



Article

# Do Codes of Ethics Reveal a University's Commitment to Sustainable Development? Evidence from Italy

Giorgio Mion \*D, Angela Broglia and Angelo Bonfanti

Department of Business Administration, University of Verona, 37129 Verona, Italy; angela.broglia@univr.it (A.B.); angelo.bonfanti@univr.it (A.B.)

\* Correspondence: giorgio.mion@univr.it; Tel.: +39-45-802-8172

Received: 24 December 2018; Accepted: 18 February 2019; Published: 21 February 2019



Abstract: Higher education institutions, such as universities, formulate strategies and undertake initiatives to support sustainable development (SD). Scholars draw up and examine sustainability reports as the main institutional documents to assess and communicate universities' efforts towards SD. However, the presupposition of a commitment to SD by the university community is the declaration included in their codes of ethics, which can subsequently be verified and included in their sustainability reports. Thus, although codes of ethics orient strategies, no studies have yet attempted to examine if they can be considered as a communication tool able to express a university's commitment to SD. This exploratory study aims to investigate if and how the codes of ethics of the Italian public universities reflect their commitment towards SD. Content analysis was carried out using the 17 Sustainable Development Goals (SDGs) proposed by the United Nations' 2030 Agenda. The findings suggest that SD is a common aim among Italian universities, although it is not explicitly communicated in their codes of ethics, and that each university contributes to SD in different ways. In practical terms, this study suggests to adopt an approach that is better directed towards SD to improve universities' codes of ethics and compliant strategies.

**Keywords:** ethical codes; higher education institutions; strategic management; sustainability reports; sustainable development goals (SDGs); Italian public universities; communication tool; ethical values; corporate social responsibility; sustainability practices

## 1. Introduction

Higher education institutions play a key role in triggering a sustainable change, given that they can promote the principles of social responsibility and sustainability through scientific research and educational programs [1,2]. More precisely, universities are change agents in meeting the challenges of sustainable development (SD) [3,4] which, according the report of the World Commission on Environment and Development by Brundtland (1987), is a process 'that meets the needs of the present without compromising the ability of future generations to meet their own needs' [5] (p. 8). The SD concept incorporates environmental, societal and economic dimensions, as the 17 SD Goals (SDGs) and 169 associated targets highlight in United Nations' 2030 Agenda for SD announced in 2015.

Universities can effectively promote SD on a local and global level to trigger new sustainability values, attitudes, and behaviours in coming generations of citizens [6] and, in this way, to activate adaptations or anticipate changes. Essentially, universities are contributing to SD in two ways: on the one hand, they aim to prepare students to create a more sustainable society by increasing their awareness, knowledge, skills and values so that they can manage companies and other organisations more responsibly [7] and on the other hand, some universities are implementing sustainability in their

operations [8] by reducing the environmental impact of their actions, analysing their carbon footprints, using resources efficiently and reducing and treating waste [9].

The universities' efforts taken to trigger SD need to be communicated to all stakeholders to be known and, in turn, learned and eventually applied. Therefore, universities draw up sustainability reports [10,11] that are voluntary tools as they are not legally required in educational institutions, although sustainability reports may provide advantages in terms of public relations, transparency and stakeholder engagement [12]. In the literature, sustainability reporting within the university context is a topic currently still in its infancy, both in terms of scholarly research and diffusion among universities [11,13–15]. Despite this, sustainability reports are studied more than other institutional documents, such as codes of ethics, in the higher education field because the information contained in these reports comes from reliable and verifiable sources and responds to well-defined procedures to prevent the actions required for SD becoming mere declarations of intent, and as such, escape verification. In contrast, codes of ethics provide statements of intent regarding SD. As the preventive nature of codes of ethics cannot ensure that universities implement SD in their organisational procedures and systems, SD risks becoming merely the topic of promotional documents, rather than being fully integrated into universities' ethics and strategy. Consequently, the declarations included in codes of ethics presupposes the existence of a commitment by the university community that can subsequently be verified and included in the sustainability reports drawn up by universities. Thus, codes of ethics and sustainability reports are complementary documents that universities oriented towards SD. In fact, codes of ethics orient university strategies and express the fundamental values of the university community, ensure the protection of fundamental rights, and establish rules of conduct for the members of that community, including provisions on discrimination, abuse, conflicts of interest and intellectual property [16–18], while sustainability reports are final documents [10,15] that enable the investigation of whether, and which, actions related to SD have been implemented by the university.

We believe that to exclusively focus on sustainability reports does not enable a full understanding of the opportunities for universities to improve their efforts to SD because the study of sustainability reports leads to an evaluation of the actions implemented for SD (i.e., actual results) without comparing these to the objectives, values, and behaviour rules (i.e., the expected results) that are included in universities' codes of ethics. Previous studies have examined the importance of codes of ethics in higher education institutions in terms of their nature, content, scope, and impact on the behaviour of participants in the university community [16,17]. Despite the attention that has recently been devoted to codes of ethics in the university sector, to the best of our knowledge, no studies have yet attempted to examine if codes of ethics can be considered a communication tool able to express a university's commitment to SD.

Based on the above considerations, this study tries to fill this research gap by answering two questions: (1) Do codes of ethics reveal an explicit university's commitment to SD? (2) If so, how can universities contribute to a path toward SD? Given that no studies have previously been carried out in this regard, this research is exploratory in nature. More specifically, an analysis of the codes of ethics drawn up by universities has been conducted, focusing on Italian public universities. Thus, this paper aims to investigate if and how the codes of ethics of Italian public universities reflect the universities' commitment towards SD by highlighting towards which areas of SD the universities are heading and what actions can trigger SD. To this end, content analysis was used and the 17 SDGs were adopted for the classification of SD information into categories.

The findings suggest that SD is a common aim in the Italian universities, although it is not explicitly communicated in their codes of ethics, and that each university contributes to SD in different ways. In practical terms, this research offers suggestions to university managers for how they may improve their universities' codes of ethics and their compliance strategies, essentially by adopting an approach more directed towards SD.

Sustainability **2019**, *11*, 1134 3 of 18

The remainder of this paper is organised as follows. First, a brief background on university codes of ethics and the SDGs is provided. Next, the research design and method are presented. After presenting and discussing the results, their theoretical and practical implications are provided. Finally, this study concludes with limitations and directions for future research.

# 2. The Literature on University Codes of Ethics

The universities' efforts taken to trigger SD are communicated to stakeholders through various institutional documents such as codes of ethics [16–18]. Fundamentally, they are a statement of an organisation's primary rules, values, and prescriptions of conduct that is permissible or not [19], describing desirable professional conduct and guiding individuals in resolving ethical issues [20], as well as informing employees of actions that will lead to sanctions [21].

Previous studies have mainly investigated the importance, nature and scope of the codes of ethics in higher education institutions (colleges and universities), as well as their impact on the behaviour of the university community's members, such as employees, faculty and staff [16,17,22–24]. More specifically, past research highlighted that codes of ethics are the most widespread instruments of ethics management in organisations, including universities, and that discussion of the guiding principles of scientific conduct is called for [18]. However, codes of ethics are perceived by researchers of the Delft University of Technology in the Netherlands as not being a useful instrument in relation to visibility, enforcement, integration with daily practice and the distribution of responsibility [18]. Their proliferation has a reactive nature because codes of ethics are drawn up in response to scandals and as a result are punitive and negative, with lists of prohibitions [16]. To better implement codes of ethics in universities, and consequently improve the ethical climates in these organisations, previous studies suggest the need for greater emphasis on the prevention of financial, scientific and academic fraud, greater inclusion of the faculty in the process, and the establishment of a proper process for the implementation of the code [16], as well as the provision of infrastructure elements, such as training and values audits [17]. In terms of their impact on the behaviour of university community members, studies have revealed the importance of decoupling negative perceptions among employees that lead to emotional exhaustion, in order to legitimise institutions' efforts towards ethically compliant programmes and sources of unethical behaviour [24].

This topic is in its infancy, both geographically and temporally. The existing research has largely been conducted related to the United States [16,17,22,23], Asia (especially Pakistan) [24] and Europe (Netherlands and the Czech Republic) [18]. As demonstrated by these studies, research on codes of ethics with specific reference to universities is mainly dated. As in other European countries, the Italian studies are limited to the national level, and are scant because the history of university codes of ethics is relatively short. The Italian university sector comprises a large number of public institutions (66) and a smaller number of private institutions, with a total of 98 universities. With specific reference to the public universities, the subject of this research, 58 institutions offer all levels of study (bachelor, Master's and PhD programmes), two are committed to foreign students and six are schools of advanced studies. They receive more than 89% of bachelor and master students [25].

The practice of drawing up codes of ethics has long been consolidated in the private sector, above all as a tool used to prevent the risk of unfair or fraudulent behaviour. However, the mandatory publication of a code of ethics by all Italian universities was introduced in 2010. According to law 240/2010, codes of ethics are a document that defines the fundamental values of the academic community, promote the respect of individual rights and define the duties and responsibilities of each member of the community. Furthermore, codes of ethics aim to avoid any form of discrimination or abuse (above all, the abuse of power by those in leading positions), to safeguard intellectual property and to guide discipline in cases of conflict of interest. Codes of ethics address all members of the academic community: teachers, students and administrative employees.

Given the statutory and organisational autonomy assigned to the Italian universities by the law, universities have full autonomy in drawing up their codes of ethics and adapting general principles

Sustainability **2019**, *11*, 1134 4 of 18

to specific institutional frameworks or commitment. Although each university has written its own code of ethics, it is possible to identify common references that establish a common ethical framework and are sometimes explicitly mentioned in these documents: (1) the Italian Constitution, in particular articles 3 (principle of equality), 9 (promotion of the development of research culture), 33 (freedom of arts, science and teaching), and 34 (right of all capable and worthy citizenship to reach higher degree studies); (2) the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers (European Commission Recommendation 2005/251/EC); (3) the Charter of Student Rights and Responsibilities, adopted by the Ministry of Instruction, Universities and Research; (4) the Berlin Declaration on Open-access to Knowledge in the Sciences and Humanities, implemented in Italy by the Messina Declaration of 4 November 2004; and (5) the European Commission Recommendation of 27 November 1991 on the protection of the dignity of women and men at work (92/131/EEC).

Despite the role of sustainability in the universities' vision, to the best of our knowledge, no studies have yet attempted to examine if codes of ethics can be considered a communication instrument useful in expressing a university's commitment to SD. In order to fill this research gap, this study examines the codes of ethics of the Italian public universities in relation to the 17 SDGs, very briefly presented in next section.

# 3. The Sustainable Development Goals

The spirit of the work of the Bruntland Commission that proposed in 1987 the SD concept was to enlarge the vision of development in an inclusive way that did not neglect the environmental and social aspects of economic development, such as climate change, safeguarding biodiversity and the struggle against poverty, among other aspects. While sensitivity towards SD is spreading into both political and managerial debate, the demands for global policies and related tools are growing [26]. The need for a common framework of values and goals that orient individual, organisational and political action was initially funnelled into the Millennium Development Goals (MDGs), a political agenda defined by the United Nations Millennium Declaration [27]. This document defined a common commitment to SD that involves all countries in a global responsibility. For the first time, the MDGs translated the objective of an ethical and inclusive policy aimed at global development into common, simple and operative language. The MDGs aim to include all people in the development process and to promote environmental safeguards as a priority for all humanity. The deadline for the MDGs was reached in 2015, and although their merits were clear, considerable work remains to be done to reach their goals.

Meantime, several social and environmental transformations had occurred, and the mere extension of the MDGs could not be successful and was not suitable for the new global environmental situation, defined as a new geological epoch, the Anthropocene [28]. The SDGs were established by the resolution adopted by the General Assembly of United Nations on 25 September 2015, after lengthy discussions by the United Nations High-level Political Forum on Sustainable Development (HLPF), beginning at the Conference on Sustainable Development (Rio+20) that took place in Brazil in 2012. While the MDGs addressed the priorities of the low-income countries and called for solidarity from the high-income countries, the SDGs target the entire planet and pose challenges for all countries and all stakeholders, including governments, individuals, organisations and firms. The SDGs adopt the triple-bottom line [29] and concern the social, environmental and economic aspects of development, implementing a unitary view of this concept. The 2030 Agenda for SD states 17 goals and 169 targets, and aims to stimulate global action for the next 15 years [30]. Therefore, the spirit of the Agenda is an ecological view of development that involves all aspects of life and all members of humanity to promote inclusion and end the dichotomy between the developed and developing countries, and to face climate change and safeguard the environment.

As presented in the resolution adopted by the General Assembly on 25 September 2015, the SDGs are as following. 'Goal 1: End poverty in all its forms everywhere; Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture; Goal 3: Ensure healthy lives

Sustainability **2019**, *11*, 1134 5 of 18

and promote well-being for all at all ages; Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all; Goal 5: Achieve gender equality and empower all women and girls; Goal 6: Ensure availability and sustainable management of water and sanitation for all; Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all; Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation; Goal 10: Reduce inequality within and among countries; Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable; Goal 12: Ensure sustainable consumption and production patterns; Goal 13: Take urgent action to combat climate change and its impacts; Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development; Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss; Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development' [30].

The SDGs actualise the global aim of SD into specific goals and targets: if an organisation includes the SDGs in its strategy, it refers to a clear ethical issue and declares its commitment to a global ethical purpose. Even if each organisation can include SD in its ethics without declaring its commitment to the SDGs, the need to address stakeholders' requirements recommends the inclusion of SD into the organisation's ethical values and principles. The ethical nature of SD as a purpose—and consequently of the SDGs—makes it clear that codes of ethics may be suitable documents to analyse to understand how an organisation understands its role along the path to SD.

#### 4. Method

This study investigates if codes of ethics reveal an explicit university's commitment to SD and, if so, towards which areas of SD the universities are heading and what actions can trigger SD. For this purpose, an inductive approach was adopted [31] because this method offers the possibility of obtaining information directly from the data without imposing preconceived theoretical perspectives [32] and it is suitable for studying sustainability practice in higher education [33]. This exploratory research uses content analysis, which is defined as "a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes and patterns" [34]. This research technique is considered adequate because it is applied in various academic fields, and particularly in the social sciences, including in the area of sustainability and ethics [35]. Content analysis is based on the comparison of data [34,36], which in this study are the codes of ethics that were published online by all Italian public universities.

Table 1 shows the sample of analysis, highlighting some core characteristics of Italian public universities like dimensions (dimensional class, faculty and budget), and presence in the international universities rankings as Quacquarelli Symonds World University Rankings (QS), Times Higher Education World University Rankings (THE) and Academic Ranking of World Universities (ARWU).

The Italian public universities may be considered as a single in-depth case study—a method that 'focuses on understanding the dynamics present within single settings' [37] (p. 534) and suitable 'when a fresh perspective is needed' [37] (p. 549). The case study method was employed as an illustration to make a solid contribution by focusing on dynamic processes, and to draw more general conclusions. Given that three universities that are situated and operate in the same geographical area (the region of Piedmont) have chosen to draw up a combined code, and two codes of ethics are not available online, 64 (rather than the total 66) codes of ethics for 2017 were downloaded from the institutional websites of the 66 Italian public universities and were examined for this study.

Sustainability **2019**, 11, 1134 6 of 18

**Table 1.** Characteristics of analysed Italian public universities.

University	Di		<b>University Rankings</b>			
Offiversity	Dimensional Class *	Faculty **	Budget ***	QS	THE	ARW
Bari	large	1373	185,772,579	yes	yes	no
Basilicata	small	302	30,646,262	no	no	no
Bergamo	medium	347	47,608,289	no	yes	no
Bologna	large	2734	399,261,685	yes	yes	yes
Brescia	small	575	71,626,795	yes	yes	no
Ca' Foscari di Venezia	medium	568	83,752,520	yes	yes	no
Cagliari	medium	936	114,316,177	no	yes	no
Calabria	medium	748	99,331,212	no	yes	no
Camerino	small	284	44,287,274	no	no	no
Campania Vanvitelli	medium	936	129,691,549	no	no	no
Cassino	small	270	31,482,720	no	no	no
Catania		1246				
	large small	231	163,119,130	yes	yes	no
Clairi			44,722,307	no	no	no
Chieti	medium	660	97,491,481	no	no	no
Ferrara	medium	623	81,895,318	yes	yes	yes
Firenze	large	1699	241,001,043	yes	yes	yes
Foggia	small	335	41,297,781	no	no	no
Genova	medium	1226	168,594,128	yes	yes	no
Gran Sasso Science Institute	_	23	20,141	no	no	no
IMT Lucca	_	37	7,097,857	no	no	no
Insubria	small	363	42,558,101	no	no	no
IUSS Pavia	_	20	5,739,389	no	no	no
L'Aquila	medium	550	80,799,321	no	no	no
Macerata	small	275	44,364,026	no	no	no
Messina	medium	1015	140,375,545	no	no	no
Milano	large	2103	282,053,282	yes	yes	yes
Milano Bicocca	medium	938	134,620,697	yes	yes	yes
Modena Reggio Emilia	medium	786	97,133,304	yes	yes	no
Molise	small	287	30,315,013	no	no	no
Napoli Federico II	large	2524	351,323,799			
Napoli L'Orientale	small	203		yes	yes	yes
Napoli E Orientale Napoli Parthenope	small	333	35,493,821	no	no	no
			41,958,037	no	no	no
Padua	large	2208	304,213,127	yes	yes	yes
Palermo	large	1443	197,612,940	yes	yes	yes
Parma	medium	838	118,665,315	no	yes	yes
Pavia	medium	883	126,754,339	no	yes	yes
Perugia	medium	1008	133,187,298	yes	yes	no
Perugia Stranieri	small	53	13,163,962	no	no	no
Piemonte Orientale	small	381	52,166,913	no	no	no
Pisa	large	1515	196,185,932	yes	yes	yes
Pisa Normale	_	77	39,100,810	yes	yes	no
Pisa Sant'Anna	_	143	31,117,889	yes	yes	no
Politecnica delle Marche	medium	534	80,976,508	no	yes	no
Politecnico di Bari	small	276	42,124,413	no	yes	no
Politecnico di Milano	large	1398	206,142,486	yes	yes	yes
Politecnico di Torino	medium	972	140,685,122	yes	yes	no
Reggio Calabria	small	260	29,118,872	no	no	no
Roma Tor Vergata	medium	1285	150,009,721	yes	yes	no
Roma Tre	medium	820	122,917,009	yes	-	no
Salento	medium	616	75,903,205	•	yes	
Salerno	medium	922	126,971,990	no	yes	no
				no	yes	no
Sannio di Benevento	small	195	24,166,387	no	no	no
apienza Università di Roma	large	3306	483,948,995	yes	yes	yes
Sassari	small	559	69,597,955	no	yes	no
Siena	medium	715	109,065,522	yes	yes	no
Teramo	small	214	26,931,565	no	no	no
Torino	large	1952	276,594,711	yes	yes	yes
Trento	medium	632	12,838,405	yes	yes	no
Trieste	medium	641	90,046,453	yes	yes	no
Tuscia	small	307	41,742,172	no	no	no
Udine	medium	637	74,639,591	no	yes	no
Urbino	small	314	47,780,250	no	yes	no
Venezia IUAV	small	150	28,797,164	no	no	no
	medium	721	104,060,262	yes	yes	no

<sup>\*</sup> The dimensional classes are defined as follows. Small: < 15,000 students; Medium: 15,000 < students < 40,000; Large: students > 40,000. There is no information about schools of advanced studies that does not deliver bachelor and master degrees. Source: Italian National Agency for the Evaluation of Universities and Research Institutes. \*\* Source: Minister of Education and Research. \*\*\* Public financial support 2018 (Decree 587/2018).

Sustainability **2019**, *11*, 1134 7 of 18

To examine these 64 documents, content analysis was undertaken [38] using NVivo 11 software. Through it, researchers can 'sample text, in the sense of selecting what is relevant; unitise text, in the sense of distinguishing words, propositions or larger narrative units and using quotes or examples; contextualise what they are reading in the light of what they know about the circumstances surrounding the texts; and have specific research questions in mind' [39] (p. 88). Thematic coding of this material was inductively undertaken [40] in relation to the research purpose. The coding was conservative, given that it included only what was explicit in the data. In other words, intentionality was not inferred in the data.

The starting point for conducting the content analysis was the classification of information into categories about SD topics. For this purpose, each of the 64 codes of ethics was divided into different categories according to their content, resulting in 17 SDGs. Both qualitative and quantitative analyses were carried out. The qualitative analysis aimed to present data in words and categories, facilitating interpretations of the examined text. The quantitative analysis aimed to present categories from the text in the form of frequency. More precisely, SDG was indicated by a 1 when an item was present in the report, while a 0 was indicated that the information was not present in the information obtained. The method was subjected to peer review and later agreed upon by the authors of this study. More specifically, the data analysis was carried out over two stages, initially completed by the first author, and double-checked by the second and third authors.

To verify if the commitment to SD that is expressed in terms of SDGs encoded into codes of ethics, is related to some universities' characteristics, the following analyses were performed: parametric and nonparametric statistical tests and the significant level from *t*-test and analysis of variance (ANOVA) were made. More precisely, parametric tests were applied on quantitative variables while nonparametric tests were performed on qualitative variables.

# 5. Findings

## 5.1. Italian Public Universities' Codes of Ethics: Length and Content

The codes of ethics documents of the Italian universities differ in terms of their length (number of words) and content. Nevertheless, this variety did not impact on the content analysis carried out to highlight the actions that can be contributed to SD. More specifically, Table 2 shows the length of the codes of ethics and the number of encoded SDGs: the variety in length is clear, even if there is a large group of codes that range from 2000 to 4000 words and only three documents that are longer than 8000 words (Bologna, Camerino, and the 'Tor Vergata' of Rome).

The codes of ethics do not refer explicitly to the SDGs, given that no code expressly mentions the 17 goals of SD included in the SDG report. However, the SDGs are embodied in the ethical values, rules of conduct, duties and responsibilities in terms of consistent individual and organisational actions. Therefore, the content analysis has made the SDGs explicit by recognising the themes related to SD within the codes of ethics. In addition, no code analysed in this study refers to all SDGs and there are considerable differences between the codes, with a maximum of 11 SDGs present in the code of the University of Bologna and a minimum of two SDGs recognised by two universities: Florence and L'Aquila.

Sustainability **2019**, 11, 1134 8 of 18

**Table 2.** Number of words and encoded sustainable development goals (SDGs) in each code of ethics.

University	Number of Words	Number of Encoded SDGs
Bari	2699	8
Basilicata	2002	7
Bergamo	2455	7
Bologna	9681	11
Brescia	2448	8
Ca' Foscari di Venezia	3921	7
Cagliari	2048	3
Calabria	3123	3
Camerino	11,884	7
Campania Vanvitelli	1876	5
Cassino	2836	6
Catania	3530	8
Catanzaro	1299	3
Chieti	1812	5
Ferrara	3847	8
Firenze	1698	2
Foggia	2398	6
Genova	3066	7
Gran Sasso Science Institute	4631	3
IMT Lucca	1409	4
Insubria	3850	9
IUSS Pavia	2263	8
L'Aquila	1988	2
Macerata	3479	8
Messina	4645	5
Milano	1308	6
Milano Bicocca	1781	8
Milano Polytechnic	1733	7
Modena Reggio Emilia	2805	5
Molise	2750	4
Napoli Federico II	2957	5
Napoli L'Orientale	2752	4
Napoli Parthenope	2808	6
Padova	2263	3
Palermo	1339	3
Parma	3330 2712	4
Pavia		6
Perugia	2067	4 5
Perugia Stranieri Piedmontese universities	1943 1783	$\frac{3}{4}$
Pisa	4824	6
Pisa Normale	4755	6
Pisa Sant'Anna	3399	7
Politecnica delle Marche	2981	4
Politecnico di Bari	3715	9
Reggio Calabria	1851	$\frac{1}{4}$
Roma Tor Vergata	8447	9
Roma Tre	2965	7
Salento	4441	4
Salerno	1152	$\frac{1}{4}$
Sannio di Benevento	1503	6
Sapienza Università di Roma	2608	$\stackrel{\circ}{4}$
Sassari	2100	3
Siena	1964	6
Teramo	3948	7
Trento	4683	8
Trieste	2226	7
Tuscia	2117	5
Udine	4380	8
Urbino	4721	7
Venezia IUAV	2640	5
Verona	4268	8

Sustainability **2019**, *11*, 1134 9 of 18

Based on statistical tests, the distribution of encoded SDGs appears completely unconnected to the characteristics of the universities like dimensions or performances in rankings. More specifically, statistical tests show no correlations between the number of encoded SDGs and dimensional parameters (dimensional class, budget and faculty) and also between the number of encoded SDGs and the position in international rankings (rankings (Quacquarelli Symonds World University Rankings—QS, Times Higher Education World University Rankings—THE, and Academic Ranking of World Universities—ARWU). The results of nonparametric tests and analysis of variance show that only the position in QS ranking has a relation with commitment to SD; nevertheless, the hypothesis is verified into 5% range and the evidences are too weak to infer some solid conclusions. Consequently, the commitment to SD can be considered as the result of a specific attitude of academic governance that includes SDGs in their codes of ethics, if SD is considered as a main purpose of universities. On the contrary, some universities with higher position in the rankings had excluded SD from their codes of ethics, choosing other values as relevant. Table 3 reports a summary of parametric and nonparametric tests, *t*-tests and analysis of variance.

Table 3. (a) Parametric tests; (b) Non parametric tests; (c) ANOVA tests; (d) *t*-tests.

(a)				
Parametric Correlations	Faculty	Budget		
<i>p</i> -value	0.658	-0.585		
Pearson coefficient	-0.057	-0.070		

(b)					
Nonparametric Correlations	<b>Dimensional Class</b>	QS	THE	ARWU	
<i>p</i> -value	0.658	0.039	0.317	0.424	
Tau-b of Kendall	-0.046	0.230	0.113	-0.089	
<i>p</i> -value	0.661	0.038	0.321	0.428	
Rho of Spearman	-0.057	0.264	0.129	-0.102	

(c)					
ANOVA Test	Dimensional Class	QS	THE	ARWU	
F	0.172	4.437	1.331	0.332	
<i>p</i> -value	0.842	0.039	0.253	0.566	
F crit	3.164	4.001	4.001	4.001	

(d)					
t-test	QS	THE	ARWU		
T	2.106	1.154	0.576		
<i>p</i> -value	0.039	0.253	0.566		
T crit	2.000	2.000	2.000		

Table 4 shows the number of occurrences of each SDG and highlights that some SDGs are completely excluded from the ethical actions of Italian universities. Furthermore, Table 3 presents the number of occurrences of each SDG in the codes of ethics: some of these are presented several times in the same code; for example, G05 (Gender equality) and G10 (Reduced inequalities), which have been encoded over 100 times. The number of occurrences is useful information to reinforce the discussion of the analysis and highlight the specific attention devoted by the universities to individual rights.

Table 4. Number of occurrences of each SDG.

SDGs	SDGs Description	Number of Codes for Occurrences	Number of Occurrences in Codes for SDGs
G05	Gender equality	61	155
G10	Reduced inequalities	61	127
G12	Responsible consumption and production	44	53
G16	Peace, justice and strong institution	38	54
G08	Decent work and economic growth	36	67
G04	Quality education	30	45
G03	Good health and wellbeing	27	45
G13	Climate action	19	24
G11	Sustainable cities and communities	13	16
G09	Industry, innovation and infrastructure	10	11
G01	No poverty	8	8
G17	Partnership for the goals	4	5
G02	Zero hunger	0	0
G06	Clean water and sanitation	0	0
G07	Affordable and clean energy	0	0
G14	Life below water	0	0
G15	Life on land	0	0

Moving to the analysis of the recurrent SDGs, both the number of codes and number of recurrences show that the SDGs considered important by universities are related to the individual situation of members of the academic community. In particular, there is much attention to gender equality (G05), which is represented in almost all the codes. The number of references to G05 is similar in the different codes, because they call for equal opportunities for women and men in academic careers and in any evaluation. In addition, the codes of ethics oppose any form of gender discrimination and sexual misbehaviour. Many documents have general instructions against discrimination, and not only gender-based discrimination. For example, the IMT Lucca code prescribes that 'IMT is committed to providing an equal opportunity working and learning environment based on mutual respect and tolerance and free from discrimination of any kind. As such, it is IMT policy that no member of the IMT community will act in such a way as to discriminate against any person on the basis of any personal characteristic, including but not limited to, his/her sex, gender identity, age, race, national or ethnic origin, ancestry, religion, physical or mental disability, marital or domestic partnership status, sexual orientation, or political belief or affiliation. This holds with regard to the application of educational policy, recruitment, allocation of funding, research policy, professional development and any other scholarly or administrative procedures'. Other codes, such as the 'Ca' Foscari' University of Venice, make more specific commitments to gender equality: 'Equal opportunities have to be promoted also by improving forms of underrepresentation, in respect of valorisation of merit in studying, working and researching and by facilitating the conciliation between private life and work'. This example makes clear that gender equality can be related to different ethical spheres, such as the realisation of democratic and fully representative governance and welfare practices that improve the quality of work.

The promotion of G10 (Reduced inequalities) assumes different meanings in the different codes of ethics. If universities understand their commitment to equality first as constraining discrimination, they also view their commitment in a broader way; for example, the University of Bari code states that it promotes 'spiritual and material progress of society, development of culture and scientific research, the right of capable and worthy ones to reach top degrees of instruction even if they are without means'.

A large number of universities include commitments related to G12 (Responsible consumption and production) in their ethical values. The understanding of this goal does not appear to be fully developed, even if the content analysis identified this goal in 44 codes. In fact, universities frequently limit their commitment to responsible use of assets to the financial perspective in order to avoid

squandering public money. In other cases, responsibility to the environmental dimension of academic activities is claimed, for example in choosing research methods.

Another goal that universities assume as an important aspect of their ethical perspective is G16 (Peace, justice and a strong institution). In particular, this goal is understood by the universities as the capacity to build strong democratic institutions in which any member of academic community can actively participate and practice the right and duty to contribute to the community. The University of Camerino's code of ethics clearly displays this commitment: 'Teachers-researchers must guarantee an assiduous and constructive participation in the academic collegiate bodies to whom they belong, in a spirit of service and belonging'.

The content analysis also highlighted some predictable issues related to the institutional activities of universities. In particular, there are several references to the commitment to build good work environments for both students and workers (researchers and administrative employees). These issues are linked to two different SDGs: G08 'Decent work and economic growth', and G03 'Good health and wellbeing'. It is as much foreseeable also the ethical value attribute to the commitment to education quality (G04). In this case, it is surprising that an explicit reference to this goal can be identified in only 30 codes; as in other documents this aspect is not developed.

Another remarkable goal assumed as an ethical commitment relates to the contribution to G11 'Sustainable cities and communities'. This ethical issue is understood as the possibility to realise smarter cities by adopting innovative methods and tools to share knowledge. This goal is related also to the Berlin Declaration on Open-access to Knowledge in the Sciences and Humanities.

The remaining SDGs are less present in the codes of ethics and seem to be less crucial in the ethical constructs of Italian universities, even when they can be linked to certain aspects of academic life. Nevertheless, the content analysis showed that issues such as contribution to industrial development (G09, Industry, innovation and infrastructure) and the struggle against poverty (G01, No poverty) are not understood as primary values by Italian universities.

It is particularly interesting to highlight how some SDGs are totally excluded from the ethical landscape of universities. In more detail, four of the five excluded SDGs are essentially related to environmental issues: clean water and sanitation, life below water, life on land and affordable and clean energy. Universities generally refer to environmental themes, and in our content analysis we have chosen to uniquely encode all environmental actions in G13 'Climate action'. This study shows that universities do not assume commitments to specific themes that could have been included, such as energy use.

In addition to identify the SDGs that have an important role in the universities' codes of ethics examined, this study also investigates actions that universities consider as positive and negative to trigger SD.

# 5.2. Actions Triggering Sustainable Development

The analysis carried out highlights how there are both negative and positive actions that universities—and the individuals belonging to academic communities—can implement to be compliant with their ethical commitments. While negative actions are common to the majority of the codes, the positive actions in the codes are more differentiated and less generalisable. Table 5 shows the principal meaning that the SDGs assume within the universities' codes of ethics, as established by the content analysis; the rank of the meanings was assigned on the basis of their frequency.

Other positive actions are connected to research methods and outputs: by promoting safe and healthy methods, researchers can contribute to wellbeing of academic community and, more generally, of all stakeholders involved in research programmes. Furthermore, the last phases of research programmes can be implemented in such a way to influence SD, and particularly the building of sustainable cities and communities (G11). By adopting smart ways to spread research output (i.e., open-access systems), universities promote environmental sustainability and enlarge social relationship in a worldwide context.

 Table 5. Principal meanings of SDGs in universities' codes of ethics.

SDGs		Positive Actions		Negative Actions
G01	•	promoting the right of study for all students (i.e. by financial granting)		
G03	•	building healthy working places that allow students and workers to improve their quality of life	•	avoiding mobbing and any practice that can damage physical, psychological or emotional aspects of workers' life
	•	choosing research methods that safeguard researchers' health, especially in biomedical sciences		
G04	•	promoting the quality of degrees by improving teaching and continuous update of teachers' competences as well as good services to students (i.e. orientations)		
G05	•	guaranteeing equal opportunities to female and male in accessing to job positions	•	avoiding any discrimination on the basis of gender
			•	struggling against sexual abuses
G08	•	adopting individual merit as evaluation principle in any recruiting process	•	avoiding any type of abuse of power in working place, including nepotism and favouritism
	•	enabling work flexibility		
G09	•	obtaining research outputs with a significant impact on economic and social development		
G10	•	making all efforts to allow to any student to access top level studies	•	avoiding any discrimination, included ones based on religion, race, census, etc.
G11	•	adopting smart and sustainable way to spread research output (i.e., open-access system)		
G12	•	using responsibly universities' assets and accountability of any financial supports	•	avoiding any wastefulness and improper use of universities' resources
	•	adopting a style of consumption attentive to the environmental effects		
G13	•	promoting an ecological culture	•	minimising environmental negative effects of research and of daily activities
	•	building strong democratic institution, by promoting individual participations to	•	avoiding conflict of interests that hinders the pursuit of the common
G16	•	decision-making processes assuming responsibilities for the common good of institutions		good and the excellence in research and education
	•	promoting the human dignity and rights by both education and research		
G17	•	building good relationship with local and global partners that are involved in research programs		

Another important ethical issue is the democratic life of institutions and the empowerment of each member of these communities. In their codes of ethics, universities stress the need for individual responsibility to reinforce institutional democracy and to strengthen sense of belonging to the academic community. By assuming responsibility (i.e., participating in collegiate bodies), individuals contribute to a democratic community and, indirectly, to SDG G16, which includes targets like 'develop effective, accountable and transparent institutions at all levels' (G16.6) and 'ensure responsive, inclusive, participatory and representative decision-making at all levels' (G16.7). In particular, student participation is encouraged, so that they can grow in their awareness of civil responsibility by experimenting with the democratic life of an academic institution during their student life.

## 6. Discussion

Universities are communities open to international debate and oriented towards social, cultural and economic development; consequently, their ethical values are deeply influenced by common trends in social, ethical and political thinking, such as the value of sustainability. The emergence of widespread pressure to adopt a SD strategy at all levels of public life has also played a role in updating the universities' vision of their role in society. If in past centuries universities could be small elitist communities devoted to preserving tradition and knowledge (the so-called 'ivory tower'), the contemporary view of universities' responsibilities reveals the necessity to open universities to a wider horizon, where the value of sustainability plays a central role [41–45]. Universities around the world are trying to include SD into their activities and processes. Therefore, universities have to pay more attention to their institutional documents of communication such as codes of ethics. Declarations of intent regarding SD can be used as an opportunity to evaluate managerial culture as well as improve quality and image [35]. In addition, the information contained in these documents can be practically verified through the comparison with sustainability reporting to communicate to stakeholders the strong commitment towards SD.

Previous studies about universities' codes of ethics conducted at an international level highlight both a limited information about their content [17] and, when they are examined in detail, the lack of analysis of the SD perspective [44]. After all, a relatively short history of the codes of ethics in universities limits the production of research conducted until today and opens the possibility of further investigations [44].

The results of this study highlight how SD is object of the Italian public universities' ethical commitment because it affects each aspect of daily life in universities, including in research, education, the third mission (i.e., the set of activities that relates directly to a university's stakeholders) and administrative services. The clarification of this commitment into an important public document like code of ethics seems to confirm that sustainability actions can work into higher education institutions only if they are promoted by top management [46]. Essentially, the introduction of the SDGs into codes of ethics directs the building of a community aware of its duties and responsibilities and of a workplace that sets the conditions for individual behaviours compliant with the general purpose, as highlighted previous studies [16,17,24]. In their codes of ethics, the impact of SD on universities appears as a set of actions that positively contribute to improving the culture of sustainability [47], building good relationships between individuals and institutions and enhancing work, study and research practices. It is remarkable that the inclusion of the SDGs is never uncritical, but that they are selected for the particular reality of universities, with the strength to direct the role of universities in pursuing SD. The attention devoted to individual misbehaviour in the codes of ethics is a reflection of the crucial ethical role that universities assume. All members of the academic community must be conscious of the commitment of the organisation and of their personal contribution to the organisational goals.

Both qualitative and quantitative analyses revealed that the inclusion of SD into codes of ethics is not clearly related to universities' characteristics like dimensions or performance. This finding seems

to confirm that the commitment to SD is influenced by leadership's ethics more than other institutional aspects [48,49].

In addition to be integrated in ethical values, universities' ethical commitment is also included in actual practice, even if with some differences. A clear commitment to SD is fundamentally aimed to certain social aspects, above all the promotion of equality and the rejection of any discrimination. These goals are related to different aspects of university life: first, the realisation of high-quality educational programmes is an instrument to promote the public interest and the common good. Second, universities want to contribute to social development by research activity with a clear impact on society. Third, the codes of ethics make it clear that universities can cooperate in social development by being good democratic and inclusive institutions. The cultural and educational role of universities to encourage organisational behaviour acts as an example for wider society in topics such as social and gender equality.

Although no studies have previously examined universities' codes of ethics in a SD perspective, the results presented in this study could be compared with the conclusions of other international similar works. On the one hand, this analysis is, for example, in-line with that studies that argue that an (a) SD is a well-defined concept within higher education [11,50], (b) the SDGs have a global dimension and their action implementation depends on the level of priority that different countries give to them [51], (c) there are currently no international guidelines and best practices on sustainability in universities [35] and (d) only a small number of universities are communicating their sustainability efforts [11]. On the other hand, it is important to highlight how in the universities' codes of ethics some SDGs are totally excluded from the ethical actions of universities. In particular, the SDGs that are related to environmental issues such as quality of natural resources, biodiversity and renewable energy are completely neglected. This aspect is not in-line with the numerous studies conducted at an international level in which universities try, especially empirically, to address environmental issues [52,53]. Even though some environmental issues can be considered external from the activities of universities, universities themselves could encourage, certainly not obliging, research activity to be focused on these themes. This possibility—which is not mandatory—is in-line with the fact that universities stress the freedom of each researcher in choosing their field, methodologies and themes [54]; consequently, codes of ethics avoid limiting this freedom, not even when this could be motivated by the goal of SD. The central position of freedom within the ethical frameworks of universities is fundamental to understand the content of the codes. The Italian Constitutional Chart endorses the value of individual freedom. Therefore, it is not surprising to find so many references to individual freedom. Only individual responsibility and loyalty to the community limit this recognised freedom; therefore, the codes of ethics clearly aim to defend this freedom and to prevent any misbehaviour that might restrict individual freedom. Any reference to general goals, including SD, must be compatible with freedom of research and teaching. Therefore, SD and the SDGs can be the object of both research and teaching, but this is possible only in response to the free choice of single researcher/teacher. Codes of ethics, and more generally, universities' strategies can stress the public commitment of the institution and the duty to contribute to common good, but they cannot impose a particular research project or syllabus. This finding is not in-line with the opportunity to integrate sustainability into academic curricula, as previous studies underlined [55].

This research reveals some theoretical and practical implications. From the theoretical point of view, our analysis clarifies the understanding of SD by universities by analysing documents not directly devoted to sustainability reporting. Consequently, the findings of the present research clarify the nexus between ethical values and the SDGs even in the universities that do not promote specific programmes for SD. Another theoretical contribution regards the hierarchy of the individual and communitarian levels of university ethics. In fact, individual rights seem to be at the centre of universities' ethics: codes of ethics mainly adopt a 'negative approach', prescribing which actions must be avoided, but devoting an under dimensioned space to actions that can positively contribute to SD. Therefore,

universities use code of ethics to prevent the risk that any component of these academic communities generates negative impacts on SD.

From the practical perspective, this research can be useful for universities aiming to improve their codes of ethics and their compliance strategies by adopting an approach more directed towards SD. Given that universities have full autonomy in drawing up their codes of ethics and they can adapt general principles to specific institutional frameworks, university managers cannot refer to guidelines that help them pursue initiatives addressing issues related to SD. While guidelines are offered to private organisations, most of these tools are not suitable for universities because they are either very specific or are focused on a single issue [56]. The analysis has shown the need for a more explicit subscription to the SDGs to make clear universities' contribution to public interest. In practical terms, the role of the universities is complex and they have important responsibilities (the education of young people and research) in furthering social, economic and environmental development. By analysing their codes of ethics, an unexpressed potential contribution to SD has emerged and can be further developed by improving the codes of ethics. Another critical issue revealed by the analysis includes the environmental aspects that are very important in the SDG context, but are not developed in universities' codes of ethics. A more sustainable approach can be adopted by introducing distinct SDGs into codes of ethics, for example focusing on energy saving, sustainable mobility or knowledge transfer about clean production. Finally, this research has shown the need for practical goals that allow the concretisation of these principles. On the contrary, there is the risk of minimising sustainable impact and limiting universities' commitment to a formal level.

## 7. Conclusions

Codes of ethics are mandatory documents that Italian universities must write, approve and make public. They reflect the ethical vision and values of the universities and make clear major ethical commitments of universities as institutions and communities. Through content analysis, this paper has analysed the universities' codes of ethics to understand if they are tools able to express the universities' commitment to SD.

Even though the literature has shown that sustainability has earned increasing attention in universities' strategy in the related fields of research and education, our analysis has highlighted that the SDGs are not explicitly included in the ethical vision of Italian universities. Nevertheless, some SD issues are compatible with academic declarations of ethics and several actions have been individually expressed as concrete commitments to SD. Content analysis makes it clear that the codes of ethics have the primary goal of avoiding the risk of any individual misbehaviour that may damage the reputation of the academic community. In this sense, on one hand, negative actions (like prohibitions) are more widespread than positive actions. On the other hand, the priority of freedom as an ethical value frees all members of the academic community to make individual or cooperative efforts to promote SD. In summary, we can conclude that SD is compatible with the ethical overview of the universities, but it is not a primary commitment, or better, is not an institutional goal, but rather the consequence of a general purpose of common good.

The content analysis has shown that individual rights are considered more often than communitarian goals. More specifically, the most recurrent SDGs are related to gender equality (G05) and reduced inequalities (G10). Also G12 (Responsible consumption and production) is frequently cited in the codes of ethics, but this is mainly related to individual responsibility, as occurs for G16, which involves universities' concerns about participation in institutional collegial bodies and the related internal democracy. On the contrary, there are no references to certain environmental goals (G06, G07, G15 and G15).

The analysis of universities' codes of ethics shows that SD is a common aim, although it is not explicitly communicated in the codes of ethics. This study highlights that each organisation can contribute to SD in different ways, such as realising educational programmes devoted to sustainability, promoting equality in access to studies and academic positions, creating conditions to encourage

individual participation in the democratic life of institutions, encouraging research activities with a clear social impact or adopting smart and sustainable ways to spread research output.

This study is not without limitations. First, this qualitative analysis only examined Italian public universities. Due to the subjectivity of the choice of the sample, the selection of codes of ethics and the absence of interviews with the university managers who drew up these institutional documents, the generalisability of the findings of this study must be carefully evaluated. In addition, these choices do not enable the capture a complete vision of the ethical framework of universities because the codes of ethics are only one of the possible institutional documents that express a university's commitment to SD.

Further research could develop the consistency of principles enounced in these codes of ethics with strategic planning of the universities to verify if they are converted into concrete objectives. Furthermore, research can continue to better understand the materiality of the issues presented in codes of ethics for internal and external stakeholders. Future studies could also explore universities' commitment to SD in other institutional documents, such as university statutes and strategic planning documents, which are dynamic over time in nature, in order to compare these documents in terms of their commitment to SD, as well as examine their coherence at the ethical, strategic and operative level. Another interesting research area is the extension of this analysis to other countries to detect if and how other universities draw up and implement codes of ethics, and eventually, to compare the aspects that emerge with those of this study to identify if and how universities' commitment to SD is expressed differently in these contexts.

**Author Contributions:** All authors contributed substantially to the paper. Conceptualisation: G.M. and A.B. (Angelo Bonfanti); Methodology, Data Collection and Analysis: G.M. and A.B. (Angelo Bonfanti); Data Analysis and Interpretation: G.M., A.B. (Angela Broglia) and A.B. (Angelo Bonfanti); Writing: G.M. 3, 4 and 5; A.B. (Angela Broglia) 7; and A.B. (Angelo Bonfanti) 1, 2 and 6.

Funding: This research receives no external funding.

**Conflicts of Interest:** The authors declare no conflicts of interest.

## References

- 1. Lozano, R.; Lozano, F.J.; Mulder, K.; Huisingh, D.; Waas, T. Advancing Higher Education for Sustainable Development: International insights and critical reflections. *J. Clean. Prod.* **2013**, *48*, 3–9. [CrossRef]
- 2. Ramos, T.B.; Caeiro, S.; van Hoof, B.; Lozano, R.; Huisingh, D.; Ceulemans, K. Experiences from the implementation of sustainable development in higher education institutions: Environmental Management for Sustainable Universities. *J. Clean. Prod.* **2015**, *106*, 3–10. [CrossRef]
- 3. Crespo, B.; Míguez-Álvarez, C.; Arce, M.E.; Cuevas, M.; Míguez, J.L. The Sustainable Development Goals: An Experience on Higher Education. *Sustainability* **2017**, *9*, 1353. [CrossRef]
- 4. Macharis, C.; Kerret, D. The 5E Model of Environmental Engagement: Bringing Sustainability Change to Higher Education through Positive Psychology. *Sustainability* **2019**, *11*, 241. [CrossRef]
- 5. Bruntland, G.H.; Khalid, M.; Agnelli, S.; Al-Athel, S.; Chidzero, B.; Fadika, L.; Hauff, V.; Lang, I.; Shijun, M.; Morino de Botero, M.; et al. *Our Common Future ('Brundtland Report')*; United Nation: Rome, Italy, 1987.
- 6. Ferrer-Balas, D.; Buckland, H.; de Mingo, M. Explorations on the University's role in society for sustainable development through a systems transition approach. Case-study of the Technical University of Catalonia (UPC). *J. Clean. Prod.* **2009**, *17*, 1075–1085. [CrossRef]
- 7. Lozano, R.; Young, W. Assessing sustainability in university curricula: Exploring the influence of student numbers and course credits. *J. Clean. Prod.* **2013**, *49*, 134–141. [CrossRef]
- 8. Mcmillin, J.; Dyball, R. Developing a whole-of-university approach to educating for sustainability: Linking curriculum, research and sustainable campus operations. *J. Educ. Sustain. Dev.* **2009**, *3*, 55–64. [CrossRef]
- 9. Larsen, H.N.; Pettersen, J.; Solli, C.; Hertwich, E.G. Investigating the Carbon Footprint of a University—The case of NTNU. *J. Clean. Prod.* **2013**, *48*, 39–47. [CrossRef]
- 10. Ceulemans, K.; Molderez, I.; Liedekerke, L.V. Sustainability reporting in higher education: A comprehensive review of the recent literature and paths for further research. *J. Clean. Prod.* **2015**, *106*, 127–143. [CrossRef]

11. Del Mar Alonso-Almeida, M.; Marimon, F.; Casani, F.; Rodriguez-Pomeda, J. Diffusion of sustainability reporting in universities: Current situation and future perspectives. *J. Clean. Prod.* **2015**, *106*, 144–154. [CrossRef]

- 12. Moggi, S. Il Sustainability Reporting nelle Università. Modelli, Processi e Motivazioni che Inducono al Cambiamento; Maggioli Editore: Rimini, Italia, 2016.
- 13. Siboni, B.; Del Sordo, C.; Pazzi, S. Sustainability reporting in state universities: An investigation of Italian pioneering practices. *Int. J. Soc. Ecol. Sustain. Dev.* **2013**, *4*, 1–15. [CrossRef]
- 14. Lopatta, K.; Jaeschke, R. Sustainability reporting at German and Austrian universities. *Int. J. Educ. Econ. Dev.* **2014**, *5*, 66–90. [CrossRef]
- 15. Gamage, P.; Sciulli, N. Sustainability reporting by Australian universities. *Aust. J. Public Adm.* **2017**, 76, 187–203. [CrossRef]
- 16. Rezaee, Z.; Elmore, R.C.; Szendi, J.Z. Ethical behavior in higher educational institutions: The role of the code of conduct. *J. Bus. Ethics* **2001**, *30*, 171–183. [CrossRef]
- 17. Kelley, P.C.; Agle, B.R.; Demott, J. Mapping our progress: Identifying, categorizing and comparing universities ethics infrastructures. *J. Acad. Ethics* **2005**, 205–229. [CrossRef]
- 18. Schuurbiers, D.; Osseweijer, P.; Kinderlerer, J. Implementing the Netherlands code of conduct for scientific practice. A case study. *Sci. Eng. Ethics* **2009**, *15*, 213–231. [CrossRef] [PubMed]
- 19. Gellerman, S.W. Managing ethics from the top down. Sloan Manag. Rev. 1989, 2, 73–79.
- 20. Ferrell, O.C.; Fraedrich, J. Business Ethics: Ethical Decision MAKING and Cases; Houghton Mifflin Co.: Boston, CA, USA, 1991.
- 21. Robbins, S. Management; Prentice Hall: Englewood Cliffs, NJ, USA, 1988.
- 22. Engle, T.; Smith, J. The ethical standards of accounting academics. *Issues Account. Educ.* 1990, 5, 7–28.
- 23. Kibler, W.L. Addressing academic dishonesty: What are institutions of higher education doing and not doing. *Naspa J.* **1994**, *31*, 92–101.
- 24. Hamza, M.A.; Ahmed, A. The existential paradox between code and conduct: Decoupling and its far reaching consequences in higher education. *Pak. J. Commer. Soc. Sci.* **2016**, *10*, 547–568.
- 25. Anagrafe Nazionale Studenti. Available online: http://anagrafe.miur.it (accessed on 20 February 2019).
- 26. Lomborg, B. Global Crises, Global Solutions; Cambridge University Press: Cambridge, CA, USA, 2004.
- 27. United Nations. *United Nations Millennium Declaration*; Resolution adopted by the General Assembly 55/2; United Nations: Rome, Italy, 2000.
- 28. Griggs, D.; Stafford-Smith, M.; Gaffney, O.; Rockström, J.; Öhman, M.C.; Shyamsundar, P.; Steffen, W.; Glaser, G.; Kanie, N.; Noble, I. Sustainable development goals for people and planet. *Nature* **2013**, *495*, 305–307. [CrossRef] [PubMed]
- 29. Elkington, J. Cannibals with Forks: The Triple Bottom Line of 21st Century Business; Capstone: Mankato, MN, USA, 1997.
- 30. United Nations. *Transforming Our World: The 2030 Agenda for Sustainable Development;* Resolution adopted by the General Assembly 70/1; United Nations: Rome, Italy, 2015.
- 31. Leitch, C.M.; Hill, F.M.; Harrison, R.T. The philosophy and practice of interpretivist research in entrepreneurship: Quality, validation, and trust. *Organ. Res. Methods* **2010**, *13*, 67–84. [CrossRef]
- 32. Moretti, F.; van Vliet, L.; Bensing, J.; Deledda, G.; Mazzi, M.; Rimondini, M.; Zimmermann, C.; Fletcher, I. A standardized approach to qualitative content analysis of focus group discussions from different countries. *Patient Educ. Couns.* **2011**, *82*, 420–428. [CrossRef] [PubMed]
- 33. Lee, K.; Barker, M.; Mouasher, A. Is it even espoused? An exploratory study of commitment to sustainability as evidenced in vision, mission and graduate attribute statements in Australian universities. *J. Clean. Prod.* **2013**, *48*, 20–28. [CrossRef]
- 34. Hsieh, H.; Shannon, S.E. Three approaches to qualitative content analysis. *Qual. Health Res.* **2005**, *15*, 1277–1288. [CrossRef] [PubMed]
- 35. Salvioni, D.M.; Franzoni, S.; Cassano, R. Sustainability in the Higher Education System: An Opportunity to Improve Quality and Image. *Sustainability* **2017**, *9*, 914. [CrossRef]
- 36. Kondracki, N.L.; Wellman, N.S. Content analysis: Review of methods and their applications in nutrition education. *J. Nutr. Educ. Behav.* **2002**, *34*, 224–230. [CrossRef]
- 37. Eisenhardt, K.M. Building theories from case study research. Acad. Manag. Rev. 1989, 14, 532–550. [CrossRef]
- 38. Stemler, S. An overview of content analysis. Pract. Assess. Res. Eval. 2001, 7, 1–5.

39. Krippendorff, K. Content Analysis: An Introduction to Its Methodology, 3rd ed.; Sage: Thousand Oaks, CA, USA, 2013.

- 40. Saldana, J. The Coding Manual for Qualitative Researchers; SAGE: Los Angeles, CA, USA, 2009.
- 41. Rusinko, C.A. Integrating sustainability in higher education: A generic matrix. *Int. J. Sustain. High. Educ.* **2010**, *11*, 250–259. [CrossRef]
- 42. De Lange, D. How do Universities Make Progress? Stakeholder-Related Mechanisms Affecting Adoption of Sustainability in University Curricula. *J. Bus. Ethics* **2013**, *118*, 103–116. [CrossRef]
- 43. Mio, C. Towards a Sustainable University: The Ca' Foscari Experience; Palgrave McMillan: Basingstoke, UK, 2013.
- 44. Bohatà, M. Ethical codes of universities and colleges. Ekon. Listy 2017, 18, 27–39.
- 45. Sonetti, G.; Brown, M.; Naboni, E. About the Triggering of UN Sustainable Development Goals and Regenerative Sustainability in Higher Education. *Sustainability* **2019**, *11*, 254. [CrossRef]
- 46. Clugston, R.R.M.; Calder, W. Critical dimensions of sustainability in higher education. In *Sustainability and University Life*; Leal Filho, W., Ed.; Peter Lang: Frankfurt, Germany, 2000.
- 47. Payne, D.M.; Raiborn, C.A. Sustainable Development: The Ethics Support the Economics. *J. Bus. Ethics* **2001**, 32, 157–168. [CrossRef]
- 48. Lozano, R.; Ceulemans, K.; Alonso-Almeida, M.; Huisingh, D.; Lozano, F.J.; Waas, T.; Lambrechts, W.; Lukman, R.; Hug, J. A review of commitment and implementation of sustainable development in higher education: Results from a worldwide survey. *J. Clean. Prod.* **2018**, *108*, 1–18. [CrossRef]
- 49. Lozano, R.; Lukman, R.; Lozano, F.J.; Huisingh, D.; Lambrechts, W. Declarations for sustainability in higher education: Becoming better leaders, through addressing the university system. *J. Clean. Prod.* **2013**, *48*, 10–19. [CrossRef]
- 50. Zutshi, A.; Creed, A.; Connelly, B.L. Education for Sustainable Development: Emerging Themes from Adopters of a Declaration. *Sustainability* **2019**, *11*, 156. [CrossRef]
- 51. Salvia, A.L.; Leal Filho, W.; Brandli, L.L.; Griebeler, J.S. Assessing research trends related to Sustainable Development Goals: Local and global issues. *J. Clean. Prod.* **2019**, 208, 841–849. [CrossRef]
- 52. Gwendolyn, B.; LaPoint, T. Comparing Greenhouse Gas Emissions across Texas Universities. *Sustainability* **2016**, *8*, 80. [CrossRef]
- 53. Leal Filho, W. Sustainability at Universities—Opportunities, Challenges and Trends; Peter Lang: Frankfurt, Germany, 2009.
- 54. Garfolo, B.T.; Roark, R. Institutional Barriers to Academic Research: A Slow Erosion of Academic Freedom. *Acad. Bus. J.* **2015**, *1*, 88–105.
- 55. Sibbel, A. Pathways towards sustainability through higher education. *Int. J. Sustain. High. Educ.* **2009**, 10, 68–82. [CrossRef]
- 56. Lozano, R. The state of sustainability reporting in universities. *Int. J. Sustain. High. Educ.* **2011**, 12, 67–78. [CrossRef]



© 2019 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).