

University sustainability assessment and reporting: preliminary findings from the Italian context

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Abstract

With universities playing a key role in creating and promoting sustainable development, they are inevitably called upon to report to stakeholders their active commitment to facing social and environmental issues using comprehensive and clear reporting tools. GRI Standards provide guidelines to help write these reports, yet these can lead universities to prepare heterogeneous documents that are difficult to understand and compare in terms of both information and results. Considering Italian state universities, this paper examines the materiality matrix, a tool used to disclose social, environmental and economic efforts toward the stakeholders. Preliminary results seem to show that somehow universities have misunderstood the GRI 2016 guidelines concerning the materiality matrix. The paper concludes by outlining the limitations of the study and offering suggestions for future research.

Keywords: *Sustainability; reporting; Italian higher education system; GRI standards; materiality matrix.*

1. Introduction

In the last decades, sustainable development has attracted the attention of organisations, both private and public, including educational institutions at all levels. In this context, the relevance of higher education institutions (HEIs) has been widely recognised as meaningful in that they act as drivers of sustainable change (Barth and Rieckmann 2012; Disterheft et al. 2013; Lozano et al. 2013). In particular, universities not only have the duty to teach and transmit knowledge, but they must also act as responsible institutions by advancing research to stimulate sustainable development and change (Barth and Michelsen 2013). Some initiatives to foster universities' sustainable activities have taken hold, such as the new global university rankings aimed at assessing universities for their contribution to sustainable development goals (e.g., The Times Higher Education Impact Rankings). Moreover, some governments have developed sustainability indicators to determine their funding lines to motivate universities to act sustainably. HEIs are thus called upon to improve the dialogue with government and society by reporting and disclosing their sustainable activities and efforts that foster sustainable development. However, the lack of standardised standards has led to the production of different documents across HEIs, making it difficult to clearly disclose or compare information (Fiorani and Di Gerio 2022). Starting from these assumptions, this study attempts to analyse sustainable reports in the Italian higher education system (IHES) by investigating if and how state universities are adopting the so-called materiality matrix and how the standards are being applied. A materiality matrix is a tool that considers key aspects and indicators that reflect an organisation's social, environmental, and economic impacts, or those that influence stakeholder decisions, thereby identifying material issues that deserve to be included in the report (Hsu, Lee, and Chao 2013).

The paper is organised as follows: section 2 presents a brief literature review on sustainability reporting in HEIs; section 3 explains the methodological approach; section 4 describes the findings; and the conclusions are provided in section 5.

2. Literature review

Due to the necessity to act sustainably, HEIs play an essential role in providing and promoting helpful pathways to sustainable action. HEIs, indeed, have a twofold responsibility: delivering trustful results that can help both citizens and firms on the path to sustainability, and being reliable institutions and points of reference when it comes to representing virtuous actions in this sense and stimulating organisational change (Ceulemans, Lozano, and Alonso-Almeida 2015). Especially for the latter, universities should externalise their institutional role by communicating a coherent and reliable image that represents all the virtues expected of them. In this sense, reporting activities, intended as means and measures to collect, process, and present information, help organisations reduce the complexity of information by making

data accessible and understandable in a simplified way for specific target groups and stakeholders. From the sustainability viewpoint, reporting is an accounting practice that aims to communicate all the efforts that an organisation makes in terms of the environment, society, and economy, tracking the impacts and actions related to these aspects, and engaging stakeholders during the investigation process. From a legal perspective, countries are developing numerous directives and laws to provide clear and trustful guidance. It is widely accepted that financial and non-financial information have the same importance and must be subject to regulations, resulting in the double-materiality concept. For example, the European Union recently moved from the NFRD (Non-Financial Reporting Directive) (Directive 2014/95/EU) to the CSRD (Corporate Sustainability Reporting Directive) (Directive (EU) 2022/2464). However, the path to providing clear instructions is long and diversified, and each institution can use one of many available standards (e.g., from the Global Reporting Initiative (GRI) or the International Accounting Standards Board (IASB)) to map its sustainability actions. GRI Standards are the most widely adopted worldwide, but despite their importance, they do not provide specific guidelines for HEIs and more generally for other types of organizations. This might explain why sustainability reporting is still at an early stage in this field (Herzner and Stucken 2020). For this reason, academics questioned whether GRI Standards are adequate when writing sustainability reports for HEIs and proposed alternatives and modifications (Amiano Bonatxea, Gutiérrez-Goiria, Vazquez-De Francisco, & Sianes, 2021; Lozano, 2006), such as the use of a materiality matrix. A materiality matrix is a tool that illustrates which material topics are salient for an organisation based also on the perspectives and opinions of its stakeholders. GRI Standards state that an issue is material when it represents “the organization’s most significant impacts on the economy, environment, and people, including impacts on their human rights” (Global Reporting Initiative, 2021a), whereby material topics are “topics that represent the organization’s most significant impacts on the economy, environment, and people, including impacts on their human rights” (Global Reporting Initiative, 2021b). While an example of a materiality matrix is lacking in the most recent set of standards, one can be found in the GRI Standards published in 2016. This states that a materiality matrix “shows the two dimensions for assessing whether a topic is material; and that a topic can be material based on only one of these dimensions. The use of this exact matrix is not required; however, to apply the Materiality principle, it is required to identify material topics based on these two dimensions.” The topics appear to be relevant according to the two dimensions: if they are reasonably important in reflecting the organisation’s economic, environmental, and social impacts, or in influencing the decisions of stakeholders. However, only the 2016 GRI Standards mention the two dimensions in the report (Global Reporting Initiative, 2016). In the 2021 GRI Standards, the example of the materiality matrix was removed and replaced by more general indications about the process of determining material topics (Global Reporting Initiative, 2021a). This backing down about the materiality matrix between 2016 and 2021

could have been caused by the problematic definition of materiality (herein termed materiality haziness) and by the fact that proposing a materiality matrix became more difficult following the 2016 guidelines. However, even though the materiality matrix is no longer recommended by GRI, it continues to be employed both by companies (De Cristofaro and Raucci 2022) and universities. The GRI 101: Foundation 2016 presents a graphical materiality matrix example, wherein the two previously cited dimensions are respectively associated with the x-axis and y-axis. This inconsistency was already noted by Taubken and Feld (2018), who found that is not so uncommon for the materiality matrix to be subject to misunderstandings and mistakes due to both the materiality haziness and the fact that the matrix is part of a method that is imprecise overall. Problems and misunderstandings, also related to the materiality haziness, moreover seem common in HEIS, to the point that recent literature underlined that HEIs' sustainable reports have a low quality and quantity (Ceulemans, Stough, and Lambrechts 2018) and are mainly limited to the environmental side without properly engaging all stakeholders (Disterheft, Caeiro, Azeiteiro, & Filho, 2015). These issues related to materiality haziness introduce several discrepancies when mapping and identifying key topics for the organisation. The problem of defining when a certain topic is material for a given institution is an object of debate, both for the standards' providers and legislators, to the extent that the definitions of materiality differ slightly in meaning and content, causing several misunderstandings in creating a materiality matrix. The lack of clearness regarding materiality assessment thus has a subjective effect (Bellantuono, Pontrandolfo, and Scozzi 2016; Calabrese et al. 2019). Moreover, assessing the materiality to create a matrix is even more complex. Indeed, materiality must not only determine the relevance of the social, economic and environmental impacts of the institutions but also quantify the influence of these topics on stakeholders in terms of choices and evaluations when making decisions concerning the institution itself.

3. Methodology

Starting from this scenario, and according to the GRI Standards and the GRI's materiality concept, this work aims to investigate if and how Italian state universities incorporate the materiality matrix in their sustainability reports. Although, as seen in the previous section, there is no specific reference to HEIs, this study considers the GRI Standards as the most frequently used within the sustainability reporting of each business area, regardless of the organisation. To address this research topic, and per GRI Standards, this work tries to understand how Italian universities build materiality matrices and if the results thereof are reliable. The methodology used in this paper is content analysis, which is a qualitative research technique used to interpret and evaluate textual material such as sustainability reports (Aggarwal and Singh 2018). The content analysis resulted in a conceptual analysis conducted through Nvivo 12 Plus, aiming to shed light on the concept of materiality along

with the materiality matrix. A list of all Italian public universities was considered to conduct this analysis (N = 67), whereby 19 universities were found to produce sustainability reports, of which only four (University of Brescia, University of Tor Vergata, University of Tuscia, and University of Torino) disclosed a materiality matrix. For each university, only the most recent published report has been considered, regardless of the academic years under consideration. Subsequently, analyses and comparisons of the materiality matrices in the sustainability reports were conducted to detect their peculiarities and characteristics, as well as any inconsistencies with the GRI Standards.

4. Results and Discussion

The analysis showed that of the 19 identified documents, 17 cite the word “materiality”, although only 4 provide a materiality matrix. All 19 reports state that they have been drawn up based on GRI Standards 2016 (see Table 1).

Table 1. Presence of the materiality concept, materiality matrices and GRI Standards.

	Yes	No	Total
Materiality	17	2	19
Materiality Matrix	4	15	19
GRI Standards 2016	19	0	19

The results show a common implementation of the GRI Standards by the entire sample. Yet while the term “materiality” is used in 17 of the 19 reports, only 4 provide a matrix. This could be due to the materiality haziness perceived by the staff in charge of the materiality assessment. Due to the different existing definitions provided by the standards and the legislator, the interpretation of what is material can vary greatly. In any case, even though the definition of materiality is still unclear for academics and regulators, the adoption of the GRI Standards should assume that the organisations that choose to use them automatically share the materiality definition proposed by the GRI. Assuming that it is necessary to follow GRI 2016 instructions when constructing a materiality matrix, and considering that all four universities with a materiality matrix followed GRI Standards 2016, it goes without saying that they embrace the definition of materiality proposed by those standards. Consequently, they should build a matrix based on these. Focusing on the analysis of the four identified materiality matrices, it emerged that there is no alignment between GRI 2016 and the results presented in the graphics produced by these Italian universities. Table 2 shows the discrepancies between the examples of materiality provided by the GRI Standards of 2016 and what is present in the materiality matrices of the Italian universities, demonstrating that what they map slightly differs semantically from what was stated as the basis in the GRI 101 Foundation.

Table 2. Discrepancies between the GRI example and the materiality matrices of four Italian universities.

	Example of a materiality matrix by the GRI Standards (2016)	University of Brescia 2017-2019	University of Tor Vergata 2021	University of Tuscia 2021	University of Torino 2019/2020 - 2020/2021
x-axis	Significance of economic, environmental, & social impacts	Relevance for the University of Brescia	Relevance for the university/ internal stakeholders	Relevance for the university	Relevance for the University of Torino
y-axis	Influence on stakeholder assessments & decisions	Relevance for stakeholders	Relevance for external stakeholders	Relevance for stakeholders	Relevance for the University of Torino's stakeholders

Based on the indications provided by the GRI Standards, the identified materiality matrices did not precisely follow the suggestions provided by the standards. This assumes that the universities did not properly conduct the materiality analysis according to the two dimensions, doing it in terms of tracking the importance of the topics for the institution and its stakeholders. Moreover, the topic prioritizations of the four matrices are not used as guidelines for the sustainability reports. What they missed probably links to the materiality haziness, which can cause an effective misinterpretation of what is important to map, leading to incorrect questions being asked, and consequently influencing the meaning of what is being investigated (Taubken and Feld 2018). This is also the result of a non-mandatory way of conducting the materiality analysis. With the 2016 and 2021 standards, the GRI merely outlined an overall pathway to follow, without forcing the organisations to adhere to a defined methodology, even though the provided path was quite specific and method-oriented. As a result, the materiality analysis is not a materiality analysis conducted based on the recommendations provided by the GRI Standards. These matrices result in tracking the relevance of specific topics from both the university's and the stakeholders' points of view. In other words, the analysed matrices do not seem to provide reliable results according to the recommendations of the GRI Standards, and misunderstandings seem to emerge. The prioritisation of topics is based on an estimation of the relevance from both the internal and external perspectives, i.e. from the points of view of the university and its stakeholders. However, the materiality matrix should prioritise issues based on their influence on stakeholder decisions and on the organisation as well as the impacts that the organisation has in social, environmental, and economic terms – the latter issues are currently neglected.

5. Conclusion

This paper is a preliminary investigation into the coherent use of the materiality matrix in sustainability reports disclosed by HEIs in the context of the IHES. Preliminarily, the results show that those universities that used the matrix deliberately chose to do so based on their free interpretation, thereby producing matrices that, while referring to GRI 2016, bear no relevance from the point of view of the prioritisation of issues. The matrices seem to be based on improper investigations, compared to what was prescribed by the GRI 2016 indications. Moreover, the results prove that the matrix conceived in the 2016 GRI Standards created problems for users and was not easy to put into practice. This is consistent with the retraction by the GRI, which does not further mention the materiality matrix in the new 2021 standards. The difficulties in realising and applying the materiality matrix are also consistent with the notion of materiality haziness. Nevertheless, the matrix, in line with the indications of the materiality analysis, could still be relevant if it is developed using a tailored methodology.

Finally, although the research is still in the preliminary stage, it still presents some limitations, which mainly relate to the sample comprising only Italian state universities that provide a materiality matrix. For this reason, future studies should be extended to the European context or include Italian private universities. This would provide more relevant and comparable information that could help researchers, university managers, and policymakers find the best practices for building the materiality matrix.

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