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Are Spanish business schools playing the role they should in bringing sustainability to the corporate world?

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ABSTRACT

Over the last decade, the importance that Society has attributed to sustainability has grown exponentially – to the point of becoming one of its main concerns. The scientific community, albeit with differing opinions regarding the foreseeable evolution of possible scenarios, unanimously agrees that a rapid, joint, global and coordinated response must be acted upon in order to reverse the current situation. The research work that is presented here focusses specifically on identifying the necessary changes to be implemented both in universities and business schools (BSs), in order to significantly contribute to moving society towards a more sustainable scenario. Although this research work was on the Spanish market, it seems that most of the conclusions could be applicable to other countries. A combination of techniques, both quantitative (questionnaires and data analysis of reports, webs, etc.) and qualitative (focus groups, interviews, etc) has been applied to obtain important conclusions, among which the following should be highlighted: specific education programmes should be introduced for business schools and university lecturers; key programmes such as MBAs should include a number of sustainability-specific subjects, and these moves should be implemented as a mid- to long-term strategy policy.

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1. Introduction

In recent years, the higher education sector in Spain has constantly grown, as it has in other European countries (DBK Informa, 2021; División de Estadística y Estudios Secretaría General Técnica Ministerio de Cultura y Deporte, 2020). This growth, which has taken place both at the undergraduate and postgraduate level, has affected the range of academic programs and the number of students. This is evident in both public and private universities. However, even though an increase has been maintained, there is a slowdown in the rate of growth (División de Estadística y Estudios Secretaría General Técnica Ministerio de Cultura y Deporte, 2020).

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Traditionally, Spanish business schools (BSs) have had great international prestige, appearing in the rankings of numerous well-positioned publications. In fact, its target audience, although the majority are Spaniards, has a strong international character. It is a fact that some of the Spanish business schools are among the best in the world, which means that they are able to open up to markets beyond Spanish borders.

Consequently, the present work, albeit limited to Spanish business schools, can surely be taken into consideration, due both to the strongly international character of some of the business schools considered, as well as the geographical and cultural diversity of their students. In this direction, we should refer to the rankings that classify these schools.

First of all, it should be noted that some of these rankings refer to specific courses, such as the Master's Degree in Business Administration (MBA). Not always these rankings, which classify the best MBAs, are in line with those that refer to other executive education programmes, or to customised programmes that are designed and taught in line with the needs and characteristics of the organisations that provide them.

On this point, what must be highlighted is that hardly any of the existing rankings that evaluate the quality of business schools, include any aspect directly or indirectly related to sustainability. However, in recent years, a significant increase in the interest of business school students in sustainability-related topics has been clearly identified. Almost all the most important BSs associations, in their annual reports, concur with this conclusion. (Association of MBAs, 2022). After analysing a significant sample ($n = 727$) of students from its associated centres, the report concluded that despite only 12% of these students considering sustainability-related aspects when deciding on the course they finally study; once they complete it, 31% of them affirm that these topics are the ones that had interested them the most. And in both cases, growth is very important. Even pioneering organisations in these aspects, such as Second-nature, Net Impact, the National Wildlife Federation, or the Association for the Advancement of Sustainability in Higher Education, are still far from identifying standardised criteria on commitment to sustainability for adoption by academic institutions, both universities and business schools.

It is clear that implementing sustainability-based courses and learning methods is a very complex objective, since diverse disciplines must be considered, while also dealing with very different cultures, governments, sectors of activity and practical situations. However, it is really important to start developing a global approach to this necessity worldwide, and business schools should be one of the leading stakeholders (Edwards et al., 2020).

From the beginning of the twenty-first century, but especially within the last decade, some authors have deepened into the general perspective of sustainability and its implications (Blome et al., 2017; Herremans et al., 2016). The first of these clearly centres on the relationships with all stakeholders, both public and private, and the effect and implications that sustainability-promoting activities and plans have on business performance. The latter approaches the topic from a much more compliance related point of view, including an extremely interesting relationship with ethics, incentives and authorities, in one of the most sustainability-aware countries, Germany.

It also appears to be obvious to researchers that the future sustainability of societies must be a shared public and private responsibility, however this growing awareness of

sustainability and its influence on business schools is increasing in very different areas of the world, as is becoming more and more of a global phenomenon (Dieck-Assad, 2013). For instance, in Brazil, through the concept “Education for Sustainability” (EfS), the main goal is to develop business professionals with the knowledge and skills to take management decisions based on their social, environmental, and economic context (Figueiró et al., 2016). This is achieved through critical thinking and reflection, always oriented towards action and implementation, applying what is called “Social Learning”, and always through collaboration between different players. In Australia (Dyball et al., 2015) one of the key factors that has been detected as critical for future developments is the disengagement of business schools and university teaching staff from sustainability. Some research, conducted in Latin America, shows that the emphasis on active learning appears to correlate positively with observed changes in students’ civic behaviour, including sustainability awareness (Reficco et al., 2019).

Due to its population, economic situation, and development, India is one the most interesting countries to investigate from the point of view of sustainability work. In this country, a very positive “global” approach is shown, based on the following ten main strategies: re-orienting the MBA curriculum; adherence to multi-attribute admission criteria; recruiting quality teachers and staff; use of relevant academic materials; trial and error teaching and learning methods; encouraging competition amongst students; enhancing interaction with local organisations; institutionalising direct quality assurance of activities; promoting an entrepreneurship culture, and focussing on research (Kola, 2019). Also, Nauman and Hussain (2017), present a very interesting analysis of what is required of Pakistan’s business schools in the field of sustainability in the banking sector, highlighting that different economic sectors need different approaches.

In the case of North America, that could be considered as the origin of business management education: some interesting perspectives can be found (Hart et al., 2015); albeit excessively focussed on MBA courses, and the relationship with CSRS. Also Waddock (2020), brilliantly deals with the way in which neoliberalism must necessarily confront the wellbeing of society through a more sustainable model within developed societies.

However, the authors have not been able to find any analysis similar to the one that is presented in this work, and this research gap could be summarised in the following aspects:

The approach consists of thoroughly examining all the main business school stakeholders: students, teachers, external companies and their executives, following a multi-level approach.

Not only are MBA courses analysed but also the whole portfolio of senior level courses, since businesspeople closest to decision-making in the near future will be those who already have professional experience. Consequently, they will be able to implement sustainability-oriented actions sooner.

Another key aspect to be considered when analysing both the current situation and the future needs of business schools and universities to foster sustainability awareness, is the extreme importance of the employees of these institutions, in general, and the teachers and faculty members in particular. Without staff commitment, effective plans cannot be implemented (Dyball et al., 2015). And one of the most

efficient ways to foster this culture in companies is through a disruptive “inside-out” approach, obviously including teachers and lecturers, who are the key employees in business schools (Briscoe, 2021).

This research work aims to analyse the most important challenges that will affect business schools in making their contribution to society by properly training future managers and directors, raising their awareness of sustainability, and helping them to profitably implement much-needed action within their companies. Although most of the results presented in this study are derived from the analysis of Spanish business schools, most of the conclusions could also be applied to other countries. Business schools have a major influence upon society since:

Business schools are an important social and economic agent, generating ideas and opinions, contrasting aspects concerning the business, economic and financial world. Their influence derives not only from the knowledge and experiences that are taught and shared but rather from the trends observed in the business world and, therefore, socially (Kitchener & Delbridge, 2020; Lange, 2013; McPhail, 2013; Sharma, 2013).

Contributions made by business schools in the business field help to achieve more efficient organisations. The research and publications produced by these institutions have been a factor influencing the development and improvement in companies and this is an area whose impact on the business world has a great influence. In this sense, to the extent that business schools are more solid, they can serve as platforms for research and the exchange of ideas that contribute to improvement in organisations.

A very important aspect of business schools is their relevance to society. Education is of great importance when it comes to people contributing to social changes. In this sense, business schools play a prominent role, to the extent that many company leaders (also agents of social transformation themselves) are executives who have received training in business schools.

These schools should constitute a real catalyst of change towards a more sustainable world, highlighting the real possibility of company improvement when implementing sustainable processes and policies, not only through the effect of positive “image” and “marketing” conveyed to customers when the companies are able to transmit that they are sustainable.

There are several ways in which a school can approach sustainability training, but there appears to be a consensus at least as regards the need for a forum for reflection on the consequences of decision-making within the framework of managers’ jobs. The majority of activities related to resources management take place within commercial and industrial business, regulated and controlled by public administration, while the third critical element is ourselves, the public at large (Pekkanen, 2021).

When trying to think about essential strategic approaches for working on sustainable procedures to achieve a real circular economy, there is none more important than education, since from a broad perspective, this contributes to building a green culture in all groups in society. Without a real medium to long term education policy, it is absolutely impossible to reach a truly green and sustainable global consciousness in society. More precisely, both universities and business schools are directly related to the educational background of most company and government managers and executives worldwide.

Although sustainability is a global aspect to be considered and this study is mainly focussed on Spanish business schools, one of the key objectives is to obtain conclusions that add value in a general way, since Spain, due to its language, location, and history, is one of the key “business education hubs” in Europe. To achieve this, it is important to highlight the following aspects, that significantly vary depending on the specific situation of different countries and populations (UNESCO Higher Education Observatory, 2021).

By far, Asia is the continent with the most students studying abroad, but not specifically in Spain.

China, with almost 820,000 students abroad, presents figures that are double that of the two countries that follow in the ranking, taken together. It has as many students outside its borders as the sum total of the rest of the world.

India and South Korea, with practically 210,000 and 121,000 respectively, are the next on the list worldwide, far behind China but substantially more than the others, with the exception of Germany, with 112,000.

In the case of these three Asian countries, the United States is the preferred destination, by far.

Among the destinations preferred by Asian students, where the United States is the first importer, with some exceptions of a geographical nature in terms of proximity, the main countries are English-speaking.

In Europe, in addition to the United States, most of the students abroad study on the European continent itself. The country with the highest number is Germany, which, with more than 109,000 students, accumulates as many as the following two: France and Italy.

In Europe there is greater linguistic dispersion in terms of destination countries than in the case of Asian students. In any case, English is the most widely used language.

The American continent is clearly an exporter, with the exception of the United States, which welcomes more than 755,000 students and sends 57,000 abroad, and Canada (123,000 and 46,000 respectively).

Latin American countries, in absolute terms, export very few students. In the case of Spain, this data is very relevant, as will be seen later.

The figures presented in absolute terms by the rest of the American countries are low in comparison with Asia or the main European countries.

Australia and New Zealand have been constantly growing in recent years, but do not present relevant figures. Australia being the more important of the two.

The relative participation of Africa, in this context, is very low. Nonetheless, there are opinions that support the idea that, in the future – as a consequence of development in African countries with favourable investment conditions – their growth capacity will be high.

From an empirical and critical point of view, this research work highlights some of the most urgent actions to be implemented in both universities and business schools, in order to contribute to this key social transformation towards a more sustainable world. There is no doubt that social concern with this aspects is already key, since concepts such as corporate social responsibility (or CSR) sustainability (Hart et al., 2015); global business ethics (Sastre Segovia, 2018); the circular economy

(Murray et al., 2017); or corporate sustainability (Tollin & Christensen, 2017), have constantly grown in importance over the last few decades. Notwithstanding, there is still a lot to do in both the universities and business schools to strengthen and develop these areas in forthcoming years, particularly in view of the increasingly intense and rapid globalisation process that our society is experiencing.

The researchers, directly related to college education through several main subjects, and to business school through specific courses in business administration, legal or human resources and talent management in Spain, have run an extensive analysis on the perception of students; the current situation of sustainability-related education, and the desired situation, to obtain definitive conclusions. Among the key aspects, it is worth highlighting that only a small number of the top-ranked business schools teach subjects specifically centred on sustainability, so it is clear that this strategic focus should be included in a more generalised way. Besides, nowadays there are very few academic institutions that are both universities and business schools (ESIC; IE, etc), which produces a certain inconsistency between sustainability-oriented education at those two levels. It would be advisable to have a clear path as regards what, when, and how to teach sustainability and generate enough awareness; however it has been extremely difficult to achieve any institutional agreement on this. Finally, the correct implementation of these specific sustainability-related subjects and courses appears to indicate a relationship with students' positive perception of the academic institution, and also its ranking and business performance.

To conclude this section, this research aims to carry out a critical and pragmatic review that enables to identify the essential focus of the new business models in the sector, also evaluating whether Spanish business schools are sufficiently prepared, as a whole, to face the challenges set by these trends, and to capitalise on synergies with institutions in other more advanced countries. Based on this analysis, we define what should be the action plan for sustainability in Spanish business schools and universities by recording the opinion of their two most important stakeholders: faculty members on the one hand, and students on the other.

2. Literature review

There is a vast array of literature on sustainability in higher education, including really important and influential international journals, which has been growing during recent years. This section presents a far-reaching review of the most prominent research works of the last few years. Based on this analysis, already briefly highlighted in the introduction, the main research question will be framed and defined.

When approaching the current situation regarding sustainability and business schools (BSs), a very interesting point of view is set out by Rodenburg et al. (2022). In this work, after the analysis of more than 4500 articles of the 50 journals that have joined the Financial Times' ranking (FT50) as representative of research quality and prestige by BSs, the main conclusion is that the majority of research projects are not clearly aligned with social needs, in particular with what is stated in the United Nation's 17 Sustainable Development Goals (SDGs). Therefore, a greater alignment between

companies' strategic directions, social goals, and BSs activities and courses, would improve the necessary progress towards much more sustainable business policies.

When exploring the different possible ways to improve this situation, there are some excellent approaches that clearly show the need for a global perspective. Two of the most recent examples can be found in Greenland et al. (2022), where a clear need to consider social, political, environmental and corporate perspectives as a whole is shown through an empirical procedure in Australian BSs; or in Bapoo et al. (2022) that underlines a clear requirement to consider all dimensions of a sustainability-based orientation (knowledge, culture, practice and commitment) in order to inculcate solid sustainability policies in companies. On this last case, special needs for business models or start-ups are analysed for Malaysia.

The present review has also highlighted two really interesting aspects. Firstly, the specificities of the different countries in which the different research projects undertook thorough analyses, albeit extremely locally-based and consequently difficult to replicate or apply to other geographies. And secondly, the majority of the papers are focussed on only one of the information sources, business functions or stakeholders.

On the first aspect, some interesting approaches can be identified. A Korean study, by Jun and Moon (2021) presents a good analysis of integrating sustainability within BSs through their course syllabuses. According to Pedro et al. (2022) the contribution of BSs to local business development of sustainable policies, depends not only on teaching and research activities but also on activities related to Social Responsibility (SR), in the Portuguese case. In Sweden, Alm et al. (2022) presents a fantastic approach to students' sustainability awareness and competencies, through a case study.

In Rodenburg and Macdonald (2021), an intriguing perspective of the key influencers on ethical decision-making and sustainable direction can be found for Canada, orientated not only to situational factors but also future predictions as to appropriate implementation of the SDGs.

As to the second aspect, it is necessary to further segment the analysis based on several aspects. When considering business models and business functions, both Williamsson et al. (2022) and Csillag et al. (2022) produced good studies on the requirements and competencies of future business leaders to achieve a more sustainable business environment.

With regard to the application of innovation to the BSs, in order to secure better awareness of sustainability among graduates when they become managers, some studies such as Daub et al. (2020) prove useful in showing how necessary it can be to apply innovative ideas, while always paying full attention to students' feedback.

There is an apparently clear need to consider BSs' approach to sustainability from a wider and more global point of view. This is stressed by some studies, such as Findler (2021), that points to a certain lack of a pluralistic conceptualisation of sustainability-oriented activities in BSs. Oonk et al. (2022) also insist on the need to reinforce a cross-cutting philosophy between different business functions. In 2015, as Spanish researchers García-Feijoo et al. (2020) describe, nearly 200 business schools had already committed to incorporating the 17 SDGs for 2030 within their syllabuses, however time has shown that, for now, progress in that direction has been less than expected, and above all, very few meaningful synergies have emerged.

Another interesting point here is the difficulty of applying sustainability-orientated business models that had been successfully applied in some BSs, to others indifferent counties or cultural settings. This particular matter is sensibly described though an excellent example from Landrum (2021). Furthermore, and most likely due to the rich tradition of BSs in these areas, there is a substantial amount of research work in this field, specifically related to the finance function, such as Brunstein et al. (2019); to employability, as in Winfield and Ndlovu (2019); or MBA courses, as described by Rehman et al. (2019).

3. Materials and methods

As already mentioned in previous sections, the majority of the research was undertaken by the authors within the environment of Spanish business schools. Nevertheless, and taking into consideration that the first initiatives to include sustainability-related aspects in business schools came from both North America and the rest of Europe, possible synergies have not been lost sight of in this research.

Both quantitative and qualitative aspects have been considered, and the process of obtaining the data is summarised in Table 1:

Websites and public corporate information from the 38 Spanish business schools detailed in Table 2 have been evaluated for the quantitative analysis. In total, these schools account for 91.3% of the total student population at business schools in Spain, and 92.7% of the 2019 turnover in this sector.

Both the questions used for the quantitative analysis (detailed in Table 1), and the main topics to be discussed at the interviews run for the qualitative analysis, were set based on the main aspects obtained from the literature review, the gaps defined in the research, and also those aspects that, in the authors' view, were important to discover students' impressions.

A total of 47 teachers and lecturers, and 163 students from 12 of the 38 BSs mentioned above, responded to the questionnaire used for the quantitative analysis (at least eight of the ten proposed questions). These BSs were EAE, CUNEF, IMF, ESIC, Univ. of Navarre, IEB, UNIR, ICADE, Univ. of Oviedo, IESE, IE and UC3M (Figure 1).

For the qualitative analysis, 7 teachers, 12 students (also from the former 12 BSs), and 9 top-level business executives (all members of their boards of directors, and 5 working for Ibex 35 companies), were interviewed in depth as key stakeholders (Dzhengiz & Niesten, 2020). Natural, un-forced replies and comments were sought, aiming to obtain different nationalities, business sectors and functional areas represented. It is important to highlight that, with these sample sizes, the conclusions had, necessarily, to be qualitative.

Table 1. Research methodology framework. "Corporate and sector reports" refer to the institutions' documents (research documents and guides, activity reports, etc.).

Analysis type	Tools	Information Sources
Quantitative	Content Analysis	Institutions' websites Corporate and sector reports
	Questionnaires	Students' surveys Teachers' surveys
Qualitative	Focus Groups	Website maps & networking Corporate and sector reports
	Surveys	Interviews (teachers, business executives and students.) International associations (such as AACSB, EFMD, Aspen Institute or AASHE)

Source: In house.

Table 2. List of business schools considered in the research. Information and data from the following academic institutions have been considered for this analysis. At least, the syllabus of the main courses, and the number of students and their characteristics (nationality and working experience) for each business school had to be available to be included in the list. Conversely, not all these schools are represented within the students or teachers interviewed.

Business Schools

Deusto Business School
 ESADE Business School
 CEU Business & Marketing School
 ESIC Business School
 ICADE Business School
 IESE Business School
 SAN TELMO International Institute
 ISEM Fashion Business School
 IMF Business School
 La Salle International Graduate School
 Aliter International School of Business
 Barcelona Graduate School of Economics
 Barcelona School of Management – IDEC
 CEF, Center for Financial Studies
 Garrigues Studies Center
 CESMA Business School
 CUNEF Postgraduate
 EADA Business School
 ENAE Business School
 EOI, School of Industrial Organisation
 AFI, School of Applied Finance
 NovaCaixaGalicia Business School
 ESB, European School of Business
 ESDENT Business School
 ESERP Business School
 ESEUNE Business School
 EUDE Business School
 Fundesem Business School
 IDE-CESEM
 IEB
 IE Business School
 ISDE, Superior Institute of Law and Economy
 ITAE Business School
 Madrid School of Marketing
 EAE
 STEM
 IEDE
 ADM Business School

Source: In house.

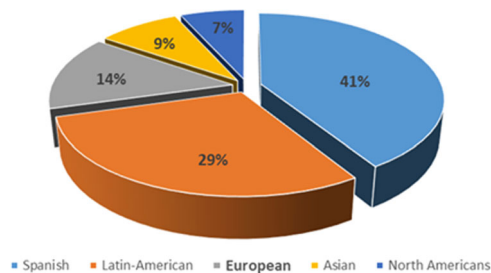


Figure 1. Distribution of students interviewed, by nationality. Source: In house.

4. Results

Based on what has been described in the previous sections, both qualitative and quantitative results were obtained from the surveys, polls and interviews conducted. [Figure 2](#) shows the main quantitative results obtained from the students.

The survey can be considered as an opinion poll, which aims to capture the point of view of the students. For each of the 10 questions, the students were requested to rank their answers from 1 – strongly disagree- to 5 – strongly agree-. As the authors could neither afford to sample the whole population, nor run a purely probabilistic sampling process, the questionnaire was sent to all the students on courses at a total of 16 selected business schools (as listed in [Table 2](#)), This selection was based on the three following parameters: the degree of internationalisation of their student population; more than three relevant courses included in their portfolio; and lastly, good quality records. A detailed list of these 16 business schools is not specifically provided, so as to avoid any minimum risk of prejudicing those that were not included.

As a consequence of the above, the number of correct answers was not known until the closure of the survey process, so the sample size could not be previously adjusted to achieve the desired values of confidence intervals. However, as this is also shown in [Figure 2](#), taking into consideration for the survey a precision error of 7% (for this type of opinion surveys, values normally vary from 5 to 9%), and the real sample sizes for each question, it can be clearly seen that most of the confidence intervals calculated are representative.

Main aspects that have emerged from the interviews held with teachers are as follows:

The majority did affirm that they were aware of the increasing interest in sustainability within society, however it was quite surprising that nearly 40% of them were not sure about the need to immediately introduce specific subjects or adapt their syllabus to include aspects of sustainability.

Awareness of these sustainability-related aspects was found to be three times greater among part-time teachers, when compared with full-time teaching staff.

Slightly over 80% of teachers were convinced that even they would need specific training in sustainability as applied to business, before being able to competently teach those concepts to the students.

Many significant results were obtained from interviews with senior executives (most of them extremely useful to foster and set up future lines of research). Nevertheless, there were two results that really would have to be immediately considered when setting the next 3 to 5 strategic approaches for business schools:

The vast majority reported that, even if the executive and decision-making bodies in companies – and the companies themselves – most often affirmed that they were really committed to implementing sustainability, the resources allocated were far less than needed.

One of the aspects they referred to as key to reversing this situation, was to thoroughly conduct research work on the impact of sustainability on businesses, including adjusted models and simulations of this impact on global value chains.

Nº	Question	Ans.	Avg.	StDev	5	4	3	2	1	5	4	3	2	1	Conf. Interval
1	Sustainability should be part of the content of the programs of a business school	163	4.69	0.48	114	48	1	0	0	69.9%	29.4%	0.6%	0.0%	0.0%	94.0%
2	There should be a specific area or department dedicated to sustainability in business schools.	163	4.57	0.72	113	32	16	2	0	69.3%	19.6%	9.8%	1.2%	0.0%	78.6%
3	It is important that business schools establish and promote contact with prestigious international associations related to sustainability	163	4.68	0.65	128	18	17	0	0	78.5%	11.0%	10.4%	0.0%	0.0%	82.9%
4	There should be a specific subject on sustainability into business schools' programs.	160	3.01	1.02	18	26	59	53	4	11.3%	16.3%	36.9%	33.1%	2.5%	61.3%
5	It is important for the business schools to include sustainability into their strategic components (Mission, Vision and Values)	163	3.13	1.01	17	44	46	56	0	10.4%	27.0%	28.2%	34.4%	0.0%	62.5%
6	I would rather prefer to work for a company strongly committed to sustainable processes and	163	4.84	0.40	139	22	2	0	0	85.3%	13.5%	1.2%	0.0%	0.0%	97.5%
7	I would be willing to sacrifice part of my potential salary to work for a company that has sustainability as a reference	163	3.82	1.10	47	71	22	15	8	28.8%	43.6%	13.5%	9.2%	4.9%	58.4%
8	Nowadays, it is important for business schools to conduct research on sustainability, and its impact on corporate functions and business areas, from a global perspective.	162	3.83	0.69	24	89	46	3	0	14.8%	54.9%	28.4%	1.9%	0.0%	80.3%
9	I consider it important that business schools collaborate with sustainability conscious non-profit organizations	163	3.80	0.80	34	67	59	2	1	20.9%	41.1%	36.2%	1.2%	0.6%	73.7%
10	I believe that in the near future business schools will have areas specifically dedicated to sustainability / CSRS	159	4.87	0.37	141	16	2	0	0	88.7%	10.1%	1.3%	0.0%	0.0%	98.3%

Figure 2. This summarises the results of the students' survey. For each question, the total number of valid responses, the number of different gradings, their percentage over the total, and the main statistic parameters of the survey (mean, standard deviation and confidence intervals). Responses vary from 1: "strongly disagree" to 5 "strongly agree". Source: In house.

5. Discussion

Based on the research work that has been presented throughout this paper, it can be concluded with certainty that BSs should definitely include sustainability training and global sustainability awareness as one of their strategic approaches – not only due to the importance of a vital commitment to the evolution of a business model towards a more sustainable one – but also because a growing and significant interest in sustainability could be easily detected in students.

One of the main aspects to be highlighted as a line of discussion, in contrast to most of the existing literature analysed and revised for this study, is that the direction that the business schools, and also universities, must head in to contribute to a more sustainability-oriented society. It is not sufficient to implement a number of independent, low-level actions to fully contribute to this major goal. Conversely, it is imperative to include within the schools' long-term strategic plans a highly coordinated and global plan to foster sustainability. It also appears that the business schools have already fallen behind the requirements and needs of students.

More precisely, the authors would recommend the following actions:

Business schools should implement sustainability courses for their teachers, so that they have theoretical and practical foundations on which to base future courses and events related to the impact of sustainability on businesses.

Besides, in the short term, business schools should introduce specific sustainability-oriented subjects with interesting syllabuses in MBA and CSR-related courses, at the very least.

There is a clear need to promote corporate lobbies, and to participate in and actively support those national and international institutions and associations that are currently related to sustainability.

Another of the critical aspects for business schools, when it comes to sustainability, is the implementation of a broad-based, long term and strong communication strategy, to fully monitor the information to be exchanged with all key stakeholders.

As for other key areas of knowledge, it is imperative to allocate specific resources to conduct research and development in sustainability. In a relatively new area like this one, it is critical to demonstrate to the industrial and business sectors that there is still great scope for improvement, both from the economic point of view, as well as brand image and visibility.

Compliance and corporate governance have become increasingly crucial in recent years, so it would be extremely beneficial for business schools to explore and define synergies in this regard, since in most cases, sustainability will become essential from a legal point of view.

Even if interesting conclusions have been reached in this research, this would need to be further extended in the future, as is the intention of the research team. From a statistical point of view, further surveys should be conducted, ideally segmented by academic course type, including those not oriented to university students. It is also the intention of the research team to fully collaborate with at least three business schools to define and implement their strategic plan with a clear orientation to sustainability.

In any case, the research work presented could be a useful guide for business schools to revise, adapt or implement their own strategy regarding sustainability.

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