

Ethical and Social Values in Business Administration and Management Studies

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The objective of this research was to analyze the impact of the learning process in business administration and management of students' values, through the application of factor analysis to the information obtained in a survey consisting of students in the first and fifth year of studies. The study derived the following conclusions: First, students bring a value-oriented education that is consolidated and strengthened during their studies; and Second, the set of values that are identified could be classified as moral values and action-oriented values related to decision-making. The results of this research work will help to review the competencies as defined in degrees and different courses, as well as establish better mechanisms, so that the university can become an instrument of social transformation.

Keywords: values, higher education, research

Introduction

The university has at least three functions: educational, social and knowledge generating. Carrying out these functions involves a social transformation due to the influence it has on students and society in general, which then promotes a series of values.

This study has helped analyze the current debates and discussions about the word “value” which is assessed from three basic points of view: the ethical-philosophical dimension, the economic dimension and the psychological dimension. It is not, however, intended to be a bibliographical review of the word, instead, it aims to identify the basic concepts to be considered and what has guided the study.

Rokeach (1973) defined “value” as an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state existence.

The father of American humanism, Maslow (1991), also defined values and tried to analyze the humanistic and personal side of psychology, which led him to develop the so-called needs of a human being, self-actualization and development. These needs are fulfilled by taking into consideration a series of values which he summarized as realism, acceptance, spontaneity, intimacy, independence, optimism, humility and creativity.

Different theories have identified an axiological problem, namely, whether the value lies within or outside the human being. In other words, whether the human being creates a value or discovers it. According to

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Aristóteles (2000, p. 160), there are two types of virtues—dianoetic and ethics. The former originates and grows mainly through education. This requires certain experience and time to be able to put what is learnt into practice, whilst ethics come from habit. So none of the virtue ethics produced in humans are natural, but are acquired through education and moreover, through practice, which is then consolidated through behaviour.

This need for ethics is satisfied by identifying the objectives of higher education centres through knowledge transfer, qualifications to get a job and socialization, which means, education to make the student socially responsible. This last function implies that the school transmits values. In this sense, the individual, through education, absorbs values to become humanized and the process of teaching has a positive effect (Lovat & Clement, 2008).

Different types of values are produced when the different aspects of the human are analyzed: physical, intellectual, affective, moral, social, ecological, etc.. Different studies on value classification have been conducted. More specifically in Spain, the axiological model of integral education proposed by Gervilla (2000) has been used as a reference point to define educational policies and carry out studies on the concept of values at a compulsory educational level, which have identified the importance of obtaining a clear definition of the values in the mission and outlook of the schools¹, so that they are used as a benchmark in all pedagogical work.

In any case, value appreciation means that humans want to have all of them or at least as many as possible, which is the reason why the concept of integral education refers to all dimensions of the individual's education that have been acknowledged and assessed by all types of educational ideals, laws and rules, and it is one of the main pedagogical pillars of the society of Jesus university institutions.

We agree with Tort (2000, p. 253) in that values are not relative; they do not depend on the subject, the object, the time or place. They are relational, which means that they are in constant interaction with the subject's self-esteem, the objective ideal and the context (place, time, circumstances, etc.). Therefore, value in its real terms exists when triangulation occurs among these factors. This demonstrates how important and influential society is in terms of development and globalization, and even more so, with regards to the evolution and definition of these values. Nowadays, teaching values for the family, school and civil society as a whole is a real challenge, one which does not only depend on the influence that higher education centres could and must have.

Nevertheless, the current crisis and the different financial scandals that have taken place worldwide and especially in Europe, have emphasized and strengthened the role of educational institutions in transmitting values.

In this regards, the university reform brought on by the current EHEA (European Higher Education Area) process has coincided with the demands on behalf of different international institutions to take on and accept their important role in teaching leaders about values. This is documented in the London Communiqué (2007) and Leuven and Louvain-la-Neuve Communiqué (2009), which recognize the role of higher education institutions in defining and transmitting those values used as the foundations of our societies, for which they stated that the higher education policies must focus on increasing the potential of individuals to a maximum in terms of their own personal development and contribution towards a sustainable democratic society, based on knowledge, which includes having the specific ethic competences to do so.

¹ A study carried out by Lara and Fernández (2005) showed how the ideologies of private schools consider education in terms of values as a part of their mission and their organization's outlook, highlighting social, moral, dynamic, individual and globalization values as being the most contemporary. Hofmann-Towfigh (2007) reached the same conclusion.

Along the same lines, the superior general of the society (Nicolás, 2009) stated that Jesuit education reflects an enormous ideal, rather than small goals, “helping our students to achieve their fullest growth potential as a person, that leads to the action, the man for others” and claimed that the following values have to be promoted in university studies: universality, internationalization, attitude of change with the future in mind, willingness to listen and cooperate, shrewdness and analytical and creative capacity, amongst others. In his latest public talks, he has stressed that the main objective of the Jesuit institutions is to provide “integral education” that emphasizes “spiritualism and transcendence”, to produce “this endless transformation” (of reality and the individual). The superior general points out that the university must work together with the institutions and organizations with which it coexists, so that the needs of society can be identified for education and research to focus on.

Fulfilling this mission in a changing environment, such as the construction of the EHEA led universities and higher education centres of the society in Spain to develop guidelines² on how to implement the identity and mission within this new context. The guidelines focus on integral education of the individual that considers four dimensions:

- (1) Practical dimension—“Utilitas”;
- (2) Civic dimension-social or ethical-political—“Iustitia”;
- (3) Human-personal dimension—“Humanitas”;
- (4) Religious dimension—“Fides”.

One must take into account that nowadays in different organizations in society, there is a need to consolidate values which are becoming increasingly more important for entities to identify themselves with their stakeholders. Companies have to incorporate social responsibility and sustainability concepts into their management so as to operate in global markets, which means that they need talented leaders with ethics. This need has resulted in the “Principles for Responsible Management Education” emerging, an initiative from the United Nation’s Global Compact³, in which the signatory organizations agree to incorporate global social responsibility values described in international initiatives. They also recognized that their own organizational practices should serve as an example of values and attitudes that are transmitted to their students. The values that are promoted are, therefore, sustainability and everything else related to social responsibility.

However, values have been an important part of business studies for a long time. In 1973, the third Davos management forum had already proposed a code of ethics for business management that included tasks, such as helping consumers, workers, capital and society and harmonizing their antagonistic interests (Küng, 1999). For students, to perceive these objectives, education must be based on the existence of a set of values that ultimately will result in a certain way of doing things at the time of joining the workforce.

Normally, it is believed that values which are promoted by ethical leaders are transformed through example and rules in ethical management (behaviour codes, codes of ethics, implementing policies, etc.). Different studies have proved that management’s philosophy of ethics and values has a huge impact on the

² The documents and different articles that analyze the different positions can be found in M. Agúndez Agúndez S. J. (2008). The binominal identity and mission of the university challenges, *Revista de Fomento Social*, 252, 589-762. Retrieved from http://www.etea.com/biblioteca/sumarios_revistas/revista_fomento_social.htm

³ Initiative promoted by the United Nation’s Global Compact, originating from the belief that academic institutions help to shape the attitudes and behavior of leading entrepreneurs, which is the reason why in an open dialogue between different international organizations and an international working group from this field, certain principles for responsible management education were devised in July 2007. Retrieved from <http://www.unprme.org/index.php>

quality of workers' ethics (B. A. Stead, Worrell, & J. G. Stead, 1990; Wimbush, Shephard, & Markham, 1997), the company's social work (Anisya & Simerly, 1994) and the organization's evaluation of the managers' ethics (Rubin, Dierdorff, & Brown, 2010).

Hall (1998) stated that successful organizations nowadays are based on values, such as respect, listening and sharing with others. These organizations are also capable of integrating traditional values, such as efficiency, productivity and achievement. Others like Fernández de Tejada, López, and Saavedra (2007), said that the values needed by an ethical leader are: courage, restraint, generosity, magnificence, magnanimity, gentleness, kindness, sincerity, wit and distributive and corrective justice.

As Maslow (1991) said that, the problem is that a lot of evil in the world nowadays is due to the fact that not enough attention is paid to the values that are high up on his/her hierarchy of needs, as other basic needs are not satisfied. Different sources of information have shown that the current crisis is a result of the lack of leadership and corporate responsibility and in particular, the existence of counter-values such as irresponsibility, greed, egoism, arrogance, etc.. The question that was asked was: What type of education did these leaders get?

As previously mentioned, the value analysis is affected by the education given to young people and by the characteristics of the society in which they live. To that effect, according to the analysis of Elzo (2004, p. 7), our young people and, in particular, our current students,

have had a sweet childhood, they have been over protected, with more material resources than adolescents and young people have ever had before in our society, but at the same time nobody has told them or taught them about how important self-sacrifice is to be successful... about self-responsibility.

In view of this situation, he made a proposal of values by which we must struggle to implement and spread through education: rationality, personal competence, active tolerance, solidarity, spirituality and the utopia of a better society.

Given this initial situation, we were concerned about the state of affairs in young people opting to study at our institution for their university education and the effect that spending at least four years in the classroom has on them, as they will be our future leaders.

The aim of this study was to analyze the values and their changes in the students in the ETEA (school of economics and management science), in the training period that elapses during their time at the university. Other objectives were to analyze the influence of gender or the centre of origin. The hypotheses to be tested are: (1) The centre has a positive effect on strengthening students' values; (2) Women are more sensitive in certain values (Smith & Oakley, 1997; Eweje & Brunton, 2010); and (3) The centre of origin influences the importance attached by students to certain values.

Research Methodology

Research in education, as in all social sciences, has several peculiarities related to the specificity of the study subjects. La Torre, del Rincón, and Arnal (2003) indicated that in educational phenomena, due to their complexity, a variety of interacting variables do not allow for an accurate and precise study. For example, important issues, such as the one in question in this research, values, are not directly observable or subject to experimentation. Furthermore, in the field of education, behavior must be contextualized, making it difficult to generalize, because the latter is necessary to withdraw from the context.

In order to obtain information, a questionnaire was developed following the scheme or the methodology

defined by Prat and Doval (2005), in which after a survey of members of the population under study, a group of experts, academics, filtered responses (grouping synonyms, eliminating repeated responses or those with an absolute frequency equal to or less than two), obtaining as the final result the 12 items which made up the definitive questionnaire (see Table 2).

The decision to use a questionnaire with closed items and a Likert scale data collection tool is based on a review of the opinions or different experts (McMillan & Schumacher, 2005; Torrado, 2004).

We used a non-probability sampling technique called accidental in which the researcher directly and intentionally selects individuals from the population. This type of technique is also called random sampling or convenience sampling and several authors (Grande & Abascal, 2005; McMillan & Schumacher, 2005; La Torre et al., 2003; Bisquerra, 2004) justified the suitability of this sampling in this type of research.

In order to determine the reliability of the scale, Cronbach's alpha (α) internal consistency coefficient was used, with recommended values ranging between 0.75 and 0.90. The value obtained for data collected in this study is $\alpha = 0.823$. This data indicates the reliability and validity of the questionnaire, revealing that the instrument actually measures the attribute being measured and if it does in a precise way (Prat & Doval, 2005).

Factor analysis was performed as soon as the information was collected and its reliability analyzed. This type of analysis allows for the identification of latent or unobserved relations among the original variables, reducing them into a smaller number of variables or factors, which are a linear combination of the original variables. The grouping of a set of variables in a factor is given by the existence of a relationship among the variables that cannot be observed directly. In short, the value given to a variable (e.g., the value given to a student's "responsibility") is a manifestation of another factor not directly observable, which is shared by other variables of the study and, therefore, are grouped together. Therefore, we affirm that the variables grouped into a single factor have something in common—the significance of unobservable joint is to be interpreted for each of the factors obtained, this being the most important part of the analysis.

All the analysis and estimates were made with the SPSS (Statistical Package for the Social Sciences) program.

Sample Selection and Variable Definition

The population is made up of students in first and final year courses at ETEA. As previously mentioned, the student has already been taught values, which at this new stage of their education have to be backed, promoted, developed and guided towards their professional career; that is the reason why the analysis of the first year students was suggested in order to be able to determine their outset and then later on analyze students in the fifth year to be able to identify any possible effects that the educational process has had on them.

The total number of first year students is 348 whilst the number in the final and fifth years is 160; 316 students participated in the interview, out of which 175 are studying in the first year and 141 in the fifth year. The sample size was designed for a 95% level of confidence. The maximum error rate of the estimates that could be made with the data from the samples is 1.2%.

Table 1 contains data that help to distinguish the sample. The students were asked to identify the type of school (state or private) where they studied before going to university, in order to determine if there was any type of difference in the values that they been taught beforehand. By chance, the percentage of students that answered the survey and who studied at state schools is the same as those who studied at private schools.

Table 1

Characteristics of the Sample Data

	Men	Women	First year	Fifth year	State schools	Private schools
Total	149	167	175	141	158	158
Percent out of the total (%)	47.2	52.8	55.4	44.6	50	50

The objective of the study was not easy to measure directly, which is the reason why indirect measurements that are related to the objective are applied. These indirect measurements are a group of 12 variables that have been chosen from the bibliographical review and in compliance with the competencies included in the White Paper of the Studies on Business Administration and Management that are included in Table 2. Furthermore, they reflect Weber's (1978) analysis of "... what becomes the object of research and how far the investigation extends into the infinity of causal connections is determined by the value ideas".

In general, education is based on four pillars (Delors, 1996, pp. 75-85): "learning to know"; "learning to do"; "learning to live together"; and "learning to be". The suggested values concern the last two. As Savater (1999) pointed out in "learning to be", man is born a man, but he has to become a man, and that is the reason why the socialization process is needed, which in turn requires the support of the other pillar, "learning to live together". This means that the individual needs integral education to make us aware of the surrounding reality, which is currently affected by the globalization process that has to involve defining the concept of sustainable human development. If the aforementioned mission and identity approach is taken into account, the established analysis covers the following dimensions: Humanitas and Iustitia.

Each student was asked to state, in a scale of 1 to 5, the importance they give to each one of these variables (see Table 2), according to their value scale, 1 being of "minimal importance" and 5 being of "maximum importance".

Table 2

Study Variable

V1	Responsibility	V7	Veracity
V2	Ability to think	V8	Equality
V3	Solidarity	V9	Proactiveness
V4	Respect	V10	Honesty
V5	Loyalty	V11	Tolerance
V6	Internationalization	V12	Service attitude

Factor Analysis

Despite of the fact that factor analysis is a well known and distinguished technique (Rencher, 2002; García & Gil, 2000), the various stages of implementation are summarized below so that monitoring of the results is easier to interpret.

The first stage consists of calculating how suitable the factor analysis application is for the data sample. The size of the sample must be defined beforehand. Usually, at least 10 observations must be made for each original variable and the number of variables should not exceed half the total sample size. Given that the number of variables is 12 and that the sample is made up of 316 answers, the requirement established is more than satisfied.

One of the requirements to identify the suitability of the factor analysis is that the variables are correlated. If the correlations between the variables are null, the variables would not be related, so there would be no point in carrying out a factor analysis; there would be no point in applying this technique either if the correlations were very high as this would mean that the variables would be the same. The suitability of applying this technique will be analyzed by means of the KMO (Kaiser-Meyer-Olkin) measure of sampling adequacy and Bartlett's test of sphericity.

Having identified the suitability of using factor analysis, the second stage consists of applying it, strictly speaking, in obtaining the factors. This study is not based on a hypothesis about the number of factors or the number of variables that could be grouped into a factor, which is the reason why one of the points to be assessed at this stage is the number of suitable factors needed to represent the underlying structure in the data. Different methods can be used for this although we have focused on the percentage of the total variance given by the factors.

The third stage consists of interpreting the factors obtained; this is the most important part of the analysis where the researcher must use his/her knowledge to explain the results obtained. If a simple interpretation of the factors cannot be obtained with the initial answer, they can be rotated, so that each of the variables has a close correlation to 1 with a factor and close to 0 with the other factors.

Results

The descriptive statistics contained in Table 3 were obtained from the univariate analysis of the 12 variables chosen. The coefficient of variation is an indicator of the sample's greatest and least homogeneity. The values obtained in terms of percentages enable us to affirm that there are no significant differences between the scores that the students gave the different variables, which means that the sample is indeed homogeneous. The sixth variable, "internationalization", is the variable that has the most heterogeneous answers and this is also the variable that has the lowest mean value, while the most homogeneous variable is the first variable, "responsibility", which is also the variable that has the highest mean value together with "respect".

Table 3

Descriptive Statistics

Variable		Mean	Standard deviation	Coefficient of variation (%)
V1	Responsibility	4.46	0.696	15.61
V2	Ability to think	3.90	0.743	19.05
V3	Solidarity	3.83	0.883	23.05
V4	Respect	4.46	0.770	17.26
V5	Loyalty	4.11	0.887	21.58
V6	Internationalization	3.57	0.962	26.95
V7	Veracity	3.95	0.805	20.38
V8	Equality	4.12	0.885	21.48
V9	Proactiveness	3.70	0.821	22.19
V10	Honesty	4.29	0.800	18.65
V11	Tolerance	4.04	0.853	21.11
V12	Service attitude	3.94	0.910	23.10

Table 4 provides an in-depth study of the previous analysis by distinguishing between the mean values and the standard deviation according to the different categories identified in the survey: men and women, year (first or fifth) and school of origin (state or private). The most important details from the second analysis include: (1) The mean scores given by women are equal to or greater⁴ than that given by men, in all variables; (2) The mean scores given by the fifth year students are greater than that given by first year students, except in variable V8 “equality” where they coincide; and (3) The mean scores given by students coming from private schools are greater than that given by students from state schools, except in the variable V1 “responsibility”, where the mean score is somewhat lower for the students from private schools, although the standard deviation is noticeably less. For variable V8 “equality”, the mean score given by students from state schools is greater and the standard deviation is lower.

Table 4

Descriptive Statistics per Category

	Men		Women		First year		Fifth year		State school		Private school	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Responsibility	4.3	0.79	4.6	0.56	4.4	0.72	4.5	0.66	4.5	0.72	4.4	0.67
Ability to think	3.8	0.83	4.0	0.63	3.8	0.76	3.9	0.71	3.9	0.74	3.9	0.74
Solidarity	3.7	0.85	3.9	0.89	3.7	0.84	4.0	0.90	3.7	0.87	3.9	0.89
Respect	4.3	0.77	4.6	0.75	4.4	0.79	4.5	0.74	4.4	0.82	4.5	0.72
Loyalty	4.2	0.87	4.1	0.90	4.1	0.81	4.2	0.97	4.1	0.91	4.1	0.86
Internationalization	3.4	1.05	3.7	0.85	3.5	0.95	3.7	0.97	3.4	0.93	3.7	0.98
Veracity	3.9	0.79	3.9	0.82	3.9	0.79	4.0	0.81	3.9	0.81	3.9	0.80
Equality	3.9	0.88	4.3	0.86	4.1	0.82	4.1	0.97	4.2	0.85	4.1	0.92
Proactiveness	3.6	0.78	3.8	0.85	3.6	0.83	3.8	0.80	3.7	0.81	3.7	0.83
Honesty	4.3	0.79	4.3	0.81	4.3	0.72	4.2	0.89	4.3	0.81	4.3	0.79
Tolerance	3.9	0.85	4.2	0.83	3.9	0.79	4.1	0.92	4.0	0.87	4.1	0.84
Service attitude	3.9	0.93	3.9	0.89	3.8	0.88	4.1	0.93	3.9	0.96	3.9	0.86
Total answers	149		167		175		141		158		158	

Results From the First Year Students

In addition to the aforementioned correlation analysis to determine whether to reduce the features of the information contained in the variables described by the construction of factors, a series of a priori or convenience contrasts were carried out with the objective of reducing the characteristics of the data available.

The first test carried out is Bartlett’s test of sphericity, in which the critical level of 0.000 (Sig.) shows that the null hypothesis is rejected which means that the variables analyzed have some type of correlation relationship and therefore, can be useful when carrying out a factor analysis.

The KMO statistical measure was the second test carried out. It also considers the factor analysis to be acceptable as the aforementioned statistical value was greater than 0.5.

The total variance percentage of the data explained by the three factors obtained is 52.559% of the information contained in the 12 original variables selected.

⁴ Different studies have proved that female students are more ethically aware than male students: Smith and Oakley (1997); Eweje and Brunton (2010).

The interpretation is based on the factor loadings which are the means to identify the invisible relationships between variables that are grouped into one factor (see Table 5). These factor loadings are the correlations between each variable and the factor. The objective of this stage was to examine the characteristics of the variables associated with a factor, in order to determine common features that allow the factor to be identified and name it or understand how it responds to these common features.

Table 5

Rotated Factor Matrix—First Year Students

Variable		Factor		
		1	2	3
V1	Responsibility	0.104	0.752	0.108
V2	Ability to think	0.019	0.809	0.248
V3	Solidarity	0.571	0.430	0.047
V4	Respect	0.744	0.199	-0.058
V5	Loyalty	0.548	0.418	0.016
V6	Internationalization	0.183	0.199	0.667
V7	Veracity	0.374	0.433	0.173
V8	Equality	0.502	-0.036	0.350
V9	Proactiveness	-0.097	0.124	0.783
V10	Honesty	0.718	0.109	0.112
V11	Tolerance	0.687	-0.103	0.375
V12	Service attitude	0.227	0.137	0.542

In Table 5, the variables that are loaded in each factor are marked in boldface, and we can see that: (1) The first factor is made up of the following variables: V3 solidarity, V4 respect, V5 loyalty, V8 equality, V10 honesty and V11 tolerance; (2) The second factor is made up of the variables: V1 responsibility, V2 ability to think and V7 veracity; and (3) The third factor is associated with the variables: V6 internationalization, V9 proactiveness and V12 service attitude.

The first factor is a linear combination of the variables that represent the students' main moral values: solidarity, respect, loyalty, equality, honesty and tolerance. It is a factor that is related to the human values that the first year students already have when they start university.

The second factor is a combination of responsibility, ability to think and veracity. These variables reflect a dimension of the person linked to or that symbolizes the characteristics involved in people's implicit decision-making process. These are related to behaviour and occupational attitude.

Finally, the third factor is a combination of internationalization, proactiveness and service attitude. In our opinion, the variables grouped into the third factor represent a third dimension of the human being—action. The student's exposure to the outside world, internationalization, is directly related to proactiveness and can also be interpreted as taking initiative and their abilities to go out on their own into the outside world, which is all related to service attitude.

In summary, the factors obtained with these three names can be "labelled" as follows: F1: moral values, F2: decision making and F3: action.

The results obtained provide a surprisingly coherent idea of the person, to such an extent that the three factors obtained form a tripod on which each person can base his/her own professional development. These

values were acquired during childhood and adolescence, and therefore, are incorporated mainly through the educational process and the family environment, although they are also supported by the society in which the student has been taught (friends, other activities outside of school, etc.).

Given these results the question was asked, what does university education provide students with if they already have these values when they start? As previously mentioned, bearing in mind that the values are relational, they are continuously interacting with each other, and so they could have changed.

Results From the Fifth Year Students

In this case, the suitability of factor analysis from Bartlett's test was also proved, attaining a critical level of 0.000 (Sig.) and the KMO (0.85). The variance value explained by the two factors obtained in this case is 49.139%.

Table 6 contains the rotated factorial solution that shows the value of the factorial loads that measure the correlation between each variable and the factor in question. The first difference with the previous analysis is that the number of factors is reduced to two.

Table 6

Rotated Factor Matrix—Fifth Year Students

Variable	Factor		
	1	2	
V1	Responsibility	0.361	0.483
V2	Ability to think	0.098	0.698
V3	Solidarity	0.745	0.008
V4	Respect	0.724	0.228
V5	Loyalty	0.769	0.140
V6	Internationalization	0.005	0.724
V7	Veracity	0.451	0.318
V8	Equality	0.563	0.356
V9	Proactiveness	0.242	0.612
V10	Honesty	0.780	0.112
V11	Tolerance	0.779	0.145
V12	Service attitude	0.515	0.275

In Table 6, the value of the variable that is loaded into each factor is also marked in boldface, and we can see that: (1) The first factor is made up of the following variables: V3 solidarity, V4 respect, V5 loyalty, V7 veracity, V8 equality, V10 honesty, V11 tolerance and V12 service attitude; and (2) The second factor is made up of the variables: V1 responsibility, V2 ability to think, V6 internationalization and V9 proactiveness.

The first factor is still a linear combination of those variables that represent the moral values. It contains the same values as those of the first year students plus service attitude and veracity that are now understood as being moral values.

The second factor would include factors 2 and 3 regarding the first year students that were related to decision-making and action. We believe that integrating the aspects related to the decision-making process and action into one single factor is education's main contribution to students; although we cannot be sure that this change is only due to the education received.

Whilst the first year student separates the decision-making process from action, the fifth year student thinks of the two things as being combined and undivided. Decision-making necessarily leads to action, to opening up to the outside world, internationalization and proactiveness. They are not seen to be independent matters; they are related.

It is important to note that the scale of values does not change and is consolidated by incorporating other values into this factor. Note that the mean scores given by the fifth year students to the 12 variables were higher than those given by first year students, which is the reason why we believe that the objective of strengthening and increasing the values has been achieved.

Results From Other Studies

It was decided that this analysis should be studied in greater detail to see whether there were differences according to different categories identified or established in the sample, men and women and origin: state or private schools. All the studies carried out satisfied the requirements established for the sample. The rotated factor solution can be found in the Appendix (see Tables A1 and A2).

Considering the school of origin, the results obtained and the content of the factors coincide in both cases (students from public and private schools) with those shown for the first year students. That is, the first factor reflects the structure of moral values, a second factor is related to decision-making and a third factor is related to action; the factors obtained include the same aforementioned variables as in the case of the first year students, apart from service attitude (V12) which is linked to factor 2 in the case of students coming from private schools and for which reason the third hypothesis is not satisfied.

There are three factors related to gender, although between men and women, there are certain differences that might be related to the role assigned to some variables by the group of women, while the three factors obtained for men coincide, once again, with those obtained for the first year students, in the case of the three factors obtained for women, there are some changes despite the fact that the factors are interpreted in the same way. This means that we can refer to the first factor that reflects the structure of moral values, a second factor related to decision-making, which includes the variables V1 responsibility, V2 ability to think and V9 proactiveness, and a third factor linked to the action which is altered slightly by the importance that women give to other values, including the variables V6 internationalization and V8 equality, as raised in the second hypothesis. Veracity is a variable that is not clearly "loaded" into a factor, which means that the students may not have understood its meaning properly.

These results support the idea that the grouping into one single factor of the variables related to decision-making and action-related variables is linked to the education process, given that it only appears when comparing the first and fifth year students, although this is not the only reason for this change.

Conclusions

The Spanish University is in the midst of change as a result of having to adapt to the EHEA, which among other objectives, aims to provide future professionals with those skills necessary for professional development.

The concept of competence is of fundamental importance. In addition to the knowledge competencies, students will develop skills, such as teamwork ability, ability to put knowledge into practice, etc.. In this context, the values of the individual together with their knowledge and skills, acquire special importance in so far as they are one of the fundamental pillars of a professional career.

Education on values is a challenge faced by those responsible for teaching future professionals within the scope of the Society of Jesus university institutions.

The empirical study carried out has revealed that there are different patterns of behaviour among first year students of the faculty and the fifth year students. This change becomes clear when the moral values that students already have upon starting university are consolidated (factor 1) and integrated into one single factor from the two known as: factor 2: decision-making and factor 3: action.

There is no significant change in the composition between first and fifth year students for factor 1: moral values. Students start university with certain values that they have acquired in the previous stage of teaching that fifth year students maintain and consolidate by incorporating new values: V7 veracity and V12 service attitude. Remarkably, the mean scores given by fifth year students are higher than that given by first year students, except for variable V8 equality where they coincide, which supports the fact that the values are consolidated throughout the years in school.

The main change in behaviour patterns is seen when factors 2 and 3 are integrated into one single factor, which is explained by the fact that the fifth year student considers decision-making and action to be inseparable and undivided. That is, the decision-making is action-oriented and in particular this research has been developed based on two variables: proactiveness and internationalization. The conclusion made from the study is confirmed when the same study is carried out on other categories of the sample (gender and school of origin) and this change is not detected, which means that a part of this change can be attributed to the educational process and not to other factors or categories from the sample.

Indirectly we have proved that the students' educational process at the university provides them with certain behaviour patterns that are different from the ones they had upon starting university and which can be put into practice when they start their own professional career.

However, as previously mentioned, integration into a single factor in the decision-making and action may also be due to other variables that have not been considered in the analysis, such as the maturity of the person at that time. Although it must be emphasized that education is transactional, meaning that there is an exchange between the subject and their surroundings, which is the reason why depending on how the subject behaves, stimulus may or may not help their personal development.

The research findings also corroborate claims from Barba and Alcántara (2003), who emphasize that education has to be not only comprehensive, but also integrated. For example, the aggregation of the education has to yield the individual to a better situation than before and integrate into higher values.

We believe that the results obtained are partly a consequence of practices carried out so far in the institution. Work on this has been carried out for several years. In addition to business ethics courses, additional electives are offered in relation to the mission of Jesuit schools. In addition, group work, cooperative work experiences (Parker, 2010), the integration of new methodologies for skills development (Ruiz-Lozano, Tirado-Valencia, & Menor-Campos, 2009), in which students learn from each other, and evaluate themselves and their classmates are some examples of efforts being made towards work values. Participation in other ventures organized by the institution and the ETEA foundation for development is also important.

Outstanding issues that may favor the formation of values are the institution's commitment to initiatives, such as PRME (Principles for Responsible Management Education) or similar, incorporating social responsibility into the management system of the centers, as well as developing sustainability reporting as a tool that facilitates transparency and promotes the values of the educational community. Simultaneously,

methodologies should be adapted, promoting innovation in teaching, to be incorporated into the transfer and consolidation of values processes.

Finally, we would like to highlight the interest of continuing this work by comparing the results obtained with the opinion of graduates and students from other schools. Furthermore, as progress is made in introducing new diplomas and qualifications the extent to which the competencies defined in the qualifications are developed and their impact on the values will be assessed, which is the reason why we intend to continue with this line of study.

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Appendix A

Table A1

Factor Analysis: Men Versus Women

		Men			Women		
		1	2	3	1	2	3
V1	Responsibility	0.311	0.651	0.070	0.057	0.487	0.373
V2	Ability to think	0.058	0.755	0.214	0.074	0.835	0.068
V3	Solidarity	0.655	0.158	0.048	0.681	0.297	0.104
V4	Respect	0.733	0.268	-0.027	0.704	0.005	0.220
V5	Loyalty	0.631	0.431	0.006	0.677	0.196	0.243
V6	Internationalization	-0.047	0.366	0.689	0.066	0.244	0.582
V7	Veracity	0.189	0.664	0.097	0.400	0.047	0.630
V8	Equality	0.543	-0.156	0.411	0.439	0.048	0.592
V9	Proactiveness	0.039	0.049	0.811	0.052	0.540	0.393
V10	Honesty	0.619	0.239	0.112	0.797	-0.038	0.230
V11	Tolerance	0.584	-0.048	0.484	0.834	0.038	0.108
V12	Service attitude	0.294	0.247	0.472	0.546	0.526	-0.283

Table A2

Factor Analysis: State Schools Versus Private Schools

		State schools			Private schools		
		1	2	3	1	2	3
V1	Responsibility	0.219	0.799	- 0.062	0.233	0.659	0.127
V2	Ability to think	0.063	0.728	0.383	0.132	0.763	- 0.017
V3	Solidarity	0.610	0.292	0.052	0.729	0.225	0.039
V4	Respect	0.726	0.347	- 0.042	0.704	0.154	0.001
V5	Loyalty	0.661	0.311	0.062	0.737	0.167	0.063
V6	Internationalization	0.117	0.363	0.607	0.007	0.462	0.473
V7	Veracity	0.386	0.232	0.209	0.440	0.333	0.323
V8	Equality	0.654	0.065	0.269	0.275	- 0.073	0.819
V9	Proactiveness	0.100	- 0.090	0.836	- 0.013	0.538	0.575
V10	Honesty	0.830	- 0.035	0.097	0.689	0.043	0.215
V11	Tolerance	0.756	- 0.062	0.199	0.628	0.110	0.430
V12	Service attitude	0.395	0.163	0.417	0.348	0.495	0.045