

**ATTITUDES OF GREEK PHYSICAL EDUCATION TEACHERS
TOWARD INCLUSION OF STUDENTS WITH DISABILITIES**

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The purpose of this study was to examine the attitudes of Greek physical education teachers toward the inclusion of students with disabilities in regular education settings and to compare the results with the findings of similar studies. The sample consisted of 93 participants, all physical education teachers working at different schools of Athens. Each subject completed the Teacher Integration Attitudes Questionnaire (Sideridis and Chandler, 1997), which assesses scores for four factors: skills, benefits, acceptance and support. The results of the study showed that the attitudes of physical education teachers toward the inclusion of students with disabilities in their regular classes are related to the level of knowledge that the teachers believe they have for the special needs conditions; in addition, they doubt that inclusion could be workable, due to the lack of appropriate support services. In the light of the findings, the concept of inclusion was further analysed.

The last decades the idea of inclusion has become the most important topic in the field of special education. Inclusion means educating students with disabilities in a regular educational setting along with non-disabled peers (Rizzo, Davis and Toussaint, 1994). The inclusion movement has been reinforced by many who believe that separate education is not an equal education and that the setting in which a program is implemented significantly influences the program provided for a child (Winnick, 2000). The movement toward inclusion is compatible with the equally strong concept of *least restrictive environment*, a continuum of alternative environments that is used for the education of an individual with disabilities, ranging from segregated formats to fully integrated placements without modifications that reflect the nature and severity of the disability and the ability of the individual to perform in related sports (Winnick, 1987; Stein and Paciorek, 1994).

The benefits of inclusion are significant. Inclusion improves the social development of children with and without disabilities who are educated in inclusive classrooms, in terms of getting along with others, interacting, seeking assistance and lending assistance, moving from one context to another and asking questions (Chesley and Calaluce, 1997; Lipsky and Gartner, 1997).

Numerous mainstream physical education models have been created to help students with disabilities gain the social competence and other skills to function independently in regular physical education. According to Sherrill (1998), exceptions to this practice may be the population with severe to profound retardation and/or multiple disabilities that make success in the regular classroom very difficult or impossible. Exceptions also occur when parents insist on adapted physical education services in separate settings that afford opportunity for individualized instruction to meet special needs.

Inclusion programs typically assume the ability of the physical educator to use developmentally appropriate practices (Auxter, Pyfer and Huettig, 2001) and the availability of support services accompanying students with disabilities into the regular physical education classes (Sherrill, 1998; Houston-Wilson, Dunn, van der Mars and MacCubbin, 1997; Sideridis and Chandler, 1997; Block and Zeman, 1996; Block, 1994). According to Shanker (1995), support services should include aides who are trained to handle the special needs of students, school personnel, peer grouping, special equipment, various instructional adaptations, and any other services that would allow for effective teaching of students with disabilities in regular classrooms.

However, physical education teachers have mentioned barriers to inclusion of students with disabilities in general physical education. Some of these are the inadequate professional preparation at the university level, the lack of information regarding learners with disabilities in kinesiology courses such as biomechanics and exercise physiology and the lack of teaching and coaching method courses and special training about safety aspects (Sherrill, 1998). Many teachers have negative attitudes toward students with disabilities because they do not know how to teach them (Clark, French and Henderson, 1986). In addition, the huge class size and the lack of equipment and support personnel create problems as well (Auxter *et al.*, 2001). Research indicates that inclusion does not promote positive attitudes, unless specific interaction experiences are planned and the environment is carefully structured (Jones, 1984; Horne, 1985).

Another frequent problem in inclusive education is that students without disability often interact too much with other students without disability in class and not too much with their assigned partners (Sherrill, 1998). Peer acceptance is not easily achieved when students perceived as different (Fishbein, 1996). According to Sherrill (1998), teachers must find ways for these students to be socially accepted, despite their differences from the others. In this regard, Sherrill, Heikinaro-Johansson and Slininger (1994) described a model designed to change attitudes and create equal-status relationships between children with and without disabilities, identifying the need for community-wide preparation, especially home-school-community, collaborative planning and negotiation. According to Theodorakis, Bagiatis and Goudas (1995), the physical education teacher must learn how to manage time and resources as well as how to negotiate for more time and resources. This is a tremendously important skill for regular physical educators who are accommodating students with severe disabilities in their classes.

LaMaster, Gall, Kinchin and Siedentop (1998), interviewed six elementary physical education specialists to obtain their views of inclusion practices and perceived outcomes. The results indicated that the schools provided little support. The teachers reported that they were inadequately prepared to teach effectively with inclusive classes and they had strong feelings of guilt and inadequacy as they continued to try to be effective for all children.

Kozub and Porretta (1998) examined the coaches' attitudes about including adolescents with disabilities in interscholastic programs. Results indicated that coaches tend to show agreement

with this participation, although felt inadequately trained to address the needs of individuals with disabilities in integrated interscholastic sports settings.

Yasutake and Lerner (1996) reported that 41,9 percent of general educators believe that inclusion is not workable, regardless of the level of support provided; only 4,6 percent of the educators responded positively about the academic results of inclusion.

A comprehensive survey that has been widely used is the Physical Educator's Attitude Toward Teaching Individuals with Disabilities (PEATID) instrument (Folsom-Meek and Rizzo, 2002; Kowalski and Rizzo, 1996) that measures three factors: (a) outcomes of teaching students with disabilities in regular classes, (b) effects on student learning, and (c) need for more academic preparation to teach students with disabilities. Results showed that the perceived competence of pre-service students in teaching individuals with disabilities was the best predictor of favorable attitudes, followed by the number of infusion-based courses and coursework in adapted physical education.

Rizzo and Vispoel (1992) used the Physical Educators' Attitudes Toward Teaching the Handicapped (PEATH) instrument, to determine the influence of two physical education courses on undergraduate physical educators' attitudes toward teaching students with disabilities. The results indicated significantly improved attitudes only for the physical educators attending the adapted physical education course. In addition, Rizzo and Kirkendall (1995) assessed the association between demographic attributes of undergraduate physical educators and their attitudes toward teaching students with disabilities. The results showed that perceived competence and academic preparation of physical educators regarding individuals with disabilities were the best predictors of favorable attitudes, followed by their age and year of studies.

Sideridis and Chandler (1997) developed the Teacher Integration Attitudes Questionnaire (TIAQ) that yields scores for four factors: skills, benefits, acceptance and support. The perceived skills and competencies of the teachers in effectively teaching and managing probable challenging behaviors of the students with disabilities in regular classes influence the realization of inclusion. The benefits from inclusion for both students with disabilities and their typical peers are the basic aim of the whole inclusion movement. Social acceptance is the approval of students with disabilities by typical students as perceived by the teachers and teacher's willingness to accommodate students with disabilities in their classroom. Teacher support is the availability of adequate funds, materials, and supportive personnel toward teaching students with disabilities. This survey was designed to extend the assessment provided by the PEATH by including two new categories (those with orthopaedic impairments and multiple disabilities) that would evaluate the status of inclusion for students with disabilities who were educated in regular education settings as perceived by their music and physical education teachers. The results were encouraging but also suggest the need for additional research.

At present, the idea of inclusive education is gaining ground in many parts of the world. In the United States, Canada, England and other countries, there are laws that promote inclusive programs both in general and in physical education. Due to the fact that physical education teachers continue to play a critical role in the lives of children and youth (Auxter *et al.*, 2001), their attitudes toward the inclusion of students with disabilities in regular classes is significant and needs to be further examined (Sideridis and Chandler, 1997). Useful conclusions could also

be drawn with the comparison of physical educators' attitudes toward inclusion from different countries.

The purpose of this study was to examine the attitudes of Greek physical education teachers toward the inclusion of students with disabilities in regular education settings with the use of the Teacher Integration Attitudes Questionnaire (Sideridis and Chandler, 1997) and to compare the results with the findings of similar studies. In the light of the findings, the concept of inclusion - which is still at a phase of an early development in Greece- was further analysed.

Method

The 93 participants (56 males, 37 females) of the survey were all physical education teachers working at different schools of Athens. The mean age of the participants was 37 years ranging from 31 to 43 years of age. All subjects held a bachelor's degree in physical education. Fifty-two (52) teachers of this sample were currently working in public schools and forty-one (41) were working in private schools.

Each teacher completed the Teacher Integration Attitudes Questionnaire (Sideridis and Chandler, 1997) comprised from 12 statements that assess scores for the factors of skills, benefits, acceptance and support. For each attitudinal item, five categories of children were included: children with orthopaedic impairments, multiple disabilities, mental retardation, behavioral disorders, and learning disabilities. The researchers gave verbal instructions prior to the completion of the questionnaire and they were present during the whole process to provide any additional information required by the teachers. The participants responded on a 4-point Likert-type scale, anchored by strongly agree (1 point) and strongly disagree (4 points) for each item. A neutral response was not included in an effort to elicit the teacher's responses only regarding agreement and disagreement with the statements. Instead of this, an N/A (not applicable) category was used (Table 1).

Statistical analysis

Statistical analysis included the use of the Statistical Package of Social Sciences (SPSS 10.0). Cronbach's (1951) co-efficient alpha was used in order to determine internal consistency of the questionnaire. A t-test for independent samples was used for the analysis regarding gender and school type. The level of statistical significance was set at $p < .05$.

Results

The results of this study indicate that most physical education teachers of this sample believe that they do not demonstrate the necessary skills for inclusion. An examination of the responses to the 1st item of the questionnaire showed that 60.2% of the physical educators believe that they do not have the skills to cope with the instructional needs of children with disabilities in regular classes. Interestingly, only 41% of the above percentage of teachers has positive attitudes toward inclusion according to their responses given on items 2 and 3. It seems that the physical educators' willingness to include students with disabilities in their regular classes is strictly related to the knowledge that the teachers believe they have for the special needs conditions. Indeed, the 39.8% of the teachers who believe that they do demonstrate the necessary knowledge they also demonstrate positive attitudes toward the inclusion of disabled students at a much higher percentage (81.2%).

The above finding is in agreement with Clark, French and Henderson (1986) who stated that many teachers have negative attitudes toward the inclusion of students with disabilities because they do not know how to teach them, mainly due to inadequate professional preparation at the university level also mentioned by LaMaster *et al.* (1998), Kozub and Porretta (1998), Sherrill (1998), Kowalski and Rizzo (1996), Rizzo and Kirkendall (1995), and Clark *et al.* (1986).

Table 1. The Teacher Integration Attitudes Questionnaire (Sideridis & Chandler, 1997).

1. I feel that I have the knowledge to cope with the instructional needs of children with disabilities.						
Orthopedic impairments (OH)						
Agree	1	2	3	4	Disagree	N/A
Multiple disabilities (MH)						
Agree	1	2	3	4	Disagree	N/A
Mental retardation (MR)						
Agree	1	2	3	4	Disagree	N/A
Behavioral disorders (BD)						
Agree	1	2	3	4	Disagree	N/A
Learning disabilities (LD)						
Agree	1	2	3	4	Disagree	N/A
Other. Please specify: _____						
Agree	1	2	3	4	Disagree	N/A
2. I feel that the children with disabilities will benefit from the interaction supplies by placement into a regular classroom.						
3. I feel that typical children will benefit from the integration of children with disabilities into a regular classroom.						
4. I feel that children with disabilities are socially accepted by their typical peers.						
5. I feel that I am able to remediate the learning benefits of children with disabilities.						
6. I feel that I am able to manage the behavior of children with disabilities.						
7. I like having children with disabilities in my classroom.						
8. I feel that children with disabilities encounter considerable humiliation from their typical peers in the regular classroom.						
9. I feel that adequate instructional materials are available to me for teaching children with disabilities.						
10. I feel that adequate support services such as reading teachers, speech therapists, itinerant learning disability teachers, school psychologists, diagnostic specialists, and nurse personnel are readily available to me.						
11. I feel that I have sufficient budget to obtain resource materials for planning and working with children with disabilities.						
12. I am willing to attend additional workshops to broaden my knowledge about education of children with disabilities.						

However, the results were encouraging in terms of the teachers' willingness (82.8%) of this sample to attend additional workshops to broaden their knowledge about education of children with disabilities (item 12).

An examination of the scores from the Teacher Integration Attitudes Questionnaire shows high internal consistency of the four factors: skills, benefits, acceptance and support. The rate of Cronbach's alpha was rated between .64 (for *acceptance*) and .89 (for *skills*). (Table 2).

Table 2. Internal consistency of the factors

Factors	Cronbach's α
<i>Skills</i>	.8924
Benefits	.8818
Acceptance	.6399
Support	.7789

Between male and female physical education teachers there are statistically significant differences regarding their attitudes on the factors of *benefits* and *support* (Table 3).

Table 3. Gender Differences

Factors	Gender	N	Mean	SD	t	df	p
<i>Benefits</i>	male	46	22.98	6.65	-2.588	75	.006
	female	31	26.87	6.20	-2.624	67.541	
Support	male	53	9.58	2.29	-1.670	82	.040
	female	31	10.39	1.80	-1.777	74.920	

More specifically, female educators expressed more positive attitudes toward the benefits that both children with and without disabilities can have in their classes compared to male educators ($p = .006$). Furthermore, female teachers believe that they have the availability in support services in comparison with male teachers ($p = .040$). The more positive attitudes of female teachers concerning *benefits* and *support* compared to male teachers, is in agreement with Downs and Williams (1994). According to Downs and Williams (1994), women were more likely to express a positive attitude toward teaching individuals with disabilities. This is easily explained by societal expectations of women as nurturers and caregivers.

Table 4. School Type Differences

Factors	School type	N	Mean	SD	t	df	p
Support	Public	47	10.57	1.98	3.488	84	.001
	Private	39	9.05	2.06	3.474	79.686	

Significant differences on the factor of *support* were also observed between the physical education teachers who work in public schools and those who work in private schools and took part in the present survey ($p = .001$) (Table 4 above). Teachers in private schools believed that they have the appropriate support services for inclusive programs in comparison with public school teachers. This finding is in agreement with the study of LaMaster *et al.* (1998), which also verified the little support provided by public schools. It seems that the support services of private schools are more adequate and better financing of public schools is needed in order to improve their services. According to Horne (1985) and Jones (1984), inclusion without the appropriate support services is not workable and does not promote positive attitudes, unless the environment is carefully structured.

Conclusions

The present survey was an attempt to explore the tendency of Greek physical education teachers toward the inclusion of students with disabilities in regular classes and to make further recommendations for the improvement of inclusion in Greece. The results of this study indicate that most physical education teachers of this sample believe that they don't have the skills to cope with the needs of students with disabilities in their regular classes and their willingness to promote inclusion to these students depends on their perceived level of knowledge.

The results were encouraging in terms of teachers' willingness to broaden their knowledge about education for students with disabilities. The future development of appropriate support services especially in the public schools along with the more adequate preparation of the physical education teachers are necessary issues that need to be addressed in order to bridge the gap between the theory of inclusion and its application in Greece.

The findings of this study agree with the findings of similar studies mentioned. It seems that the inclusion movement faces common problems related to inadequate professional preparation and lack of support services in other countries as well. Given that the implementation of inclusion in several countries is based mostly on values and least on survey, future research with larger samples is needed to generalize the results for the future of inclusive programs (MacCallum, Roznowski and Necowitz, 1992).

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