A Cross-cultural Examination of Typically Developing Children’s Attitudes toward Individuals with Special Needs

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This study explores children’s attitudes toward individuals with special needs in Greece and in the United States. A total of 196 kindergarten-age children participated in the study. Children’s attitudes were examined using the Acceptance Scale for Kindergartners-Revised (ASK-R) and were further explored with the use of an open-ended interview. In addition, the Inventory of Disability Representation (IDR) was used to collect information about how individuals with special needs are represented in school and classroom environments through books, displays, materials and curriculum. The results indicated that children in Greece and the United States were accepting of individuals with special needs. Also, children attending inclusive kindergartens held more positive attitudes when compared with children attending non-inclusive kindergartens. Results from the interviews provided further information that contributes to the understanding of children’s perceptions of people with special needs and the reasons why children become more or less favourably disposed towards individuals with special needs. Finally, IDR results indicated that the classrooms in Greece had low representations of individuals with special needs compared with US classrooms, which had moderate and high representations of individuals with disabilities in the classroom and school environments.

Keywords: Attitudes; Inclusion; Kindergarten; Special needs

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Introduction

Inclusion has been a major issue in education (Fuchs & Fuchs, 1994) and prevails in the educational policies in many countries (van Kraayenoord, 2003). However, the realisation of an inclusive school is not an easy process and several issues need to be considered to make it happen. One issue that creates a major discussion concerns the social implications of inclusion (Nowicki, 2002; Rossiter & Horvarth, 1996; Salisbury, Gallucci, Palombo, & Peck, 1995), with a special emphasis on the role of children’s beliefs and attitudes towards their peers with special educational needs (Rossiter & Horvarth, 1996; Stainback & Stainback, 1990; Stinson & Antia, 1999).

The physical placement of children with special educational needs in a general classroom does not ensure that they are automatically accepted by their peers (Kluwin & Gonsher, 1994; McEvoy & Odom, 1996). Rather, research has indicated that children are not always accepting of their peers with special needs and that their attitudes are often negatively biased (Hall, 1994; Harper, 1997; Nowicki, 2002; Ochoa & Olivarez, 1995; Scheepstra, Nakken, & Pijl, 1999).

In contrast, many studies have documented that children who are educated in the same educational settings with children with special educational needs become more accepting of individuals with disabilities (Diamond, 2001; Favazza, Phillipsen, & Kumar, 2000; Favazza & Odom, 1997; Hall, 1994; Salisbury et al., 1995), develop empathy and acceptance of individual children’s differences (Lieber, Capell, Sandall, Wolfberg, Horn, & Beckman, 1998), and also become more aware of and more responsive to other children’s needs (Peck, Carlson, & Helmesbetter, 1992) as well as more knowledgeable regarding disability (Bricker, 1995; Diamond, 2001; Diamond, Hestenes, Carpenter, & Innes, 1997; Favazza & Odom, 1997; Favazza, Phillipsen, et al., 2000; Nikolaraizi & de Reybekiel, 2001). Specifically, preschool children attending the same educational settings with children with special needs were found to have a better understanding of certain disabilities (Diamond & Hestenes, 1994, 1996), more knowledge about the long-term consequences of disabilities (Diamond et al., 1997) and more ideas about ways to help a classmate (Diamond & Carpenter, 2000) compared with children who did not have similar experiences in their schools. In addition, with regard to gender it has been reported that girls were more accepting toward disabilities than boys (Favazza & Odom, 1996; Sigelman, Miller, & Whitworth, 1986).

Understanding how children develop positive or negative perceptions and attitudes is not a simple and easily understood process (Innes & Diamond, 1999; Scheepstra et al., 1999). Children’s attitudes are learned and acquired under the influence of several factors, such as their teachers’ and parents’ beliefs (Gollnick & Chinn, 2002; Triandis, Adamopoulos, & Brinberg, 1984), the curricula and the classroom experiences (Gollnick & Chinn, 2002; Nikolaraizi & de Reybekiel, 2001; Stoneman, 1993, 2001), and the direct or indirect experiences with people and events (Triandis et al., 1984), such as contact with children with special needs in an inclusive classroom or in social interaction programmes (Diamond et al., 1997; Favazza & Odom, 1997; Innes & Diamond, 1999). Overall, understanding
children’s minds demands the consideration of various factors that form the wider cultural and social context in which children grow and are located (Vlachou, 1997).

Our understanding of difference, ability and disability are socially constructed, since according to the patterns of the culture in which people are raised they develop their views, their attitudes and internalise the social and cultural rules (Gollnick & Chinn, 2002). People’s beliefs and attitudes are reflected in the various economic and political arrangements and organisations of their community (Shakespeare, 1994). One of these organisations is the educational system (Carrington, 1999). Classroom contexts themselves are “cultures” that represent values, structures and systems, recognition of roles and responsibilities (Otis-Wilborn, 1995). The aim of this study is to enrich our understanding regarding preschool children’s beliefs about individuals with special needs in educational settings in two countries, Greece and the United States. Both of these countries share many similarities in their educational policies, in that they try to support inclusive education; however, at the same time there are differences, as a result of the different national and structural features in each country (O’Hanlon, 1993).

In the United States, services for students with special needs were influenced by the Civil Rights movements, court cases and federal laws (Friend & Bursuck, 2002). In 1975, the first law of special education in the United States, the Education for All Handicapped Children Act (P.L. 94-142), was passed that required all states to provide free and appropriate education to students with disabilities. The law required that students with disabilities should be educated with their typically developing peers to the maximum extent possible and every student should be served in the least restrictive environment. Although, this law gave students with disabilities access to public school education, it led to segregated special education programmes for students with disabilities. In response to this concern, in the early 1980s there was an initiative to integrate special education and regular education called the Regular Education Initiative (Fuchs & Fuchs, 1994). However, in the 1980s children with special educational needs were mostly placed in regular schools with limited concern about their social and academic development. By the 1990s an emphasis was placed on the “social integration” of students with disabilities (Friend & Bursuck, 2002). Furthermore, the reauthorisation of the Individuals with Disabilities Education Act in 1997 (P.L. 105-17, 20 U.S.C. § 1400 et seq.) stressed the importance of including students with special needs in the regular education classroom and providing access to regular education curriculum. The inclusion movement reflected society’s changing views of disability. Many researchers and advocates asserted that disability was not an impairment of the individual, but rather it resulted from the mismatch between the individual’s needs and services provided by the schools (Lipsky & Gartner, 2001). From 1996 to 1997 approximately 45.7% of all school-age students with special needs in the United States received at least 79% of their education in regular education classrooms (Friend & Bursuck, 2002). Today, students with special needs in many places across the United States and the world pariticipate in academic, social and community settings, which was unimaginined 25 years ago (Fisher, Frey, & Thousand, 2003).
It is important to note that although the policy of inclusion is prevalent in the educational policies throughout the United States, districts approach inclusion differently according to the needs of their students as well as the available resources (Evans, Townsend, Duchnowski, & Hocutt, 1996). Furthermore, the quality and nature of inclusive practices vary from school to school. Finally, the training of teachers who work in educational settings with students with special educational needs vary. All states in the United States provide licensure in regular and special education, but the structure of the teacher training programmes vary. Other states have two distinct course options for teachers in the two areas. If courses are required in regular education, the amount and type of special education course could vary as well. The content of one of these courses is typically an overview of the field of special education. They may also take classes on family issues, behaviour management or assistive technology. In some instances, individual universities choose to integrate special education content directly into regular education classes (i.e., methods classes). In general, in most states regular education teachers are required to take one course in special education that provides an overview of the legislation and information on the various disabilities.

In Greece, the first legislation on special education was introduced in 1972 (Decree 1222/72), which concerned the additional training of teachers in special education for one year in addition to their main training course. The systematic development of special education started in 1974, when a significant democratic political change took place that led to the development of laws that were orientated towards the consideration of individuals with special needs as equal with other individuals (Kouroublis, 1994). This political change, in combination with the growing development of organisations advocating for the development of special education, resulted in the introduction of Law 225/75, which established a two-year course for teachers in special education, in addition to their basic training as teachers (Damasiotou, Krassas, & Panagakis, 1994; Lampropoulou, 1989). The first essential step towards the establishment of special education was the first law concerning special education (Law 1143/81), and in 1985 Law 1566/85 made special education an integral part of regular education. Therefore, the previous separate legislation (Law 1143/81) has been incorporated into a combined law that is concerned with the structure and operation of primary and secondary education (Greek Ministry of National Education, 1994; O’Hanlon, 1993). A trend towards integration was seen through the rapid establishment of resource rooms/units in the period 1984–1992 and the movement towards integration was further highlighted through the participation of Greece in the European programme “HELIOS I”, an action programme towards the social and economic integration of people with disabilities (O’Hanlon, 1993). Within this programme integration made rapid development, and the term “inclusive education” appeared. There was a trend towards full-time integration although the resource class/unit continued to exist. Major inclusion projects were implemented mainly in Athens but also in other parts of the country (Lampropoulou & Padeiadou, 1995). In the recent legislation (Law 2817/2000) integration is further supported, as well as the right of every child to be educated in regular educational settings.
Furthermore, during the past decade an emphasis has been placed on teacher training (Nikolaraiizi, 2000). Initial teacher training courses across the various universities in Greece have gradually incorporated courses in special educational needs. In addition, postgraduate courses and several in-service teacher training courses in different areas of special education needs (e.g., learning difficulties, education of the deaf) were organised to address the needs of experienced and non-experienced, regular and special teachers in Greece.

Considering that the educational policies in both countries support inclusion and that the success of inclusion is linked partially to the attitudes of typically developing children’s attitudes towards individuals with special needs, the following research questions were addressed in this study: Are there differences in children’s attitudes regarding children with special needs in Greece and in the United States? Are there differences in children’s perceptions regarding children with special needs in inclusive and non-inclusive settings in Greece and in the United States? Are there gender differences in typically developing children’s perceptions regarding children with special needs?

Method

Participants

A total of 196 kindergarten-age children (93 boys and 103 girls) and 14 teachers participated in this study. The participants from the United States included 92 kindergarten children and nine teachers, while the participants from Greece included 104 kindergarten children and five teachers. Out of the total 196 children, 99 children (47 boys and 52 girls) were enrolled in inclusive kindergarten classrooms and 97 children (46 boys and 51 girls) were enrolled in non-inclusive kindergarten classrooms. An attempt was made to find schools that were similar in terms of cultural heterogeneity and socioeconomic status.

Participants in the United States. The participants in the United States included 92 children (43 boys and 49 girls) enrolled in kindergarten classes. The mean age of the participants was 73.2 months (range = 66–84 months). The children were enrolled in nine kindergarten classrooms distributed in two different school districts in a suburban school district in the Midwest. The students came from a middle socioeconomic background. The school population was predominantly (more than 90%) white and the rest were from different ethnic groups including African-Americans, Asian-Americans and Hispanics. These children were distributed in both inclusive and non-inclusive classrooms. The school district office determined the schools that would participate in the study.

Out of these nine classrooms, five kindergarten classes included children with special needs. The number of children with special needs varied. One classroom had only one child included whereas the other four classrooms had three or four children with special needs included, including deaf children, children with speech delays, Down syndrome,
autism and low vision. The kindergarten classrooms had an average total of 17 children with four or five children with special needs, except one kindergarten classroom where there was only one child with an intellectual disability (i.e., Down syndrome) included. Fifty-four children without special educational needs (25 boys and 29 girls) participated in the study. Four kindergarten classrooms were non-inclusive and did not have any child with special needs included. Thirty-eight children (18 boys and 20 girls) were enrolled in non-inclusive classrooms. The children did not have any other opportunities to interact with children with special needs in their school.

**Participants in Greece.** The sample included 104 typically developing children (50 boys and 54 girls) enrolled in kindergarten classes. The mean age of the participants was 68 months (range = 55–72 months). The children were enrolled in five kindergarten classrooms distributed in three different school districts. Out of these five classrooms, two kindergarten classes included children with special educational needs and three kindergarten classrooms did not include children with special educational needs.

Sixty-one children (29 boys and 32 girls) from the three non-inclusive classrooms participated in the study. Forty-three typically developing children (21 boys and 22 girls) from the two inclusive kindergartens participated in the study. Five children with special needs were enrolled in the inclusive kindergarten classrooms (two in one kindergarten classroom and three in the other kindergarten classroom). The children with special needs involved a deaf child, a child with a speech delay, a child with autism and a child with intellectual disability. The schools districts were located in the north and north-east part of Greece and the school population was white. Out of the 104 children, 28 children were from different ethnic-religious and cultural groups, including Pomacs and Pontioi. All participants, regardless of whether they were minority groups or not, could fluently communicate in the Greek language and this was the main criterion for their participation in this study.

**Procedure**

The study was conducted during the period March–April 2001 both in Greece and in the United States. Kindergarten teachers in these schools were asked to identify typically developing children, meaning children that were not diagnosed as having special educational needs and who could communicate fluently in the dominant language of each country. Consent letters were mailed to the parents. The researchers and graduate assistants administered the *Acceptance Scale for Kindergartners—Revised (ASK-R)* (Favazza & Odom, 1996; Favazza, Phillipsen, et al., 2000) to individual children. The authors followed the standard protocol described by Favazza, Phillipsen, et al. (2000) including providing the explanation of an individual with a disability used by Favazza and Odom (1996). Specifically, “I am going to read some questions about people who are disabled or handicapped. If a person has a disability or is handicapped, they may have trouble talking or may have trouble
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walking, or may have difficulty seeing, or they might be in a wheelchair”. The test administration was conducted in a quiet, isolated place in the school. After completing the test, each child was interviewed individually so more detailed responses clarifying the children’s answers on the ASK-R could be gathered.

**Instrument: The Acceptance Scale for Kindergartners—Revised (ASK-R)**

The ASK-R is a global scale designed to measure the affective component of attitudes of typically developing kindergarten children toward children with special needs. It was originally developed by Favazza and Odom (1996) and was later revised (ASK-R) (Favazza & Odom, 1999; Favazza, Phillipson, et al., 2000) with changes made in the protocol and administration. The ASK-R is an 18-item, three-point scale that requires children to respond “yes”, “no” or “maybe” to questions that reflect acceptance and non-acceptance of persons with special needs (e.g., “Would you like to be good friends with a kid who can’t see?”, “Would you play with a kid even if he couldn’t walk?”). The scale has reportedly good reliability (Cronbach’s alpha = 0.87, Split Half = 0.91). In the present study, the alpha was 0.89 for the Greek sample and 0.82 for the US sample. Nevertheless, because of its use in two cultures, the construct validity of the ASK-R was re-evaluated using confirmatory factor analysis procedures (see Loehlin, 1998), accounting for the three-category scaling system (i.e., using polychoric correlations). All analyses were run using EQS 5.7b (Bentler, 1998).

In this study, the test was administered individually by reading the instructions and questions verbatim from a standardised protocol. Children were given individual colour-coded sheets and were told to record their responses by marking an “X” on either the happy face for YES, the sad face for NO, or the “Maybe Man” for MAYBE. To compute a child’s total ASK score, 0 is assigned to a non-accepting response, 1 to a neutral response and 2 to an accepting response. The scores of the test range from 0 to 36, with high scores reflecting accepting attitudes and low scores reflecting non-accepting attitudes. The scores ranging from 0 to 11 indicate low acceptance, from 12 to 24 moderate acceptance, and from 25 to 36 high acceptance.

Based on theoretical issues concerning terminology in the area of special needs education, as well as teachers’ recommendations, the term “handicapped” on the test was replaced by “a child with special needs” to reflect current terminology.

**The Interview**

In addition to the ASK-R test an interview was used. The interview comprised four open-ended questions that addressed the four questions in ASK-R aimed at gathering more detailed and analytic data, and at gathering an insight into the children’s perceptions regarding children with special needs. Specifically, in the questions “Would you like to be good friends with a kid who can’t see?” or “Would you like to play with a kid even if he/she couldn’t walk?”, children were asked to explain the reason why they would or would not do that, how they would play with the children and what kind of
games they could play. Also, in the questions “Have you helped someone who has special needs?” and “Do you have a friend who has special needs?”, children who responded that they had such an experience were asked to describe that person.

The interviews were audiotaped, transcribed and analysed based on the principles of grounded theory. Specifically, the researchers read the transcriptions multiple times to achieve familiarity with the transcripts. By reading the transcripts the researchers highlighted the comments that were related and were informative to the study and formed the meaningful units (Gall, Borg, & Gall, 1996; Nikolaraizi, 2000). Thus, highlighted information indicated the preliminary concepts that were firmed into categories. Next, connections and similarities between the categories were explored with the use of the constant comparative method (Lincoln & Guba, 1985), and gradually the final categories were developed (Strauss & Corbin, 1990). The identification of meaningful units, the allocation of the children’s comments to a category and the creation of the categories were made by two of the researchers independently.

Inventory of Disability Representation

Children can be exposed to people with special needs within the school environment through displays, activities, books and the curriculum. The Inventory of Disability Representation (IDR) (Favazza, LaRoe, & Odom, 1999; Favazza & Odom, 1999) provides information about how individuals with special needs are represented in school and classroom environments through books, displays, materials and curriculum. The 15-item survey is based on the criteria for curriculum analysis for cultural diversity from the Anti-Bias Curriculum (Derman-Sparks & Anti-Bias Curriculum Task Force, 1989). The survey examined whether people with special needs were depicted in the visual environment (i.e., posters, bulletin boards), in the play area (i.e., dolls, books or puzzles depicting children with disabilities), through language (exposed to sign language or Braille in the curriculum) or school programmes (designed to promote acceptance of or interactions with people with disabilities). Some examples of items included “Are there images of children with special needs in your room (in photos, pictures, posters)?” and “Do children have access to books in your room that reflect children/adults with special needs?”

The teachers completed the IDR to describe children’s exposure to individuals with special needs in the classroom and school environments. A total of 20 points can be obtained on the Inventory, with high scores reflecting a high representation of people with disabilities and low scores reflecting a low representation of people with disabilities. Scores ranging from 0 to 6 indicate low representation, from 7 to 13 moderate and from 14 to 20 high representation.

Results

Psychometric Analysis of the ASK-R

Confirmatory factor analysis. A multi-group confirmatory factor analysis was applied to evaluate the unidimensionality of the ASK-R for two populations, students from
Greece and the United States. Among various indices of fit, the Comparative Fit Index (CFI) and Bollen’s Incremental Fit Index (IFI) were used because prior research indicated that they are particularly appropriate with small to medium samples (Hu & Bentler, 1995, 1998a, 1998b). Typical conventions of acceptable fit include fit index values above 0.90 (Bentler, 1990; Bentler & Chou, 1987), and non-significant chi-square statistics. Using the Greek sample, indices of fit using the CFI and the IFI were 1.00. The chi-square test was also non-significant, suggesting that there were no discrepancies between the relationships observed and those implied by the hypothesised one-factor model. All factor loadings were significantly different from zero at \( p < 0.01 \). Results using the US sample suggested factor invariance as model fit was again acceptable (CFI = 0.90, IFI = 0.90) although the chi-square statistic was significant. Fifteen out of the 18 coefficients were also significant (at \( p < 0.01 \)) in the US sample. Those findings suggested that the one-factor structure fit the data from both countries well. Thus, a total attitude score comprised the dependent variable in the relevant comparisons.

Item response theory. As a thoughtful reviewer suggested, multicultural issues raise a possible concern of item biases. Thus, we applied the Rasch model (for example, Betemps, Smith, Baker, & Rounds-Kruger, 2003) to examine invariance at the item level for individuals completing the scale in the United States and in Greece. Using the appropriate infit and outfit mean square statistics, \( z \) values above \( \pm 2.5 \) were considered indicative of biased items (Smith, Schumacker, & Bush, 1998). Within-sample analyses (at the participant level) also evaluated the presence of random responding. Individuals with patterns of random responding (e.g., noisy outliers, erratic transitions, noisy progression, extreme categories) would be eliminated from further analyses (if their infit or outfit mean square statistics exceeded standardised values of 2 units). Results on item bias indicated no patterns of differential item functioning as no item exceeded 2.5 standard deviations of differential responding. Regarding random responding, the infit and outfit mean square statistics ranged between –1.5 and 1.8, suggesting that random responding was not overly present and no individual was non-informative for measurement purposes. Thus, all participants were incorporated in subsequent analyses.

The ASK-R

All children in Greece (\( M = 23.45 \)) and in the United States (\( M = 25.61 \)) were found to be accepting of individuals with special needs. Those differences did not reach significance using conventional parametric procedures (i.e., one-way analysis of variance) or indices of effect size (Onwuegbuzie, Levin, & Leech, 2003). Cohen’s \( d \) as an index of effect size was 0.27, suggesting small effects. A three-way analysis of variance was employed with country (Greece, United States), gender (male, female) and setting (inclusive, non-inclusive) as factors and ASK-R scores as the dependent variable. There were no statistically significant differences in the levels of acceptance
between children in Greece and in the United States. Also, no statistical differences were found between girls and boys (Table 1).

Significant differences were identified in the total population attending inclusive and non-inclusive settings \((F = 8.824, p < 0.01)\). The total population of children attending inclusive settings had significantly higher ASK-R scores \((M = 26.19)\) when compared with children attending non-inclusive settings \((M = 22.77)\). In addition, statistical differences in levels of acceptance were found within groups and specifically between children in inclusive and non-inclusive classrooms in Greece \((F = 5.446, p < 0.05)\) (Table 2). Those differences were expressed as medium effect sizes using Cohen’s \(d\) statistics (E.S. = 0.42).

The Interview

The analysis of children’s comments when they were asked to explain why they would like or not to become good friends with a kid who could not see and when they were asked whether they would like or not to play with a kid even if he/she couldn’t

Table 1. Means of boys’ and girls’ ASK-R scores in Greece and in the United States

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girls</td>
<td></td>
<td></td>
<td>Boys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greece</td>
<td>23.46</td>
<td>8.95</td>
<td>23.44</td>
<td>9.23</td>
<td>23.45</td>
<td>9.04</td>
</tr>
<tr>
<td>USA</td>
<td>27.00</td>
<td>6.91</td>
<td>24.04</td>
<td>7.10</td>
<td>25.61</td>
<td>7.12</td>
</tr>
<tr>
<td>Total</td>
<td>25.14</td>
<td>8.20</td>
<td>23.72</td>
<td>8.28</td>
<td>24.47</td>
<td>8.25</td>
</tr>
</tbody>
</table>

Note: Cohen’s \(d\) for examining differences between boys and girls in Greece was 0.001. The respective estimates of effect size for individuals in the United States were 0.17.

Table 2. Means and comparison of children’s ASK-R scores in inclusive and non-inclusive settings in Greece and in the United States

<table>
<thead>
<tr>
<th></th>
<th>Inclusive settings</th>
<th>Non-inclusive settings</th>
<th>(F)</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard deviation</td>
<td>Mean</td>
</tr>
<tr>
<td>Greece</td>
<td>25.84</td>
<td>9.54</td>
<td>21.77</td>
</tr>
<tr>
<td>USA</td>
<td>26.44</td>
<td>7.01</td>
<td>25.10</td>
</tr>
<tr>
<td>Total</td>
<td>26.19</td>
<td>8.03</td>
<td>22.77</td>
</tr>
</tbody>
</table>

\*p < 0.05 \**p < 0.01. Cohen’s \(d\) for examining differences between individuals from inclusive and non-inclusive settings in Greece was 0.45. The respective estimates of effect size for individuals in the United States were 0.19.
walk indicated that children’s perceptions in Greece and in the United States shared many similarities.

Specifically, children in the United States who expressed positive perceptions made comments that were categorised as the following: (a) feelings of compassion or that this was the correct attitude; (b) willingness to offer their help to the child and (c) ideas about interacting with the child through various games, and through the adaptation of existing games so that they could become inclusive for a child who could not see or walk (Table 3).

Regarding the negative perceptions of children in the United States, their comments were categorised as the following: concerns about perceived limitations that would impede them from interacting with a child who could not see or a child who could not walk (Table 4).

Children in Greece who expressed positive perceptions made comments that were categorised as the following: (a) feelings of compassion or that this was the correct attitude; (b) willingness to offer their help to the child; (c) ideas about interacting with the child through various games and through the adaptation of existing games so that they could become inclusive for a child who could not see or walk; and (d) willingness to interact with the children to offer medical help, because they believed that a child who could not see or walk required medical attention (Table 5).

Regarding the negative perceptions of children in Greece, their comments were categorised as the following: (a) concerns about perceived limitations that would impede them from interacting with a child who could not see or a child who could not walk (Table 4).

Table 3. Categories of reasons emerging out of children’s comments in the United States explaining why they would like to become good friends with a kid who could not see or a kid who could not walk

<table>
<thead>
<tr>
<th>Category</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct attitude and compassion</td>
<td>“It would be rude if you didn’t”</td>
</tr>
<tr>
<td></td>
<td>“I like people”</td>
</tr>
<tr>
<td></td>
<td>“I am a nice kid”</td>
</tr>
<tr>
<td></td>
<td>“I would care for him”</td>
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<tr>
<td>Willingness to help</td>
<td>“I could try to teach him”</td>
</tr>
<tr>
<td></td>
<td>“I would help him to walk”</td>
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<tr>
<td></td>
<td>“I could show him where to go”</td>
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<tr>
<td></td>
<td>“I could push his wheelchair”</td>
</tr>
<tr>
<td>Ideas about games and ways to interact</td>
<td>Monopoly</td>
</tr>
<tr>
<td></td>
<td>Puzzle</td>
</tr>
<tr>
<td></td>
<td>Colouring</td>
</tr>
<tr>
<td></td>
<td>Chinese Checkers</td>
</tr>
<tr>
<td></td>
<td>Video games, volley ball with our heads</td>
</tr>
<tr>
<td></td>
<td>Games that we don’t have to move a lot</td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
</tr>
<tr>
<td></td>
<td>Watch television</td>
</tr>
</tbody>
</table>
not walk; and (b) medical concerns, indicating that they would reject or avoid a child who could not see or a child who could not walk because he/she had a contagious illness (Table 6).

Both groups of children’s descriptions of their background experiences regarding their contacts with individuals with special needs indicated that their experiences were acquired through; (a) children at school, (b) relatives, and (c) acquaintances and friends (Table 7).

**The IDR**

Nine teachers in the United States and five teachers in Greece completed the IDR to describe kindergarten children’s exposure to people with disabilities in the classroom and school environments. In the United States, three classrooms (two inclusive and

<table>
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<tr>
<th>Category</th>
<th>Comment</th>
</tr>
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<tbody>
<tr>
<td>Rejection and exclusion based on perceived limitations</td>
<td>“He might bump into something”</td>
</tr>
<tr>
<td></td>
<td>“He cannot see, so he cannot play football”</td>
</tr>
<tr>
<td></td>
<td>“They run into a lot of stuff”</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct attitude and compassion</td>
<td>“Otherwise he will be sad”</td>
</tr>
<tr>
<td></td>
<td>“It would be a nice thing to do”</td>
</tr>
<tr>
<td></td>
<td>“I love all children”</td>
</tr>
<tr>
<td>Willingness to help</td>
<td>“I would help him to walk without falling”</td>
</tr>
<tr>
<td></td>
<td>“I would help him to get dressed”</td>
</tr>
<tr>
<td></td>
<td>“I would hold his hands”</td>
</tr>
<tr>
<td></td>
<td>“I would carry him”</td>
</tr>
<tr>
<td>Ideas about games and ways to interact</td>
<td>“I would play basket ball. He could run in his wheelchair”</td>
</tr>
<tr>
<td></td>
<td>“We could watch/play videogames”</td>
</tr>
<tr>
<td></td>
<td>Puzzle</td>
</tr>
<tr>
<td></td>
<td>Colouring</td>
</tr>
<tr>
<td>Need for medical attention</td>
<td>“I would take him to the hospital”</td>
</tr>
<tr>
<td></td>
<td>“We would go to the doctor”</td>
</tr>
<tr>
<td></td>
<td>“I would give him medicine and he would become well”</td>
</tr>
</tbody>
</table>
one non-inclusive) had very low representations, with scores ranging from 3 to 5. Four classrooms had moderate representations and the scores ranged from 10 to 13 (two inclusive and two non-inclusive), and two classrooms had high representation scores from 14 to 15 (one inclusive and one non-inclusive). The mean score for non-inclusive classrooms was 10.2 and that for inclusive classrooms was 9.6. The disability representation was slightly higher in non-inclusive classrooms but both settings had only moderate representations.

In Greece, all classrooms (inclusive and non-inclusive) had very low representations of individuals with disabilities in the class environment regardless of whether they included children with special educational needs or not. In all settings the score ranged from 0 to 5. Specifically, in one inclusive setting the score was 5, in the other

<table>
<thead>
<tr>
<th>Table 6. Categories of reasons emerging out of children’s comments in Greece explaining why they would not like to become good friends with a kid who could not see or a kid who could not walk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Rejection and exclusion based on perceived limitations</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Rejection and exclusion based on medical concerns</td>
</tr>
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<td></td>
</tr>
</tbody>
</table>

Table 7. The background experiences of children in Greece and in the United States with people with special needs

<table>
<thead>
<tr>
<th>Category</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children at school</td>
<td>“A girl in my classroom”</td>
</tr>
<tr>
<td></td>
<td>“A boy in class who used to fall on the floor and shake [seizures]”</td>
</tr>
<tr>
<td></td>
<td>“A is in my classroom, he cannot speak very well, and sometimes he spits”</td>
</tr>
<tr>
<td></td>
<td>“A boy in my classroom. He cannot hear and we talk with our hands”</td>
</tr>
<tr>
<td>Relatives</td>
<td>“My uncle”</td>
</tr>
<tr>
<td></td>
<td>“Grandma in wheelchair”</td>
</tr>
<tr>
<td>Acquaintances and friends</td>
<td>“Girls on crutches, I opened the door for her”</td>
</tr>
<tr>
<td></td>
<td>“A lady who was blind, saw her at the store”</td>
</tr>
<tr>
<td></td>
<td>“Dad’s friend. He is in a wheelchair and we help him and carry his wheelchair to enter our house”</td>
</tr>
<tr>
<td></td>
<td>“A boy lives near my house. I help him to walk”</td>
</tr>
<tr>
<td></td>
<td>“Nathan in my church, he uses wheelchair”</td>
</tr>
</tbody>
</table>
inclusive setting the score was 1, and in the other three non-inclusive settings the score was 0. Teachers, both in Greece and in the United States, reported that there were no school-wide programmes to promote and encourage interactions between children with and without special needs.

**Discussion**

The most important finding in this study was that participants in the United States and in Greece were accepting of individuals with special needs. No significant differences were identified in the level of acceptance between boys and girls. Despite the possibly greater efforts in the United States to foster acceptance of disability among school students, compared with Greece where a more delayed development occurred, the attitudes of kindergarteners in both countries, as exemplified in the samples used in the present study at least, were not significantly different. Possibly, the absence of differences in the levels of acceptance between children in Greece and in the United States might be linked to the fact that both societies have followed similar special education initiatives that saw education move from segregated settings to mainstreamed and fully integrated settings. Those mandates, which were similar in both countries, may have resulted in an educational experience that included ample contact with children with special needs. This contact may have shaped children’s perceptions and may have led to high levels of acceptance for both countries, regardless of age and type of special need.

An interesting finding concerns the fact that children in inclusive settings were more accepting of children with special needs compared with children in non-inclusive settings. This finding is also consistent with previous studies indicating that children attending inclusive classrooms become more accepting of individuals with special needs compared with children who do not have such an experience (Diamond & Carpenter, 2000; Diamond & Hestenes, 1994; Diamond et al., 1997; Favazza & Odom, 1997; Favazza, Phillipsen, et al., 2000). However, in our study the significant differences concerned mostly the Greek participants, since the score for the children attending non-inclusive classrooms was quite low. This result may be associated with the IDR results that, although not statistically analysed (due to the small number of teachers), revealed that the educational environment in the United States, both in inclusive as well as in non-inclusive settings, reflected more diversity when compared with Greece. As a result, children in the United States were more familiar with individuals with special needs through the educational environment (displays, books, media). This might not be a strong factor in promoting greater acceptance of individuals with special needs in inclusive classrooms where children have direct experiences with children with special needs in their own classrooms. According to the teachers’ comments there was also no planned curriculum that focused on promoting acceptance of children with differences or special needs. However, in non-inclusive classrooms the role of the classroom’s educational environment might be more important in making children more accepting of individuals with special needs.
Our effort to achieve an insight into children’s perceptions provided us with a mixed picture. In many cases both participants in Greece and the United States indicated that they had some understanding of disability, in that they referred to some of the difficulties that children with special needs may face in playing or in that they suggested ways to interact with a child with special needs, by selecting or changing their games to accommodate a child with special needs. Especially, children’s comments such as “He could run in his wheelchair” or “Games that we don’t have to move a lot” strongly indicate that they were aware and had an understanding of the disability and also were quite inventive in their games.

It is worth stressing, however, that the participants’ understanding might have been facilitated through the fact that ASK-R explored perceptions regarding persons with evident disabilities, such as blind people or people in wheelchairs, and avoided abstract and more hidden disabilities. In a previous study (Magiati, Dockrell, & Logotheti, 2002) that explored children’s perceptions about both evident and less evident disabilities, it was found that children had a clearer understanding of more evident disabilities. Despite the fact that children indicated a certain level of understanding, it cannot be ignored that young children’s views of disability are emerging and their understanding of difficulty is quite limited (Magiati et al., 2002). Therefore, it is not surprising that certain misconceptions were also expressed, especially by children in Greece. This was especially so in cases where they believed that children with special needs had to have “medical care” or that a special need was “contagious”.

Children’s comments that indicated feelings of sympathy or their willingness to help a peer may be an indication of children’s needs to hold a parenting attitude or to protect children with special needs (Ward, Center, & Bochner, 1994). In addition, some of the children’s comments such as “It would be a nice thing to do” or “It would be rude if you didn’t” indicate that children’s perceptions reflect the cultural beliefs of their home, their school and the environment in which children are growing up. Also, children might be ashamed to express a negative attitude and prefer to express socially acceptable attitudes (Nikolaraizi & de Reybekiel, 2001). It is suggested that the parents and teachers, as well as the wider socio-educational context in which children grow up, may affect children’s perceptions regarding disability and children with special needs (Gollnick & Chinn, 2002; Triandis et al., 1984). Finally, children’s interview responses indicated their hesitance in becoming friends or in playing with a child with special needs, and a tendency in some cases to underestimate their peers’ potential. Such perceptions may have been driven by ignorance, fear of the unknown or feelings of insecurity (Ward et al., 1994). Such findings may also suggest that children accept their peers with special needs at a superficial level without being ready to establish a reciprocal relationship (Nikolaraizi & de Reybekiel, 2001). Such findings indicate the need for the promotion of awareness programmes to dispel myths, fears and erroneous information regarding individuals with special needs.
Conclusions

The findings of the study are encouraging in that they indicate that kindergarten-age children were accepting of individuals with special needs. They also provide some support for the fact that kindergarten children who are educated together with children with special needs are more accepting of individuals with disabilities than children enrolled in educational settings without children with special needs.

However, in this study, teachers in the United States and especially teachers’ comments in Greece indicated that they did not adopt programmes or strategies that systematically promoted acceptance of children with special needs. It is important to consider, however, that teachers are in a position to facilitate acceptance of children with special needs (Gollnick & Chinn, 2002). Therefore, it might be beneficial if schools make children of this age aware of individuals with special needs through books, videos and, most importantly, through programmes that are incorporated into the curriculum, along with the teaching of strategies that promote positive social interactions and acceptance among children with and without special needs.

Finally, this study has some limitations that can be addressed in future research. One issue that requires some consideration is the fact that the schools that were selected in this study did not have programmes that promoted acceptance, and an avenue for further research would be to explore children’s perceptions in schools, which truly support inclusive policies by developing and implementing programmes that promote inclusion. A second issue concerns the need for more detailed information about the children’s backgrounds and environments. Interviewing children’s parents and teachers would provide further insight into adult influences on children’s perceptions. Another limitation concerns the exploration of preschool children’s beliefs through a scale and interviews that might have included questions that the children did not fully understand. This may have led to random responses or, because of a social desirability element, may have influenced their replies. More sources of information are required such as through direct observation of children in their educational as well as in other natural settings (e.g., at play). Finally, there is a need for studies that will enable a better understanding about the role of the social and cultural context on children’s perceptions regarding children with special needs to be developed.

References


