Evaluation of Social and Environmental Management as Stakeholders of USR in the Faculty of Administration Sciences, Universidad Autónoma de Coahuila, Saltillo, Mexico

Evaluación de la Gestión Social y Medioambiental como partes interesadas de la RSU en la Facultad de Ciencias de la Administración, de la Universidad Autónoma de Coahuila, Saltillo, México

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Abstract

It cannot be possible to form and unite the University that is required these days, without the people who interact within this institution having a sustainable way of thinking, one of the priority ways to achieve this goal is to manage the development of stakeholders of University Social Responsibility (USR). The Faculty of Administration Sciences (FAS) of the Universidad Autónoma de Coahuila has as its priority tasks to develop sustainable thinking through continuous improvement and the incessant search of areas of opportunity in these subjects. The objective of this work was to evaluate the degree of social and environmental management that exists in the FAC focusing on the actions that are carried out in a positive way and in those that must be worked to achieve an advance and development of these stakeholders of the (USR). The empirical research was based on the exploration of a sample that included 211 people who study and work in the FAS. The evaluation instrument incorporated questions that relate the interaction of the FAS with society and the local community and the development of plans, actions and knowledge related to the environmental management required by the University for the training of new types of professionals. For its evaluation, Contingency Tables and Exploratory Factor Analysis were used. The results demonstrate the existence of strategic planning, commitment and integration of social issues in the way the University operates and a linkage in the midst of work and commitment in the improvement of environmental aspects, all of this while there is no training, dissemination and technology innovation that promotes sustainable development in these matters.

University social responsibility, Society, Environment, Exploratory Factor analysis

Resumen

No puede ser posible conformar la Universidad que se requiere en estos días sin que las personas que interactúan en el seno de esta tengan un pensamiento sostenible, una de las vías prioritarias para lograr este objetivo es gestionar el desarrollo de las partes interesadas (Stakeholders) de la Responsabilidad Social Universitaria (RSU). La Facultad de Ciencias de la Administración (FCA) de la Universidad Autónoma de Coahuila tiene como sus tareas prioritarias desarrollar el pensamiento sostenible a través de la mejora continua y la búsqueda incesante de áreas de oportunidad en estos temas. El objetivo de este trabajo fue evaluar el grado de gestión social y medioambiental que existe en la FCA centrándose en las acciones que se realizan de manera positiva y en aquellas que se debe trabajar para lograr un avance y un desarrollo de estas partes interesadas de la (RSU). La investigación empírica tuvo su base en la exploración de una muestra que abarcó 210 personas que estudian y trabajan en la FCA. El instrumento de evaluación incorporó preguntas que relacionan la interacción de la FCA con la sociedad y la comunidad local y el desarrollo de planes, acciones y conocimientos relacionados con la gestión medioambiental que requiere la Universidad para la formación de profesionales de nuevo tipo. Para su evaluación se emplearon Tablas de Contingencia y el Análisis Factorial Exploratorio (AFE). Los resultados demuestran la existencia de una planeación estratégica, compromiso e integración de las cuestiones sociales en la manera de hacer de la Universidad y una vinculación, trabajo y compromiso en la mejora de aspectos medioambientales, mientras que se adolece de una capacitación, divulgación e innovación tecnológica que potencie el desarrollo sostenible en estos temas.

Responsabilidad social universitaria, Sociedad, Medioambiente, Análisis factorial exploratorio

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Introduction

In recent years it can be observed, without going into considerations about possible causes and motivations that explain this phenomenon, that corporate social responsibility has largely permeated in global business. However, the same has not happened at a university level, where reflection on social responsibility has only just began (Ball & Bebbington, 2008). So far, universities, like other public organisms, have shown a lower level of development of the concept of social responsibility in their management and information systems than companies, despite their clear vocation and social orientation.

A responsible University allows to open the economic, social and environmental thinking of the people and to train students and educators in a responsible way. According to UNESCO (2007), in the World Conference on higher education, one of the points related to University Social Responsibility (article 6 of the declaration) is raised, the responsibility of universities to have long-term orientations that allow solving social needs and aspirations, instilling this responsibility in students. (Gil, 2012)

In the educational field, this concept finds its reference in the social function attributed to Higher Education Instances, compared to their social commitment as a pillar of development and transformation of the economic and social order of the communities that interact in the territory Company-Society-State, which implies also taking care of its ethical dimension, providing skills to its students as responsible citizens (Olarte & Ríos, 2015).

The responsible University reinforces the development of the local community, the interaction with the governing bodies and the environmental concern through a responsible development program in which students, professors, administrators, senior management, graduates and the network of companies, with which the university interacts, intertwine forming a fabric that feels social, economic and environmental concerns as a whole and from each interested party (Stakeholders) the feelings and common actions are reinforced to achieve a general commitment.

Universities apply USR when they take an interest in the way in which the interested parties (Stakeholders) who interact with them behave, evaluating the participation of these parties in a strategic way to achieve competitive advantages and an education with ethical and sustainable principles, the evaluation of Internal interaction between employees, governing bodies and students is the first step to achieve better management stability, social commitment and university development and the foundation for future development in the other stakeholders that make up the USR.

The relationship with the local community, the work for a social improvement and the possible areas of opportunity in the mitigation of environmental impacts as interested parties of the USR that exists in the business schools of the Universidad Autónoma de Coahuila has not been investigated in depth, there is a need to evaluate the degree of development of these practices for a responsible development of the university campus. It's of vital importance to direct the University towards a new structure that takes on current challenges in a more sustainable way through training, planning, investment and the general development of its Stakeholders, all of this focused on the principles of social and environmental improvement that the University can transmit within its framework and beyond the borders of this, disseminating ways of thinking and doing in the thousands of people with whom it interacts daily.

The research is carried out through 5 stages that include the review of the literature, the creation of an evaluation instrument through a Focus Group, made up of several experts, the formulation of the hypotheses and the obtaining of the variables, the resolution of the factors proposed in the objectives through the EFA and the presentation of results and conclusions of the study. The study aims to assess the degree of social and environmental management, as stakeholders (Stakeholders) of the USR and determine a number of factors that concisely explain the areas of opportunity that exist on these issues, focusing on the subjects that are exercised in a positive way and in those in which it is necessary to work for continuous improvement and progress towards a new way of approaching the vision and doing on responsible issues in the large public business school of the Universidad Autónoma de Cohahuila, the Faculty of Administration Sciences (FAS) of Saltillo, Coahuila, Mexico.

Literature review

In the public sector, and particularly in higher education, the current context, characterized by globalization, the privatization of many universities and the greater intensity of competition between such organizations, is causing universities to adopt a business management approach that allows them to improve their competitiveness and thus guarantee their survival in a dynamic and complex environment. (Sanje & Senol, 2012).

According to (Núñez Chicharro et al., 2015) the Universit Social Responsibility (USR) has been defined from the point of view of the impacts that they cause in the development of their activities. In this sense, and starting from the groups of impacts, we can consider a measurement model, identifying the aspects related to MSW with dimensions.

a. Organizational dimension: relative to the performance of the university in the scope of its organization and management. This dimension is also common to the university and the company. Four key factors have been identified in it: 1) Corporate Governance, 2) economic impact, 3) environmental impact and 4) social impact.

b. Educational dimension: relative to the performance of the university in its training and educational function in relation to Social Responsibility.

c. Research and epistemological dimension: related to its research function allied to the areas that make up Social Responsibility.

d. Social dimension: relative to their relationship with social agents, their participation in the local and global community, and their influence on human and social development.

The Technical Commission of the 2015 University Strategy, in its latest report exposes the difficulty of defining this concept in a univocal and precise way. They define USR as the reconceptualization of the entire university institution in light of the values, objectives, forms of management and initiatives that imply a greater commitment to society and with the contribution to a new, more balanced and sustainable development model. (Naval & Ruiz-Corbella, 2012).

The fact that universities have not received adequate attention in research on social responsibility generates a need and an opportunity not only due to the social and environmental impacts that derive from each of the areas of university management, but also because of the exemplary role that they must assume in society and the risk they may have when training professionals exempt from social values and without a true perception of the role that companies should have in the current and future context (De la Cuesta et al. , 2010)

For all these reasons, a university social responsibility model must permeate its activity, pursuing the achievement of various objectives aimed at creating true environments for university life in which all the people who make up this community participate and encourage the participation of social agents from the environment of the institution. In its activity, the university must promote and fuel a more efficient use of resources that respect the environment and be able to create an academic, research and innovative environment that manages to increase its excellence and quality (Madorrán-García, 2012)

The representation of the fundamental principles and values in which the USR is governed according to "The University builds country" are grouped into the following topics described by (Jiménez et al., 2003):

1. Principles and values of the personal plane.

a. Dignity of the person.

b. Freedom.

c. Integrity.

2. Principles and values at the social level

a. Common good and social equity.

b. Sustainable development and environment.

c. Sociability and Solidarity for coexistence.

d. Acceptance and appreciation of diversity and. Citizenship, democracy and participation.

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3. Principles and values at the university level:

   a. Commitment to the truth.

   b. Excellence.

   c. Interdependence and transdisciplinarity.

This work addresses the organizational dimension evaluated from the points of view of social and environmental impact, determining the social interaction of the University and the ability to mitigate, through the development of its stakeholders, the environmental impacts that are generated in herself. The identification of the variables that influence the way of doing things and the evaluation of their relationship in the conformation of factors that describe the state of MSW through the use of EFA reinforces the research towards a better understanding of the sustainable dimensions of the Universidad Autónoma de Coahuila.

Relations with the local community and society, the basis for a social development of the University

Within the framework of local development, it is up to the universities to define an adequate communication system with the community in which their role as generator and disseminator of knowledge is set in. In this sense, this system should strengthen the aspect of the linkage with communities, productive agents and local and regional institutions, while creating capacities to disseminate knowledge and local initiatives in global spaces that offer opportunities to contribute to this. local development. (González-Hernández, 2013).

Preparation for the professional field and training for active citizenship are presented today as the two most relevant objectives of education for the coming decades and also as key goals in university education, as in fact they appear in the programmatic documents and strategic of the universities (Kingston, García, Puig, & Santos, 2011).

The sustainable development of the University cannot be seen without the relationships with the community and without that contribution to society that is so much required in our days, not only in what the university can provide support to those in the community who attend it seeking protection and better preparation for their children, a way of escape and entertainment necessary for them to feel welcomed by community work and by what the faculty can give them, but in the sustainable, ethical and moral preparation of the students who attend every day to exchange their social life, with administrators, teachers and staff in general within the campus. This positive influence creates campaigns to support those in need, improve the environment, work and support social causes, of which today's universities cannot be unaware.

Inside and outside the University, strong ties must be forged that promote innovation, there is no better way to serve society than to contribute knowledge capable of being transferred to this in the form of scientific research that can be quickly converted into a common good, in a marketable products or services. This momentum is sustained by the level of preparation, awareness, management and research that exists among the stakeholders that make up the basic core of the campus, its development depends, to a great extent, the sustainable future of the University and its contribution to the society.

USR guarantees the quality of higher education as a whole. For this reason, it cannot ignore: preparing professionals with relevant knowledge to the requirements of the environment, sensitive and motivated by values; orient scientific research towards solving social problems; develop projects with real social impact; promote the transfer of knowledge and technology to society; interact and dialogue with society; train its teachers and employees at the highest level; support student volunteering; make students aware of the co-responsibility of all in solving the world's problems. (Valarezo & López, 2014).

The University based on the mitigation of environmental impacts

The consolidation of the University in USR issues related to the environment is one of the facets of greatest commitment since it closely links ways of seeing and doing, values and characteristics of the people who share the university environment and whose actions and decisions impact the environment. The issues related to the mitigation of environmental impacts go through a required investment in this field, a training in sustainability issues of the faculty that complements the curricula, a teaching staff prepared to promote ethical and environmental development in their students, a program of activities with a responsible base and an innovation and research that encourages the development of critical thinking and acting on sustainable issues.

It is not only about the civil part and the necessary restructuring of the university's infrastructure, going through energy savings, the incorporation of non-conventional sources, the use of low-energy consumption equipment, but also the changes in thinking. Responsible for the university community and the active participation of its members in order, control, decrease or total elimination of the possible impacts that the university can generate, the way of thinking and doing is the foundation for sustainable development. Society is the first place where the responsible aspirations of university students should rest, the criteria learned and shared in it, are modified, improved and strengthened provided that in the place of study and preparation for life there is an environment of continuous improvement to society and the environment.

All that has been said before leads us to evaluate the degree of social and environmental commitment that the FAS possesses and the knowledge that is had within the institution of the issues addressed in this work, the mission and vision of the university must be coupled with in order to be a responsible, sustainable social entity and guide for present and future generations that interact within it.

Research model

The basis for the development of this qualitative research was developed based on key constructions adapted from the literature. For its creation and development, a Focal Group was created, initially, where specialists from the Faculty of Administration Sciences (FAS) of the city of Saltillo, Coahuila, Mexico and from the North Unit participated, which includes the schools of Administration and Businesses, located in the city of Monclova and Piedras Negras in the state of Coahuila, Mexico.

Researchers in the social and behavioral sciences use focus groups to explore phenomena and are accepted as a legitimate qualitative methodology. The main objective of the focus groups is to use the interaction data resulting from the discussion between the participants to increase the depth of the investigation and reveal aspects of the phenomenon that are supposed to be less accessible. The focus group technique is an opinion space to capture the feeling, thinking and living of individuals, provoking self-explanations to obtain qualitative data (Hamui-Sutton & Varela-Ruiz, 2015). (Kitzinger, 1995) defines it as a form of group interview that uses communication between researcher and participants, with the purpose of obtaining information.

For a second stage, once the variables had been excluded, a tool (survey) was created on Google Form which was shared online with Administrators, Teachers and Students who work and study at the FAS, who have the necessary knowledge to express the way in which the relationship of the University with the local community and society is developed and what are the main changes that have been made in it to reduce the impacts on the environment. For the development of the survey, the Likert scale was used, as well as open questions aimed directly at evaluating the objectives of this study, previously validating its reliability using Cronbach's Alpha. In contrasting the hypotheses, the descriptive frequencies were used, which are very useful to visualize the results of these scales in a first approximation.

As there was a large sample, the statistical technique of factoring could be applied. (Hair et al., 2010) indicate that statistics cannot be applied correctly with a sample of less than 50 observations. (Costello & Osborne, 2005) tell us about the need to maintain a sample greater than 50 observations "in order to minimize the probability of error, increase the precision of the population estimators and, therefore, the confidence in the inferences drawn". (Arrindell & Van der Ende, 1985), for their part, concluded that obtaining a stable factorial solution is possible when the sample size is close to 20 times the number of factors.

The empirical inquiry was applied to a random sample of 210 people made up of 184 students from the Bachelor's and Master's degrees in Business Administration, 17 Teachers, and 9 Administrators. The variables obtained were processed by contingency tables, contrasting the null hypothesis, to measure the possible association between the observed and expected frequencies through Pearson's Chi-square (Herrera Madueño, 2016) and an Exploratory Factor Analysis (EFA) was applied. to reduce these variables to factors.

The EFA allows the variables to be grouped into homogeneous groups. All these items can be correlated and grouped together in a single factor (Kahn, 2006) but they are also relatively independent of other items that have been grouped in other factors. For this, the Principal Component Analysis (PCA) is used as a measure for the determination of independent factors. From a conceptual point of view, the PCA assumes that individual scores on a series of measures cause or define the component; according to (Decoster & Hall, 1998): the component is equal to the compound of the observed variables. Therefore, the PCA should be applied when the objective is to reduce the initial dimensionality of the data in a smaller set of components that explain the total variance observed.

To assess whether the application of the EFA is possible, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was calculated, which consists of comparing the observed correlation coefficient with the magnitude of the partial correlation coefficient. This adequacy measure indicates how large the correlation is between the measured variables.

If the correlations are large enough, the matrix is considered suitable for factoring because it will offer stable results, replicable in other different samples, regardless of the sample size, or the number of factors, or the number of items. Otherwise, if KMO is big enough, the results will not be accidental. Kaiser considered a matrix with KMO values below 0.50 inappropriate for the EFA; mediocre if these values ranged between 0.60 and 0.69; and satisfactory only values of 0.80 onwards (Lloret-Segura et al., 2014).

Results

The descriptive analysis of the sample obtained can be seen in Table 1.

Valid	Frequency	Percentage	Valid percentage	Accumulated percentage
Student	184	87.6	87.6	87.6
Teacher	17	8.1	8.1	95.7
Administrative	9	4.3	4.3	100.0
Total	210	100.0	100.0	

Table 1 Percentage analysis of the sample evaluated
Source: Own elaboration

To check the reliability of the scales used and evaluate the level of understanding of the survey presented, Cronbach's Alpha was used, which has a significant impact on the precision of the results obtained by an instrument (Domínguez-Lara & Merino-Soto, 2015), the results of this statistical test can be observed in Table 2.

Cases	N	%
Valid	205	97.6
Excluded	5	2.4
Total	210	100.0
Cronbach´s Alfa	N of elements	
.874	14	

Table 2 Values of Cronbach's Alpha for the scales applied
Source: Own elaboration

The results obtained show, based on the high value of Cronbach's Alpha, that the Likert scales used are highly correlated and have internal consistency. Establishing the internal consistency of a scale is an approach to the validation of the method and consists in the quantification of the correlation that exists between the items that compose it. Cronbach's alpha values between 0.70 and 0.90 indicate good internal consistency. (Oviedo & Campo, 2005).

USR practices that evaluate the relationship of the University with the Local Community / Society and the Environment

For the evaluation of the existing relationship between the University and the Local Community, determining the level of knowledge and immersion that its stakeholders may have in social issues, as well as seeing the interaction and development of environmental practices, the opinions of students, teachers and administrators through contingency tables focused on the variables of the instrument were analyzed.

| | (Stakeholders) Means | | | Sig. χ^2 |
	Students	Teachers	Administratives	
V7. A high social commitment is reflected in the mission and vision of the University.	3.98	4.70	4.11	0.002*
V11. Faculty, staff, students, and members of the local community are involved in college decisions.	3.51	4.17	3.66	0.000*
V12. The relationship with the Social Councils improves the image and reputation of the University.	4.00	4.58	3.77	0.264
V26. Employees and students are trained through courses on topics related to USR.	2.33	3.88	3.55	0.000*
V28. The University staff (Employees-Students) know the foundations on which a Responsible University is based.	2.26	3.82	3.00	0.000*
V30. Social aspects are integrated into the strategic planning of the University.	3.58	4.35	3.66	0.06***
31. Environmental aspects are integrated into the strategic planning of the University.	3.04	4.23	3.66	0.000*
V34. Campaigns are carried out by employees and students to support social causes.	3.66	4.35	3.66	0.07***
V35. There is knowledge and control of the environmental impacts that are generated in the University.	2.67	3.64	2.66	0.000*
V36. Some technological innovation is carried out to eliminate or mitigate impacts to the environment.	2.54	3.47	2.88	0.000*
V39. Investments are made to save energy.	2.76	3.23	2.44	0.66
40. Alternative energy programs are adopted.	1.40	2.76	1.66	0.000*
V41. Campaigns are carried out to save water.	2.41	2.76	2.66	0.000*
V42. The environmental regulations in force in the country are known.	2.35	3.52	3.00	0.000*

*Chi square: 99%, Sig < 0.01.; ** Chi square: 95%, Sig < 0.05.; *** Chi square: 90%, Sig < 0.1.

Table 3 Mean values and Pearson's Chi square
Source: Own elaboration

Determination of the factors that express the behavior of USR linked to social ties and the mitigation of environmental impacts

The use of the EFA made it possible to determine four factors from the variables of the measurement instrument that clearly and independently express the conditions in which the University operates in USR issues linked to social management and the mitigation of environmental impacts evaluated by through planning, programming, training, innovation and investment as necessary activities for sustainability. The four factors allow rejecting the null hypothesis H03.

H03: There is not a limited number of variables that identify factors that determine the planning, programming, training, innovation and investment carried out by the FAS based on social and environmental issues.

The results of the KMO sampling adequacy test and Bartlett's sphericity are shown in Table 4.

KMO and Bartlett Test		
Kaiser-Meyer-Olkin measure of sampling adequacy		.883
Bartlett's test of sphericity	Approx. Chi squared	1018.134
	gl	91
	Sig.	.000

Table 4 Test of KMO and Bartlett
Source: Own Elaboration

The reduction of the variables to 4 factors that explain 64.05% of the variance can be seen in Table 5, as indicated (Costello & Osborne, 2005), in empirical research in the Social Sciences the range of saturations is usually moderate or low (.32 <Saturation Range <.50), hence saturations above .50 can generally be considered strong saturations, which validates the result obtained in the total variance explained.

Component	Squared load extraction sums			Squared load rotation sums		
	Total	% of variance	% accumulated	Total	% of variance	% accumulated
1	5.390	38.503	38.503	2.779	19.851	19.851
2	1.371	9.790	48.293	2.511	17.937	37.787
3	1.161	8.293	56.586	1.880	13.426	51.214
4	1.046	7.471	64.057	1.798	12.843	64.057

Table 5 Result of factorial analysis with four components
Source: Own elaboration

Varimax rotation was applied for a better interpretation of the results. Orthogonal rotations (Varimax, Quartimax and Equimax) produce uncorrelated factors, so they could be considered appropriate when independence of the factors is assumed, at least from a conceptual point of view. (Fabrigar et al., 1999; Conway & Huffcutt, 2003; Costello & Osborne, 2005; Beavers et al., 2013). Varimax rotation consists of rotating the four coordinate axes that represent the factors / components. This continues until you get as close as possible to the maximum variables in which (the components) are saturated. According to several authors ((Fabrigar et al., 1999; Conway & Huffcutt, 2003; Costello & Osborne, 2005; Beavers et al., 2013), oblique rotations allow obtaining precise, simple, reproducible and more realistic solutions. Table 6 shows the 4 factors identified with the names (Planning and Integration), (Programming, Training and Logistics), (Innovation and Investment) and the (Knowledge and Social Relationships).

The names chosen are based on the variables that determine each factor. The factors clearly delimit the successes and difficulties that the University has in USR issues and are supported by the initial evaluations prepared by the experts in the Focus Group. The factor (Planning and Integration) encompasses issues related to the development of the Faculty's stakeholders, as well as social and environmental integration in its strategic planning. The factor, (Programming, Training and Logistics) was made up of the programming of issues that encompass environmental development, the logistics applied to that issue and training in that sense, being of vital importance to carry out sustainable activities.

The third factor called (Innovation and Investments) concentrates on whether the need for investment for a sustainable improvement, assessing whether there is an investment aimed at fulfilling these issues in the FAS and at the same time assessing the level of innovative development that is required in a high house of studies to achieve the USR.

The fourth factor speaks of the relationship with the local community and society, its participation in important decisions and the conjugation of all internal and external stakeholders with society, the support provided by the faculty to social causes and stability of these relationships today.

Rotated Component Matrix[a]

	Componente			
	Planning and Integration	Programming, Training and Logistic	Innovation and Investment	Knowledge an Social Relationships
V7. A high social commitment is reflected in the mission and vision of the University.				.603
V11. Faculty, staff, students, and members of the local community are involved in college decisions.				.619
V12. The relationship with the Social Councils improves the image and reputation of the University.				.845
V26. Employees and students are trained through courses on topics related to USR.		.727		
V28. The University staff (Employees-Students) know the foundations on which a Responsible University is based.		.788		
V30. Social aspects are integrated into the strategic planning of the University.	.687			
31. Environmental aspects are integrated into the strategic planning of the University.	.745			
Campaigns are carried out by employees and students to support social causes.	.644			
V35. There is knowledge and control of the environmental impacts that are generated in the University.	.713			
V36. Some technological innovation is carried out to eliminate or mitigate impacts to the environment.			.594	
V39. Investments are made to save energy.			.655	
40. Alternative energy programs are adopted.		.677		
V41. Campaigns are carried out to save water.			.833	
V42. The environmental regulations in force in the country are known.		.584		

Table 6 Main rotated components obtained through EFA

Validation of the factors found as vital points that place Senior Management as the central link of the stakeholders of the USR

Worldwide research relates the variables that make up these 4 factors of our work, focused on social relationships and the reduction of environmental impacts, as vital issues that must be resolved for a sustainable improvement in the university environment, only that we have placed social relations as the guiding center of each process since their connection, support and commitment are considered vital for a takeoff in USR issues.

Institutional congruence refers to the fact that in the socially responsible approach, the university is in charge of contrasting the results of the self-diagnosis with the commitment and compliance with the university philosophy, in addition, improvements in areas, dependencies are planned and then the USR projects are executed, the various levels, but always thinking about the comprehensive participation of all members of the university community and external factors such as civil society and the state (Valarezo & López, 2014).

(Brunner, 2011) tells us that in turbulent times such as the current one, the magnitude, intensity and speed of changes in the environment, within which universities operate, threaten to exceed their capacities for reaction and adaptation, which may cause crises, loss of competitive position and, in some cases, disappearance. The University is responsible if it influences society, channels the influence of a clear transforming orientation of the areas of social, economic and public vulnerability present in our society. (Gil, 2012)

The factors found encompass in general terms the main issues for sustainable development and an improvement in the university's relations with its social and environmental surroundings, which leads us to a higher education of the stakeholders that make up the basic university core. Educating for sustainable development means incorporating the fundamental themes of said development into teaching and learning (climate change, disaster risk reduction, biodiversity, poverty reduction, sustainable consumption, etc.). Likewise, this type of education requires participatory teaching and learning methods that motivate students and give them the autonomy to change their behavior and facilitate the adoption of measures for sustainable development. Consequently, education for sustainable development promotes the acquisition of skills such as critical thinking, the elaboration of hypotheses to anticipate the future and collective decision-making (Cervantes & Aldeanueva, 2016)

Conclusions

The degree of social and environmental management that exists in the FAS was evaluated through the application of an instrument prepared by experts from the Faculty of Administration Sciences (FAS) of the city of Saltillo and the North Unit that includes schools Administration and Business, located in the city of Monclova and Piedras Negras in the state of Coahuila, Mexico.

Four factors were determined through the application of the Exploratory Factor Analysis that evaluate Planning and Integration, Programming, Training and Logistics, Innovation and Investment and Knowledge and Social Relationships, key points within the investigation that allow determining the degree of management that the FAS has in terms of work and social integration and in the assessment and mitigation of the environmental impacts generated by the faculty.

The degree of understanding and veracity of the answers provided by 210 people who work and study at the faculty was made through Cronbach's Alpha statistics and the use of Contingency Tables with the evaluation of Pearson's Chi square, finding a high percentage of agreement in the response of the groups participating in the study.

It is concluded that there is a development in the FAS of its social practices and an active participation in activities of this nature through the incorporation of stakeholders in social projects, the programming and development of social campaigns that benefit the local community and other communities further away from the university (V7, V11, V13) and to a lesser degree lacks training that complements these activities in a better way (V26 and V28).

It was determined that there are measures and actions in environmental management that improve this performance, such as activity planning and some actions for improvement (V31), however, innovation, investment and the application of effective programs that favor development are insufficient. sustainable in this area (V36, V39, V40 and V41), while at the same time there is a lack of knowledge of the impacts and of the regulations that the country governs in environmental matters (V35 and V42).

Conflicts of interest

The authors declare that there is no conflict of interest in the present investigation.

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