

## ANALYSIS OF ATTITUDES TOWARDS DISABILITY AMONG UNIVERSITY STUDENTS: A FOCUS ON THE THEORY OF REASONED ACTION

*[Análisis de las actitudes de los jóvenes universitarios hacia la discapacidad: un enfoque desde la teoría de la acción razonada]*

by/por

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Novo-Corti, Isabel ([isabel.novo.corti@udc.es](mailto:isabel.novo.corti@udc.es))

Muñoz-Cantero, Jesús-Miguel ([jesus.miguel.munoz@udc.es](mailto:jesus.miguel.munoz@udc.es))

Calvo-Porrall, Cristina ([ccalvo@udc.es](mailto:ccalvo@udc.es))

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### Abstract

The present democratic values in most Western societies have fostered social norms promoting inclusion of groups at risk of social exclusion. This research has focused on the inclusion of the disabled collectives at conventional university environment. For that purpose an inquiry was carried out to young university students registered in the University of A Coruña, in several grades and levels of Economics and Business Administration studies. Thereinafter, we performed a descriptive research and a factorial analysis based on the Theory of Reasoned Action. Results obtained indicate that dominant social values are a determining factor for inclusion, however individual attitudes, although favorable for helping and giving support to people with disabilities, are not as significant as it was expected. Furthermore, results concerning the intention to help for people with disabilities inclusion indicate that students would rather prefer public institutions to take care of this issue.

### Keywords

Attitudes; Disability; Inclusion; Educative Discrimination; Social Integration; Disability Discrimination; Higher Education.

### Resumen

Los valores democráticos presentes mayoritariamente en occidente han impulsado normas sociales favorables a la inclusión de colectivos en riesgo de exclusión social. Esta investigación se centra en la inclusión de colectivos con discapacidad en el ámbito de la universidad, para lo cual se realizó una encuesta a jóvenes estudiantes universitarios matriculados en la Universidad de A Coruña, en diferentes estudios y niveles, pertenecientes a las ramas de Economía y Empresa. Posteriormente, se llevó a cabo un estudio descriptivo y un análisis factorial basado en la Teoría de la Acción Razonada. Los resultados alcanzados muestran que los valores sociales prevalentes se presentan como la variable más importante y con mayor influencia sobre la intención de ayudar a las personas con discapacidad, mientras que las actitudes personales, así como el control percibido, aunque predisponen de manera favorable a prestar ayuda la persona con discapacidad, no han mostrado una influencia significativa. Asimismo, las respuestas sobre la intención de ayudar a la inclusión de las personas con discapacidad indican que los estudiantes prefieren que esta labor recaiga sobre las instituciones.

### Descriptores

Actitudes; Discapacidad; Inclusión; Discriminación Educativa; Integración Social; Discriminación por Discapacidad; Educación Superior.

## Introduction

In a worldwide context there is a dominant social norm in favor of inclusion and so is reflected on the Objectives of the Millennium, proposed by the United Nations (2010). In the European Union, this social concern has been synthetically reflected by the commitment of struggle against social exclusion, assumed since the earliest treaties and reflected in the Cohesion Funds, as well as in strategies proposed for year 2020 (COM 2010). Actually, and for long decades, frequently the most valued matter for people was focused not on what they really are, but on their concordance level on some standards considered the ideal. Thus, this matter have encouraged an homogeneity based culture, where the difference and diversity look like not desirable and, therefore, it constitute both a problem and an generate an exclusion reason (Muñoz and Espiñeira, 2010).

The Welfare State and the improvement of quality standards of living have represented a priority governments and developed societies, so that the importance of the elaboration of educative policies to promote these goals, as the ones for attending the diversity, including programs for intercultural sensibility (Sanhueza and Cardona, 2009), attention to disabled children (Dueñas, 2000), emotional education (Álvarez et al., 2002) and high capacity students attendance (Cajide, 2000).

Simultaneously, however, the education received by students has boosted their access to higher education and it has been increasing remarkably the amount of disabled students' attending University (Eches y Ochoa, 2005; Granados, 2000). At the same tieme, some actions were developed to contribute to remove barriers for the access and social inclusion of the disabled university students (Arana, Rodríguez and Meilán, 2008; Bause-la, 2004; Center y Ward, 1987). Although these performances are significant, ther are another crucial aspect for integration and social inclusion of the disabled students like interpersonal relationships that are estab-

lished between the disabled students and their classmates (Alonso, Navarro and Lidón, 2008); Bueno and Mirambel, 2003; Polo and López, 2005).

Recent research has pointed out that young university students show a positive attitude towards their disabled classmates (Suriá, 2011), however, recognizing the variables determining inclusive attitudes are required yet. Therefore, the main goal of this research is to identify these variables that determine good predisposition to help disabled persons and to ease their integration into social environment.

This study is focused in youngest sectors of population and in the superior educational levels. The theoretic foundations we based the research on is the Reasoned Action Theory (Theory of Reasoned Action, TRA) (Ajzen, 1991), which considers besides the Attitude of the involved agent ( in this specific case, the university student), other variables, such as the subjective norms (Social Norms) and the behavior Perceived Control (the personal feeling about the difficulty or the ease to carry on a determinate behavior), are determinant behavior factors (Ajzen y Madden, 1986).

To answer these questions, we study, firstly, The theoretical framework, to define main concepts, foundations and theories used to developed our research hypothesis. Particularly, we will establish disability, exclusion and social inclusion concepts from a multi-dimensional viewpoint, useful to identify factors that reveal the existence of exclusion or collectives at the risk of social exclusion. The Reasoned Action Theory foundations are also explained in a synthetic way, which supports our research. Secondly, based on these theoretical foundations, we propose a model for representing the attitudes and the behavior the young university students towards inclusion, targeted on the Intention of helping to the inclusion of people with disabilities. Next, starting from 180 surveys to

young university students, a factorial confirmatory analysis was carried out to prove the verification test of our model. Finally, considering the results obtained, we achieve some conclusions and recommendations to take into consideration by the social and educative policies, as well as the future research guidelines.

### **Literature review and theoretic foundations**

Our study is based on main concepts such as the disability, and the exclusion risk, that it may generate, the values and attitudes towards inclusion and, finally, the university educative environment. As it was previously remarked, in this section we will particularly refer to the educative context, in general terms, and particularly to the university context.

Regarding the gresearch that has been made in our country about insclusion, López Torrijo (2008) carried out a study on the Spanish university policies and practices towards the disabled students. In this research, López Torrijo have analysed the educative inclusion of auditory disabled in higher education, reviewing the solutions provided by the legislative mandatory and the services and social benefits offered to the disabled persons, which are basic for the professional skill and social participation of the auditory disabled students, guaranteeing a quality educative and social inclusion. Later, (López Torrijo, 2009), performed a comparative analysis in several countries of the European Union about the inclusion of serious and permanent disabled students, although focused on Special Education centers.

Recently, Suriá Martínez (2011) focused students' attitudes towards disability of students of different educational stages, analyzing how different the attitudes are towards their disabled classmates depending on their educational stage, as well as their specific course. The study made by Suriá also tried to

prove the influence of the interaction with disabled persons on getting attitudes towards disability. The results of our study indicate that young university students show a more positive attitude towards disability than secondary education students. At the same time, Suriá (2011) remarks the existence of a greater level of sensitization towards disability among those students that interplayed with disabled classmates.

Furthermore, the research of Infante and Gómez (2004), focused on attitudes of higher educational stages students (university students, from the first to the last year of their grades) towards disabled persons and to educative inclusion of students from ethnic minorities. The study was performed amongst students of Pedagogy, Civil Construction and Engineering and results obtained point out that university students wholly show positive attitudes towards multicultural education, remarking that some variables such as the age, the contact with ethnic minorities or the frequency and the reason for this contact are not explanatory factors of the attitude. However, the research finds out a tendency of improvement of attitudes towards multicultural education during the grade last years. This issue was also obtained in relation with attitudes towards inclusion: Infante and Gómez (2004) discovered that even though students of all grades analyzed present at the beginning of their university studies a favourable attitude towards disabled educative inclusion, all of them tend to improve their attitudes at the end of their studies. The same idea is pointed out by the research of Gughwan and Chow (2001), remarking the fact that a more favourable attitude towards disabled inclusion in students of higher educational level, and specifically in postgraduate students.

Moreover, Infante and Gómez (2004) showed that the improvement in the attitude towards disabled inclusion was even higher in Pedagogy students. In that sense Alonso, Navarro and Lidón (2008) carried out a re-

search on the attitudes towards diversity with the aim of finding out if there were any differences in these attitudes in terms of the university students knowledge area, choosing five different areas (Education, Humanities, Experimental Sciences, Social Sciences and Engineering). Their results reveal important differences in terms of this variable, so that attitudes towards disability are quite more positive in Humanities and Education students than in the other knowledge areas.

Finally, we should remark the research of Alcantud, Asensi and Ávila (2000) regarding the disabled students integration in higher studies. It is a broad and complete study that undertakes different interest scopes, like the legal environment, disabled potential segregation factors, social relationships and likewise the attitudes towards this collective. The authors analyze with huge detail the principles emerged in Spanish Universities to cope with this fact, guaranteeing their complete educative inclusion, so that they carry out a comparative study about integration in Spanish Universities and in the European environment, such as Germany, Holland or the United Kingdom, as well as the United States of America.

Our research is focused on the inclusion of disabled university students in Spanish University, so that our initial hypothesis is that young Spanish university students of different grades and levels of the Economics and Management and Business Administration, show a favorable attitude towards disabled persons inclusion. The main objective of this research is the identification of those variables which specifically determine the presence of a favorable attitude towards disability, as well as a good inclination for helping the disabled.

### **Disability and Social Inclusion**

The concept of disability concerns a complex knowledge field which gathers multiple terms related to medical, social, psychological or educational conceptions (Verdugo,

1995). Amongst the first studies concerning this subject stand out the researches made by Haber (1967, 1973) about conceptualizing and the methods for measuring and evaluating disability, as well as the studies of Nagi (1965, 1979) about the disability concept, its treatment and rehabilitation. In following decades Altman (2001a, 2001b), Bickenbach, Chatterji, Badley and Üstün (1999), Fujiura and Rutkowski -Kmitta (2001), Grönvik (2009), as well as Gross and Hahn (2004), have remarked the huge researchers effort in finding proper definitions for disability which might be complete, global or stable in time, due to the fact that the disability concept, as it happens with other social sciences concepts has a however the problem of disability as a concept lies in its circumstances have contingency characteristics (Aspinall, 2001).

Grönvik (2009) contributes with three disability concepts. Firstly, the disability as a functional limitation, understood as blindness, deafness or any corporal injury, definition as a consequence of the medical understanding of the disability phenomenon. Secondly, it involves an administrative definition, starting from social assistance, so that if some benefit set aside for disabled is conceded to a person, it would be considered as a disabled (Barron, Michailakis and Söder, 2000) –provided that this disability conceptualization changes a lot depending on the different welfare systems (Altman, 1986; Mashaw and Reno, 2001)-. Finally, it provides a subjective definition, based on an individual that considers himself or herself as a disabled, so that following this criteria, the inclusion in the disabled person category may be voluntary.

The conception of disability as a functional limitation has been broadly discussed (Oliver, 1990, 1996a, 1996b), not only for not attending the peculiarities of each person, but also for ignoring the social, educational, cultural and legal implications, as well as the context involving the disabled. This way,

some authors like Schalock (1997) point out the relationship among the functional limitations, the social environment and the physical appearance of the disabled person. Proposals about the disability social model point out in the same way, like the model of Barnes and Mercer (2004), which remarks that interrelations between society and disability presented by Oliver and Barnes (2010), as well as the concept of exclusion as a matter of social justice explained Barton (2009).

It is quite interesting to remark also the definition provided by *Convention on the Rights of the Disabled persons* of the U.N, given that its 1<sup>st</sup> article refers to the disabled as those persons with physical, mental, intellectual or sensory long term deficiencies, which when interacting with several barriers may prevent them from taking part completely and effectively in the society in equal terms with the others.

Taking into consideration these new focuses, our research starts from the concept of disability focused on social aspects, which is named *functional disability* (Alonso *et al.*, 2008), in the way that are not only considering the physical and functional limitations of the individual, but also social representations generated amongst it, fruit of the stereotype created in relation with disability (Soto y Vasco, 2008). This way, disability is not the attribute of a person, but an imbricate joint of conditions, most of them created by the social environment.

Regarding the social exclusion, it can be defined as the process by which individuals or human groups are totally or partially excluded from a complete participation in the society they live (*European Foundation*, 1995). Social exclusion deals with a multidimensional phenomenon which affects negatively to different aspects of human development, not only it refers to material aspects (Haan y Maxwel, 1998). In this sense, the idea of social exclusion remarks the importance of public policies that endow with the

capacities required for the participation of all the individuals and the paper fulfilled by the State in the developing of such policies (De Hann, 1998).

Social Researchers have purified the concept of social exclusion and have associate it to the poverty dimension, summarized by the Economy Nobel prize Sen (1985), who in the *capabilities* focus, points out that the real important question in social exclusion is its multidimensional and dynamic character, variable depending on the countries, periods and social norms considered. However, the contribution that Sen (2000) has gathered along his valuable and numerous studies points out that key factor is that individuals may have capacities to avoid social exclusion or to leave it behind. An interesting reading on the meanings of social exclusion is the well-known research of Silver (1995), in which he analyses several definitions of social exclusion and integration, depending on the different context, and has remarked the “ideological meaning” underlying in each one of them, leading him to propose the well-known “three lines” or “main paradigms. Exclusion should be considered like a process instead of state (Karsz, 2004). Following

The values and practices in western democracies related to concepts such as democracy, equality and inclusion are extremely complex and contradictory (Barton y Armstrong, 2000). Following Valenciano (2009), education as a right as well as education for everyone layout, are the strong basis for quality education, quality standard of living and the set up of solidary and fairness societies.

Therefore, the UNESCO defines the concept of inclusion as the process of dealing and giving an answer to the diversity of needs by an increase of the participation in education, culture and the different communities, and by the reduction of social and educative exclusion. In the educative point of

view, it does involve an important change and a modification of strategies and structures, with the main objective of including the whole children in the educative system (UNESCO, 2005). In this way, society transferred values are critical for inclusion support (Verdugo y Schalock, 2009), and the improvement of the standards of living (Verdugo, 2009) for disabled persons as well as for the society as a whole.

### **The Theory of Reasoned Action: a tool for analysing the intention of helping the disabled inclusion**

The valuation of attitudes toward inclusion is often performed by means of factor analysis, such as Akrami Ekehammar, Claesson and Sonnander (2006) or Sciora and Furnham (2011). Nevertheless, the Theory of Reasoned Action (Theory of Reasoned Action, TRA) offers an alternative to this type of analysis, providing a complete methodology for the investigation of the behavior.

This theory was proposed by Ajzen and Fishbein (1980) to explain how attitudes can predict behavior associate to some probability. The fundamental of this theory are, first, that intentions determine the behavior in a causal way, and secondly, that the intentions are caused by the sum of the influences of attitudes towards the behavior, and the subjective norms (Ajzen and Fishbein, 1977). About subjective norms, we are meaning the social pressure perceived by the individual by their most important patterns or models, in order to perform or not some particular behavior, that is what we call in our study Social Norms.

According to these authors, the personal attitudes are those that underlie behavior, and therefore, to the actions undertaken by individuals. Subsequent studies reinforce the evidence that individual attitudes and values predict behavior (Brinberg, 1979; Pagel and Davidson, 1984).

Later, Ajzen further indicates that the original model of the Theory of Reasoned Action, deals exclusively volitional behavior, so this model has no ability to predict behaviors that are not under full control of the own will. That is the reason why Ajzen (1991) proposed later the Theory of Planned Behavior (Theory of Planned Behavior, TPB). In this new model, he includes Perceived Control, that became a determinant factor in understanding those behaviors whose realization requires control by the individual. Following Ajzen, we can define Perceived Control as the assessment made by the own individual about his own capability on doing something, that is to say, whether a behavior is easy or not to carried out, related to a given behavior (Ajzen, 1991).

Given the above proposals, attitudes become a factor greatly relevant. About attitudes, we mean the individual's learned predisposition to respond consistently in a favorable or unfavorable way to objects, people or groups of people and situations (Ovejero, 1998). As stated by the author, the attitude is learned and therefore is shaped all over a person's life and not in a particular time. Therefore, it seems to be clear that attitudes towards people with disabilities are influenced by variables such as age or education level. This was emphasized, as we explained above, in some recent studies such as Infante and Gomez (2004), which indicate that attitudes are more favorable to disability in the final year students, or the Gughwan and Chow (2001) research, which identifies also a more favorable attitude in postgrade students. Finally, it should be noted also that a positive attitude of individuals -in our case, university students-, is essential in creating inclusive environments and generating a favorable change in group's attitude towards people with disabilities (Clore and Jeffrey, 2007).

Thus, if attitudes are acquired throughout life, based on personal experience, living with people with disabilities will probably be

a determining influence on the own perception about them, as well as own attitudes towards this group. In this context, it becomes a key matter to study attitudes, because these attitudes are one of the most important factors trying to hinder or boost the inclusion and integration of people with disabilities in the social and educational environment (Arnaiz, 2003; Konur, 2006).

Once we have analyzed the concepts of disability and inclusion, we consider the determining factors for the willingness to provide cooperation and assistance to people with disabilities -that is to say, the *Intention of helping to inclusion*-. For this purpose, we have followed the model offered by the Theory of Planned Behavior that takes into consideration, as we have explained above, the *Attitude towards inclusion* (factor 1) or the person's predisposition towards disability, -in this paper, the university student- *Social Norms* (factor 2), and *Perceived Control* (factor 3). Therefore, the main determining factors for Intention of helping to inclusion would be the Attitude toward inclusion, the Social Norms and the Perceived Control.

Disability is perceived differently according to different societies' sensitivity. Therefore, is normal to find differences between inclusive attitudes among young people, because these attitudes will change when the environment changes, and hence the importance of what we call Social Norms. As we explained above, it deals with the individual own perception about the influence of relevant reference groups (friends, family, educational institutions, etc.), at the time one decides to perform a certain action. As we explained at the beginning of Introduction, in the international context the dominant social values are conducive to inclusion (see, for example, the Millennium Goals proposed by the United Nations, 2010). In the European Union, the social concern is reflected, in a

synthetical way, in the commitment on fighting against social exclusion, assumed since the first treaties, as well as the creation of the cohesion funds and, finally, on proposed strategies for 2020 (COM, 2010).

### **Educative contexts inclusion: The University**

The concept of inclusive education refers to the normalization and inclusion of people with disabilities both in school and in society, which is applying the principle of least restrictive environment (Biklen, 1981, Frith and Mitchell, 1981). This concept has been studied by many authors in such different educational levels (Alvarez et al. 2002, Muñoz and Espiñeira, 2010). Thus, according to López Torrijo (2009), we can state that the inclusion of students, with special educational needs, is one of the most outstanding innovations that educational systems have been implemented in recent decades, particularly by developed countries. A concept related to the previous one, is the inclusive school, defined by Arnaiz (2003) as the one that has to develop its work in an educational system designed for all, based on equality, participation and non-discrimination. Thus, we find the inclusion as a value that incorporates the human reality of diversity. Beyond teaching, inclusive education is an attitude, a system of values and beliefs (Armstrong, 1999).

The method proposed by the Theory of Reasoned Action of Ajzen has been used in several studies about inclusive education, among which, we can find the recent work of Obrusnikova, Block and Dillon (2010), their achieved results differ depending on the schools (primary and secondary) analyzed, and the study of Kudláèek, Valkov, Sherrill, Myers and French (2002), related to physical education teachers in the Czech Republic. Chart 1 shows some of the most representative recent studies.

Chart 1. Recent studies about inclusion in the university environment.

AUTHORS	STUDY SCOPE	STUDY FIELD
Alcantud, Ávila and Asensi (2000)	University of Valencia (Spain)	Disabled students' integration in High education (Spanish and European universities).
Infante and Gómez (2004)	Catholic University of Chile (Chile)	Attitudes of classmates towards disabled students in different university studies.
Alonso, Navarro and Lidón (2008)	University Jaume I of Valencia (Spain)	Attitudes of classmates towards disabled students in different study branches in Spanish University.
López (2008)	University of Valencia (Spain)	Auditory disabled students in Spanish University.
Collins, Baird and Hager (2009)	Kentucky University (USA)	Disabled students at Distance University
Campbell (2009)	Several countries (USA Australia)	The need of education in social attitudes towards disabled students of Medicine.
McCarthy, Donofrio-Horwitz and Smucker (2010)	Ohio University (USA).	Management and Business Administration Degree students and their relationship with persons with communication problems
Oh, Rizzo, So, Hosung; Park and Lei (2010).	Universities of China, Corea and USA	Attitude of physical education professors towards TDAH students
Obrusnikova, Block and Dillon (2010)	Several countries and cultures	Professors' attitude towards physical education.
Suriá (2011)	University of Alicante (Spain)	Attitudes of classmates towards disabled students in different educative levels.

Given the theoretical foundations exposed here, we propose a model based on the Theory of Reasoned Action to analyze the influence of attitudes on the individual's behavior, and considering the improvements introduced by Ajzen (1991) in the model, we have also included the Perceived Control variable, according to the Theory of Planned Behavior. In this way, we have built the essential links that relate *Attitudes toward inclusion* and *Perceived Control* with the *Intention to assist the inclusion of people with disabilities*, that is, the observed behavior of

the individual (in this case, the university student). If we understand that the student's *Attitude toward inclusion* is their learned predisposition to respond favorably or unfavorably toward disability, then, *the Intention of helping to the inclusion*, would be linked to the intention of working or to engaging in activities that support the inclusion of the disabled people (Figure 1). The subsequent empirical study is aimed to obtain and analyzing empirical data to verify the suitability of this model.

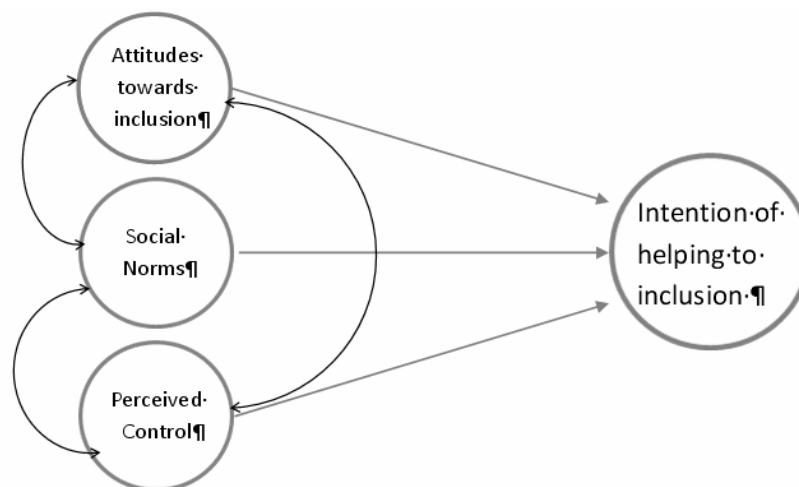


Figure 1. Relations between Attitude towards inclusion, Social Norms, Perceived Control, and Intention.



## Methodology

### Participants

A survey was carried out to 180 young students matriculated in the University of A Coruña (Spain), in different studies and levels related to Economics, Management and Business Administration. The research took place in May of year 2010.

The process of sample selection prioritized the participation of students in their final years (3rd course of the Diploma in Business Studies and 4th and 5th courses of the degree in Economics and Business Administration). The reason for this selection is not casual, we choose them because they are more experienced on interacting with all types of students (with or without disabilities). It is, therefore, a conglomerates initial selection,

in which we selected students integrated in the selected clusters (class of 3rd, 4th and 5th course of the Faculty of Economics and Business Administration) attending classes in the instruments' application session. The random error, assuming the maximum indetermination hypothesis ( $p=q=50$ ) and a confidence level up to 95.5%, was the 5.3%. The sample description includes the most representative classification variables (Table 1).

In the description of the sample, we have first considered the variables of gender and age because numerous studies indicate that both of them are important determinants of beliefs and attitudes (Ajzen and Fishbein, 1980). The mean age was 22 years. The description of the sample (Table 1) shows the most relevant classification variables.

Table 1. Sample Description

Variable	Category	%
Gender	Male	32.32
	Female	67.68
Age	18-20	21.95
	21-23	51.83
	24-26	21.34
	>27	4.88
University Studies (Type of Degree)	Bachelor in Business Administration	21.95
	Bachelor in Economics	10.37
	Graduate in Business	67.68
Father's educational level	None	0.61
	Primary Education	42.07
	Secondary Education	38.41
	University Education	18.30
	Doctorate (Phd)	0.61
Mother's educational level	None	0.61
	Primary Education	44.51
	Secondary Education	40.85
	University Education	12.81
	Doctorate (Phd)	1.22
Suffer from disability	Yes	0.62
	No	99.38
Close persons with disabilities	Yes	35.98
	No	64.02

### Tool

Before beginning the fieldwork, the questionnaire was tested, valued and depurated with the esteemed help of a 5 membership group of teachers of the Economics and

Business Administration Faculty of the University of A Coruña, all of them experts in using the PLS (Partial Least Squares), which target is to predict latent variables in the Theory of Planned Behavior context.

The young university students answered the questionnaire considering their level of agreement or disagreement to several items or indicators representing the determinant factors of intention and willing to help people with some degree of disability. A Likert - type 5 point scale was used to value the level of agreement or disagreement in responses (1 = totally disagree; 5=totally agree).

Due to the fact that our dependent variable (Intention to help inclusion) is explained by

three concepts (the Attitude towards inclusion, the Social Norm and the Perceived Control) or abstract and multidimensional nature variables (latent variables), it is quite necessary to use multiple indicators (items) or observed variables, that may guarantee their measurement trustworthiness (Churchill, 1979). Table number 2 includes these items used for every construct measurement.

*Table 2. Reflective indicators used for measuring latent variables.*

<b>Latent Variable</b>	<b>Reflective indicators</b>	<b>Description</b>
<b>Attitude towards inclusion</b>	Attitude 1	Honestly, I believe I have nothing to do with this matter.
	Attitude 2	I believe it is pleasant to devote some or our time to helping each other.
	Attitude 3	The disabled problem only concerns one to part of the society.
	Attitude 4	Even though we do not suffer from disability it does concern all of us.
<b>Social norms</b>	Social Norm 1	Inclusion programs should be promoted by the State.
	Social Norm 2	My parents have thought me that anyone may become a disabled and need help from the others.
	Social Norm 3	Teachers are concerned about disabled persons in the University.
	Social Norm 4	Students are concerned about disabled persons in the University.
	Social Norm 5	My family had thought me from childhood that should give help to whom it may need it
	Social Norm 6	In school had thought me from childhood that should give help to whom it may need it
	Social Norm 7	In High School had thought me that should give help to whom it may need it
	Social Norm 8	If the University proposed supporting programs for disabled persons I would collaborate
	Social Norm 9	I believe that anyone is under the obligation of helping the others.
	Social Norm 10	I believe disabled persons have the right to participate in all activities where the non-disabled persons do take part
<b>Perceived control</b>	Perceived Control 1	I feel able to give support and help to any disabled person.
	Perceived Control 2	I believe I am able to perceive the special needs of disable persons
	Perceived Control 3	I believe I would be able to help some physical disabled person.
	Perceived Control 4	I believe I would be able to help some psychical disabled person.
<b>Intention</b>	Intention 1	I wish to participate in organizations for supporting persons at risk of exclusion.
	Intention 2	I would like to participate in social inclusion programs.
	Intention 3	I want the educational institutions to promote programs for disabled persons inclusion.
	Intention 4	I have the intetion to give help and support for disabled inclusion.
	Intention 5	I am trying to help some disabled

### Statistical Analysis

For data processing two different types of techniques were used. To identify those attitudinal variables and the items which have bigger influence in predisposition towards inclusion, we have made a detailed descriptive analysis of each one of the items, trying to identify those that were more agreed or disagreed among students, and that were probably more to influential on intention. Despite being an ordinal scale, in this section we will analyze the values of the responses as indicative, either general agreement or disagreement with assertion.

However, due to the fact this analysis does not consider all the possible interrelations amongst variables, this matter is solved by developing the multivariable analysis, used to simultaneously not only measure the influence of different constructs, but also to test their validity and internal consistency. Using the multivariable analysis we intend to take into consideration all interactions between items previously analyzed, because it provides with an analysis from the point of view of the variables as explanatories for each construct, as well as all possible interrelations amongst them. The figure 2 shows the configuration of the multivariable analysis.

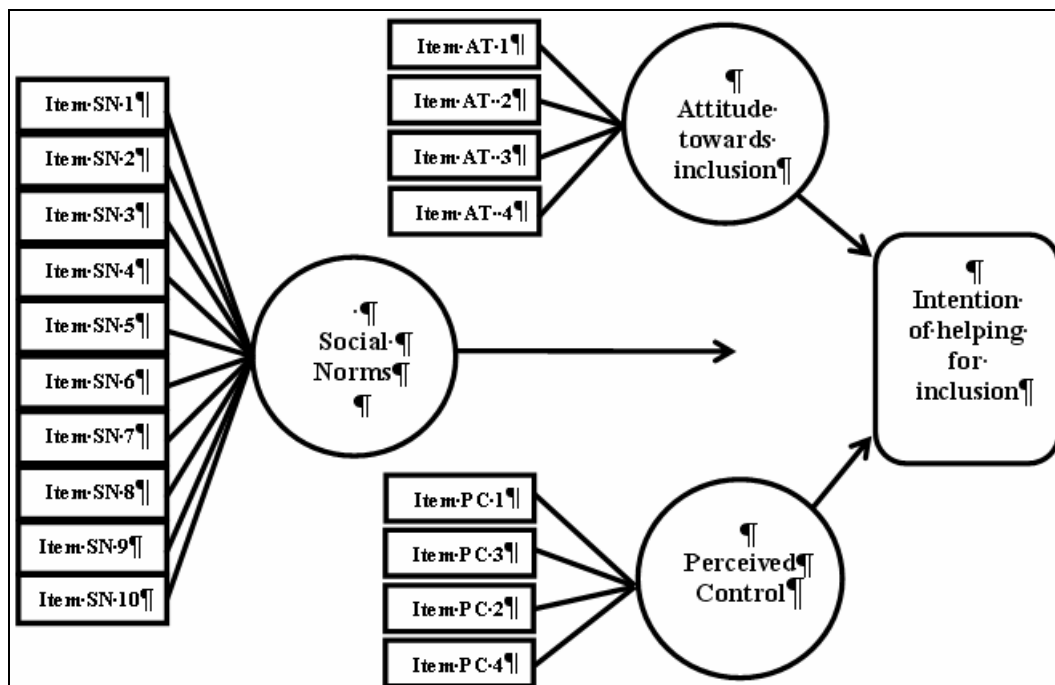


Figure 2. Relations between Latent Variables and Observed Variables

It deals with the covariances structure analysis (Satorra and Bentler, 1994). We have resorted to the PLS statistical program, which main objective is predicting the dependent variables, both latent or observables, as well as quantifying causal relations amongst interdependent variables. In our study, it does exist a dependent variable which is the favorable Intention for helping for inclusion to disabled persons and another independent variables like the Attitude towards inclusion, Social Norms and Perceived

Control. The statistical procedure for data obtained from questionnaire was the SPSS statistical program (PASW Statistics), performing the corresponding psychometric analysis.

## Results

### Descriptive Analysis Results

Items with higher explanatory power in the multivariate model to explain the attitude

towards inclusion (as shown in Table 3), are the AT4 *-The disabled problem does affect all of us to a certain extent, even though we do not suffer from disability-*, which mean is 4.12 and also the AT2 *-I believe it is quite gratifying to devote some of my time for helping other people-*, with a mean of 3.83. It should be remarked that both variables are quite significant, because the former implies the empathy and the latter implies the interest in helping and giving support, while both conditions may indicate great intention or predisposition to help.

Table 3. Mean Scores for Attitude indicators or Individual Values.

Latent variable	Reflective indicators	Mean	Standard deviation
Attitude towards inclusión	AT1	1.878049	0.918658
	AT2	3.829268	0.994523
	AT3	1.878049	0.957889
	AT4	4.121951	0.989395

The collective values, measured as Social Norms (Table 4), most valued by students are those corresponding to items SN10 *-I believe disabled persons have the right to participate in all activities where the non-disabled persons do take part-*, SN5 *-My family has teach me from childhood that I should give help to whom it may need it-*, SN2 *-My parents have thought me that anyone may become disabled and need help from the others-* in this specific order and which means are respectively 4.18, 4.11 and 4.10.

Furthermore, punctuations obtained for items SN6 *-In school had taught me from childhood to give help to whom it may need it-*, SN9 *-I believe that anyone is under the obligation of helping the others-* and SN1 *-The inclusion programs should be promoted by the States-*, which respective means are 3.84, 3.83 and 3.76 are quite relevant.

Lowest average values were registered in items SN3 *-Teachers take care of the dis-*

*abled in the University-* and SN4 *-Students take care of the disabled in the University-* with means of 2.9 and 2.85, respectively.

Table 4. Mean scores for Social Norms and social values indicators

Latent variable	Reflective Indicators	Mean	Standard deviation
Social norms	SN1	3.762195	1.026417
	SN 2	4.091463	0.995783
	SN 3	2.920732	0.965571
	SN 4	2.859756	0.842777
	SN 5	4.109756	0.858106
	SN 6	3.835366	0.992471
	SN 7	3.609756	1.082557
	SN 8	3.243902	1.015958
	SN 9	3.829268	1.216501
	SN 10	4.176829	1.020862

The Perceived Control or the ability for helping the disabled (Table 5) is quite acceptable in all items analyzed (with mean above 3). However, items PC3 *-I believe I would be able to help any physical disabled person-* and PC1 *-I believe I would be able to help and give support to any disabled person-* certainly stand out. The lower mean (3.08) corresponds to item PC4 *-I believe I would be able to help any people with physical or sensorial disability-*.

Table 5. Mean scores for Perceived Control indicators

Latent variables	Reflective Indicators	Mean	Standard deviation
Perceived control	PC1	3.487805	1.053698
	PC2	3.298780	1.022327
	PC3	3.56585	0.902554
	PC4	3.079268	1.129551

With regard to the Intention of helping to inclusion (Table 6), the three items with higher mean value are INT3 *-I would like the educative institutions to promote programs for disabled persons inclusion-*, INT2 *-I would like to participate in supporting social inclusion programs-* and INT4 *-I have the intention of helping the to the inclusion of disabled persons-*, while the lower mean value is INT1 *-I wish to participate in or-*

ganizations involved in supporting persons at risk of exclusion- and INT5 -I try to help to some disabled persons-.

Table 6. Mean scores for Intention of helping to inclusion indicators.

Latent variables	Reflective Indicators	Mean	Standard deviation
Intention of helping to inclusion	INT1	2.731707	1.021833
	INT2	3.024390	1.050569
	INT3	3.664634	1.040749
	INT4	3.018293	1.053609
	INT5	2.908537	1.101109

### Multivariable analysis Results

Before analyzing results obtained, we tested reliability and validity of measurement scales. In this way, we measure the reliability through the Cronbach's coefficient Alpha and the compound reliability index (Table 7), showing acceptable values for all constructs, except the *Attitude towards inclusion*. According literature, compound reliability indexes over 0.5 confirm internal reliability for constructs (Bagozzi and Yi, 1989), nevertheless, another authors, as Lévy and Mallou (2006) take into account upper limits. The values of both indexes are slightly under the desirable values for *Attitude towards inclusion*, for this reason we consider that they might be reviewed in future researches. Moreover, the model convergent validity is measured (Table 7) by checking the weight of regression for each one of the items on the correspondent construct (Jöreskog y Sörbom, 1993). The considered limit is the breaking

value of 0.4, and obtained results are between 0.5 and 0.9 values.

After this analysis, we consider that the proposed measurement method does prove the internal consistency and provides enough validity to be used for Attitude, Social Norms, Perceived Control and Intention to help to inclusion estimations. Once it has been verified that the construct measurements are reliable and valid, we proceed with the valuation of the reflective structural modeling. We used the PLS statistical program, as it was explained in section 3.3. Jöreskog and Wold (1982) and Barclay, Higgins and Thompson (1995) suggest this is the most suitable method for not only an exploratory analysis but also a confirmatory one. Regarding the sample size used in this study, it fulfills the requirements generally accepted for the program application, since following Gefen, Straub and Boudreau (2000), the results strong robustness could be maintained as long as the sample is a large multiple of the constructs in the model proposed (Cohen, 1977), because of the fact that is based on the lineal regression. As a guide's reference it has been broadly accepted that it must have at least ten times more cases than the number of items that made up the most complex construct of the model (Barclay et al, 1995). The predicting capacity of the minimum partial squares PLS (*Partial Least Squares*) is appropriately valued by Wold (1985), when models with solid theoretical foundations are contrasted.

Table 7. Variable measurements, latent variables and reflective indicators

Latent Variables	Indicators	Loadings (loadings)	Alpha cronbach	Composite Reliability (composite reliability)
Attitude towards disability	AT1	0.512800	0.484410	0.496237
	AT2	0.803900		
	AT3	0.496300		
	AC4	0.835600		
Social norms	SN1	0.429900	0.820042	0.862766
	SN2	0.617000		
	SN3	0.535600		
	SN4	0.519500		
	SN5	0.780700		
	SN6	0.748400		
	SN7	0.758300		
	SN8	0.687000		
	SN9	0.593200		
	SN10	0.748400		
Perceived control	PC1	0.794900	0.848027	0.900894
	PC2	0.873000		
	PC3	0.892400		
	PC4	0.768500		
Intención of helping to inclusion	INT1	0.777600	0.786863	0.855217
	INT2	0.787400		
	INT3	0.667800		
	INT4	0.843900		
	INT5	0.587100		

Once it was checked that construct measurements were reliable and valid, we proceed

to value the structural model. The Figure 3 shows the causal analysis results.

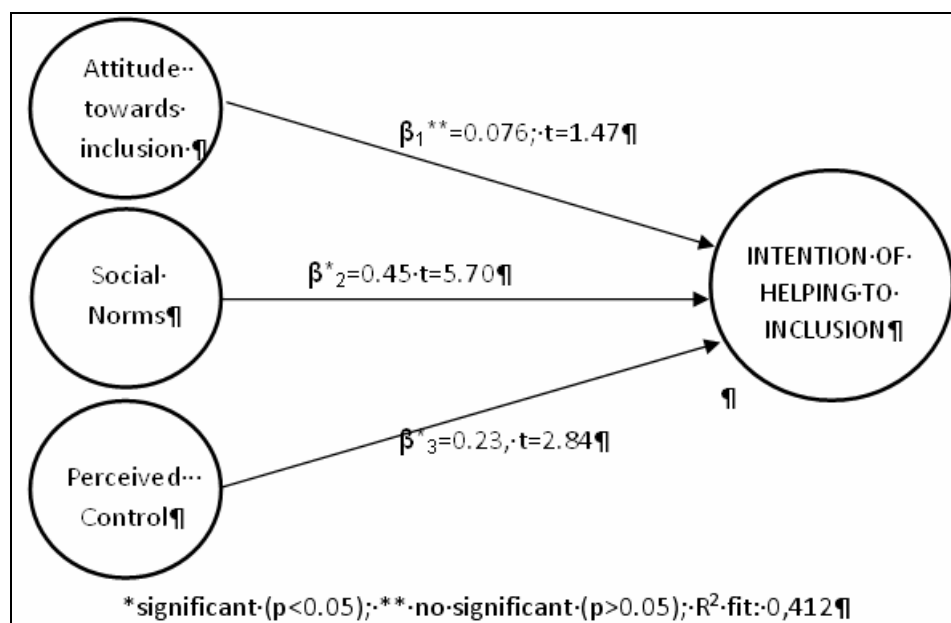


Figure 3. Structural Model Results

The results obtained point out that the Social Norms stand out as the most important variable and it also has influence upon the intention to help persons with disabilities. Likewise, the Perceived Control is another variable that predisposes favorably to the young university students to give their help. Finally, the Attitude towards inclusion of individual person did not show a significant influence.

## Discussion

The results obtained show that young people are highly influenced by the values instilled by their families, both the willing to give help –NS5- as well as empathy or the consciousness about anyone could be a disabled –NS2-, even though they are particularly sensitive towards values instilled in school (means are 3.6 in High School and 3.2 in University). These results indicate that it is in school and in the family, in fact, where young people are receiving training in values and attitudes towards inclusion. The high value reached by item NS1 shows that university students assume the need of inclusive public policies, so that these institutional actions would be accepted with pleasure.

As for the Intention of helping the inclusion of the disabled, the results show that students prefer that this work would be handled for public institutions. Although personal intentions are positive, the individual commitment is not too strong, as evidenced by lower mean values obtained by the items that indicate a desire to participate in organizations that support the inclusion or the attempt to help the people with disabilities.

We can say that Social Norms is the variable that best explains the intent to assist the inclusion, in the sense that the prevailing Social Norms has the ability to foster individual intentions in favor of inclusion. At the view of the results obtained related to Social Norms, we found that with some frequency, substantial differences have been appreciated between verbal statements about the individ-

ual intentions and actual actions. The Social Norms are favorable to inclusion and when we have analyzed the items separately, we have confirmed this standard works on all levels, including family and education.

On the other hand, the absence of Perceived Control is not a relevant difficulty for possibilities of inclusion for people with disabilities at university environment. In fact, we can say that the university students feel and believe themselves capable of helping for people with disabilities inclusion, even though this level of perceived control falls in the specific case of psychical disabled persons, feeling rather less confident in this area.

A subject to reflect on – which slips out of scope of this study - is the lack of concern about the support for disabled students inclusion in the University, observed in university students, which has been revealed in the descriptive study and tallies with the analysis of the situation raised in section 2, where the poor attendance of disabled students in the traditional or virtual university lecture rooms came out.

As for personal opinions, feelings and intentions, the study shows that have a direct bearing on the intention to help the inclusion of disabled groups, as reflected in the construct Attitude toward inclusion. However, in this model we have detected malfunctions in the construct Attitude towards inclusion. From our point of view, the problem may lie in a possible trend to not answer what they actually think, but what is socially correct to be answered. In our opinion, it is possible that students will answer what they think that they should be answered, according to social desirability and what they believe is expected of their adequate behavior. Thus, if we are right, this performance would introduce a bias in student responses which could affect the validity of the information collection instrument. The students commitment to disability may be greater if we were acting on

the values transmitted by families in the environment of non-disabled people and this result would be consistent with the proposed Verdugo and Schalock (2009), set out above in our investigation. In line with that indicated by Valenciano (2009) in paragraph 2 of this study, students widely consider that the inclusion is a right of the disabled. Although the results, are not robust in this sense, in our opinion, they may be considered as indicators of a line that must be analyzed in detail in future research. In this sense, we underlined before the importance of positive attitudes to create inclusive environments, according Clore and Jeffrey (2007), and the results confirm this model. However, the coefficient's level is not as high as expected.

The whole assessment of results, -the higher importance of the Social Norms, followed by Perceived Control, as main explainer factors- lead us to think in a society with some degree of "inclusive imbalance", not to speak of a "general contradiction" between the manifestations of the dominant social values and personal attitudes of each one.

One last matter for reflection, which is beyond the scope of this work, is that one posed by the lack of concern for supporting the inclusion of students with disabilities in the university, by university students without disabilities, as it has been shown in our descriptive analysis.

### **Conclusions and future research guidelines**

This research, allowed us to identify two crucial cores for designing and formulating social inclusion strategies for persons with disability, particularly for university students. One of them, points out to the general social policies, while the other points out to the educational ones. Regarding the latter core, some performing guidelines are proposed in several fields, depending on the educational level. Finally, some suggestions regarding the university inclusive policy are done.

### **Recommendations about social inclusive policies**

It is highly recommended the design of public transversal policies, to cover several actuation spheres as social and educational ones, and reinforce positive Social Norms towards inclusion, with specific intervention programs for all citizens. In this sense, four complementary action fields are proposed. Firstly, one action in the school field at the early ages, because it was proved that it is the most influential (this field would perform on Attitude and Social Norms). Secondly, an action aimed at university students, to promote their participation in inclusive activities, to enhance their desire and intention to involve themselves in organizations that support people at risk of exclusion. A third action, at a family level (specially aimed to the attitudes area). And lastly, an action aimed to wider social contexts such as associations, town councils, etc., which would affect both social norms and attitudes.

### **Recommendations about educational policies**

We suggest the performance on children and primary educational levels, because there is a key area, as it follows from the answers given by the university students to this research, where the designing of educational policies must be synchronized and matched with general social inclusive policies as well as with higher level educational policies.

In the university environment, some lack of sensibility towards the need of support of the disabled university students has been detected. For this reason, from our point of view, the universities must develop two main guidelines. First, designing university inclusive policies by generating pro-active attitudes in young university students to promote the concerning for the defense of rights of the people with disabilities, in accordance with the principle of equality of opportunities. These actions should be transversal. Secondly, creating and promoting critical forums for thinking that allow correcting and



directing the university policies for supporting the diversity, in order to promote the inclusion of students with special needs. These actions should be put into practice for collective values as well as for personal attitudes, and may have repercussions on the social welfare, not only for the improvement of human capital, but also for increasing the level of personal satisfaction of all university community members.

Finally, it should be remarked the convenience of promoting actions for making visible these "invisible" disabilities aiming the psychical disabled inclusion, because it has been proved that Perceived Control decreases in relation with this kind of disability.

#### **Research limitations and future research guidelines**

Finally, on a prospective way, we identify some possible areas for future research intending to address, in a part, some of the limitations noted herein.

First, the small weight of the Attitude towards disability as an explanatory variable of Intention to help the inclusion, as is highlighted in this study, is a matter that we will analyze in further research, since in our opinion, logically, is of great importance as a determinant of the intention to include the people with disabilities.

As the main limitation of this study, we will point out the size of the sample, giving a provisional nature to achieved conclusions. In the same way, as a major constraint, we understand the character of the sample, not probabilistic and that was not made a preliminary estimate of sample size. Another important limitation of the study affects the questionnaire as a tool for information gathering, given that college students could demonstrate a significant bias in the responses due to the alleged their social desirability.

On the other hand, it would be interesting to extend the study of Attitude towards in-

clusion of disabled people to other groups such as non-college youth. It would also be of strong interest for future research extending the period of study of this attitudes, to evaluate students behavior and its evolution over time, because, this would lead to test if are there any changes in their responses and attitudes towards disability. As a last research guideline, we propose to explore other possible relevant variables in the attitude towards disability, as might be the particular type of disability or the extent to which it is manifested, gender, presence of a nearby person with disabilities the family environment of college's student or the type household, because we understand that all these factors may be relevant for one's attitude towards disability, perceived control and intention to support and actively engage in the inclusion of the disabled.

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### ABOUT THE AUTHORS / SOBRE LOS AUTORES

**Novo-Corti, Isabel** ([isabel.novo.corti@udc.es](mailto:isabel.novo.corti@udc.es)). Professor of University School of Economic Analysis, Department of Economic Analysis and Business Administration, Faculty of Business and Economics, at the University of A Coruña. < estudio. las entre funcionales relaciones establecer de propósito con muestral) (estudio muestrales valores en basado explicativo descriptivo diseño un seguido ha se font autorregulado:< aprendizaje el conforman que variables>She is the author to contact regarding this article. Her postal adress is: Facultad de Ciencias Económicas y Empresariales, Campus de Elviña, s.n. 15071-A Coruña (España). [Buscar otros artículos de este autor en Scholar Google / Find other articles by this author in Scholar Google](#) 

**Muñoz-Cantero, Jesús Miguel** ([jesus.miguel.munoz@udc.es](mailto:jesus.miguel.munoz@udc.es)). Professor of Research Methods and Diagnosis in Education. His postal adress is: Facultad de Ciencias Económicas y Empresariales, Campus de Elviña, s.n. 15071-A Coruña (España). [Buscar otros artículos de este autor en Scholar Google / Find other articles by this author in Scholar Google](#) 

**Calvo-Porrall, Cristina** ([ccalvo@udc.es](mailto:ccalvo@udc.es)). Phd Professor at the Economics Analysis and Business Administration Department in University of La Coruña (Spain). Her postal adress is: Facultad de Ciencias Económicas y Empresariales, Campus de Elviña, s.n. 15071-A Coruña (España).. [Buscar otros artículos de este autor en Scholar Google / Find other articles by this author in Scholar Google](#) 

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<b>Abstract / Resumen</b>	<p><i>The present democratic values in most Western societies have fostered social norms promoting inclusion of groups at risk of social exclusion. This research has focused on the inclusion of the disabled collectives at conventional university environment. For that purpose an inquiry was carried out to young university students registered in the University of A Coruña, in several grades and levels of Economics and Business Administration studies. Thereinafter, we performed a descriptive research and a factorial analysis based on the Theory of Reasoned Action. Results obtained indicate that dominant social values are a determining factor for inclusion, however individual attitudes, although favorable for helping and giving support to people with disabilities, are not as significant as it was expected. Furthermore, results concerning the intention to help for people with disabilities inclusion indicate that students would rather prefer public institutions to take care of this issue.</i></p> <p>Los valores democráticos presentes mayoritariamente en occidente han impulsado normas sociales favorables a la inclusión de colectivos en riesgo de exclusión social. Esta investigación se centra en la inclusión de colectivos con discapacidad en el ámbito de la universidad, para lo cual se realizó una encuesta a jóvenes estudiantes universitarios matriculados en la Universidad de A Coruña, en diferentes estudios y niveles, pertenecientes a las ramas de Economía y Empresa. Posteriormente, se llevó a cabo un estudio descriptivo y un análisis factorial basado en la Teoría de la Acción Razonada. Los resultados alcanzados muestran que los valores sociales prevalentes se presentan como la variable más importante y con mayor influencia sobre la intención de ayudar a las personas con discapacidad, mientras que las actitudes personales, así como el control percibido, aunque predisponen de manera favorable a prestar ayuda la persona con discapacidad, no han mostrado una influencia significativa. Asimismo, las respuestas sobre la intención de ayudar a la inclusión de las personas con discapacidad indican que los estudiantes prefieren que esta labor recaiga sobre las instituciones.</p>
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