ATTITUDES OF 5\textsuperscript{th} AND 6\textsuperscript{th} GRADE GREEK STUDENTS TOWARD THE INCLUSION OF CHILDREN WITH DISABILITIES IN PHYSICAL EDUCATION CLASSES AFTER A PARALYMPIC EDUCATION PROGRAM

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This article is based on a master thesis project, completed in the Adapted Physical Education Laboratory, Department of Physical Education and Sport Sciences of Serres, Aristotle University of Thessaloniki, Greece.

The purpose of the present study was to examine the effect of the “Paralympic School Day” (PSD) program on the attitudes of 5\textsuperscript{th} and 6\textsuperscript{th} grade Greek students without disabilities and the effect of gender differences on the inclusion of children with disabilities in physical education classes. The 178 children were divided into two groups, (an experimental n = 86 and a control group n = 92). The experimental group received a day program, PSD, aimed at creating awareness and understanding of people with disabilities. All children answered twice the CAIPE-R, Children’s Attitudes toward Integrated Physical Education – Revised Questionnaire (Block, 1995), modified. The questionnaire posited two attitude subscales: general and sport-specific. A 2X2 repeated measures analysis of variance was used to examine the differences in pre and post tests between the two groups and genders. Results indicated significant differences on the experimental group, only in general attitudes and not in the case of sport-specific related questions. In addition no gender differences were shown (p<.05).

KEYWORDS: Disability, Physical Education, Paralympic Education, Program, Attitude, Inclusion.

INTRODUCTION

Over the last decade the idea of inclusion has become increasingly the focus of national and international policy of education (Armstrong, 1998). Inclusion has been defined as placement and education of students with disabilities in general classes (including general physical education), with peers in their neighborhood schools (Block, 2007; Block, 2000; Murata, Hodges & Little, 2000). An inclusive school is a place where everyone belongs, is accepted, supports, and is supported by his or her peers and other members of the school community in the course of having his or her educational needs met. It also means providing all students within the inclusive appropriate educational programs that are challenging yet geared to their capabilities and needs as well as any support and assistant they and/or their teachers may need to be successful in an inclusive environment (Stainback & Stainback, 1990).

Inclusion in general schools has many benefits both for students with and without disabilities. According to recent studies students with disabilities have the same possibilities and opportunities to participate as non disabled counterparts in school and social events (Mrug & Wallander, 2002). Students without disabilities: learn to approach children with different characteristics (Romer & Haring, 1994), develop empathy and acceptance of individual children’s differences (Lieber, Capell, Sandal, Wolfberg, Horn & Bechman, 1998), become more aware and more responsive to other children’s needs.
Peck, Carlson & Helmstetter, 1992), and learn more about persons with a disability (Horvat, 1990). Finally, the inclusive education gives the opportunity for the development of positive attitudes of students without disabilities toward peers with disabilities (Hall, 1994; Salisbury, Callucci, Palombaro & Peck, 1995; Mrug et al., 2002).

Attitudes of students without disabilities and their preparation to accept, coexist and cooperate with peers with disabilities in the same classes into general schools is one of the most important factors for the success of inclusion in school community (Block & Vogler, 1994; Kudláček, 2006; Sherrill, 1998; Slininger, Sherrill & Jankowski, 2000). Attitudes as refer to the beliefs and feelings that are related to a person or an event are the key to change behaviors toward people who are different. Attitude instruments are typically called surveys, adjective checklists, questionnaires, inventories, rating scales and sociometric measures. One valid questionnaire for the evaluation of 5th and 6th grade children’s attitudes is the Children’s Attitudes toward Integrated Physical Education - Revised (CAIPE-R) inventory, by Martin Block (1995), (Sherrill, 1998). Attitudes are learned through social and environmental experiences rather than determined by one’s genes (Sable, 1995). However, girls seem to have more positive attitudes than boys related to individuals with a disability (Tripp, French & Sherrill, 1995; Slininger et al., 2000). Attitudes may arise from a “single remarkable experience” (Allport, 1935, p. 805), and can be altered or changed, though, this is not an easy task because attitudes can be extremely resistant (Sable, 1995).

Education and especially areas of school curriculum like Physical Education (P.E.) are the most viable mean to change people’s attitudes toward disability in general and disability sports in particular, contributing to the successful inclusion of people with a disability into general schools and social community (Sherrill, 1988; Evaggelinou, 2006). The value of education has been recognized by the International Paralympic Committee (IPC). The success of the Paralympic Games and the enormous growth and the development of the Paralympic Movement have created the need for an educational discipline the Paralympic Education, which is a new and relatively term in P.E. The basic premise behind this term is that including Paralympic ideas in the curriculum of P.E. could be an effective pedagogical method to create awareness and understanding toward persons with a disability. Acquiring an attitude of acceptance and appreciation of individual differences is an important competence in today’s P.E. curriculum.

During recent years, different Organizing Committees of Summer and Winter Paralympic Games have developed educational projects, materials, manuals, including interesting programs and activities, which focus on the respect and acceptance for individual differences, respect for the athletic achievements of athletes with a disability and the right of persons with a disability to participate in sports. IPC Educational Committee encourages educational, cultural, researches and scientific activities that contribute to the development and promotion of the Paralympic Movement values. The Paralympic School Day (PSD) program was one of the educational activities, aiming to create awareness and understanding for people with a disability in primary school children in all over the world. This disability P.E. awareness program was implemented in six European nations: Belgium, Latvia, Germany, Czech Republic, Sweden and Greece (IPC, 2006).

In the recent international literature few studies have examined the effects of the implementation of disability awareness programs on the attitudes of children without disabilities toward inclusion of peers with disabilities in P.E. classes. Specifically, the PSD program was implemented and evaluated in Belgium and Czech Republic. Van Biesen, Busciglio and Vanlandewijck (2006), examined the attitudes of 196 students (100 boys and 96 girls), aged 8 to 13 years old, from three primary Flemish schools A, B, and C. Three categories of attitudes were reported:
general attitudes, attitudes concerning sport-specific topics and the sum of both general and sport-specific topics using the CAIPE-R before and after the implementation of the PSD program. Results indicated that the PSD program did influence the attitudes of non disabled primary school students on inclusion of students with disabilities within P.E. Attitudes scores did increase in two (B, C) of three investigated schools. In the other school (A), the mean scores of attitude, measured during the post tests period were lower compared to the pre tests scores. In this study, also found significant differences for gender, girls had more positive attitudes than boys in all three schools under all subcategories and significant differences for competitiveness, the more competitive the students reported to be the lower their scores on attitude were. In addition, the previous exposure of students to disability didn’t have any influence on their attitudes towards disability.

In the Czech Republic Ješina, Lucas, Kudláček, Janečka, Machová and Wittmanová (2006), implemented the PSD program on 48 children in 4th and 5th grade of a primary school in Olomouc. The group consists of 27 boys and 21 girls, with a mean age of 10.70 and 10.67 years old, respectively. Age ranges from 9 to 12 years old in both boys and girls. For the evaluation of the PSD program two questionnaires were used Czech version of Children’s Attitudes Toward Integrated Physical Education – Revised (CAIPE-CZ) and Siperstein’s Adjective Checklist. Results of the pre tests and post tests showed that twenty three children had a positive change on the CAIPE-CZ. Conclusively, seemed that the PSD program had an effect on the attitude of the most children, but the effect was not too big. Although the change was rather small, it was found significant. The same findings were shown by the Siperstein’s Adjective Checklist.

More researchers have examined the influence of other disability awareness programs on primary school children’s attitudes toward inclusion of students with disabilities in P.E. classes. Loovis and Loovis (1997), examined students’ attitudes toward peers with disabilities by sex and grade after an intervention. 424 students educated in grades 2 to 6 from two suburban-rural schools participated in this study. Students rotated among four to seven different locations, each identified by a different disability. It was used Children’s Attitudes Toward Handicapped Scale to evaluate students’ attitudes before and after the intervention. There was no control group. Results indicated a general increase in favourability of attitudes toward peers with disabilities and significant differences only for sex and not for school and grade. Girls’ attitudes changed significantly after their participation in the disability awareness experience, whereas boys showed modest non significant change.

Ellery and Rauschenbach (2000) evaluated the impact that disability awareness activities might have in trying to positively influence children’s attitudes toward inclusion of disabled peers in P.E. classes. Participants were 79 non disabled students from an urban school, aged 10 to 11 years old, who had never experienced a physical education class that had
a student with a physical disability. Children, who participated in games and simulation activities, had the opportunity to use a wheelchair, a walker and a mobility stander (two 30-min P.E. classes), to get information for Paralympic Games and sports (a 30-min video) and to have a presentation on what it was like to have a physical disability over a 1-week period by a wheelchair athlete. CAIPE-R was used to evaluate children’s attitudes. Pre tests results showed that the attitudes of non disabled students were positive, whereas post tests showed a decline in attitudes for 10 of the 11 statements with four of them statistically significant.

Especially Kalyvas and Reid (2003) examined a) the effect of sport adaptations on participation and enjoyment and b) the gender differences of students with and without physical disabilities. Participants (ages 7 to 12) included 15 with a physical disability and 20 without a disability. A volleyball lead up game was compared to an adapted game. Each game was played on three occasions and the participation variables were: successful passes, unsuccessful passes, active time of task, inactive time of task, and off task time. Enjoyment was assessed by a questionnaire as well as by interviews. Results indicated that sport adaptations increased participation of all children and students with disabilities had more opportunities to play, whereas a number of non disabled peers especially the older males (10 to 12 years old) argued that the adapted game was not very challenging because it was too easy, not competitive and different from that they used to.

Results of the above studies showed a) an increase in favorability of attitudes toward peers with disabilities (Loovis & Loovis, 1997; Kalyvas & Reid, 2003), b) no changes on attitudes (Lockhart, 1994), and c) negative changes after the intervention (Ellery & Rauschenbach, 2000). Particularly, Van Biesen et al. (2006) and Ješina et al. (2006), evaluated the effect of the PSD program. Results showed more positive changes only on general attitudes of the most non disabled children after their participation in the program in both studies. Also some of these studies examined gender differences. Thus, Loovis and Loovis (1997), and Van Biesen et al. (2006), founded significant gender differences after the intervention, whereas Lockhart (1994), and Kalyvas et al. (2003), didn’t find any gender differences. Generally, according to the results of the above studies these disability P.E. awareness programs seemed that might help children and youngsters to become aware of their own values and attitudes toward people with different abilities. In addition results indicated that the girls had more positive attitudes than the boys.

In Greece the organization of Olympic and Paralympic Games of 2004 was the reason not only for the development of a new Paralympic educational material, including a disability awareness program, but also for the initiation of an extra hour in school curriculum, so children to be introduced to the Olympic and Paralympic values (Evaggelinou, 2006). Regarding inclusion issues Greek government vote in the Public Law 2817/2000, according to which children with disabilities are being included in typical primary and secondary schools. Few studies referred to the effect of the implementation of the Greek Paralympic educational material titled: The Paralympics Games from 1960 to 2004, Athens 2004 on primary school children's attitudes toward inclusion of children in P.E. classes. Kippers and Bouramas (2003), examined the attitudes of 1072 Greek students (522 boys and 550 girls) of 5th and 6th grade, using the questionnaire MAIPE, revised. Classes with one or more pupils having a disability were deleted entirely. The disability awareness program is concerned with the use of the Greek Paralympic educational material. In this study researchers implemented assimilation sport activities, structured contact with children with disabilities, gave information through video and small group discussions, aiming to provide positive attitudes toward peers with disabilities for a 10-week period. Results indicated a significant positive change in non disabled children’s attitudes after the intervention. Also Christopoulou (2004) examined the influence of the Greek Paralympic educational material
on 98 children’s attitudes, of 5th and 6th grade from two urban schools. Children divided into two groups (an experimental n = 47 and a control group n = 51). The experimental group received the program of the Greek Paralympic educational material, whereas the control group followed the typical P.E. curriculum. MAIPE revised, was used to examine children’s attitudes. Results showed more propitious attitudes of non disabled children after the intervention.

It seemed that the implementation of the Greek Paralympic educational material might contribute to the development of non disabled students’ positive attitudes (Kippers & Bouramas, 2003; Christopoulou, 2004).

However, there haven’t found other scientific studies to implement Paralympic P.E. awareness programs in school community. So there is a need for more research on this domain. As a result, the purpose of this study was twofold: a) to examine the effect of the PSD program on the attitudes of 5th and 6th grade students without disabilities and b) the gender differences toward inclusion of children with disabilities in P.E. classes in Serres, Greece.

**METHODS**

**Participants**

178 students (M = 11.53 ± 0.50 years) of 5th (n = 83) and 6th grade (n = 95), from three urban non inclusive primary public schools in Serres, Greece participated in this study. There were 86 boys (48.3%) mean 11.48 ± 0.50 years and 92 girls (51.7%) mean 11.59 ± 0.50 years. The children were divided into two groups, an experimental (n = 86) and a control group (n = 92), (table 1). The experimental group received a day program, entitled PSD, whereas the control group attended the typical P.E. curriculum.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Grade – Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>5th Gender N</td>
</tr>
<tr>
<td>Control</td>
<td>83 Boys</td>
</tr>
<tr>
<td>Total</td>
<td>6th Gender N</td>
</tr>
<tr>
<td></td>
<td>95 Girls</td>
</tr>
</tbody>
</table>

**Intervention: “Paralympic School Day” (PSD) program**

The PSD was a 2-year educational project, lasted from 2004 to 2006. This project initiated and coordinated by Professor Yves Vanlandewijck under the aegis of the International Paralympic Committee (IPC) and the European Paralympic Committee (EPC). It had been developed by the following seven partner organizations/universities from six different European nations: 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. The representation of the above mentioned organizations/universities created a framework based on the following values: Respect and Acceptance of Individual Differences; Respect for Athletic Achievement; Sports as a Human Right; and Empowerment and Social Support in Sports. The aims of the PSD were: to raise awareness of the rights of independence and equal participation, to provide information about the Paralympic Games and athletes, to get knowledge about persons with disabilities (unique needs), to get experience of being different and to provide a new, positive attitude toward people with a disability. The PSD program consisted of: disability simulation sport activities through non competitive games, information about Paralympic Games, sports and athletes, through video, information by a Paralympian athlete about what it
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is like to have a physical disability (athletics – daily activities), structured contact in inclusive small group activities, role playing situation with stuffed animals different in appearance or abilities by a sociologist, group discussions with a person with a disability narrating his/her life and drawing activities related to the Paralympic sports (games, athletes, equipment).

In Greece, PSD was a day intervention program included ten activities (ten stations) with a duration of fifteen minutes each. Specifically, the activities were: 1. Human Rights; 2. Paralympic Games; 3. Boccia; 4. Classification; 5. Sitting Volleyball; 6. Goalball; 7. Accessibility games; 8. Painting; 9. Wheelchair Basketball; and 10. Athletics (IPC, 2006). The students were separated in ten groups. 18 to 20 students participated in each group and rotated among the ten stations. The children had the opportunity to become aware of the personal uniqueness of individuals with a disability, to get knowledge for different kinds and types of disabilities, to get knowledge for the Paralympic Games: rules, adaptations and regulations, athletes who participate, equipment and how are played. This study based on the following theories: Contact Theory, Mediated Generalization Theory, Persuasive Communication Theory, Social-Cognitive Theory, and Interpersonal Relations Theory, which have been summarized elsewhere (Tripp & Sherrill, 1991; Sherrill, 1998).

Instrument

Children’s Attitudes toward Integrated Physical Education – Revised (CAIPE-R) is a valid instrument for the evaluation of 5th and 6th grade children’s attitudes toward inclusion of children with disabilities in P.E. classes (Sherrill, 1998). For the collection of data 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) was used. These modifications were done in consultation with the author of CAIPE-R and approved by three APA experts from Europe. Back to back translation was used from English to Greek language. Test-retest reliability values were measured in order to examine if the children in Greek schools understand the statements (n = 20 students). Throughout this process, the content of the questionnaire remained the same. Cronbach’s alpha coefficient of reliability was within accepted values (0.78–0.80). 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 (Panagiotou, 2006).

Procedure

At the very begging of the pre phase and after the post phase, two weeks apart, all children participated in this study completed the questionnaire. The questionnaire consisted of 13 questions and posited two attitude subscales: general and sport-specific. Specifically, the first two questions were in form example statements (Question 1: I live in Serres and Question 2: We usually have lunch at 9:00 o’clock in the morning), the next six described general attitudes toward having a student with a disability in P.E. class and the last five statements described sport-specific attitudes, possible rule modifications to basketball that would accommodate this student in lead-up basketball games (tables 3 and 4). The length of time required for the whole procedure was about twenty minutes.

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 felt about what the researcher said. At the beginning, the questionnaire described a child with a physical disability who might attend a P.E. class in a typical school. After completed the demographic data (age, class, school), an example was given. Before fulfilling the questionnaire there was verification whether all the pupils understood the procedure. Then children were asked to respond in all questions (general and sport-specific questions) about the inclusion of this child in P.E. class. Students responded to each statement using a 4-point Likert scale that included yes = 4, probably yes = 3, probably no = 2, no = 1 choices. Number four indicated the most positive attitude, whereas number one the most negative attitude. Statement 4 was coded in reverse such that yes = 1, probably yes = 2, probably no = 3, no = 4. Total scores from the statements of the
questionnaire were interpreted as follows (Table 2).

Table 2
Total scores for general and sport-specific attitudes

<table>
<thead>
<tr>
<th>General Attitude (questions 3 to 8)</th>
<th>Sport-Specific Attitude (questions 9 to 13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>all 4’s (4 X 6) = 24 (yes)</td>
<td>all 4’s (4X 5) = 20 (yes)</td>
</tr>
<tr>
<td>all 3’s (3 X 6) = 18 (probably yes)</td>
<td>all 3’s (3 X 5) = 15 (probably yes)</td>
</tr>
<tr>
<td>all 2’s (2 X 6) = 12 (probably no)</td>
<td>all 2’s (2 X 5) = 10 (probably no)</td>
</tr>
<tr>
<td>all 1’s (1 X 6) = 6 (no)</td>
<td>all 1’s (1X 5) = 5 (no)</td>
</tr>
</tbody>
</table>

DATA ANALYSIS

Data analysis independent samples T-test was used in pre tests between experimental and control groups for the attitude variables (general and sport-specific). One way ANOVA analysis conducted in pre tests between boys and girls for the experimental and control groups regarding the two attitudes dependent variables (general and sport-specific). A 2X2 repeated measures analysis of variance was used to examine the effect of the PSD program on children's general and sport-specific attitudes (Group X PSD). A 2X2 repeated measures analysis of variance was used in order to examine the effect of the program on gender, using gender as a covariant (Gender X PSD). The significant level was set at p< .05.

RESULTS

Independent sample T-test showed no significant differences in pre tests between experimental and control group for the two attitude variables, general and sport-specific (p > .05). As a result, both groups had the same baseline attitude level. Results revealed significant differences only on general attitudes of the experimental group (F(1,76) = 7.432, p = .007). Medium effect size was noted (eta-squared = 0.42). More specifically mean pre tests scores for general attitudes of experimental group changed from 19.50 to 20.15. No interaction effects were noted for general attitude variable. Although there was a small change on sport-specific attitudes after the implementation of the PSD program (changed from 17.86 to 18.05) which was not significant (Tables 3, 4). So, no main effects or interaction effects were observed for this variable. There were medium effect sizes (eta-squared = 0.42). Means and standard deviations for the two variables pre and post measures with all statements for both groups are depicted in tables 3 and 4 respectively.

Differences by gender

One way ANOVA analysis showed no significant differences in attitudes (general and sport-specific) between boys and girls in pre tests regarding both groups, experimental and control group (p > .05). As a result, both gender had the same baseline attitude level. Repeated measures analysis of variance showed no significant interaction effects for gender. As a result, the program did not affect boys and girls attitudes differently.
Table 3
Mean scores of pre and post tests for general attitudes

<table>
<thead>
<tr>
<th>General Questions</th>
<th>Pre tests</th>
<th>Post tests</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participants (2 Groups)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental (E) n=92</td>
<td>Control (C) n=86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. It would be OK having <em>John</em> come to my P.E. class.</td>
<td>3.74 (0.57)</td>
<td>3.56 (0.68)</td>
<td>3.79 (0.55)</td>
<td>3.54 (0.61)</td>
</tr>
<tr>
<td>4. Because <em>John</em> cannot play sports very well, he would slow down the game for everyone.</td>
<td>2.09 (0.87)</td>
<td>2.06 (0.92)</td>
<td>2.38 (0.98)</td>
<td>2.14 (1.03)</td>
</tr>
<tr>
<td>5. If we were playing a team sport like basketball, it would be OK having <em>John</em> on my team.</td>
<td>3.31 (0.88)</td>
<td>3.25 (0.95)</td>
<td>3.38 (0.94)</td>
<td>3.05 (0.75)</td>
</tr>
<tr>
<td>6. P.E. would be fun, if <em>John</em> were in my P.E. class.</td>
<td>3.08 (0.89)</td>
<td>3.17 (1.01)</td>
<td>3.25 (0.92)</td>
<td>3.32 (0.90)</td>
</tr>
<tr>
<td>7. If <em>John</em> were in my P.E class, I would talk to him and be his friend.</td>
<td>3.70 (0.52)</td>
<td>3.85 (0.35)</td>
<td>3.74 (0.61)</td>
<td>3.78 (0.44)</td>
</tr>
<tr>
<td>8. If <em>John</em> were in my P.E. class, I would like to help him practice and play the games.</td>
<td>3.55 (0.69)</td>
<td>3.75 (0.58)</td>
<td>3.59 (0.70)</td>
<td>3.67 (0.59)</td>
</tr>
<tr>
<td>Questions 3 to 8 (total scores)</td>
<td>19.50 (2.70)</td>
<td>19.66 (2.64)</td>
<td>20.15* (3.18)</td>
<td>19.96 (2.46)</td>
</tr>
</tbody>
</table>

* p = .007

Table 4
Mean scores of pre and post tests for sport-specific attitudes

<table>
<thead>
<tr>
<th>Sport-Specific Questions</th>
<th>Pre tests</th>
<th>Post tests</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Participants (2 Groups)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental (E) n=92</td>
<td>Control (C) n=86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. If you were playing basketball would you be willing to make a pass to <em>John</em>?</td>
<td>3.53 (0.68)</td>
<td>3.55 (0.80)</td>
<td>3.62 (0.70)</td>
<td>3.65 (0.56)</td>
</tr>
<tr>
<td>10. It would be OK to allow <em>John</em> to shoot at a lower basket?</td>
<td>3.40 (0.87)</td>
<td>3.69 (0.60)</td>
<td>3.45 (0.88)</td>
<td>3.81 (0.44)</td>
</tr>
<tr>
<td>11. If you were playing basketball and <em>John</em> were in the restricted area would you allow him to stay longer (five seconds instead of three)?</td>
<td>3.72 (0.66)</td>
<td>3.66 (0.65)</td>
<td>3.60 (0.78)</td>
<td>3.73 (0.55)</td>
</tr>
<tr>
<td>12. It would be OK to allow <em>John</em> a “free” pass to a teammate (no one could steal the ball from <em>John</em>).</td>
<td>3.41 (0.78)</td>
<td>3.72 (0.57)</td>
<td>3.58 (0.72)</td>
<td>3.59 (0.75)</td>
</tr>
<tr>
<td>13. If you were playing basketball and <em>John</em> had the ball would you help and cooperate with him so that he could make a basket?</td>
<td>3.77 (0.51)</td>
<td>3.82 (0.45)</td>
<td>3.79 (0.53)</td>
<td>3.81 (0.46)</td>
</tr>
<tr>
<td>Questions 9 to 13 (total scores)</td>
<td>17.86 (2.15)</td>
<td>18.46 (1.76)</td>
<td>18.05 (2.45)</td>
<td>18.61 (1.62)</td>
</tr>
</tbody>
</table>
DISCUSSION

The hypothesis of the present study was that the PSD program would have a positive effect on the attitudes of 5th and 6th grade Greek students and there would be gender differences after its implementation toward the inclusion of peers with disabilities in P.E. primary classes. Girls would have more positive attitudes than boys. The results showed that the PSD program had a positive effect only on general and not on sport-specific attitudes of the experimental group. In addition no gender differences were shown. The results are referred to these participants.

In this study two groups participated, a control and an experimental group. The idea was to use a control group, who followed the typical P.E. curriculum, so that researchers would check the effect of the PSD program. For this reason attitudes of the two groups were compared before and after the implementation of the program. Pre tests showed no differences between the two groups, whereas post tests showed significant differences. Specifically, results of the present study revealed differences only on general and not on sport-specific attitudes after the implementation of the PSD program. The findings of this study related to general attitudes are in accordance with the recent literature regarding the conclusion that 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). Van Biesen et al. (2006), and Ješina et al. (2006), implemented the PSD program. The results of these studies indicated also positive general attitudes.

According to sport-specific attitudes similar to the findings of the present study reported by Kalyvas et al. (2003), Kalyvas and Reid (2003) found that the children, who participated in the study, didn’t agree with the rule adaptations in sports. It was referred that this could probably happen due to the fact that adaptations in the rules distracted the children from high levels of competition and challenge. Children without disabilities wanted peers with disabilities to be in their P.E. classes but they didn’t want them as teammates. Researchers supposed that this was happened due to the desire of children to have powerful teammates so that they could win the game. In future studies most emphasis must be given on having fun through the game rather than winning. In addition results of two more studies indicated negative attitudes on sport-specific attitudes (Van Biesen et al., 2006; Ješina et al., 2006).

Regarding to the findings that the girls had more positive attitudes than the boys is supported by a growing body of literature on gender differences in attitudes toward individuals with disabilities. According to Tripp et al. (1995), and Slininger et al. (2000), the girls have more favorable attitudes than the boys toward peers with disabilities. Fishbein (1996) suggested that the girls be socialized so that they are more nurturant and responsible toward dependent individuals than the boys. In this study the PSD program did not affect boys and girls attitudes differently. These findings are in accordance with the results of Lockhart (1994) and Kalyvas et al. (2003), and are in contrast with Loovis et al. (1997), and Van Biesen et al. (2006), results.

Overall in the present study attitudes were relatively positive across all children both in two groups, the experimental and the control group, before the implementation of the PSD program. This might have happened due to the implementation of the Paralympic educational material in Greek primary schools entitled: "The Paralympic Games from 1960 to 2004" for an extra hour in school curriculum and also due to the organization of the 2004 Paralympic Games in Athens. Similar to these findings reported from Shriver (1997). Findings of the above study showed that children's attitudes improved and became more positive toward including peers with mental retardation in school activities after the 1995 Special Olympics World Games. The results showed that the organization of a Paralympic athletic event in a country could improve non disabled children's attitudes. So, it is recommended
that more research be done in countries which have not been organized Paralympic Games yet.

Another statement is the way that such a program is organized and recommended to children. It seemed to play a major role on change of children’s attitudes which found negative after a disability P.E. awareness program (Ellery et al., 2000). In this study regarding to the activities, the session leader initiated an interactive discussion among the students at the end. This was a spontaneous discussion focusing on the student’s personal experiences. Though specific questions, however, the session leader guided the students toward on each task throughout the activity. In order to reach the desired goals, group discussions might be an extremely important reflection process after the end of each activity. It is recommended that group discussions be taken into account when somebody takes on to make the plan of a disability P.E. Eighteen to twenty students participated in each activity. There were no problems in the implementation of the PSD program regarding to the number of the participants. Another statement is that the program, which included ten activities, lasted one day and it was not provided for the methodology any follow-up. So researchers haven’t had the ability to make any comments about the attitudes of children after a short or a long period of the intervention. Kippers et al. (2003) found that not only the quantity but also the quality of time spent on teaching the Paralympic educational material is important to induce in change non disabled children’s attitudes. So, it is important that a longitudinal follow-up be planned for future studies.

In conclusion, a disability P.E. awareness program does not just happen; it needs to be planned for. The way that it is planned and recommended to children can play a leading role in eliminating discriminatory practices and promoting understanding toward individuals with disabilities. Paralympic ideas in the curriculum of P.E. and especially Paralympic educational programs could be an effective pedagogical method to create awareness and understanding and to develop non disabled children’s attitudes toward persons with a disability. Acquiring an attitude of acceptance and appreciation of individual differences is an important competence in today’s P.E. curriculum (IPC, 2006) because attitudes are the key to change behaviors toward people who are different (Sherrill, 1998).

The findings of the present study held good only for this sample. The implementation of national as well as international Paralympic educational programs, such as PSD program, could contribute in development positive non disabled children’s attitudes toward inclusion of peers with disabilities in P.E. classes. However, there is a need for further research in this domain to generalize such results.

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(Children’s Attitudes toward Integrated Physical Education – Revised) Fragebogen (Block, 1995). Der Fragebogen postulierte zwei Einstellungs-Subskalen: eine allgemeine und eine sportspezifische. Eine $2 \times 2$ wiederholte Messanalyse der Varianz wurde verwendet, um Unterschiede in Pre- und Post-Test bezüglich der beiden Gruppen und des Geschlechts zu untersuchen. Die Ergebnisse zeigten signifikante Unterschiede in der Versuchsgruppe, allerdings nur bei den allgemeinen Einstellungen, aber nicht bei sportspezifischen Fragen. Außerdem zeigten sich keine Geschlechtsunterschiede ($p < .05$).

SCHLÜSSELWÖRTER: Behinderung, Sportunterricht, Paralympische Erziehung, Programm, Einstellung, Inklusion.

ATTITUDES D’ÉLEVES GRECQUES EN 5ème ET 6ème GRADE ENVERS L’INCLUSION D’ENFANTS EN SITUATION DE HANDICAP EN COURS D’ÉDUCATION PHYSIQUE SUITE À UN PROGRAMME D’ÉDUCATION PARALYPMIQUE

Le but de cette étude est de déterminer l’effet d’un programme « Paralympic School Day » (PSD) sur les attitudes d’élèves grecques de 5ème et 6ème grade sans handicap, ainsi que l’impact de la différence du genre sur l’inclusion d’élèves en situation de handicap en cours d’éducation physique. Les 178 enfants ont été divisés en 2 groupes (groupe expérimental $n = 86$, groupe témoin $n = 92$). Le groupe expérimental suit un programme de sensibilisation active au handicap d’une journée, un PSD, centré sur la prise de conscience et la compréhension des personnes en situation de handicap. Tous les élèves répondent 2 fois au questionnaire du test CAIPE-R, Children’s Attitudes towards Inclusion in Physical Education – Revised Questionnaire (Block, 1995). Le questionnaire est composé de deux sous échelles d’attitudes : attitudes générales et attitudes spécifiques au sport. L’analyse de la variance pour des mesures répétées $2 \times 2$ a été utilisée pour déterminer les différences en pré et post tests entre les deux groupes et les genres. Les résultats indiquent des différences significatives concernant les attitudes générales mais pas sur les questions relatives au sport. De plus, aucune différence concernant les genres n’a été enregistrée ($p < .05$).

MOT CLEFS : Handicap, Education Physique, Education Paralympique, Programme, Attitude.