Self-Concept of Chilean and Portuguese University Students with Disabilities: Gender and Participation in Support Programmes

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Abstract: This study was designed to investigate the state of self-concept among Chilean and Portuguese university students with disabilities with the aim of introducing proposals to help their inclusion and academic performance. First, the two samples compared separately students with and without disabilities with their peers and subsequently both were compared with students with disabilities from both countries. The role of gender and participation in support programmes for students with disabilities was also examined. The instrument used was the AFS-Scale, which assesses five dimensions of self-concept (academic, social, emotional, family and physical) and a socio-demographic form. The results (applying a non-parametric analysis) showed that students with disabilities in both countries presented lower scores for physical self-concept than peers without disabilities, the Chilean students being those who obtained the lower scores when comparing only students with disabilities. Women showed higher academic self-concept, but worse emotional self-concept than men. Finally, it was found that students participating in support programmes have a higher physical self-concept than those who do not. It is concluded that a way to improve the deficit in self-concept in both samples could be associated with participation in these support programmes.

Keywords: self-concept, disability, university, gender, perceived social support


Introduction

In Chile and Portugal, as in most Western countries, access to college for people with disabilities is on the rise (Abu-Hamour, 2013; Konur, 2006). However, when we analyse the educational reality it shows that these institutions are the most excluding for them to remain there (Moreno, 2005).

The sustained increase in admissions to higher education and the barriers that still remain have led to the creation of services for students with disability, as they often present greater difficulties than the general population because, besides their own situation of disability they have to overcome various barriers, from the architectural to the psychosocial (Polo-Sanchez and López-Justicia, 2012). In this regard, it may be noted that one of the variables most studied in people with disabilities is that of self-concept (Gonzalez and Touron, 1994).

According to the proposal of Shavelson, Hubner, and Stanton (1976) and Harter (1999), self-concept is defined as the perception that the individual has of him or herself, being composed of: the perception of self (self-image); the value attributed to his or her particular way of perceiving themselves (self-esteem); and their behaviour. Furthermore, Shavelson et al. (1979) and González-Pienda et al. (2003) propose a model of hierarchical and multidimensional self-concept, in which self-concept is the result of partial perceptions of self in different areas or dimensions: academic / professional, social, emotional, family and physical.

In people with disabilities the self grows and develops as in the rest of the population (Buscaglia, 1990), but in many cases this group suffers from infancy from social rejection, prejudice or negative attitudes that may devalue the image they have of themselves (Polo-Sanchez and López-Justicia, 2012), to which individual difficulties in the process of adaptation to disability are added (Thompson, 2002). In this line, Perez and Garaigordobil (2007a, 2007b) indicate that the development of self-concept is important in these people as social comparison plays a fundamental role in self-esteem.

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Some studies have found differences in self-concept between people with and without disabilities (Taleporos and McCabe, 2005; Weisel and Kamara, 2005; López-Justicia and Nieto, 2006; Halder and Datta, 2012), which have also been detected in the university population, although little research has been done in this area (Polo and López-Justicia, 2012; Valenzuela-Zambrano and López-Justicia, 2015). This dearth, combined with the important functions that are attributed to self-concept, such as its relationship with performance in college (Gargallo, Garfella, Sanchez, Ros, and Serra, 2009), has become the centre of research interest.

Moreover, in addressing gender-related differences in college students with disabilities, the results are divergent because, although, in a study conducted at the University of Granada no significant differences were found (Polo-Sanchez and López-Justicia, 2012), yet another made with Chilean students did find that women had a higher academic self-concept than men (Valenzuela-Zambrano and López-Justicia, 2015). As noted above, the increase in students in higher education with disabilities has also allowed the emergence of support programmes by requiring the implementation of adjustments in teaching methodologies, materials and assessments to perform on terms of equity (Lissi, Zuzulich, Hoyas, Achiardi, Salinas, and Vasquez, 2013). In addition, the support offered is not restricted to academic studies only, but also provides psychosocial support, by considering facilities to make inclusion easier (Mella Diaz, Muñoz, Orrego, and Rivera, 2013).

But it should be noted that in both Chile and Portugal there is little information on the content of existing programme, forms of work and a lack of data on the quantity and characterization of the user population (Valenzuela-Zambrano, Panao, Chacon-López, and López-Justicia, in press). Despite this there is evidence of the importance of these in Chilean higher education, highlighting that students with disabilities consider the support programme as a facilitator of their stay in college (Mella et al, 2013) and show good academic results when using peer tutoring, supervised by a support programme (Lissi, Onetto, Zuzulich, Salinas, and Gonzalez, 2012). In the case of Portugal, research has not been done on the subject, but the fluid exchange of experience carrying out these programmes through seminars and permanent meetings to disseminate their practices through a national network, called GTAEDES (Valenzuela-Zambrano, Panao, Chacon-López and López-Justicia, in press) has been highlighted.

Given the situation described and in order to detect possible personal limitations in Chilean and Portuguese university students with disabilities, which require the adoption of measures facilitating inclusion, the following study is proposed, whose objectives are:

1. To determine whether there are differences in some dimensions of self-concept by comparing Chilean students with disabilities with peers who do not have them.
2. Determine differences in some dimensions of self-concept among Chileans and Portuguese students affected by disability.
3. Analyse the presence of gender differences in the self-concept of Chileans and Portuguese students with disabilities.
4. To specify whether or not participation in support programmes in the sample of Chilean and Portuguese students with disabilities show differences in self-concept.

**Methodology**

**Sample**

The sample consisted of 65 university students with disabilities: 34 Chileans and 31 Portuguese; as well as 65 students who made up the control groups (34 Chileans and 31 Portuguese respectively).

The sample of Chilean students came from universities in the region of Bio Bio, while the Portuguese students came from universities in the north-central region of the country.

The criteria for participation in this research for the group of students that made up the Chilean sample were:

In the case of students with disabilities (17 women and 17 men with an average age of 23 years), being students enrolled during the 2015-2016 academic year, who were found in the register as being disabled. The prevalence of disability rates presented was: motor-18 (52.9%), visual 12 (35.3%) and hearing (11.8%).

The control group consisted of 34 students (17 women and 17 men, average age 22 years), from different university study courses and years of training/study. The final Chilean samples of both groups (with disability and control) were selected randomly.

The Portuguese sample was composed of 31 university students with disabilities (16 women and 15 men with an average age of 23 years) who were studying during the academic year 2015-2016, belonging to north-central cities, who voluntarily agreed to participate. Due to the small size of the total sample, they could not be chosen at random. The type of disability presented differed from the Chilean sample, the most prevalent being hearing, 15 in number (49.2%), motor, 10 (24.6%) and visual, 5 (8.2%). The control group (18 women and 13 men with an average age of 27 years) were students of different degrees and years of training belonging to the Polytechnic of Coimbra, selected at random.
Table 1. Sets out the detailed sociodemographic characterization of the groups described

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>a. Chilean students with disability. n = 34</th>
<th>b. Portuguese students with disability. n = 31</th>
<th>c. (Chilean control group) Students without disability. n = 34</th>
<th>d. (Portuguese control group) Students without disability. n = 31</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Minimum and maximum age.</strong></td>
<td>17 and 34</td>
<td>18 and 40</td>
<td>19 and 28</td>
<td>19 and 43</td>
</tr>
<tr>
<td><strong>Average and SD</strong></td>
<td>34 23.12 (4.76)</td>
<td>40 23.84 (5.63)</td>
<td>28 22.32 (1.71)</td>
<td>43 27.32 (8.31)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
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</tr>
<tr>
<td>Feminine</td>
<td>17 50.00</td>
<td>16 51.60</td>
<td>17 50.00</td>
<td>18 58.10</td>
</tr>
<tr>
<td>Masculine</td>
<td>17 50.00</td>
<td>15 48.40</td>
<td>17 50.00</td>
<td>13 41.90</td>
</tr>
<tr>
<td><strong>Type of disability</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Vision</td>
<td>12 35.30</td>
<td>5 8.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing</td>
<td>4 11.80</td>
<td>15 49.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motor</td>
<td>18 52.90</td>
<td>10 24.60</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Areas of study</strong></td>
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<td></td>
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</tr>
<tr>
<td>Health</td>
<td>2 5.90</td>
<td>-</td>
<td>9 26.10</td>
<td>-</td>
</tr>
<tr>
<td>Science and engineering</td>
<td>8 23.50</td>
<td>6 19.50</td>
<td>11 32.70</td>
<td>8 25.80</td>
</tr>
<tr>
<td>Education</td>
<td>9 26.50</td>
<td>9 29.00</td>
<td>2 5.90</td>
<td>13 41.90</td>
</tr>
<tr>
<td>Humanities and Arts</td>
<td>15 44.10</td>
<td>16 51.50</td>
<td>12 35.30</td>
<td>10 32.30</td>
</tr>
<tr>
<td><strong>Support Programmes</strong></td>
<td></td>
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<tr>
<td>Participating</td>
<td>14 41.20</td>
<td>18 58.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non Participating</td>
<td>20 58.80</td>
<td>13 41.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.**

a Total of Chilean students with disability  
b Total of Portuguese students with disability  
c (Control group of Chilean students)  
d (Control group of Portuguese students)
Instruments

The instrument chosen to measure self-concept was the AF5 Self-Concept Scale of Garcia and Musitu (2011) (4th edition). The choice is mainly due to three reasons: first, it is easy and quick to administer, important when working with people with various functional difficulties. Second, it has versions in Spanish and Portuguese. Third, its psychometric properties have been obtained in countries like Spain (Esnaloo, Rodriguez, and Goni, 2010), Brazil (Martinez, Musitu, Garcia and Camino, 2003) and Chile. In this study, the instrument was validated for university population, showing an internal consistency with Cronbach alpha scores of .75. For each dimension they were: academic /professional, coefficient of .86; social dimension .78; emotional .83; family dimension .81; and physical 0.76. The construct validity confirmed the multidimensional proposal of the instrument, through confirmatory factor analysis (CFA), properly adjusted to the Chilean university population (Riquelme and Riquelme, 2011). In the case of Portugal, the validity of the pentafactorial questionnaire with Spanish and Portuguese adults was also evident, with acceptable reliability of the analysis of the Portuguese translation (Garcia, Musitu, and Veiga, 2006).

The AF5 has 30 items, which are answered by evaluation ranging between 1 and 99, depending on the degree of agreement with the proposed statement, where 1 = strongly disagree and 99 = totally agree. It is divided into five subscales or dimensions:

a) Academic self-concept that refers to the perception that the person has of the quality of their performance as a student / professional.

b) Social self-concept referring to the perception the person has of their performance in social relations.

c) Emotional self-concept alluding to the perception of personal emotional state and their involvement in specific situations.

d) Family self-concept, the perception of the person about their involvement, participation and integration in their family environment.

e) Physical self-concept, being their perception of their physical appearance, in addition to their physical condition.

In addition to AF5 a form was given to participants to collect sociodemographic information about age, gender, and degree being studied and the university attended. For the group of students with disabilities items were added, namely, type of disability, and whether or not they participated in programmes of institutional support:

Procedure

It is important to mention that this research has the approval of the Ethics Committee of the University in Spain where it was undertaken and met the guidelines of the Helsinki Declaration. The procedures performed to access the samples conformed to the protocols of universities in each country, which are described below separately.

In the case of the sample from Chile, the first author contacted via email five universities in the region of Bio Bio (University of Concepción, University Catholic of the Santisima Concepcion, University Bio Bio and University Santo Tomás), since they are those who say they accept students with disabilities and participate in regional networks. The email explained the objectives of the investigation and requested permission to access these students. Once authorized, the students were sent an email inviting them to participate in the investigation, informing them of the objectives, the confidentiality of the data and the importance of their participation. In the email, they were given three options to answer the instrument: self applied (sending the results by mail to the researcher), applied by a research assistant and thirdly, self applied, but asking for the format to be adapted (sending format with increased font size and then sending results by mail).

The application of the instrument to the control group was held at the University of Concepción as an optional subject related to the inclusion of students with disabilities for students who were studying various degrees during 2015. The administration of the instrument was collective and carried out during study hours, the students signing an informed consent after reading by the research assistant.

Regarding the Portuguese sample, contact with universities was conducted through Grupo de Trabajo para el Apoyo de Estudiantes con Deficiencia en Enseñanza Superior (GTADES), (the Working Group for the Support of Students with Disabilities in Higher Education (hereafter GTADES), an organization whose main objective is to share inter-service experiences on the inclusion of college students with disabilities (GTADES, 2016). Through the Group’s website which contains information on all Portuguese universities, an email invitation to participate in the study was sent, to which 12 institutions responded (University of Coimbra, Porto, Aveiro, Minho Catholic of Braga, Azores, Polytechnic of Coimbra, Polytechnic of Castelo Branco, Lisbon University Institute, Institute of Social Sciences of Lisbon, School of Arts and Design Lisbon and Superior Accounting Institute and Administration of Coimbra), belonging to the centre and north of the country.
The administration, as in the Chilean sample, contemplated the same response options. In both samples the application was made in compliance with the accessibility requirements necessary according to the type of difficulty presented by the participants.

The Portuguese control group was made up of students from various degrees at the Polytechnic Institute of Coimbra, mainly from the Superior School of Education, during 2016 and as in the Chilean control group the administration of the instrument was collective, during study hours, the students signing an informed consent after reading by the officer in charge of student support.

Results

Due to the small sample size of the groups we decided to opt for non-parametric analysis through the SPSS statistical package, version 20.

The first analysis was to ascertain differences in the dimensions of self-concept among students with and without disabilities in both the Chilean sample (see Table 2), and the Portuguese (see Table 3) using the U Mann-Whitney test.

In the Chilean group the results showed that students with disabilities had significantly lower scores than students without disabilities in the physical dimension of self-concept ($p = .00$).

These results match those found in the Portuguese sample (see Table 3), where university students with disabilities have significantly lower scores in physical self-concept ($p = .04$).

<table>
<thead>
<tr>
<th>Table 2. Results in dimensions of self-concept among Chilean students with and without disabilities</th>
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<tbody>
<tr>
<td>Presence of disability</td>
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<tr>
<td>With Disability</td>
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<td>Without Disability</td>
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<td>With Disability</td>
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**Note.**

$SD$: Standard deviation.
To discover the extent of the differences between samples of Chilean and Portuguese students with disability, a new analysis was performed confirming the significant differences found in the previous analysis in physical self-concept (p = .04) and, according to the average range, the Chilean students have a lower valuation (see Table 4).

Then, in order to know the role played by gender among students with disabilities in both countries a new analysis was performed, appreciating that women had significantly higher scores on academic self-concept (p = .04). However, they presented significantly lower self-concept scores in the emotional dimension (p = .03).
Finally, the last analysis was to ascertain differences among students with disabilities who participated in support programmes compared with those who did not (see Table 6), noting that those participating in these programmes had significantly higher scores on physical self-concept ($p = .04$).

According to the results, it is possible to argue that the presence of disability in both Chilean and Portuguese university students is associated with lower levels of physical self-concept, as they perceive themselves to be physically less attractive and competent than their peers without disabilities, presenting a more negative image of themselves. Some differences remain when...
Comparing Portuguese with Chilean university students with disabilities (second objective of the study), although in this case it is the Chilean university students who perceive themselves as less attractive than their Portuguese counterparts. The lower scores for both Chilean and Portuguese disabled students for physical self-respect compared to their peers without such difficulties are consistent with those found in another study conducted with Chilean students with visual and motor disabilities (Valenzuela-Zambrano and López-Justicia, 2015; leading to the conclusion that, apparently, the physical dimension of self-concept is sensitive for disabled university students from both countries. A plausible explanation for this can be found in the canons or rigid, perfect beauty stereotypes that dominate society and that, according to the statement made by Hahn (1996), foster in the disabled person a negative perception of one’s own body; as they see themselves far from having a ‘harmonious, perfect or healthy body’, it is impossible for them to develop a positive sense of self-image.

When analysing the gender variable among students with disabilities, it is found that women have a higher academic self-concept than men; however, their scores are significantly lower in the emotional dimension. Differences have been noted in another study evaluating the emotional state associated with visible and non-visible disabilities (Valenzuela-Zambrano, Chacon-López, and López-Justicia, in press).

The significant advantage of women with disabilities compared to men in academic self-concept is in line with the results of this study and that of Valenzuela-Zambrano and López-Justicia (2015) in Chilean university students with physical and motor disabilities; however, it should be noted that the highest score in academic self-concept only occurred in the group of visually impaired women, not in the group with physical disabilities. Regardless of the data, it is important to highlight the role of the academic dimension in any college student since it is an important predictor of student achievement (Gargallo, Garfella, Sanchez, Ros, and Serra, 2009; Salum-Fares, Aguilar, and Anaya, 2011). Moreover, the worst scores obtained by women in the dimension of emotional self-concept were consistent with the results found in other studies of people without disabilities (Esmola, 2005; Fernandez, Contreras, Garcia and Gonzalez, 2010); it is a widely accepted fact that women tend to be more likely than men to experience emotional problems such as anxiety and depression (Jimenez and Lopez-Zafras, 2008; Polo-Sanchez and Lopez-Justicia, 2012). Nevertheless, in the case of the university population with disabilities the results are divergent compared to those found in the study of Polo-Sanchez and Lopez-Justicia (2012), which detected no gender-related differences in any of the dimensions of self-concept. Therefore, it is considered advisable to undertake further investigations into the relationship between self-concept and gender in university students with disabilities, using large, and if possible international, sample sizes.

In reference to participation in support programmes, Chilean and Portuguese students with disabilities (the fourth of our objectives), the data show that those involved in institutional programmes achieve higher scores in the physical dimension than those who are not. It is a result worthy of consideration and could lead to the conclusion that a way to improve the physical self-concept deficit in both samples could be linked to participation in these programmes. Yet it is also possible to interpret this finding that students involved are those with greater physical self-concept, given the voluntary nature of participation.

Moreover, the fact that the Portuguese population is in better condition than the Chileans in physical self-concept can perhaps be attributed to the work of the support units that the former country has implemented. The main practices of the units of Portuguese support, according to data provided by the network GTADES (which concentrates the information of the practices of the Portuguese higher education institutions at national level) are the psychoeducational and psychosocial support of students with disabilities throughout the training process (GTADES, 2016). Although the practices in themselves do not differ substantially from the activities carried out by Chilean universities, Portugal in this area provides constitutional guarantees and good joint support programmes in higher education throughout the territory that Chile has not implemented (Valenzuela-Zambrano et al, in press.) Thus, the synergy generated as the product of collaborative work between institutions may be the key to obtaining better results in physical self-concept of their students.

Finally, we should point out some limitations of this study. The first is the small size of the sample of students with disabilities (which is due to the difficulty in getting them to agree to participate), a problem that has been noted in other studies (Fernández et al., 2007; Polo and López-Justicia, 2012; Valenzuela-Zambrano and López-Justicia, 2015). Another limitation is related to the voluntary nature of the sample of Portuguese university students with disabilities, who because of their low sample size could not be chosen at random, as was the case of the Chilean sample. The problem is also due to the difficulty just mentioned.

At present, there is no literature that highlights the impact of participation in support programmes that enables us to compare the results mentioned. However, other authors stress the need to promote proactive individual attitudes towards disability, as it would be a key issue affecting the most personal sphere of individuals (Muñoz-Cantero, Novo Corti, and Espiñeira-Bellon, 2013). Such attitudes can be empowered when working on the development of personal variables such
as self-concept. In this regard, Viera Aller, and Ferreira Villa (2011) indicate that the services of attention to students with disabilities themselves are responsible for this work, because they support university students throughout the process of inclusion (from admission throughout their course until they leave as professionals); that is why we suggest that in future studies, researchers continue to take into account the variable participation in support programmes by students with disabilities.

A strategic partner to increase sample sizes would be the help provided precisely by support programmes that can, moreover, produce mutual benefits, as the results from research can promote the development and maintenance of such programmes in university institutions, allowing them to justify the importance of their work with results (such as those that have been raised here).

Acknowledgements

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References


