

**UNIVERSITIES, STRATEGIC PLANNING AND SUSTAINABLE
DEVELOPMENT GOALS: THE SPANISH CASE¹**

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Universities, strategic planning and sustainable development goals: The Spanish case

Abstract

This paper examines the extent to which Spanish universities have aligned themselves with the achievement of SDGs from a strategic perspective. To do this, the authors analysed the actions identified in existing strategic plans of Spanish universities to find out the presence of actions aimed at achieving the SDGs. The results of this paper reveal that, although some universities have adopted different strategies to respond to institutional pressures for contributing to the achievement of SDGs, there is a large room for improvement among the set of Spanish universities. One of the main challenges that need to be addressed in the near future is the awareness and sustainability training among faculty members. By giving a strategic response to this challenge, universities could bring curricula more closely to the realities of the current socioeconomic environment.

Introduction

The high impact that the human activity is causing in our planet and the unsustainable way of living has supposed a transitional change from Holocene to a new geological era, the Anthropocene, where the demands for natural resources, energy and water has notably increased (Bebbington et al., 2020; Ferrer-Estevez and Chalmeta, 2021). This, together with global warming, waste management or social inequalities, has reinforced the discourse of sustainability as a social and a future challenge to be addressed (Yañez et al., 2019). This involves a sustainable development model where the prosperity of society and people is possible when there is a sustained and inclusive economic growth at all levels (Fleaca et al., 2018). Besides this, the credibility of organizations, both public and private, has been impaired by the occurrence of corporate scandals that have negatively impacted the reputation of these organizations (Dumay and Guthrie, 2017). Previous literature has manifested that the lack of trust is a social challenge that organizations have to face by aligning themselves with socially and environmentally responsible practices (De Villiers and Farneti, 2018).

To respond to those social and environmental concerns, the United Nations (UN) in its 70th Session approved in September 2015 a new global sustainable development agenda named as “Transforming Our World: The 2030 Agenda for Sustainable Development” (Owens, 2017). This Agenda 2030 is comprised of 17 Sustainable Development Goals (SDGs) to find a way to “live well and for communities to flourish within the capacity of the planet to sustain human needs, supported by an economic system that can ensure equitable and sustainable outcomes” (Bebbington and Unerman, 2020, p. 1658). For the next 15 years since 2015, the SDGs try to “end poverty in all its forms... and balance the three dimensions of sustainable development: the economic, social and environmental” (Leal-Filho et al., 2019a, p. 285). In sum, the 17 SDGs are aimed at stimulating initiatives of pivotal relevance for humanity and the planet for the next 15 years (Bebbington and Unerman, 2018).

The adoption of the 17 SDGs has gained the particular attention of a wide range of organizations (Fleaca et al., 2019). Among the set of existing organizations, universities have shown their commitment to sustainability by signing different international declarations since 1990 to date (Son-Turan & Lambrechts, 2019; Yañez et al., 2019). The announcement of the United Nations Sustainable Development Goals highlights the need for universities to be role models in the transition to sustainability through the achievement of these goals (Bebbington & Unerman, 2018; Yañez et al.,

2019). Universities are social institutions that they should maintain and reproduce norms and values of a society (Godemann et al., 2014; Chatelain-Ponroy and Morin-Delerm, 2016). This means that universities have an implicit social responsibility embedded in its mission as they are centres for the creation and transfer of knowledge to society (Adams, 2013; Yañez et al., 2019). Many universities are often larger than private enterprises so they contribution to national economies significantly (Ball & Grubnic, 2007). As a result, different scholars have called for exploring the role of stakeholder engagement for sustainable development in universities (Godemann et al., 2014). They have higher accountability expectations because of their high level of public interest derived from its societal role (Marroun & Lodhia, 2017). The need to pursue SDGs provides universities and opportunity to manage and account for their social, environmental and economic impact of their activities as way of achieving legitimacy and gaining public trust (Farneti et al., 2019).

While there is substantial literature in regards to sustainability and universities, SDG-related research is a field that is in its early stages of development in the higher education discipline (Leal-Filho et al., 2019a). Recent studies have been addressed to examine the implementation of the SDGs at the educational dimension from two approaches: first, the proposal of methods for integrating SDGS at the curricula and extracurricular levels (Zamora-Polo and Sanchez-Martin, 2019); second, teaching methods and pedagogies for SDGs (Albareda et al., 2018). Results from these studies reveal that the practical integration of SDGs in teaching activities is until limited (Leal-Filho et al., 2019a). However, to the best of our knowledge, the research on how SDGs have been implemented in strategic planning processes of universities is lacking. Consistent with Bebbington and Unerman (2020), accounting and management scholars have been slow to engage in SDGs-motivated research compared to other social sciences disciplines. In line with this, Bebbington and Unerman (2018, p. 3) “accounting academics can and should play a substantive role in helping embed policy and action at an organizational level in a way that contributes toward achievement of the SDGs”. It is generally manifested that accounting should play a key role in the achieving of a sustainable society (Williams et al., 2011) and the use of tools and techniques from strategic management might improve the implementation of sustainability in the decision-making process of an organization like the university (Leal Filho et al., 2019b).

To respond to this emerging field of research that has been under investigated, this paper examines the extent to which Spanish universities have aligned themselves with the

achievement of SDGs from a strategic perspective. To do this, the authors analyzed the actions identified in existing strategic plans of Spanish universities to find out the proportion of actions aimed at achieving the SDGs with regard to the total population of actions.

Strategic planning reports in universities are used to communicate their commitments and efforts to the pursuit of sustainability goals (Bieler & McKenzie, 2017). Introducing sustainability actions in strategic plans would encourage the organizational change towards sustainable development in the university setting (Yañez et al., 2019). Consistent with Leal Filho et al. (2019b), strategic planning is of critical importance for universities because it is setting the organizational goals, it provides the essential guide for management and it helps to improve the efficiency of universities. Thus, in an era of advancing toward a sustainable university, strategic planning represents a key process for the continuous improvement in universities in this regard. This reinforces the statement manifested by Adams and Frost (2008), who stipulated that the integration of sustainability aspects into strategic planning is vital for its incorporation in decision-making processes and it is embeddedness into mainstream strategy.

Institutional framework for the commitment to sustainability in the university setting

An international approach

The commitment of universities toward sustainability started in 1990 with the signatory of Talloires Declaration which defined the role of a sustainable university (Owens, 2017). Currently, this initiative has been signed by more than 500 universities being managed by the association of University Leaders for a sustainable future (Yañez et al., 2019).

At organizational level, the United Nations (UN) and European Union (EU) have adopted a leading role in the advancement towards sustainable development in the higher education context (Moggi, 2019). For instance, the Local Agenda 21 was approved in the UN Summit on Environment and Development in Rio (1992) to enhance public awareness on environmental issues within the university setting (Yañez et al., 2019). In Europe, the Lisbon Strategy, the European Strategy for Sustainable Development and the document Europe 2020 include some issues aimed at highlighting the role of universities as change agents for sustainability (Moggi, 2019). More recently, the Decade of Education for Sustainable Development (2005-2014) and the Principles for Responsible Management Education (founded in 2007) represented a qualitative step to the

advancement towards sustainability at the university level, especially in the educational dimension (Yañez et al., 2019).

Despite of the previous declarations, the sustainable development agenda acquired a renewable relevance with the approval of the Agenda 2030 and its 17 SDGs because all 193 UN Member States have shown their commitment to pursuit the SDGs by 2030 (Bebbington and Unerman, 2018). These 17 SDGs, that follow and expand on the 8th Millenium Development Goals (Leal-Filho et al., 2019a), are aligned with the achievement of social, ecological and environmental outcomes with the aims of addressing “global challenges crucial to the survival of humanity; set environmental limits and critical thresholds for the use of natural resources; and recognize that the eradication of poverty must go hand in hand with strategies that promote economic development” (Ferrer-Estevez and Chalmeta, 2021, p. 2). To realize the achievement of 17 SDGs, it has been defined a measurement and performance framework composed of 169 targets and 232 indicators (Bebbington and Unerman, 2018). They are applied, among others, in the following areas: poverty, hunger, health and well-being, education, gender equality, water, energy, decent work and economic growth, climate change and environmental protection. As it can be appreciated, these goals are not independent, but are interconnected since they incorporate social, economic and environmental dimensions in an integrative manner to achieve a sustainable society for the future (Ferrer-Estevez and Chalmeta, 2021). Although the adoption of the 17 SDGs is not legally required, it is socially expected and desired that any organization, both public and private, consider in its strategy the implementation of these goals in order to achieve a sustainable society.

The Spanish setting

From an institutional level, the Spanish government has approved different pronouncements to the advancement toward sustainable development (Crespo et al., 2017). One major legal initiative was the approval of the Law 2/2011 on Sustainable Economy which incorporates some aspects related to the inclusion of environmental and sustainability themes into the curricula of universities (Reverte, 2015). Following EU policies, the Ministry of Education launched, within the 2015 University Strategy, the report “2015 University Strategy: Contribution of universities to socio-economic progress in Spain”. This report stated the social responsibility as a key element in the higher education system (Larran and Andrades, 2017).

To respond to these institutional pressures to the advancement toward sustainability, some Spanish universities have showed their commitment to sustainability through the signatory of different charters and declarations (Zorio-Grima et al., 2018). For example, 3 public universities have signed the Talloires Declaration, while the Higher Education Sustainability Initiative for Rio + 20 has been signed by 10 Spanish universities. The United Nations Global Compact initiative has also been signed by 10 Spanish universities, 8 by public and 2 by private universities. Finally, 28 Spanish universities are listed in the Universitas Indonesia (UI) GreenMetric World University Ranking initiative for the 2019 year. Currently, 38 Spanish universities (31 public and 7 private) are listed in the Times Higher Education Impact Ranking, which is the only global performance instrument that measures universities against the UN SDGs.

To reinforce the commitment of Spanish universities toward sustainability, the Conference of Rectors of Spanish Universities² (CRUE acronym in Spanish) has showed its involvement with the progress to sustainability. In 2009, CRUE created a sustainability committee to respond to the concern for environmental management of some Spanish universities that had engaged with its adoption. In line with the 2030 Agenda, this sustainability committee has prepared three reports to promote the commitment of Spanish universities toward the achievement of the 17 SDGs since 2018. This sustainability committee has a working group on sustainability assessment that annually produces a report on the level of the environmental sustainability of Spanish universities. This working group is composed of 27 Spanish universities (24 public and 3 private).

On a governmental sided, the Spanish government approved on June 29, 2018 its Action Plan for implementing the 2030 Agenda for Sustainable Development aimed at pursuing the 17 SDGs. This Action Plan includes manifests that education for sustainability is of vital importance for achieving SDGs.

Based on the previous comments, the institutional framework that has been created can help universities to normalize their commitment to sustainability. Consistent with previous literature (Soobaroyen and Ntim, 2013), the adherence to these initiatives represent a desirable behaviour in an institutional setting. From this perspective, universities have a moral obligation with society and the commitment to sustainability is a socially and expected behaviour to be adopted by them (Suchman, 1995).

² The Conference of Rectors of Spanish Universities is a non-profit organization composed of 76 Spanish universities (50 public and 26 private). This organization is the main interlocutor between universities and the Central Government.

However, the signatory of declaration, per se, does not mean a remarkable commitment to sustainability (Dlouhá and Pospíšilová, 2018). Indeed, the UN Decade on Education for Sustainable Development has not had the desired effect despite their timeless (Leal Filho et al., 2018). Nowadays, governments and other bodies have placed their expectations on the UN SDGs and its potential impact on achieving a sustainable university (Leal Filho et al., 2018, 2019a).

Literature review: Linking SDGs to strategic planning. An opportunity to achieve a sustainable university

The literature on sustainability and universities has been widely addressed to examine the practice of assessment and/or reporting (Alonso-Almeida et al., 2015; Ceulemans et al., 2015a). It has been noted that the undertaking of a sustainability report supposes the use of a tool for measuring the social and environmental impact of any organization (Vagnoni & Cavicchi, 2015; Yañez et al., 2019). Thus, sustainability assessment can be identified as the preparatory phase in the reporting process (Ceulemans et al., 2015b).

Meanwhile, the research on how strategic planning and management can be linked to sustainability is rather limited and less studies have been developed in comparison with papers based on assessment and reporting practices (Lee et al., 2013; Leal Filho et al., 2019a). Some authors have analyzed the extent to which sustainability matters are embedded in the mission and vision statements of universities (Mattos et al., 2016). Other scholars have explored the role of planning in implementing sustainable development in universities (Leal Filho et al., 2019b). Finally, some authors have examined the extent to which strategies on sustainability are incorporated in strategic plans of universities (Larran et al., 2016; Bieler and McKenzie, 2017). Regardless the type of the study performed, results from these past studies have documented that the alignment with sustainability through strategic planning and management is rather low and lags behind compared to other sectors (Adams, 2013).

These results demonstrate that there are several barriers that could hinder the organizational change for sustainability in universities. A common barrier manifested in the literature is the lack of management commitment and support to the introduction of sustainability practices and strategies in universities (Son-Turan and Lambrechts, 2019). Another factor that has been stated is the lack of compulsory regulations that enforce the adoption and implementation of sustainability practices (Leal Filho et al., 2018). Within the UN SDGs setting, it has been manifested its lack of binding character which could

make more difficult the achievement of these goals (Ferrer-Estevez and Chalmeta, 2021). Another common barrier is the lack of involvement of stakeholders with regard to the implementation of sustainability practices in universities (Disterheft et al., 2015). In line with this, some scholars manifested the lack of pressure from society as a barrier regarding the commitment to sustainability in universities (Ferrer-Balas et al., 2008; Larran et al., 2015). Also, the complex structure of universities has been stated as key factor impeding the engagement with sustainability (Hoover and Harder, 2015). Finally, the lack of financial and human resources has been commonly cited as important obstacles to overcome (Ceulemans et al., 2015ab).

Theory

During the last twenty years, the institutional framework has helped to normalize and standardize the adoption of practices related to sustainability in universities (Moggi, 2019). Universities are complex organizations and this means that their commitment to sustainability could be depending on how they strategically respond to these institutional processes rather than on organizational characteristics (Higgins and Larrinaga, 2014; Vagnoni and Cavicchi, 2015). Consistent with previous literature, the Abrahamson (1991) and the Oliver (1991) models are used to explain whether the alignment with SDGs in the strategic plans of Spanish universities might be a response to institutional forces to achieve conformity with social expectations and this can help to gain legitimacy. Thus, legitimacy-seeking did not seem the only theoretical motivation behind the commitment to the achievement of SDGs in the university setting. Consistent with Vinnari and Laine (2013), the wide variety of potential strategic explanations offered by Abrahamson's (1991) and Oliver's (1991) is more suitable for a relatively underexplored topic.

Abrahamson's model (1991) is conceptualized to explain how organizations respond to different managerial innovations by identifying four main strategies: efficient-choice, forced-selection, fad and fashion. Extracted from Vinnari and Laine (2013, p. 1111) the efficient-choice strategy is "premised upon the beliefs that organisations are able to freely choose an innovation, that they possess some certainty over their objectives and are able to evaluate the efficiency of the innovation in terms of whether it enables the attainment of those objectives". Based on this type of strategy, organizations adopt an innovation to maximize its efficiency and performance adapted to a current environment. For this study, the inclusion of SDGs in strategic plans through actions and indicators

could help to improve the accountability for sustainability performance of universities (Tan and Egan, 2018).

The forced-selection strategy assumes that “certain outsider organisations, often political or other governmental bodies, are strong enough to impose their will on other organisations to the extent that those organisations adopt an innovation, regardless of whether it fits with their goals and interests” (Vinnari and Laine, 2013, p. 1111). For this study, national and international organizations have developed an extensive body of institutional declarations toward sustainability that can coerce universities to adopt an innovative strategy on sustainability to respond these institutional pressures (Moggi, 2019).

The fad and fashion strategies stem from the adoption of an organizational behaviour based on uncertainty in which case organizations tend to imitate similar strategies and practices to gain legitimacy because they are sensible to what their peers are doing (Di Maggio and Powell, 1983; Higgins and Larrinaga, 2014; Zhao and Patten, 2016). When a pioneering university is aligned with SDGs, others may imitate this behaviour because it is configured as legitimising in an uncertainty environment (Yañez et al., 2019). As long as there are no universities that lead the alignment with the SDGs, the other universities will not feel the pressure to imitate such behaviour.

The 2030 Agenda for Sustainable Development also suggests the need to find more arguments that explain the different strategies adopted by Spanish universities to respond to institutional pressures derived from this initiative. To do this, we use the conceptual framework proposed by Oliver (1991) that identifies five main strategies to respond to institutional processes: acquiescence, compromise, avoidance, defiance and manipulation which ranges from conformity to resistance.

Acquiescence strategy may take three forms: habit, when a practice is persistently adopted and considered as a non-imposed norm (a taken-for-granted practice); imitation, when a practice is copied from peer organizations; and compliance, when organizations consciously obey rules and accept norms (Oliver, 1991). Combining the theoretical lenses of these three tactics with the categories stated by Abrahamson, we can assume that habit might be aligned with the efficient-choice perspective. For this study, this means that a university strongly engaged with sustainability has internalized and institutionalized into their mainstream strategy through the repetitive and habitual adoption of sustainability practices. This might help to enhance the efficiency and performance of universities (Vinnari and Laine, 2013). Following this logic, it is assumed that the imitation tactic is

aligned with the fad and fashion perspectives because, in a context of uncertainty, universities might copy successful practices adopted by their leading peers (Abrahamson, 1991). Finally, the tactic of compliance shares conceptual elements with the forced-selection perspective. Within this approach, universities may strategically choose the compliance with external pressures because they need the approbation of society to be legitimate (Oliver, 1991).

Compromise strategy, represented through balance, pacify and bargain tactics, is adopted when organizations are confronted with conflicting demands and expectations from external institutional pressures (Oliver, 1991). While avoidance refers to the strategy adopted by an organization when trying to exclude the need of conformity, defiance is a more resistant strategy to institutional pressures and manipulation is the most active response to these pressures because it tries to exert power over the content of the expectations resulting from these institutional pressures (Oliver, 1991).

Methods

Sample

Consistent with the statistical data of the Ministry of Universities, the Spanish university system currently consists of 84 universities, 50 of which are public and 34 are private. The present study has selected those public universities that have a publicly available and current strategic plan that contain action lines to be implemented within the strategic process. Compared to private universities, public higher education institutions in Spain have more political pressure because their funding depends on the government and this would suppose that they could include SDGs in their strategic plans to gain legitimacy from their most powerful stakeholder (Andrades et al., 2021). Public universities could have a fear of losing legitimacy in case of not attending a socially expected practice, like the alignment with SDGs (Hooghiemstra & van Ees, 2011). This has supposed that, until 22 April 2021, we have found only 20³ universities that meet these criteria, which represents 40% of the total of Spanish public universities. By itself, this represents an evidence of the low commitment, at least a strategic level, towards the achievement of sustainable development goals and plans.

To describe the profile of the sample, we have classified the set of Spanish universities according to their institutional size. Drawing on data published by the

³ One of the 20 universities analyzed had a master plan at the time of the search process as a preliminary step to the approval and implementation of its strategic plan.

integrated Spanish university information system for the period 2017-2018, the university size can be measured as the number of employees. Consistent with these data, the average number of employees of the 20 universities sampled is 3,400 employees. A more detailed analysis of these 20 universities lead us to note that there is a balanced proportion of large, medium and small universities. This means that the sample is composed of the heterogeneous profile of the universities according to their size. According to the university size, it would be expected that larger universities, by its higher exposure to public scrutiny and they greater visibility, are more likely to align with SDGs in their strategic plans (Garde et al., 2017). Consistent with these arguments, larger universities have an implicit moral obligation with society and this reinforces the idea that they would be more oriented to the alignment with SDGs because it is socially expected (Soobaroyen and Ntim, 2013).

Data collection and analysis

We used a content analysis of the strategic plans publicly available at these 20 Spanish universities to examine the extent to which they have contemplated the contribution to SDGs through their action plans. In accordance with Hackston and Milne (1996, p. 84), content analysis is “a method of codifying the text (or content) of a piece of writing into various groups (or categories) depending on selected criteria”. Krippendorff (1980, p. 21) states that “content analysis is a research technique for making replicable and valid inferences from data according to their context”. This method has been widely used in previous research on social and environmental accounting (Patten et al., 2015). With regard to the reporting medium, strategic plans are reports that contain information on strategies and commitments assumed by any organization in accordance with the needs of stakeholders (Bieler and McKenzie, 2017). This involves that a strategic plan could explain the organization as whole (Gray et al., 2001). The data collected through the strategic plans of these 20 Spanish universities was carried out in April 2021.

To measure the extent to which SDGs are contemplated as action lines in the strategic plans of Spanish universities, we designed an instrument tool according to the literature and the institutional framework. This was performed by adopting an integrated consideration of the social, environmental and economic dimensions of the sustainable development concept through a multi-stakeholder approach. This process allowed us identifying 27 key indicators to measure the presence of the SDGs in the strategic plans according to its incorporation as action lines. These 27 indicators are grouped in the main

dimensions associated with the university activity: corporate governance (11 items); education (4 indicators); research and transfer of knowledge (3 items); people (5 items); community outreach (4 items).

Once identified these 27 items, the next step was to create an un-weighted index assigning 1 for presence and 0 for absence which means that all indicators are equally important (Saez-Martin *et al.*, 2017). This index was calculated by scaling the sum of the SDGs action lines a university provides by the maximum number of action lines that could be provided. For each university, the index was measured as the sum of the presences of SDGs action lines provided by each Spanish university by the 27 indicators that make up this instrument tool. A university that has contemplated 10 items in its strategic plan means that this institution has implemented a 37.03% of SDGs. For each dimension, the index was measured as the sum of the total SDGs action lines that each Spanish university contemplated for that dimension by the total number of action lines contemplated in that dimension. For the corporate governance dimension, that it is composed of 11 indicators, a university that contemplated 7 items related to this dimension means that this institution has implemented a 63.63% of all information items that are contained in such dimension. For the 20 Spanish universities, the index was calculated by adding all presences of SDGs action lines provided by these 20 Spanish universities divided by the 27 indicators comprising the instrument tool multiplied by these 20 Spanish universities sampled.

In addition to this, we examined the extent to which SDGs, sustainability and social responsibility were integrated both in the mission statement of each university and in the vision. This analysis was also reproduced to identify whether each university sampled defined SDGs as a transversal strategy in their strategic plans. Finally, and from an institutional approach, we examined whether each university has recently undertaken a sustainability report as well as they have an administrative structure within their senior management team related to sustainability.

To improve the reliability in the process of coding the data, three researchers coded a sample of the 20 universities to avoid potential subjectivity biases (Larran *et al.*, 2019). A fourth researcher ensured that the three coders did not have different interpretations to improve the accuracy of the coding process (Luque and Larrinaga, 2016).

Results

Table 1 shows the relatively low proportion of strategic plans with mission and vision statements disclosing sustainability, social responsibility and sustainable development goals. It appears to be that Spanish universities are more inclined to use the term sustainability compared the SDGs and social responsibility. Two possible reasons can explain this: first, the appearance of SDGs is relatively recent and it is possible that universities may need a longer period of time for their implementation in the mission and vision statements (Leal-Filho et al., 2019). Second, sustainability is a broader concept compared to social responsibility because it integrates the triple bottom line: social, economic and environmental dimensions (Larran et al., 2019). Also, sustainability is a more common topic within the public sector in comparison with social responsibility. In spite of this, few universities sampled have inserted in their mission and vision statements the term sustainability. Consistent with these results, the proportion of Spanish universities that have contemplated the SDGs, sustainability or social responsibility as a transversal strategy is reduced.

From the 20 universities, four higher education institutions contain an administrative structure related to sustainability aspects in their senior management team. Meanwhile, half of the universities sampled have recently published a sustainability report, much of which expressed their alignment with the objectives of sustainable development in the explanation of the GRI content. Likewise, some of these universities have a persistent commitment to the undertaking of sustainability reports and this practice has become a habit.

[Insert Table 1 here]

Table 2 reveals the extent to which the 20 Spanish universities sampled have contemplated in their strategic plans the achievement of SDGs through the definition of action lines. The total mean reveals that a relatively low presence of SDGs action lines in the strategic plans of Spanish universities. In depth, these 20 Spanish universities have contemplated 27.78% of the different items used to measure the extent to which SDGs are contemplated in their strategic plans. Breaking down the results by dimension, it can be appreciated that the attention devoted by universities to the inclusion of SDGs in the training of students is practically missing. With regard to the research and transfer of knowledge dimension, the presence of action lines aligned with SDGs is somewhat below the total mean (18.33%). In an intermediate position, the extent to which Spanish

universities have incorporated SDGs action lines related to the governance dimension is close to the total mean (25.00%). On the other hand, Spanish universities have shown a greater commitment to the achievement of SDGs through the incorporation of action lines in their strategic plans. The results show that Spanish universities have manifested their greater commitment to the implementation of SDGs action lines from the people dimension (52.00%) when compared to the total mean. Also, Spanish universities have contemplated more SDGs action lines from the community outreach dimension (36.25%) in comparison with the total mean.

In any case, the global impression is that, using the strategic plan as an instrument, there is a large room for improvement in the commitment to the achievement of SDGs in Spanish universities. Although some Spanish universities have tried to give a strategic response to institutional pressures aimed at improving their commitment to sustainability through the achievement of SDGs, the set of Spanish universities have not sufficiently engaged with SDGs. Reinforcing this, the low number of universities with a current strategic plan that contemplates the definition of action lines manifests their low commitment to sustainability.

[Insert Table 2 here]

Table 3 presents the results classifying the number of SDGs action lines by item and dimension. For the education dimension, the 20 Spanish universities have only contemplated some action lines related to the integration of SDGs in the training of students. However, none university has implemented any action line aimed at training faculty on SDGs or to develop a degree (undergraduate or postgraduate) focused on these SDGs. This finding is consistent with what has been stipulated in the literature in regards to the lack of faculty and students training on sustainability themes as a barrier hindering the implementation of sustainability in any organization (Moggi, 2019). It is a challenging issue the integration of sustainability themes into the curricula of universities when faculty responsible for training future managers, engineers and other professionals are not properly trained in such matters.

Focusing on the research and transfer of knowledge dimension, a slightly higher commitment to the achievement of SDGs is shown according to the presence of actions raised. Spanish universities have shown a balanced commitment to sustainability according to the three indicators associated with the research and transfer of knowledge dimension. As long as the number of research teams working on sustainability is low, the possibility of including these themes into the university curricula is rather limited because

few scholars have an expertise in this field. The literature has revealed that the lack of involvement in sustainability research by faculty may show a lack of awareness and interest with regard to the meaning of this concept and its implications (Ferrer-Balas et al., 2008; Waas et al., 2011).

Regarding the corporate governance dimension, data contained in Table 3 reveals that Spanish universities have manifested a certain commitment to the implementation of actions aimed at reducing energy consumption or to producing alternative energy, followed by those actions aimed at enhancing sustainable mobility and to promoting responsible consumption or to improving accessibility. This may be in response to the institutional commitment of universities toward environmental sustainability. Since many years ago, CRUE has been working for the environmental awareness among Spanish universities and this may be created a non-imposed norm to be adopted by these institutions. However, the 20 universities sampled have not contemplated their commitment to reducing food waste in university canteens or to the conservation of biodiversity. This reveals that the strategic response to some environmental concerns need to be addressed by Spanish universities in the near future in order to achieve the different goals associated with the environment, especially those related to climate, ecosystems and sustainable communities.

Based on the people dimension, the results show that Spanish universities are more engaged with the implementation of actions related to fostering dialogue and communication channels as well as to improving inclusion and diversity. On the other hand, less attention has been devoted to the provision of scholarships for low-income students. In a period of crisis, this could make it difficult to achieve the Goal 10 aimed at reducing inequalities.

With a focus on the community outreach dimension, Spanish universities have shown their greater commitment to the foster of university networks and alliances and this is consistent with the alignment with the achievement of the Goal 17. Also, they have also shown some commitment to the enhancement of volunteering programs and, to a lesser extent, to the promotion of international cooperation. Nevertheless, these 20 universities have not contemplated any action aimed at promoting the inclusion of external stakeholders in the governing body of universities. Consistent with previous literature, the governance model of Spanish universities is typical of European continental countries, whose public management style does not promote efficiency and accountability compared to the Anglo-Saxon regions (Andrades et al., 2021). This reinforces the idea of

the lack of an accountability for sustainability externalities in the Spanish university setting (Ortiz et al., 2018).

[Insert Table 3 here]

With a greater level of detail, we have found a common pattern among the universities with the highest level of commitment to the achievement of the SDGs through their strategic plans. To a large extent, these universities seem to have adopted different strategies to institutionalize their alignment with the implementation of SDGs.

Within their commitment to sustainability, the University of Carlos III has been working in undertaking reports aimed at informing of the level of compliance and alignment with SDGs. Its most recent report is from the 2018 year and its purpose is to publicize the actions that have been carried out at this university regarding the fulfilment of the Sustainable Development Goals during 2018. To operationalize this commitment, this university has defined a set of indicators aimed at revealing their strategy in terms of a socially responsible university. These indicators are associated with the integration of social responsibility in the curricula of the university, the orientation of research activity toward social responsibility, the enhancement of relationships with local communities or the promotion of development and cooperation, among others.

The University of Huelva has manifested its institutional commitment to the achievement of SDGs in different ways. The Vice-Rector's Office for Strategic Planning, Quality and Equality, in its institutional declaration toward the achievement of SDGs, claims that the University of Huelva is working for assessing the SDGs in their strategic planning process and deploy them globally to all areas of the University. In fact, the last sustainability report for the period 2019-2020 shows the commitment and alignment with the achievement of SDGs.

The University of Cantabria, by means of its commitment to and experience in sustainability reporting, has embedded sustainability in a transversal way at different levels of university. Its strategic plan for the period 2019-2023 contemplates sustainability as a key strategic element. Within this strategic plan, this University approved its Management Plan for University Social Responsibility for the period 2019-2023 to support the implementation and development of sustainability in the institution at all levels. This Plan establishes the contribution of the University of Cantabria to the SDGs.

The University of Santiago has been engaged with sustainability practice since 2004 when it was published its first report to measure their social and environmental

performance. This means that the strategic response of this university toward sustainability is contained in its last strategic plan.

The University of Basque Country is strongly engaged with sustainability. Since the approval of the Agenda 2030, the strategic response by this university was to undertake a report aimed at highlighting its commitment to the achievement of SDGs. This university has identified a set of indicators aimed at measuring its contribution to sustainability through the SDGs. In addition to this, this university is undertaking sustainability reports since the period 2014-2015.

The University of Granada, which is the institution that has the master plan, and UNED, are clearly aligned with the contribution of SDGs. On the one hand, the Strategic Planning Division within the Vice-Rector's Office for Institutional Policy and Planning at the University of Granada has contemplated for each strategic area the alignment with SDGs for each strategic area. Also, the Rector of the UNED states in the introduction section of the strategic plan 2019-2022 of its university that the current environment encourages universities to give a strategic response to the contribution of the objectives.

Discussion

This paper is addressed to fill a research gap in the field of the achievement of SDGs in the university setting. To do this, we have used the strategic plan as an instrument to measure the level of implementation and the commitment toward the contribution to SDGs by universities. The Spanish case is of relevance because it has been created an institutional framework to promote sustainability in universities during the last 20 years.

The results of this paper reveal that some Spanish universities are trying to give a strategic response to the institutional pressures derived from the Agenda 2030 and its SDGs. By analysing the strategic plans of 20 Spanish universities, we have found that some of these institutions, regardless of their size, have internalized the commitment to contribute to the achievement of SDGs and they have contemplated them in the mission or vision statements as well in the action lines defined in the strategic plan.

According to the Abrahamson (1991) and Oliver (1991) models, we suggest that these Spanish universities have adopted three main strategic responses to institutional pressures (Table 4).

[Insert Table 4 here]

Some universities (e.g. University of Cantabria) have institutionalized its commitment to sustainability since many years ago and they have persistently maintained

this commitment over time. This might help them to contribute to the achievement of SDGs through their strategic plans. Consistent with Oliver (1991, p. 152), these universities have adopted the tactic of habit within the acquiescence strategy. This tactic refers to “unconscious or blind adherence to preconscious or taken-for-granted rules or values”. Following this logic, when a practice is considered an expected behaviour in society, being a non-imposed norm, organizations reproduce them without being aware of the existence of institutional influences (Oliver, 1991). This tactic to respond to institutional pressures could help universities to gain legitimacy through the conformity to general accepted practices (Fallan, 2016). Combining with the efficient-choice perspective of Abrahamson (1991) model, the continuous commitment to sustainability could help universities to introduce some improvements in their efficiency and performance (Vinnari and Laine, 2013).

Other universities could learn from those top-performing universities in sustainability and they could adopt the tactic of imitation as a strategic response to institutional pressures (Oliver, 1991). When there is uncertainty, universities might respond to institutional pressures by copying other peers that have successfully implemented any practice that it is considered as a taken-for-granted action (Bebbington et al., 2009). The 2030 Agenda is a relatively new institutional arrangement, so its adoption may represent for some universities a strategic response based on a fashion and fad managerial innovation because they have not previously shown a clear commitment to sustainability (Vinnari and Laine, 2013). In this way, universities can acquire legitimacy through the imitation of a practice that has been adopted by other university which also reinforce its acceptance in society (Andrades et al., 2021). Consistent with Bebbington et al. (2009, p. 615), “organizations are highly sensitive to what their peers are doing, and therefore mimetic pressure may be more important than regulations”.

Other universities might have adopted the tactic of compliance to respond to institutional pressures related to the SDGs. These universities are those that have had a low presence of SDGs action lines in their strategic plans. Although the level of implementation is low, the mere presence of some SDGs might be a compliance strategy because the “degree of legitimacy attainable from conformity is high” (Oliver, 1991, p. 159). Combining with the forced-selection perspective of Abrahamson (1991) model, the tactic of compliance means that universities have consciously accepted norms from institutional pressures and the conformity to these pressures is an enough condition to be legitimate (Andrades et al., 2021).

Despite the previous considerations, there is a long way to go for the set of Spanish universities to align their behaviour and strategy to the achievement and contribution of SDGs. Five years after the launching of the 2030 Agenda, it is required more time to see how the implementation of SDGs in the strategy of universities can evolve as well as it is important to appreciate how the next strategic plans developed by other universities in Spain are aligned with SDGs. One of the main challenges for the future is the need to increase the awareness among faculty with regard to sustainability and SDGs. The results have demonstrated the lack of strategies and actions aimed at providing any training on sustainability to faculty and students. Consistent with previous studies, the lack of knowledge of sustainability among faculty members represents an important obstacle to overcome because this could explain why the extent to which sustainability themes are integrated into the curricula of universities remains underdeveloped (Andrades et al., 2018). This lack of awareness and training among faculty members is aligned with their lack of understanding of the sustainability concept (Waas et al., 2011). This could explain why faculty members are not participating in research projects related to sustainability themes (Ferrer-Balas et al. 2008). In accordance with these arguments, faculty did not seem to be accepted their role as educators of present and future graduates who will be responsible for caring for the planet and making decisions in a more sustainable manner (Velásquez et al. 2005). The inclusion of sustainability themes into the curricula of universities might be a strategic response to the current realities of the business environment and this may give to the future graduates the skills and competencies that they need to create economic growth as well as a sustainable future for people and the planet (Andrades et al., 2018).

Conclusions and limitations

The results of this paper reveal that, although some universities have adopted different strategies to respond to institutional pressures for contributing to the achievement of SDGs, there is a large room for improvement among the set of Spanish universities. One of the main challenges that need to be addressed in the near future is the awareness and sustainability training among faculty members. By giving a strategic response to this challenge, universities could bring curricula more closely to the realities of the current socioeconomic environment.

As other papers, this study has its own shortcomings. First, the sample of this research is reduced to 20 universities. In the future, it could be extended to other

universities when they approved their strategic plan. Second, the focus of the paper is located on the Spanish setting. Thus, a future paper could examine whether different cultural backgrounds can affect the strategic response by universities to the achievement of SDGs. To do this, the sample requires the inclusion of universities from other European countries. Third, the paper is descriptive and exploratory by studying a sample of universities. To achieve meaningful results, a future study could adopt a qualitative approach by engaging with practice. This means to select those universities that have experienced any practice related to sustainability.

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Table 1. Incorporation of SDGs and sustainability into the university structure

Dimension	Presence	%
Inclusion of SDGs in the mission	1	5%
Inclusion of sustainability in the mission	6	30%
Inclusion of social responsibility in the mission	3	15%
Inclusion of SDGs in the vision	3	15%
Inclusion of sustainability in the vision	7	35%
Inclusion of social responsibility in the vision	3	15%
Inclusion of SDGs/sustainability/social responsibility as a transversal strategy	3	15%
Proportion of universities with a recent sustainability report	10	50%
Proportion of universities with an administrative structure related to sustainability	4	20%

Table 2. Number and proportion of SDGs action lines with regard to the total of action lines defined by Spanish universities

Dimension	Presence of action lines aligned with SDGs
Education	3,75%
Research/transfer	18.33%
Corporate governance	25.00%
People	52.00%
Community outreach	36.25%
Total	27.78%

Table 3. Presence of SDGs action lines divided by item and dimension

Education (Training-Learning)	Presence
1. Actions related to the integration of SDGs in the training of students	15.00%
2. Actions related to the integration of SDGs in the training of students	0.00%
3. Actions related to the integration of SDGs in the training of students	0.00%
4. Actions related to the development of degrees related to the SDGs	0.00%
Total mean	3.75%
Research and transfer of knowledge	Presence
5. Actions related to enhance the research on SDGs, sustainability or social responsibility	20%
6. Actions related to communicate the presence of research projects where universities that participate are from a developing country	15%
7. Actions related to social entrepreneurship	20%
Total	18.33%
Corporate governance	Presence
8. Actions related to social clauses	20.00%
9. Actions related to reduce food waste in university canteens	0.00%
10. Actions related to reducing water consumption or reusing water	25.00%
11. Actions related to reducing energy consumption or to producing alternative energy	60.00%
12. Actions related to enhancing sustainable mobility	45.00%
13. Actions related to improving accesibility	35.00%
14. Actions related to contemplating the implementation of an environmental management system	20.00%
15. Actions related to conservating biodiversity	0.00%
16. Actions related to promoting responsible consumption	35.00%
17. Actions related to managing waste residues	20.00%
18. Actions related to fostering climate change awareness	15.00%
Total	25.00%
People	Presence
19. Actions related to providing scholarships for low-income students	30.00%
20. Actions related to fostering dialogue and communication channels	70.00%
21. Actions related to promoting equality	40.00%
22. Actions related to enhancing a healthy university and to promoting labour risk prevention	50.00%
23. Actions related to improving inclusion and diversity	70.00%

Total	52.00%
Community outreach	Presence
24. Actions related to fostering university networks and alliances	75.00%
25. Actions related to enhancing volunteering programs	45.00%
26. Actions related to promoting international cooperation	25.00%
27. Actions related to promoting the inclusión of external stakeholders in the governing body of universities	0.00%
Total	36.25%

Table 4. Strategic responses adopted by Spanish universities to institutional pressures

Oliver theoretical proposal (1991)	Abrahamson's (1991) model	Outcome
Habit	Efficient choice	A persistent practice that helps to maximize the efficiency and performance of universities
Imitation	Fad/Fashion	Universities respond to uncertainty by imitating successful practices to be legitimate
Compliance	Forced	Universities are obeying accepted norms imposed by outsider universities to be legitimate