THE EFFECT OF THE IMPLEMENTATION OF THE "PARALYMPIC SCHOOL – DAY" PROGRAM ON THE ATTITUDES OF PRIMARY SCHOOL CHILDREN TOWARDS THE INCLUSION OF CHILDREN WITH DISABILITIES IN PHYSICAL EDUCATION

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Abstract

Greece was the first country (among six European partners) where the "Paralympic School - Day" program was implemented. The purpose of this study was to investigate the effect of this program on the attitudes of 5th and 6th grade students, in Greece. Two groups of children were tested. The children who attended inclusive schools (n=69) and children who attended non-inclusive schools (n= 178) received an one day program, aiming in creating awareness and understanding about people with disabilities. All children answered the CAIPE-R (Block, 1995) questionnaire, which was modified to meet cultural differences in sports (basketball instead of baseball). A 2X2 analysis of variance was used to examine differences in inclusive and non-inclusive schools in the pre and post tests. Results indicated significant differences (p<.05) between groups of students from inclusive and non-inclusive schools. However, these differences were shown only for general attitudes about disabilities and not on specific sports related questions. In conclusion, multifarious curricula might improve general attitudes of children from non-inclusive schools and it seems that more specialized curricula are needed to improve general attitudes of children from inclusive schools and sport-specific attitudes of all children.

Introduction
Inclusion of students with disabilities is one of the major school reform movements of this century in many countries around the world (Zollers et al., 1999). Policies of inclusion are regarded as a major requirement for implementing change in schools. In Greece the law 2817/2000 provides education for students with disabilities in regular classes of primary and secondary schools under the supervision of the Diagnosis, Assessment and Support Center, which takes account of the severity and the type of a child’s impairment for his/her inclusion. The education system in Greece consists of: Special schools for blind, deaf and individuals with severe disabilities such as cerebral palsy etc. In specific occasions, education is provided at institutes or at home. Children with mild disabilities may attend regular schools and receive part time special instruction (3 to 6 hours a week) for Greek language and mathematics from teacher majored in Special Education (inclusive schools).

Inclusion creates the opportunity that it creates for the development of positive attitudes of children without disabilities towards children with disabilities (Hall, 1994; Salisbury 1995; Mrug 2001). According to Allport (1935) attitudes may arise even from a single remarkable experience. Attitudes involve cognitive, behavioural and affective components (Rossenberg & Hovland, 1960) and they are the key to change behaviours toward people who are different (Sherrill, 1998). Attitudes can influence children’s behaviour (Anderson, 1997) and play a significant role in successful social inclusion (Stinson & Antia, 1999).

During the school period opportunities for inclusion are increased, when non disabled children attend classes with their peers with disabilities (Fennick & Royle, 2003). The inclusion of children with disabilities into as many mainstreamed activities of the school as possible is a current trend. Physical education, art and music are often the areas of the curriculum in which such inclusion occurs first. Physical education lessons contributed more than other lessons for the inclusion of children with disabilities into general school community. Physical education instruction contributes to development in all three of the commonly recognized domains of behavior: cognitive (intellectual skills); affective (feelings, opinions, attitudes, beliefs, values, interests, desires); and psychomotor (motor and fitness performance). Physical educators need to understand the major theories that guide attitude change and apply these
theories in everyday teaching. The present study was based on Contact Theory (Allport, 1954), Mediated Generalization Theory (Lott & Lott 1960), Persuasive Communication Theory (Hovland et al., 1953), Social - Cognitive Theory, and Interpersonal Relations Theory (Selman, 1980), which have been summarized elsewhere (Tripp & Sherrill, 1991; Sherrill, 1998).

The success of inclusion depends to a great degree, on quality of regular physical education programs and the extent to meet individual differences (Sherrill, 1998). One of the benefits that is supposed to accrue through inclusion of students with disabilities into regular physical education programs is positive attitudinal changes by non disabled students (Block & Vogler, 1994; Sherrill, Heikinaro-Johansson & Slininger, 1994). Although physical education is one of the primary curricular areas to experience inclusion little research has been found in the international literature, which examined the effect that a disability awareness activity program might have in trying to create positive attitudes towards children with disabilities. It was found that a well structured multifarious disability awareness program can influence children’s attitudes positively (Loovis & Loovis, 1997; Kippers & Bouramas, 2003; Kalyvas & Reid, 2003; Christopoulou, 2004) whereas Ellery & Rauschenbach (2000) found negative impact of intervention on children’s attitudes.

In our study single day program titled Paralympic School Day was implemented, aiming to create awareness and understanding for people with disabilities (scientific coordinator Vanlandewijck). It was a multifarious program which was developed by following partner organisations: European Paralympic Committee; Catholic University of Leuven, Belgium; University of Olomouc, Czech Republic; University of Koblenz, Germany; Aristotle University of Thessaloniki, Greece; Latvian Disabled Children’s and Youth Sport Federation, Latvia and Swedish Development Centre for Disability Sport, Sweden. This multicultural project aimed to change the attitudes of youth towards persons with a disability in sports and provided an advocacy tool for elementary school teachers to use. The values of this program were: a) Respect and Acceptance of Individual Differences; b) Respect for Athletic Achievement; c) Sport as a Human Right; and d) Empowerment and Social Support in Sport.
In this study attention was given to the effect that the Paralympic School-Day program might have had in trying to change the attitudes of non-disabled students towards inclusion of children with disabilities in physical education classes. A significant improvement in general and sport-specific non-disabled children’s attitudes was expected after an one day implementation of the PSD.

**Methods**

**Participants**
In this study participated 247 (117 boys and 130 girls) students of 5th and 6th grade, 10 to 12 years old, from five urban primary schools in Serres, Greece. One hundred seventy eight students (86 experimental group and 92 control group) attended three non-inclusive schools and 69 students (32 experimental group and 37 control group) attended two inclusive schools together with several students with mild disabilities as: learning disabilities, physical disabilities and mental retardation.

**Intervention : Paralympic School - Day Program – PSD**
The PSD program included ten activities 15 minutes each: Human Rights, Paralympic games, Accessibility games, Classification, Sitting Volleyball, Goal-ball, Boccia, Wheelchair Basketball, Painting and Athletics. The program consisted of: disability simulation activities through non-competitive games, information about Paralympic games and athletes through video, structured contact in inclusive small group activities, role playing situation with stuffed animals different in appearance or abilities by a sociologist, group discussions and drawing activities related to Paralympic sports. The specific aims of the program were: 1. to raise awareness of the rights of independence and equal participation 2. to provide information about the Paralympics games and athletes 3. to get knowledge about persons with disabilities (unique needs) 5. to get experience of being different and 6. to provide a new, positive attitude towards people with a disability.

**Instrument**
All children before and after the intervention answered the (CAIPE-R) questionnaire, (Block, 1995) which was modified to meet cultural differences in
sports in Europe (basketball instead of baseball in questions 9 to 13). These modifications were done in consultation with the author of CAIPE-R and approved by three APA experts from Europe. Prior to the administration of the procedure, the following information was given to all children, that the questionnaire was anonymous, there were no right or wrong answers to any of the questions and the answer to each question depended upon how students feel about what the researcher said. At the beginning, CAIPE-R described a student with a physical disability who might attend the physical education class. The questionnaire, which consisted of two subscales: general and sport-specific attitude, was read by the researcher.

The first two questions were in form example statements, the next six described general attitudes towards having this student with in physical education (6-24) and the last five statements described sport-specific attitudes, possible rule modifications to basketball that would accommodate this student in lead-up basketball games (5-20). The length of time required for the whole procedure was 15 minutes. For validation of modified CAIPE-R was performed factor analysis which indicated that all six statements on general attitude subscale had a range of .40 to .71 and all five statements on sport-specific attitude subscale had a range of .40 to .70.

Data Analysis
A 2X2 (Group X PSD) analysis of variance repeated measures was used to examine the effect of the PSD program on children’s general and sport-specific attitudes from inclusive and non-inclusive schools. The significant level was set at p< .05.

Results
Results revealed significant differences only on general children’s attitudes from non-inclusive schools (F(1,76) = 7.432, p = .007). Specifically, the mean pretest score for general attitudes of children from non-inclusive schools changed from 19.50 to 20.15. The mean pretest score for general attitudes of children from inclusive schools were very high (21.65) and after the
intervention program they were decreased slightly but they were still at the highest level from all groups (21.56).

The mean pretest score for sport-specific attitudes were 17.86 in non-inclusive schools and 18.65 in inclusive schools. After the intervention program the scores were 18.05 and 18.90 respectively (Tables 1,2).

**Table 1.** Mean scores of pre and post tests for non-inclusive schools on general and sport-specific attitudes

<table>
<thead>
<tr>
<th>Non Inclusive Schools</th>
<th>Pre-test</th>
<th>Post-test</th>
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<td>Groups</td>
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<td>Mean (sd) General attitude</td>
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<tr>
<td>Experimental n =86</td>
<td>19.50 (2.70)</td>
<td>20.15 (3.18)</td>
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<tr>
<td>Control n =92</td>
<td>19.66 (2.64)</td>
<td>19.96 (2.46)</td>
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**Table 2.** Mean scores of pre and post tests for inclusive schools on general and sport-specific attitudes

<table>
<thead>
<tr>
<th>Inclusive Schools</th>
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<td>Groups</td>
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<td>Mean (sd) General attitude</td>
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<tr>
<td>Experimental</td>
<td>21.65</td>
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n =32 (1.85) 18.65 (1.77) 21.56 (2.19) 18.90 (1.65)

Control
n =37 20.35 (2.11) 18.54 (2.04) 20.54 (2.32) 18.62 (2.43)

Discussion

The purpose of this study was to investigate the effect of the Paralympic School - Day program on the attitudes of 5th and 6th grade students towards the inclusion of children with disabilities in physical education. The PSD program had a positive effect only on general attitudes of children from non-inclusive schools. According to Allport (1935) PSD might be a single remarkable experience for these children.

The results of the present study related to general attitudes are in accordance with the recent literature, regarding the conclusion that multifarious programs which include information, assimilation games, group discussions about disability, (Loovis & Loovis 1997) and structured contact of children with and without disabilities, can play an important role in changing non disabled children's attitudes (Kippers & Bouramas 2003; Christopoulou 2004). The way that a program is organized and recommended to children plays a significant role otherwise the effect of the program may result in negative attitudes (Ellery & Rauschenbach 2000). Similar to findings reported by Kalyvas & Reid (2003) results related to sport-specific attitudes showed that the children didn’t agree with the rule adaptations in sports. This could probably be due to the fact that adaptations in the rules distracted the children from high levels of competition and challenge.

Regarding children’s attitudes who attended inclusive schools there were no differences on general and sport-specific attitudes too. This is in accordance to the major theories that guide attitude change and it is based on interactions between non disabled and their peers with disabilities during the school period. Also it is in accordance to Hall (1994), Salisbury (1995) and Mrug (2001) who supported that inclusive education benefits and gives non disabled children the opportunity to create positive attitudes towards children with disabilities.
However, attitudes were relatively positive across all children. This may have happen because Olympic and Paralympic Games, 2004 were organized in Greece and children in primary schools attended lessons from the Paralympic educational project. It is recommended more research in countries which haven’t organized Olympic and Paralympic Games yet. In conclusion, multifarious curricula can improve general attitudes of children from non-inclusive schools and it seemed that more specialized curricula are needed to improve general attitudes of children from inclusive schools and sport-specific attitudes of all children.

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