The main problem in the field of school inclusion is that students without disabilities may avoid to interact with their classmates with disabilities	Strongly disagree	–	Disagree	–
In our Country the financial resources for school inclusion are too scarce	Agree	–	Disagree	Strongly agree
Our Country is now ready to promote school inclusion of all students with disabilities	–	–	Strongly agree	–
School inclusion of students with disabilities is a way to improve their quality of life	–	–	Strongly agree	–
Students with disabilities have potentialities which can be developed only by living with students without disabilities	–	Disagree	Strongly agree	Strongly disagree
Students with disabilities have enough social abilities to enjoy in interacting with students without disabilities	Strongly disagree	–	–	–
The regular school can be a stimulating environment both for students with and without disabilities	Disagree	–	–	Strongly agree
Special educators will have a crucial role for school inclusion effectiveness	–	–	–	Strongly disagree
If school inclusion will be practiced in our Country, family participation in the educational planning for students with disabilities will be useful for school inclusion effectiveness	–	–	Strongly agree	Strongly disagree
The most important aim of school inclusion is the socialization between students with and without disabilities	–	Agree	Strongly disagree	–
The cooperation between regular teachers and special educators in the same class will be very hard	Strongly disagree	–	–	Strongly agree
If I will work hard for school inclusion, I certainly will overcome the challenges regarding school inclusion	–	Disagree	Strongly disagree	–

The experiences of school inclusion carried out abroad are useful only for those Countries, not for ours: the situation here is too different	Agree	–	–	–
I would like to improve my knowledge about the educational systems abroad for students with disabilities, especially visiting institutions and schools	Disagree	–	–	Strongly agree
If school inclusion will be practiced in our Country, the collaboration between regular and special teachers will be necessary	–	–	–	Strongly agree
If school inclusion will be practiced in our Country, the teaching quality will be worse	Agree	Disagree	Strongly agree	–
Only one special educator per school will be enough	–	–	Strongly disagree	Strongly agree
Working in an inclusive school would make me feel insecure	Agree	–	Strongly agree	Strongly disagree

With regard to the association between clusters and supplementary variables, no significant correlation was detected. The clusters detected are interpreted based on the discriminating variables characterizing them, as follows.

Cluster 1

This cluster comprises 23.7% of the study participants. Regular teachers' general view of school inclusion is quite pessimistic: they think that the regular school can't be a stimulating environment for children with disabilities, as well as for children without disabilities, and that if school inclusion was practiced the quality of teaching would get worse. School inclusion is thus represented as problematic and quite disturbing the ordinary teaching-learning process in regular classes. Indeed, they perceive the impracticality of school inclusion in their own country, also because of the lack of financial resources and the specific difficulties of their reference context compared to other countries. In addition, they don't feel as well prepared for promoting socialization among students and have no demand for improving their own knowledge about other educational systems practicing school inclusion. In this sense, they tend to perceive school inclusion as something they don't succeed in managing and which may threaten their sense of professional security. However, school inclusion is regarded as opportunity for students without disabilities to learn living with diversity because they are open to helpfully interact with their classmates with disabilities, despite the latter are considered as mostly unable to enjoy in the social interactions with them. According to this framework, the regular teachers' thought about both the potentialities of school inclusion with every kind of disability and their proneness to collaborate with special educators in the same class has to be interpreted cautiously. It is possible that regular teachers tend to delegate the problem of school inclusion to special educators or to students without disabilities, because they are perceived as more able to socially interact with children with disabilities.

Cluster 2

This cluster comprises 38.2% of the study participants. Despite regular teachers consider the socialization between students with and without disabilities as the main aim of school inclusion, they don't see any concrete usefulness or advantage deriving from their coexistence in the same class. Indeed, students with disabilities are perceived as not having potentialities which can be developed by social interactions with their classmates. In this sense, school inclusion seems to relate only to an idealistic conception which can't be actually carried out and is viewed as quite ineffective, thus suggesting a deep distance between theory and practice. In this regard, regular teachers feel as scarcely involved and interested in working for school inclusion, because their potential efforts are not considered relevant for changing the critical problems related to it. However, if school inclusion was practiced in the country it would not affect the quality of

teaching, probably because school inclusion is considered as a useless matter regular teachers have not to take care of, thus revealing their substantial disengagement.

Cluster 3

This cluster includes only 11.8% of the study participants. Regular teachers tend to recognize the importance of school inclusion for improving the quality of life of students with disabilities. They think that financial resources for school inclusion are enough and that their country is ready to promote school inclusion of all students with disabilities, thus suggesting their optimistic view about the usefulness and practicality of inclusive processes. However, as regular teachers they don't consider themselves as well prepared to promote socialization within a class including students with disabilities. Indeed, working in an inclusive school would make them feel insecure because they perceive themselves as helplessness and unable to overcome the challenges regarding school inclusion alone. This, in turn, may negatively affect the quality of teaching. In this sense, they attribute a significant role to the contribution of special educators and family participation in the educational planning for students with disabilities. They think that students without disability can easily interact with their classmates with disabilities and that the latter have potentialities which can be developed only by living with them. However, school inclusion is not mainly viewed by regular teachers as aimed at promoting socialization among students or as opportunity for students without disabilities to learn living with diversity. This could suggest a slightly radical vision of school inclusion according to which regular teachers tend to feel greater responsible and concerned for their educational function. In other words, they may realize the need for other resources (i.e. special educators, families) which could sustain them in the inclusive process, thus showing a realistic conception of school inclusion which is not limited to peer relationships and exchanges.

Cluster 4

This cluster includes 26.3% of the study participants. Despite financial resources for school inclusion in the country are considered as too scarce, the regular school is seen as a stimulating environment both for children with and without disabilities and school inclusion is conceived as possible with every kind of disability. Regular teachers are interested in improving their knowledge about the educational systems abroad for students with disabilities, especially visiting institutions and schools. In addition, they perceive themselves as well prepared to promote socialization within a class including students with disabilities and as perfectly self-confident for working in an inclusive school. However, while school inclusion is considered as opportunity for students without disabilities to learn living with diversity, students with disabilities are perceived as unable to develop their potentialities by social interactions with their classmates. In addition, despite regular teachers recognize the cooperation with special educators as necessary, they think that it is difficult to achieve. Indeed, the coexistence of two different professional roles in the same class is regarded as quite problematic: regular teachers think they can do without special educators, regarded as not having a crucial role for school inclusion effectiveness. In this regard, family participation in the educational planning for students with disabilities is seen as useless too. In other words, regular teachers tend to show a self-referential and all-powerful tendency in managing the inclusive process, detecting no resources in students with disabilities or within the school context.

Factors

Below, Figure 1 shows the distribution of clusters within the factorial space, represented graphically on a two-dimensional plane defined by the first two factors and, with respect to which, the third factor is "virtually" perpendicular. Student's t-test (Bonferroni adjustment applied) is used to indicate the specific relationship between clusters and factors, respectively on the positive and negative factorial poles (Table 4).

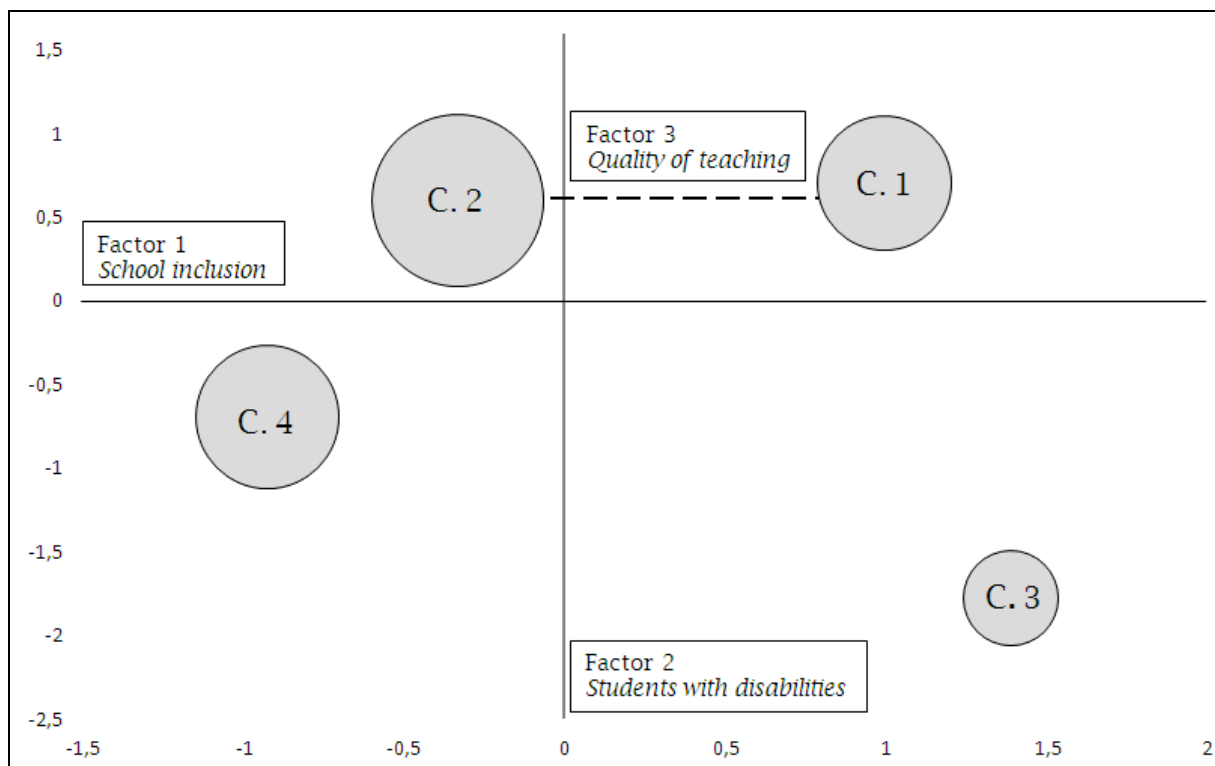


Figure 1. *The clusters within the factorial space*

Table 4. *Relationship between clusters and factors (Student's t-test - Bonferroni adjustment applied)*

	Factor 1	Factor 2	Factor 3
Cluster 1	9.37	5.67	-3
Cluster 2	-4.17	8.14	4.72
Cluster 3	8.18	-6.33	-
Cluster 4	-6.41	-7.80	-

Note. Only associations which are statistically significant at 95% are reported.

The first factor accounts for 36.9% of the total variance and is characterized by clusters 1 and 3 on the positive pole and clusters 2 and 4 on the negative one. It refers to a different vision of regular teachers about the *potential implementation of school inclusion in their professional context*: on the one hand, regular teachers seem to propose greater exploration of school inclusion as a complex process which requires some resources, changes, solutions; on the other hand, they seem to ignore the potential problems that school inclusion may lead in their usual professional experience. *Exploring and ignoring thus represent two different strategies for favoring the adaptation of the inclusive education to the local school context*. Indeed, on the positive pole, both cluster 1 and 3 highlight some difficulties concerning the practicality of school inclusion with specific regard to some aspects of regular teachers' perception: the lack of preparation for promoting socialization within a class including students with disabilities, their sense of inadequacy in working in an inclusive school and the consequent potential negative impact of this process on the quality of usual teaching. In other words, regular teachers recognize that school inclusion is a challenge which can't be taken as granted but requires some necessary adaptations: in cluster 1 they tend to detect resources for inclusive processes in students who can provide their classmates with disabilities with social interactions; in

cluster 3, instead, they look for greater support of special educators and families for the educational planning for students with disabilities. On the contrary, on the negative pole, school inclusion seems to be scarcely explored with regard to its potential development in regular school and is mostly dealt with as a taken for granted issue. In this regard, we can highlight two different conceptions proposed by regular teachers: in cluster 2 they consider school inclusion as a useless matter they have not to take care of, while in cluster 4 they tend to show a self-referential tendency in managing the inclusive process. Despite these positions are opposite, both regular teachers' disengagement and omnipotence can be viewed as related to the same ignoring dynamic, because they express the difficulty of confronting oneself with the complexity of disability and inclusion. In both situations, regular teachers are not able to detect some human or organizational resources which can be activated in the school context. School inclusion does not seem to require any change: it is not their concern or it depends exclusively on them.

The second factor accounts for 28.8% of the total variance and is associated with clusters 1 and 2 on the positive pole and with clusters 3 and 4 on the negative one. This factor seems to relate to regular teachers' two opposite *representations regarding students with disabilities*: on the one hand, students with disabilities are perceived as mostly problematic and disturbing thus contributing to teachers' neglecting attitude towards them; on the other hand, they are seen as damaged and well-cared-for thus leading to greater attention and solicitousness. In this sense, *neglect and solicitousness represent two specific relational dynamics enacted by regular teachers, which may differently affect inclusive processes*. Indeed, on the positive pole, both cluster 1 and 2 show regular teachers' general tendency to conceive the regular school as an environment which is not able to adequately stimulate both children with and without disabilities, mostly expressing the substantial useless and impracticality of school inclusion. In more detail, cluster 1 highlights a pessimistic attitude toward inclusive education which is perceived as too complex to manage, thus leading to delegate the problem of socially including students with disabilities to peer relationships. In cluster 2, instead, the relevance of school inclusion is affirmed only in principle, however students with disabilities are not perceived by regular teachers as their concern and are quite ignored in the teaching-learning process. In this sense, both avoidance and dismissing can be seen as complementary attitudes which pertain to the same devaluing symbolization of students with disabilities in terms of individuals which can represent a potential problem or a danger to reject. On the contrary, on the positive pole, clusters 3 and 4 show a representation of students with disabilities as needing for care and a consequent relational dynamic oriented to solicitously take on responsibility of them. In cluster 3, regular teachers tend to worry about and feel greater responsible for their educational function and look at students with disabilities as individuals whose quality of life can be improved and who can be included by means of a shared educational planning. In cluster 4 regular teachers reveal a total inclination to deal with students with disabilities, despite it seems to be mostly based on omnipotent care for disability and on their excessively self-referential function in inclusive education. Despite these differences, both clusters suggest the conception of disability as a weakness to take care of and protect (cluster 3) or on which to prove their powerful professional skills (cluster 4). Independently from the specific potentialities and social abilities attributed to students with disabilities, this conception leads to benevolence, involving and openness towards them.

Then, the third factor accounts for 14.3% of variance and is associated with clusters 1 and 2, respectively on the negative and the positive pole. This factor relates to *different conceptions of inclusive education and its impact on the quality of teaching*. As above mentioned, both these clusters suggest a relational dynamics concerning teachers' neglecting attitude towards students with disabilities: avoidance (cluster 1) and dismissing (cluster 2). However, avoidance is regarded as defensive effort to delegate to others the problems of disability and inclusive education, while dismissing refers to a general indifference towards inclusive education which is not perceived as a task which has to be accomplished by regular teachers. Consistently with this, in cluster 1 regular teachers show greater concern about the negative consequences that including students with disabilities in class may have for their classmates' learning; instead, in cluster 2 the issue of school inclusion is quite ignored and no change is thus foreseen with regard to the quality of teaching. In other words, *two different strategies related to inclusive education can be detected: accommodation and assimilation as ways to include diversity in teaching-learning process*. On the one hand, inclusive education is perceived as a challenge because it requires a necessary accommodation of usual teaching for matching the needs of all students; on the other hand, inclusive education is not differentiated from regular education but is assimilated to ordinary teaching, probably because socialization is considered as the only possible aim of school inclusion.

Discussion

This study seems to confirm that regular teachers' attitudes towards school inclusion show several configurations and can't be taken as a whole. Indeed, different patterns emerge which range from exclusion or avoidance to control or taking responsibility with regard to the implementation of inclusive process. This result is thus consistent with the idea that regular teachers hold a number of restrictive as well as conflicting beliefs towards disability and educational inclusion (Dukmak, 2013). On the one hand, regular teachers think that inclusion can reduce marginalization and stigmatization of students with disabilities but, on the other hand, they tend to conceive segregation of students with disabilities as a means to provide a secure and protective shelter to them (Zoniou-Sidri & Vlachou, 2006). Despite teachers are more and more positive or optimistic about inclusion of students with disabilities (Avramidis et al., 2000), some resistances to include children with special needs in regular classes are detected in the present study. For instance, as suggested by previous studies, regular teachers believe that inclusion interferes with the effective education of other students (Florian, 2012) or feel scarcely confident, confused and worried about the actual implementation of inclusion (Avramidis et al., 2000; Bradshaw & Mundia, 2006). This is mainly due to their concern with the lack of adequate teacher preparation and administrative support and the uncertainty of academic and social gains through adopting inclusive education (Whitaker, 2004). In this sense, many teachers do not fully agree and believe that inclusion works. According to UNESCO survey (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 1985), teachers who favor the education of all children in ordinary classes were from the countries have laws requiring this (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000). This could be particularly true for Macedonia because of its recent and complex history of inclusive education.

With regard to factors influencing attitudes of regular teachers towards inclusion, the study results are quite similar to what was highlighted by Avramidis and Norwich (2002) who summarized three groups of variables: teacher-related, child-related and educational environment-related variables. Indeed, our study confirms that the main emerging factors, in terms of cultural models, deal with teachers' views about three variables: school inclusion, children with disabilities and impact of inclusion on the teaching quality. However, we have to note that these variables are conceived as independent uncorrelated dimensions (because they refer to orthogonal factors). This suggests the complexity of teachers' attitudes towards inclusion which refer to a multitude of aspects, which can't be simplified. In other words, what regular teachers think about school inclusion doesn't necessarily affects their conceptions of students with disabilities and the expected value of school inclusion in educational terms. In this regard, our findings show that despite teachers agree with the potential implementation of school inclusion in their work context, they may think that inclusion is not something they have to take care of and delegate it to peer relationships. On the contrary, some teachers can be solicitous towards students with disabilities but they may think that these students have no potentialities to develop or have to be controlled in order to preserve regular education with other students. The investigation of the relationship between regular teachers' attitudes towards inclusion and the supplementary variables adopted in the present study found no significant correlations. This is consistent with other studies which revealed that age (Chhabra, Srivastava, & Srivastava, 2010), gender (Chhabra et al., 2010; Cornoldi, Terreni, Scruggs, & Mastropieri, 1998; Peng, 2000; Wan & Huang, 2005; Wei & Yuen, 2000) and years of tenure (Fakolade & Adeniyi, 2009) had no influence on teachers' attitudes towards inclusion. In addition, despite school factors are generally regarded as relevant in affecting teachers' opinions about inclusive education (Avramidis & Norwich, 2002; Opdal et al., 2001), our findings suggest that teachers' attitudes are not influenced by their reference school thus no revealing a potential bias in the study results. In other words, regular teachers' representations of inclusive process seem to refer to wide and shared attitudes not depending on the specific school context; however, further research would be needed in order to disentangle school-related variables and test their influence. Another limitation of this study deals with the lack of consideration with regard to students' types of disability which can also impact teachers' attitudes towards inclusion. Despite our main research aim was to explore regular teachers' attitudes towards inclusion and disability in general, it would be useful to account this dimension in future investigation. Indeed, research debate is quite controversial in this regard. For instance, Alghazo and Gaad (2004) found that teachers were more accepting students with physical disability for inclusion than students with other disabilities such as specific learning difficulties, visual impairments, hearing impairment, behavioral difficulties and intellectual disability. On the contrary, Qaraqish (2008) highlighted that teachers

showed positive attitudes towards including students with learning problems in the regular classroom while they showed negative attitudes towards the inclusion of students with physical and behavioral problems in classroom.

The added-value of our study consists in exploring representations of inclusive process directly from teachers' responses, based on the multidimensionality of their attitudes towards inclusions and disability. We think that one of the main critical issues of current research refers to the unidimensionality of teachers' view about school inclusion, as a rigid construct pertaining favorable or adverse attitudes. This may lead to the candid hypothesis that favorable attitudes certainly predict the actual implementation of inclusive practices. However, we know that research findings are quite opposite and controversial in this regard (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000): indeed, some studies reported that regular classroom teachers do not hold supportive attitudes towards educational inclusion (Minke et al., 1996; Reiter, Schanin, & Tirosh, 1998) while others (Villa et al., 1996; Ward, Center, & Bochner, 1994) stated that regular classroom teachers hold more favorable attitudes. As suggested by Bradshaw and colleagues (Bradshaw & Mundia, 2006), from the methodological perspective, respondents of attitude survey tend to express politically correct and socially desirable answers. As a consequence, teachers may express acceptance but not be willing to make the adaptations and modifications necessary for successful inclusion (Dukmak, 2013).

The biggest challenge for education systems around the world is responding to learner diversity (Ainscow, 2007; Florian, 2008); indeed, inclusive education is increasingly accepted as a unified approach to education for all (Florian, 2012). However, school inclusion can't be conceived as a spontaneous process which can be triggered only by people of good will. It is thus necessary to provide support interventions that make regular teachers self-aware about the complexity of inclusive process and more engaged in responding to learner diversity. Further, each country is a special case, and the findings based on one or more countries may not be directly applicable worldwide (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2000). In this sense, it would be useful to adopt a multidimensional approach in studying school inclusive process, which detects a multitude of specific symbolic and representational dimensions within a contextualized perspective, rather than using universal and fixed attitudinal constructs unable to account for cultural variability. The present study can thus support the implementation of inclusive practices which better fit the cultural specificities of the context.

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