Evaluation Physical Education Teacher´s difficulties with carrying out diversity outreach

Evaluación de las dificultades de llevar a cabo la atención a la diversidad por parte del profesorado de Educación Física

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Abstract

This research analyse how Physical Education teacher’s attitude is facing Students with Special Educational Needs regarding to qualifications, age and sex characteristics. The methodology is quantitative and transversal, and the sample is made up 40 teachers of Community of Madrid, which teach in the stage of primary and secondary schools. The results obtained therefrom have been subjected to a bi-variable analysis of the contingency table, resulting in a moderate relationship between the variable attitude with age ($\phi = .449$), sex ($\phi = .411$) and qualification ($\phi = .422$), and it is always that $\phi = .25 - .5$. It reaches the conclusion that it exists difficulties with carrying out diversity outreach.

Key words

Students with special educational needs; Physical Education; Attitude; Inclusion; Diversity.
Resumen
El presente estudio analiza cómo es la actitud de los profesores de Educación Física ante Alumnos con Necesidades Educativas Especiales, en relación a la titulación, edad y sexo. La metodología es cuantitativa y transversal, con una muestra de 40 profesores de la Comunidad de Madrid de Primaria y Secundaria. Para el análisis de los resultados se ha optado por un análisis bivariable a través de tablas de contingencia, dando como resultado una relación moderada entre la variable actitud con la edad ($\varnothing = .449$), sexo ($\varnothing = .411$) y titulación ($\varnothing = .422$) siempre que $\varnothing = .25 - .5$. Se llega a la conclusión de que existen dificultades hacia la atención a la diversidad.

Palabras clave
Alumnos con Necesidades Educativas Especiales; Educación Física; Actitud; Inclusión; Diversidad.

Introduction
The teacher’s attitude significantly influences students in a positive or negative way, so a positive attitude towards students with special needs should be developed because it will promote inclusion and attention to diversity.

It must be borne in mind that there are a few factors that can lead to negative attitudes from teachers like the lack of good initial and continuing education which leads to the teacher not knowing how to intervene when faced with a situation of diversity (Single, 1997).

Furthermore, Garcia, Garcia, Garcia and Rodriguez (1991) mention possible causes for this ambivalent attitude such as a greater workload since it is necessary to analyse the different situations to look for improvement which, at the same time, can lead to a state of anxiety, and a greater demand for thinking and acting, which is not easily satisfied. These special needs are incompatible with those of other students, and success is never assured, so that failure or not reaching the goals set, could lead not only to a state of anxiety, but also a state of frustration.

In addition, the contributions of Castro and Campo-Mon (2005) are also significant. Their sample consisted of 389 primary education teachers in 35 different schools and among the results they concluded that teachers consider the integration and attention to students with special educational needs of great importance, and they also highlight the importance of the participation of the families in this aspect. However, teachers are demanding more resources, implying that integration could be improved. In addition, these
results show a lack of knowledge of combined education and a lack of strategies and resources to respond to special educational needs. In short, there is a positive attitude towards the integration of students with special educational needs, there are higher expectations for these students in the subjects of physical education and arts and crafts, but despite this, it is apparent that integration does not work as it should.

Similarly, Durán and Sanz (2007) carried out a study on the difficulties of physical education teachers in secondary education regarding students with disabilities, with a sample of 30 physical education teachers from different secondary schools in the Community of Madrid. This research showed a positive attitude in the teachers towards integration in ordinary schools; however, they had difficulties due to the refusal of the Administration to provide them with resources.

Molina and Marques (2009) in their research on experience teaching students with special educational needs tried to ascertain the interdependence between teaching experience in physical education and the relationship with opinions about the inclusion of students with special educational needs. The research was carried out in Brazilian schools with 107 teachers, of whom 56.1% had teaching experience of less than 10 years and 43.9% of more than 10 years. However, the authors did not perceive any linearity with which to establish a correlation. The physical education teachers considered that continuing education should help them in classroom intervention with students with special educational needs but they recognised limitations for teaching when they paid attention to these students blaming the authorities for these limitations and lack of resources.

For this reason, it is necessary to bear in mind the importance of physical education and how it helps in the integration of the students with special educational needs, due to its eminently cooperative nature and the involvement of the students in the subject. This is because physical education encourages movement and body control, which has a direct impact on the development of the child’s personality (Lora, 1991). In this way, movement will help students in the three areas of behaviour: social, cognitive and affective, provided that the activity is always adapted to the level of each individual.
Objectives

The overall objective of this research was to investigate the attitude of the teaching staff towards the integration of the ACNEEs (Special needs students).

The specific objectives of this research were:

I. To analyse the attitude of physical education teachers in the presence of students with special educational needs in their classes.

II. To ascertain if there are difficulties in carrying out the integration of the students with special educational needs for physical education teachers.

Method

Research design

This study is based on a non-experimental quantitative and cross-sectional type design since it takes place at a single moment in time, i.e., data collection was conducted using a questionnaire, only once at a given time and in different schools (Cea D’ancona, 2001; Bravo Sierra, 2001).

Sample

Table 1. Teacher profile

<table>
<thead>
<tr>
<th>Sex</th>
<th>Diploma</th>
<th>%</th>
<th>Degree</th>
<th>%</th>
<th>Dip. and Deg.</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>9</td>
<td>22.5</td>
<td>13</td>
<td>32.5</td>
<td>5</td>
<td>12.5</td>
<td>27</td>
</tr>
<tr>
<td>Female</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>12.5</td>
<td>4</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>32.5</td>
<td>18</td>
<td>45</td>
<td>9</td>
<td>22.5</td>
<td>40</td>
</tr>
</tbody>
</table>

The sample was composed of 40 primary and secondary education teachers (n = 40) randomly selected from different state, semi-private and private schools in the Community of Madrid.

Of the total, 32.5% were women and 67.5% men.
Instrument

The data collection instrument used in this research was a questionnaire, designed by Barroso (1991) and later adapted, firstly by Hernandez (1995), for a postgraduate course in adapted physical activities; and secondly, by Rizzo and Vispoel (1991) regarding experience with students with special educational needs, according to sex and age; also with the proposal to include general educational experience as reflected in Hernandez (1995); and finally incorporating the formulating proposals made by Verdugo (1994). Subsequently, another adaptation was proposed by Hernandez and Hospital (1999).

The questionnaire begins with a few questions about age, sex, degrees and the educational stage where they work. Secondly, there are 11 mixed questions about the teachers’ education and knowledge about the subject. Finally, 22 Likert scale questions follow about need and adequacy of education with attention to diversity in physical education and possible difficulties for its inclusion in the classroom.

The question concerning the attitude of the teachers, specifically, the question which examines whether teachers have difficulties in paying attention to diversity, was taken from this questionnaire. This question is closed and can only be answered with the different options given (Table 2):

Table 2 Questions analysed concerning the difficulties teachers encountered to achieve integration

<table>
<thead>
<tr>
<th>Question</th>
<th>Reference in the analysis tables</th>
</tr>
</thead>
<tbody>
<tr>
<td>What difficulties do you consider are implied in implementing attention to diversity?</td>
<td>1. Experience of the impossibility of teaching effectively in the presence of children with problems</td>
</tr>
<tr>
<td></td>
<td>2. The consideration that it is better to teach student with special educational needs in specific schools.</td>
</tr>
<tr>
<td></td>
<td>3. Other reasons</td>
</tr>
<tr>
<td></td>
<td>4. I do not think that there is rejection</td>
</tr>
<tr>
<td></td>
<td>5. The impossibility of teaching and the fact that students with special educational needs should go to specific schools.</td>
</tr>
</tbody>
</table>
Procedure

The procedure used for the collection of information was through questionnaires which were given to the teachers in the different stages and schools.

Data collection was carried out between the months of December 2013 and January 2014.

Teachers were invited to participate in the investigation and the questionnaires were given out allowing them time to complete them and hand them in.

The time estimated to complete the questionnaire was 15 to 20 minutes.

Statistical analysis

A bivariate analysis through contingency tables with descriptive statistics such as chi-square and phi, was performed with the SPSS® statistical program.

Results

There follows the analysis and interpretation of these questions in relation to the selected independent variables which were the sociodemographic variables (age and sex) and the degree variable.

In general, the percentage data show, regardless of the variables of age, sex and degrees, that the most common answer to the difficulties implied in implementing attention to diversity was the impossibility of teaching effectively in the presence of children with problems (37.5%). One of the reasons for this could be the lack of initial or continuing education on the subject. Furthermore, teachers considered that the education of these students should be provided in specific schools (35%).
Table 3 Relationship between teachers’ attitudes and the age variable

<table>
<thead>
<tr>
<th>Age</th>
<th>Total</th>
<th>X²</th>
<th>Sign.</th>
<th>Ÿ</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 30</td>
<td></td>
<td></td>
<td>22.5</td>
<td>.494 *</td>
</tr>
<tr>
<td>31-40</td>
<td>7</td>
<td></td>
<td>12.5</td>
<td>.638</td>
</tr>
<tr>
<td>41-50</td>
<td>2</td>
<td></td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>&gt; 51</td>
<td>5</td>
<td></td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>37.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where $X^2$ is significant if p-value <.05 and not so if p-value >.05
* There is a moderate relationship since $\Theta = .25 - .5$

Table 3 shows the teachers´ answers when asked the reason for their attitude towards integration, linking it with the independent variable of age.

It can be seen that from all those who answered the question, only one considered that there were no difficulties. In the rest of the cases, they considered that there were several reasons.

Thus, if data are analysed using chi-square and phi statistics, it can be seen that according to chi-square, the relationship between the difficulties encountered and age is not significant, because $X^2 (12) = 9.753; \ p = .638$.

However, according to the phi coefficient, there is a moderate relationship between both variables, attitude and age, which is $\Theta = .449$ and this is true if $\Theta = .25 - .5$. 
### Table 4 Relationship between teachers’ attitudes and the sex variable

<table>
<thead>
<tr>
<th>Sex</th>
<th>Total</th>
<th>X²</th>
<th>Sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male %</td>
<td>Female %</td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Experience of the impossibility of teaching effectively in the presence of children with problems</td>
<td>11</td>
<td>27.5</td>
<td>4</td>
</tr>
<tr>
<td>The consideration that it is better to teach student with special educational needs in specific schools.</td>
<td>11</td>
<td>27.5</td>
<td>3</td>
</tr>
<tr>
<td>Other reasons</td>
<td>4</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>I do not think that there is rejection</td>
<td>1</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td>Both the impossibility of teaching and the fact that students with special educational needs should go to specific schools..</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>67.5</td>
<td>13</td>
</tr>
</tbody>
</table>

Where $X^2$ is significant if $p$-value < .05 and not so if $p$-value > .05

* There is a moderate relationship since $Ø = .25 - .5$

In Table 4, it should be taken into account that the number of women who participated in the study is lower (32.5%) than the number of men (67.5%).

The difficulties to achieve integration most mentioned by teachers were the impossibility of teaching effectively when there were students with problems and the consideration that it was better for these students to go to specific schools; both answers being chosen by men equally, i.e. each option was chosen by 27.5% of men.

However, women stated that the causes of rejection towards integration that stood out were the impossibility to impart classes in the presence of students with problems (10%) and other reasons (10%).

Therefore, to analyse data through chi-square and phi statistics, phi only indicates that the relationship that exists between the difficulties encountered by the teacher and sex is moderate, being $Ø = .411$ and this is true if $Ø = .25 - .5$. 


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Table 5 Relationship between teachers´ attitudes and the degree variable

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Diploma</th>
<th>%</th>
<th>Degree</th>
<th>%</th>
<th>Dip. and Deg.</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>p-value</th>
<th>Ø</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Experience of the impossibility of teaching effectively in the presence of children with problems</td>
<td>5</td>
<td>12.5</td>
<td>6</td>
<td>15</td>
<td>4</td>
<td>10</td>
<td>15</td>
<td>37.5</td>
<td>.522</td>
<td>.422 *</td>
</tr>
<tr>
<td>2. The consideration that it is better to teach student with special educational needs in specific schools.</td>
<td>4</td>
<td>10</td>
<td>8</td>
<td>20</td>
<td>2</td>
<td>5</td>
<td>14</td>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Other reasons</td>
<td>4</td>
<td>10</td>
<td>3</td>
<td>7.5</td>
<td>1</td>
<td>2.5</td>
<td>8</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I do not think that there is rejection</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2.5</td>
<td>1</td>
<td>2.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Both the impossibility of teaching and the fact that students with special educational needs should go to specific schools.</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2.5</td>
<td>1</td>
<td>2.5</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>13</td>
<td>32.5</td>
<td>18</td>
<td>45</td>
<td>9</td>
<td>22.5</td>
<td>40</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Where $X^2$ is significant if p-value <.05 and not so if p - value >.05
* There is a moderate relationship since $\phi = .25 -.5$

Table 5 shows the relationship between the difficulties encountered for paying attention to diversity by the teachers and their degree. Thus, it can be seen that the most outstanding difficulties in three cases were: on the one hand, the impossibility to teach students with problems (15% of degree graduates in the Sciences of Physical Activity and Sport; 12.5% of teachers with diplomas in Physical Education, and 10% of teachers with both degrees). And on the other hand, the consideration that it is better for these students to go to specific schools (20% of degree graduates in the Sciences of Physical Activity and Sport; 10% of teachers with diplomas in Physical Education and 5% of teachers with both degrees).

In this way, and after analysing the data through the chosen statistics, it can be observed that the relationship between the two variables is moderate as $\phi = .422$ and this is so if $\phi = .25 -.5$.

Discussion

The positive attitude of teachers toward students with special educational needs is an indispensable factor in education. There are studies that show the possible causes of the negative attitudes towards students with special educational needs, being in many cases, an
increase in the workload, anxiety, or other factors (Alvarez, Castro, field and Martino, 2005; Garcia et al, 1991).

In addition, regarding attitude, as Garcia, Garcia, Garcia and Rodriguez (1991) have shown in their research, teachers are in favour of inclusion, but not so much with the workload it entails. This may be why, according to the results of this research, only 2.5% of the teachers surveyed considered that there were not difficulties or any type of rejection of integration, while 97.5% considered that there were difficulties or negative attitudes for different reasons, either because of the inability to carry out education in the presence of children with problems (37.5%), because they considered that these students should go to specific schools (35%), for both reasons at the same time (5%) or for other unspecified reasons (20%). However, Fernandez, Sanchis, Puchalt, Ros and Ruiz (2016: 511) claim that teachers have a positive attitude towards the integration of these students, but that "without economic aid the access and the provision of suitable materials would be very difficult" which may be the cause of less involvement and motivation, and therefore a negative attitude.

Nowadays there are students with special education needs in most ordinary schools and these students are therefore present in the physical education classes, as reflected in the evolution of the laws and the improvement of education for students with special educational needs (Jiménez, 2006). For this reason, a positive attitude towards students with special education needs is considered important to achieve their integration and education, with teachers being responsible for generating knowledge that will enable them to implement inclusion in the classroom, which is important for all subjects (Fernandez, Ruiz and Paton, 2017).

Conclusions

Nowadays there is a student with special educational needs in the majority of schools, and as a result, there are students with special educational needs in physical education classes.

The results of the investigation show that there are differences between the difficulties encountered for paying attention to diversity and the variables of age, sex and degree.

In this way, it can be seen that regardless of degree, age and sex, there are different difficulties for implementing integration, mainly with emphasis on the impossibility to teach
the specific content in the presence of students with special educational needs and the opinion that these students should go to specific schools.

Thus, there is still a negative attitude toward students with special educational needs, not so much because of their integration but rather due to the workload and the difficulties that arise to teach effectively with students whose needs are different.

Some of the limitations of this study have been the inability of the teachers to respond to the questionnaire for lack of time. In addition, some of them felt uncomfortable at having to answer questions about the difficulties of implementing integration in their classes.

Bibliographic References


