## Social Sustainability in Higher Education: The Role of Institutions from Students' Point of View

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### Abstract

Social and educational inclusion of people with disabilities is an objective for all developed countries. This paper examines the perception of economics and business students regarding the sensitivity of higher education institutions to students with disabilities and the commitment and the role played by those institutions. Two typical universities, one in Spain and one in Romania, were considered for this study. Results indicate that there are no significant differences between countries, but also some elements that should be taken into account by the European policy makers in order to create socially and educationally successful policies for the integration and inclusion of students with disabilities in higher education and increasing their possibilities of getting a job and, as a consequence, promoting social sustainability.

**Keywords:** social inclusion, educational inclusion, disabilities, young people, students **JEL Classification:** I23, I24, J13, J14, Z13

### . Introduction

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The United Nations acknowledges that poverty eradication and social development are among the most important building blocks for sustainable development. The ways to achieve this complex goal are:

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"sustained, inclusive and equitable economic growth, creating greater opportunities for all, reducing inequalities, raising basic standards of living, fostering equitable social development and inclusion, and promoting integrated and sustainable management of natural resources and ecosystems that supports, inter alia, economic, social and human development while facilitating ecosystem conservation, regeneration and restoration and resilience in the face of new and emerging challenges" (United Nations 2012, p. 2).

Therefore, social sustainability is a goal as important as environmental sustainability. Particularly on point 6, the Report of the United Nations Conference on Sustainable Development (Rio +20) states: "We recognize that people are at the center of sustainable development and in this regard we strive for a world that is just, equitable and inclusive, and we commit to work together to promote sustained and inclusive economic growth, social development and environmental protection and thereby to benefit all."

When the Universal Declaration of Human Rights and the other international instruments pertaining to human rights and international law are considered, addressing the issues related to disabilities and other exclusion risk factors become the key to achieving social sustainability. In compliance with the Charter of the United Nations, each state has the responsibility to respect, protect and promote human rights and fundamental freedoms (no matter the race, color, sex, language, religion, political or other opinion, national or social origin, property, birth, disability or other status of the person considered). As a result, allowing equal opportunities for all is vital. The United Nations Millennium Development Goals (2010) – the product of a worldwide expert effort – promote inclusive societies. Similarly, the European Union reshaped its social concern as the commitment to fight against social exclusion; this goal, assumed since the earliest treaties, is reflected in the design of Cohesion Funds, as well as in the proposed 2020 strategies (COM 2010).

The rest of the paper is organized as follows: Section II introduces the concepts of 'triple bottom line', 'social sustainability', and 'inclusion' versus 'integration'; Section III discusses the access of young people with disabilities to higher education as a means of social inclusion; Section IV presents the design and the method of this study; Section V discusses the results. Section VI concludes and formulates some policy recommendations.

## **II**. The triple bottom line

The so-called 'triple bottom line' has quickly become a common way to cover environmental, social as well as economic matters:

"The sustainability agenda, long understood as an attempt to harmonize the traditional financial bottom line with emerging thinking about the environmental bottom line, is turning out to be much more complicated than some early business enthusiasts imagined. Increasingly, we think in terms of a 'triple bottom line', focusing on economic prosperity, environmental quality, and – the element which business has tended to overlook – social justice." (Elkington 1997, p. 2)

Despite its inclusion in the triple bottom line, the role played by social concerns is rarely equal to that of economic and environmental concerns (McKenzie, 2004). In this paper,

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social sustainability is understood in a wider sense as a condition sine qua non for achieving sustainability as a whole. Accordingly, considering the suggestions advanced by the UN, the EU, and other international institutions, achieving equal opportunities is a necessary step towards social sustainability. Access to all levels of education, including higher education, should not be more difficult for people belonging to certain social groups, because this could be a source of inequalities. People with disabilities represent one of the social groups at risk of social exclusion; in order to have access to all levels of education, its members have to overcome various difficulties.

Even though the words 'include' and 'integrate' have very similar meanings, it should be emphasized that, in social movements, inclusion and integration represent totally different philosophies, even if they seem to have a similar objective: the inclusion of people with disabilities in society. 'Inclusion' is focused specifically on those modifications of their surroundings that are necessary for the full integration of individuals with disabilities (that is to say change the houses, buildings or whatever would be needed to change to allow disabled people to manage by their own, that is to say, without help) while 'integration' is focused on helping people to participate, but no necessary by themselves. For example, for inclusion, a person with a physical disability will require a wheelchair ramp, while her integration requires someone to help her access a location. Both of them (inclusion and integration) are trying to boost the participation in society of people with disabilities.

For students with any type of disability, most European countries have promoted access to education, even to higher education. Although for primary and secondary education the main inclusive matters are solved quite well; however, at the university level this is not always the case since most students with disabilities are attending open universities. But, as Sen (1999) said, everybody should have the capability and freedom to do the things that they really want to do, to be the person they want to be, because this is the goal of human development. The main aspects of social sustainability – equity, diversity, social connections (interconnection), quality of life, democracy and governance and maturity – all point towards the same direction: inclusive societies are necessary to achieve social sustainability. On a very fundamental level, human development is what sustainability proponents want to sustain and without sustainability, human development is not true human development (Neumayer, 2010).

# **III.** Social Sustainability and Young People with Disabilities: Access to Typical Higher Education

In achieving social sustainability, the level of education is a potent tool for successful labor market integration, particularly for young people. Although, some young people do not have the same opportunities as others and this is the case for people with disabilities; they hardly enrol in higher education institutions, and if they do it, they are at open universities. This situation implies a double discrimination, because it lowers their access to universities and it deprives them of social contact with peers. Sustainable development must be inclusive and people-centred, benefiting and involving all people, including youth and children (UN: Rio+20, 2012). Consequently, social sustainability

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related to disability (onwards SSRD) is a very important matter if human resources are not to be wasted and the quality of live improved.

In this research, we address the importance of access to higher education at 'typical' (non-open) institutions for people with disabilities, and we focus on students' appraisal of their feelings concerning SSRD and the role played by institutions and social groups.

#### Figure 1



## Employment Rate by Highest Level of Education Attained in EU27, Spain and Romania (% of Age Group 20-64 Years, 2012)

Source: Own elaboration from Eurostat data.

It is well known that with a higher education level, the opportunities to get a job are higher. Figure 1 shows a comparison for EU27, Spain and Romania. There is a clear upwards tendency in employment; for example, people that have reached levels 3 and 4 have 34%, 24% and 21%, respectively, more chances of getting a job than those with levels 0 to 2; these percentages are 18%, 25% and 27% when the education increases to levels 5 and 6.

According to a eport by Applica & CESEP & Alphametrics (2007) and from data from the Labor Force Survey (LFS) ad hoc module and from EU-Statistics on Income and Living Conditions (EU-SILC), compared to peers who have no limitation, restriction or impairment, young people under the age of 25 with some restriction in their mobility or in work are less likely to remain in education or training (Table 1); it is regretful the results for participation of young people in education or training by degree of restriction have not been updated since.

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#### Table 1

101 Feople Ageu 10-24 (76, 2002)									
Sex/Age/Restriction	Spain	Romania	EU (Exc FR)	Difference EU (Exc FR) - Spain	Difference EU (Exc FR) - Romania				
		Men &	Women						
16-19	76.2	69.3	82.4	6.2	13.1				
Considerably restricted	39.3	10.6	63.0	23.7	52.4				
To some extent restricted	57.5	81.5	74.8	17.3	-6.7				
Not restricted	76.7	69.5	82.8	6.1	13.3				
20-24	42.9	27.6	42.1	-8,0	14.5				
Considerably restricted	19.7	3.6	23.2	3.5	19.6				
To some extent restricted	24.4	13.8	35.8	11.4	22,0				
Not restricted	43.3	27.9	42.6	-7,0	14.7				
		M	en						
16-19	71.8	68.3	81.3	9.5	13,0				
Considerably restricted	45.0	0.0	64.4	19.4	64.4				
To some extent restricted	49.5	100.0	71.0	21.5	-29,0				
Not restricted	72.3	68.6	81.7	9.4	13.1				
20-24	38.5	25.5	39.9	1.4	14.4				
Considerably restricted	18.9	0.0	20.5	1.6	20.5				
To some extent restricted	23.6	19.3	31.9	8.3	12.6				
Not restricted	38.9	25.8	40.5	1.6	14.7				
		Wor	men						
16-19	80.8	70.4	83.6	2.8	13.2				
Considerably restricted	26.7	30.7	60.8	34.1	30.1				
To some extent restricted	71.3	78.2	78.6	7.3	0.4				
Not restricted	81.2	70.5	84.0	2.8	13.5				
20-24	47.5	29.6	44.4	-3.1	14.8				
Considerably restricted	21.1	7.4	26.3	5.2	18.9				
To some extent restricted	25.4	11.7	39.9	14.5	28.2				
Not restricted	47.9	29.9	44.8	-3.1	14.9				

Participation in Education or Training by Gender, Age and Degree of Restriction for People Aged 16-24 (%, 2002)

*Source:* Own elaboration from LFS ad hoc module 2002 and first data collection of the EUSILC 2004, and Applica & CESEP & Alphametrics, Eurostat (2007).

In effect, in the EU (excluding France, where the distinction between those who are considerably restricted and those who are restricted to some extent is not made) only 63% of young people with considerable restrictions (aged 16-19) attend education beyond compulsory schooling, compared to 75% of those who are limited to some extent and 83% of young people not restricted at all. At the European level, students aged 20-24 attending educational or training programs represent 43%, 36% and 22%, depending on their belonging to the 'non-restricted' group, 'to some extent restricted'

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group or 'considerably restricted' group. Obviously, this is not the best scenario for SSRD.

Both Romania and Spain are below the education attainment levels of the EU for noncompulsory education, for all groups except the group of women without disabilities aged 20 to 24 in Spain and the group of men aged 16 to19 with some restriction in Romania. These differences increase with disability; the higher the disability degree, the higher the difference. The data show that the group of youth considerably restricted participate in lower level education or training, and some restricted youth are in the same situation. As mentioned above, Romanian men aged 16-19 are the exception; an important gap in their participation is possible to appreciate depending on the disability level.

#### Figure 2

#### Participation in Education or Training by Age Group and Degree of Restriction for Youth in the EU (excluding FR), Spain and Romania (%, 2002)



*Source:* Authors' own computations, based on LFS ad hoc module 2002 and first data collection of the EUSILC 2004 and Applica & CESEP & Alphametrics, Eurostat (2007).

Youth participation in education or training by age and degree of restriction in EU (excluding France), Romania and Spain is presented in Figure 2. It is obvious that young people without restrictions (dotted black line), people with restrictions (dark line) and those with slight disabilities (gray line) are differently involved in education and training programs. In general, their participation is inversely proportional to the degree of disability suffered; the larger the area within the line, the greater the number of people attending education or training.

Since each of the vertices represents a combination age group-geographical area it is clear that closer to the center the level of education received is lower; for young people with disabilities the probability of attending educational programs is decreasing with increasing age. In general, on average, in the EU (except France) participation is higher

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than in Spain or in Romania (except for the 16 to19 years old with a slight disability). According to the data, for not compulsory schooling, on average, it is clear the lower participation of young people with disabilities as compared to those without restrictions. Applica & CESEP & Alphametrics (2007) data indicate a clear inverse relationship between a long-standing health problem or disability (LSHPD) and the education level attained (Table 2 for Spain, Romania and the EU excluding France).

#### Table 2

#### People Aged 25-64 with at Least One Restriction by Degree of Restriction, Type of Disability and Education Attainment Level for the EU (Excluding FR), Spain and Romania (%, 2002)

Restriction	Considerably				To some extent							
Туре		Mental		Other LSHPD		Mental			Other LSHPD			
Education	1	2	3	1	2	3	1	2	3	1	2	3
EU exc FR	61.4	29.1	9.5	55.7	34.9	9.4	49.2	34.2	16.5	45.8	40.3	13.8
SP	87.7	6.7	5.6	85.6	7.8	6.6	71.9	15.6	12.5	80.3	10.1	9.5
RO	62.5	34.1	3.4	45.3	50.8	3.9	58.0	42.0	:	40.1	55.7	4.2

: Not available; 1.Low, 2. Medium & 3. High

Source: Own elaboration from LFS ad hoc module 2002 and first data collection of the EUSILC 2004, and Applica & CESEP & Alphametrics, Eurostat (2007).

If this is the case, a great number of people with disabilities are in a disadvantageous situation, because they have a relatively low education level, and thus, a lower possibility of getting a job; only few of them complete tertiary-level - or university education. At the same time, for all the EU countries studied in 2002 the proportion of considerably restricted young people aged 25-64 who had tertiary-level education was significantly smaller than for those without any restriction. The situation is different from country to country: a high 30 percent of people with disabilities attending tertiary education or more in Sweden, Norway, the Netherlands, Denmark, and Finland, around 15 percent in Estonia, Ireland and Spain and 9 percent or little less in Austria, the Czech Republic, Hungary and Romania.

Mullins and Preyde (2013) studied Canadian university students with invisible disabilities and found that although several accommodation services were available, several barriers to accessing services were still present, which included: a lack of funds, staff, and resources, campus accessibility, procedures for identifying individuals with disabilities, and the attitudes of faculty and staff towards individuals with disabilities, as it was already underlined by Hill (1992). In the study by Mullins and Preyde (2013), the participants reported that they experienced social barriers related to negative social attitudes (negative perceptions and comments about disabilities). They also confirmed a general lack of understanding related to disabilities, which they felt was heightened since the invisible disability could be attributed to a psychological component. Although the university was accommodating to the needs of students with invisible disabilities, it was reported the presence of social and organizational barriers that made university experiences difficult for these students.

In such a situation, the attitude towards disability must be changed and improved to ensure Member States promote sustainable development awareness among youth, inter alia by promoting programs for non-formal education in accordance with the goals

of the United Nations Decade of Education for Sustainable Development (2005-2014). One easy way to get this result would be to introduce in the curricula a specific subject related to diversity in general and, in particular, to all types of disabilities, visible and invisible.

## **IV**. Experimental Design and Method of Analysis

Evaluating the perceptions and attitudes of students towards the inclusion of peers with disabilities requires asking them directly. Consequently, it is necessary to use a validated questionnaire and a group of students large enough to achieve confident results. The reference questionnaire is the one introduced by Novo-Corti (2010), adapted by Novo-Corti *et al.* (2011), and revised by Muñoz-Cantero *et al.* (2013).

The target groups of students were selected for their Western and South East European background, respectively, namely from Spain and Romania. Spain became a European Union member in 1982 and it is integrated in the Euro Zone; Spanish socio-economic development took place in the capitalist world. Differently, Romania comes from a communist tradition and has joined the EU in 2007; it is not yet in the Euro Zone. The students (respondents) have been chosen from similar faculties of economics and business at universities of La Coruna (Spain) and 'Constantin Brancusi' in Targu-Jiu (Romania).

The two universities considered are representative for small-medium sized universities in Spain and Romania and given the sample source, the results are representative. These results are important as a first assessment for both countries of student's feelings and perceptions regarding students with disabilities. Without any doubt, the results could improve if more universities would be considered, though in this regard the authors would like to point out the difficulties they encountered in their effort to get a larger sample.

The questionnaire administered was the one proposed by Novo Corti *et al.* (2012) and Muñoz-Cantero *et al.* (2013) for faculties of economics and business and educational sciences. Students were asked about their level of agreement with several statements using a Likert scale, where 1 was 'absolutely disagree' and 5 'completely agree'.

Prior to answering the survey, the students were informed about the purpose of the research and the confidentiality of their responses. They were also told that there are no good or bad responses, only their "own" responses, so they answered freely.

Table 3 presents the structure of the sample.

This study has two main goals:

- 1. To evaluate the main factors determining the perception of higher education institutions commitment to social sustainability.
- 2. Evaluate the differences between the Spanish and Romanian groups in this study.

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#### Table 3

The Sample		Number	%
Gender	Male	69	28.16
	Female	176	71.84
Age	18 to 20	80	32.70
	21 to 23	117	47.80
	24 to 26	37	15.10
	26 to30	7	2.90
	31 and up	4	1.60
Nationality	Romanian	83	33.88
	Spanish	162	66.12
Suffering disability	Yes	2	0.82
	No	243	99.18
Disability on close environment	No	163	66.53
	Yes	82	33.47
Studies	Business and Firm Administration	147	60.00
	Economics	93	37.96
	Master	5	2.04

Structure of the Sample

Factor analysis was conducted to sort items with similar characteristics. This analysis allowed finding the latent variables (factors) that could explain the areas of interest for this study: personal values, attitudes, influence of social groups, evaluation of institutional actions and educational environment. When the main areas were determined, in order to explain the institutional factors in terms of the items asked on the survey, a regression analysis on two levels was conducted for the whole group and for each country separately. Finally, for evaluating the possible differences, a Student t test to perform a comparison of means for students in both countries was conducted.

## V. Results

#### V.1. Key Factors of Social Sustainability Related to Students with Disabilities

Factor analysis shows how social values, individual values and the self-perception of capability are key factors for intention or willingness to take part in actions associated with social sustainability related to students with disabilities. The results are in agreement with the theoretical studies of Novo-Corti (2010) and Novo-Corti *et al.* (2013).

The items constructing each factor, or latent variable, are shown in Table 4. In addition to previous studies, two more factors were identified: the general institutional behaviour and the commitment of higher education institutions.

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#### Table 4

	Matrix of rotated components		F	actors		
	Item	F1	F2	F3	F4	F5
F1	Since childhood, my parents thought me that I should help those who need me	0.90	0.22	0.09	0.10	-0.05
	In school we have been taught that we should help those who need us	0.90	0.12	0.02	0.12	0.01
	In high school we have been taught that we should help those who need us	0.89	0.11	-0.08	0.07	0.12
	If the university promotes support programs for people with disabilities, I would participate	0.73	0.09	0.09	-0.03	0.16
	I would study with people with disabilities	0.69	0.39	0.26	0.09	0.00
F2	My desire is to participate in organizations to support people at risk of exclusion	0.20	0.81	0.25	-0.07	0.01
	I like to participate in programs to help social inclusion	0.11	0.81	0.32	0.13	0.01
	I have the intention to help the inclusion of people with disabilities	0.26	0.79	0.24	0.21	-0.07
	I feel happier helping people with disabilities	0.12	0.65	0.31	0.18	-0.09
	I want educational institutions to promote programs for the inclusion of people with disabilities	0.09	0.64	0.14	0.47	0.01
	I try to help people with disabilities	0.39	0.53	0.38	0.13	-0.04
F3	I think I would be able to help someone with physical disabilities	0.02	0.28	0.82	0.09	0.02
	I think I am able to perceive the special needs of people with disabilitities	0.09	0.25	0.82	0.10	0.02
	I think I would be able to help someone with mental or sensorial disabilities	0.01	0.20	0.78	0.02	0.04
	I feel qualified to support and assist anyone with disabilities	0.10	0.24	0.76	0.12	-0.06
F4	Inclusion programs should be promoted by the state	0.17	0.26	0.07	0.76	0.06
	Inclusion programs should be promoted by international institutions	0.22	0.22	0.10	0.72	-0.01
	Institutions boost the number of programs enough to support people with disabilities	0.10	0.01	-0.07	-0.66	0.14
F5	In college, students show a real concern about disabilities	0.09	-0.12	0.03	-0.04	0.88
	In college, teachers show a real concern about disabilities	0.19	-0.06	0.05	0.02	0.87
	In college there seems to be a real concern for disabilities	-0.34	0.23	-0.17	-0.30	0.49

Matrix of Rotated Components (Varimax)

Table 5 presents the list of the five factors resulted from factor analysis.

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#### Table 5

#### **Description of Identified Factors**

Factor	Area
F1	Social values about sustainability
F2	Individual behavior towards social sustainability
F3	Self-perception of capability to participate in social sustainability
F4	Institutional behavior towards social sustainability
F5	Perception of higher education institutions commitment to social sustainability

#### V.2. Commitment of Higher Education Institutions to Social Sustainability

Once the perception of commitment of higher education institutions for SSRD was determined as a factor, a regression analysis was conducted taking F5 as dependent variable and the items composing that factor as independent variables to determine the weight of each item as explicative variable. Specifically, to know which of the university groups (teachers, students or the collectivity) have a larger weight. Three regressions were conducted: one for the whole group and one for each sub-group. The two individual regressions were then analyzed to determine the differences between them.

Results of those analyses are shown in Tables 6, 7 and 8, respectively.

The results show that the most relevant item, for the whole group, is the one related to students, then the one related to teachers and finally that for the whole institution (Table 6). Also, the sub-group results show that Spanish students evaluate more the aspects related to teachers than to students. Here is an important reference in terms of policy intervention: it is not the same for both countries.

#### Table 6

Dependent Variable	Standard	t Student	Signif.	R-	Durbin-
The perception of higher education institutions commitment to social sustainability	coefficients			Squared Fitted	Watson
Constant	-4.104	-92.291	***	0.977	1.832
In college, teachers show a real concern about disabilities	0.487	35.154	***		
In college, students show a real concern about the disabilities	0.470	33.907	***		
In college there seems to be a real concern for disabilities	0.285	28.453	***		

**Regression Analysis for the Whole Group** 

significance level: α<0.001

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#### Table 7

Dependent Variable	Standard	t Student	Signif.	R-	Durbin-
The perception of higher education institutions commitment to social sustainability	coefficients			Squared Fitted	Watson
Constant	-3.981	-42.104	***	0.947	1.849
In college, teachers show a real concern about disabilities	0.580	24.183	***		
In college, students show a real concern about disabilities	0.532	21.562	***		
In college there seems to be a real concern for disabilities	0.323	16.990	***		

Regression Analysis for the Spanish Group

\*\*\*significance level: α<0.001

#### Table 8

Regression Analysis for the Romanian Group

Dependent Variable	Standard	t Student	Signif.	R-	Durbin-
The perception of higher education institutions commitment to social sustainability	coefficients			Squared Fitted	Watson
Constant	-4.141	-98.038	***	0.993	1.600
In college, teachers show a real concern about disabilities	0.413	25.409	***		
In college, students show a real concern about disabilities	0.469	28.921	***		
In college there seems to be a real concern for disabilities	0.215	14.872	***		

\*\*\*significance level: α<0.001

For all three situations and for all independent variables the significance level is very good and the fit is also very good (R squared fitted >0.9). The signs of the standard coefficients are the expected ones according to the theory (all positives). They indicate that the higher the real concern about disabilities of teachers (both professors and lecturers), students and whole institution, the higher the perception about institutions' commitment to social sustainability. Moreover, since the values of the Durbin Watson statistics are close to 2 (1,832 for the whole group, 1,849 for the Spanish group and 1,600 for the Romanian group), it can be stated that the relation is not spurious.

In all three regression analyses – for the whole group and, separately, for the two universities – results show that the university as a whole has a lower importance as compared to any of the groups of teachers or students. In addition, there are some differences between the Spanish and Romanian universities regarding the weights of those groups (teachers and students). The Spanish students, similar to the Romanian students, feel the groups of people are more important in explaining institution's commitment than the institution itself as a whole. However, the young Spanish students

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questioned in this survey see the group of professors and lecturers as more relevant as compared to the group of students. Differently, Romanian students felt the influence of the students' group is more important than the teachers' group.

#### V.3. Do Spanish and Romanian Students Really Feel The Same Way?

The differences due to the nationality of students were analyzed. First, for the two groups of students, a Levene test for equality of variances was conducted and, then, the means were compared based on the Student's t test. The results indicated that statistically there were significant mean differences for a great number of questions in the questionnaire organized as factors. Table 9 shows the values for those differences. The positive values of differences indicate that Spanish students value those issues higher, while negative values indicate just the opposite.

#### Table 9

Factor	Lever	ne Test	T test					
	F	Signif.	t	Degrees of freedom	Signif. (two tailed)	Mean differences	Standard deviation of difference	
F1 <sup>(2)</sup>	16.19	0.000	-21.65	198.34	***	-1.67	0.08	
F2 <sup>(1)</sup>	0.01	0.943	-5.16	238.00	***	-0.68	0.13	
F3 <sup>(2)</sup>	3.93	0.049	-3.75	182.25	***	-0.47	0.12	
F4 <sup>(1)</sup>	1.04	0.309	-2.55	238.00	0.01	-0.35	0.14	
F5 <sup>(2)</sup>	46.22	0.000	1.53	91.60	0.13	0.27	0.17	

Mean Differences Analysis

<sup>(1)</sup>Equal variances assumed <sup>(2)</sup> Different variances assumed \*\*\*significance level: α<0.001.

In Romania, the perception of students toward their peers with disabilities and, in general, toward all persons in such situations is similar. Students do not have a clear understanding of what disabilities represent because the legislation in this area has appeared quite recently (2006). Social inclusion and integration of people with disabilities is also difficult because Romanian mentalities and cultural perceptions represent barriers. Also, it is considered that physical and/or mental problems prevent their integration, while in Spain there is much more institutional support. Acceptance in Spanish society is also much higher. Unfortunately, in Romania the media encourages compassion for those affected and not social inclusion and integration.

## **VI**. Conclusions and Policy Recommendations

Regression analysis was conducted to find relations among the evaluation of institutional commitment to social sustainability and the other factors influencing the inclusion of students with disabilities into typical universities.

There are two main conclusions derived from this research. First, the importance of universities as institutions engaged in social sustainability through the support for people with disabilities. Second, evidence for this importance is weaker than for the role played by the groups it includes (teachers and students); the results show the university–institution itself is less valuated than those groups.

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This research also achieved some stimulating results related to the differences between Spanish and Romanian students: the Spanish students believe the role of teachers in that university is more important for social sustainability than the role of students, while the Romanian students value the role of students more.

It was shown how the university institution is important as an engine to promote social sustainability. At the same time, it was not as visible as the groups (teachers and students) belonging to it. Consequently, it encourages the design of inclusive university policies and, simultaneously, their announcement through reports addressed to students, teachers and general society. Information should be provided about the actions undertaken to boost educative and social inclusion of students with disabilities. This is a general recommendation for all countries. Due to possible differences among countries, it is suggested to design different policies for diverse countries, when those policies are intended for teachers or students, because it was shown that there are dissimilar feelings regarding the role of these groups.

The recommendations derived from this study are in accordance with the United Nations' proposal indicating that policies must address the concern about inequalities and to promote social inclusion, including social protection floors, and that social policies are vital to promoting sustainable development, encouraging initiatives aimed at enhancing social protection for all people. The United Nations suggests promoting sustainable development social services, a safe and healthy living environment for all, particularly children, youth, women and the elderly and disabled. Accordingly, this research indicates the inclusion of younger people with disabilities increases with their level of education.

Another outcome of this research is to show that efforts to encourage the access to quality education at all levels for students with disabilities through the social participation of institutions in general, and universities in particular, for promoting inclusive policies as a way to promote social sustainability is highly valued by students. As a result, this paper has presented important findings that policy-makers can use to integrate people with a disability with the rest of society in order to obtain a true social sustainability.

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## References

Applica & CESEP & Alphametrics. Eurostat, 2007. *Men and women with disabilities in the EU: statistical analysis of the LFS ad hoc module and the EU-SILC.* Study financed by DG Employment, Social Affairs. Available at: <https://circabc.europa.eu/sd/d/7f3c69e9-9613-4b04-ba7f-08d624664939/Analysis\_and\_\_the\_EU-SILC[1].pdf> [Accessed on 05/06/2013].

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- Elkington, J., 1997. Cannibals with Forks: The Triple Bottom Line of 21st Century Business. Capstone Publishing, Oxford, hardback. UK.
- European Commission, 2010. Communication from the Commission. Europe 2020. A strategy for smart, sustainable and inclusive growth. COM (2010) 2020, Brussels, 3.3.2010
- Hill, J., 1992. Accessibility: Students with disabilities in universities in Canada. *The Canadian Journal of Higher Education*, 22(1), pp. 48-83.
- McKenzie, S., 2004. Social sustainability: towards some definitions. *Hawke Research Institute, Working Paper Series, No* 27.
- Mullins, L. and Preyde, M., 2013. The lived experience of students with an invisible disability at a Canadian university *Disability & Society*, 28(2), pp. 147– 160. Available at: <a href="http://dx.doi.org/10.1080/09687599.2012.752127">http://dx.doi.org/10.1080/09687599.2012.752127</a>>.
- Muñoz-Cantero, J.M. Novo-Corti, I. and Espiñeira-Bellón, E.M., 2013. La inclusión de los estudiantes universitarios con discapacidad en las universidades presenciales: actitudes e intención de apoyo por parte de sus compañeros. (Inclusion of University Students with Disability at Conventional Universities: Attitude and Support Intention by Their Colleagues). *Estudiossobre Educación, 24*, pp. 103-124.
- Neumayer, E., 2010. Human Development and Sustainability. United Nations Development Programme. Human Development Research Paper, 2010/05.
- Novo-Corti, I. and López, D., 2013. Searching for a Job at Standardized labor market for people with disabilities: an analysis of the role of peers as key factor for labor inclusion. IV Conference of Spanish Network of Social Policy (REPS). June, 6 & 7, 2013, Alcalá University, Madrid, Spain. [Accessed on 2014, May], Available at: <https://www.dropbox.com/s/hpzto77agdc0cq5/actas.pdf>.\_
- Novo-Corti, I. and Muñoz Cantero, J.M., 2012. Revista de OrientaciónPsicoeducativa, REOP., 23(2), 2º Cuatrimestre, pp.105 - 122 [ISSN electrónico: 1989-7448].
- Novo-Corti, I. Muñoz Cantero, J.M. & Calvo-Porral, C., 2011. Analysis of attitudes towards disability among university students: a focus on the theory of reasoned action. *Relieve*, 17(2), pp. 1-26. Available at: <a href="http://www.uv.es/RELIEVE/v17n2/RELIEVEv17n2\_5.htm>[Accessed on 14/02/2013].</a>
- Novo-Corti, I., 2010. Attitudes toward disability and social inclusion: An exploratory analysis. *European Research Studies Journal*, *13*(*3*), 83-107.
- Sen, Amartya K., 1999. Development as Freedom. New York, NY: Random House.
- United Nations, 2010. *The millennium development goals*. New York. United Nations. Available at: <a href="http://www.un.org/millenniumgoals/pdf">http://www.un.org/millenniumgoals/pdf</a>>.
- United Nations, 2012. Report of the United Nations Conference on Sustainable Development, Rio de Janeiro, Brazil, 20–22 June 2012. NewYork, 2012.

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