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Data in Brief

Data Article

Check-list and questionnaire datasets on diversity in Spain's higher education

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A R T I C L E   I N F O

A B S T R A C T

Universities around the world, and particularly Spanish universities, are involved in the process of implementing diversity policies and practices, although productivity rankings have not yet considered inclusion indicators in their quality approaches. The current paper, which is a result of a national research project (No. EDU2017–82,862-R), describes two rich datasets on the issue of diversity in Spain's universities. Data were obtained by using a check-list and a questionnaire, collected in samples of 81 and 33 institutions, respectively. In particular, the paper provides extended descriptive data on institutionalisation of diversity indicators corresponding to philosophy and policy, and practices, that have been analysed in the article entitled 'Exploring the Status of Diversity in Policies and Practices of Spanish Universities. An Asymmetric Dual Model' [1]. It also reports descriptive statistics for indicators and areas by type of university (public *vs.* private). In addition, it shows graphical comparative data on standard scores of policies and practices *vs.* productivity indicators (global and partial *U*-Ranking indexes). Researchers, policy makers and practitioners could benefit from datasets, as they provide information on a good number of

indicators reflecting strengths and weaknesses in university policies and practices in the field of diversity.

Specifications Table

Subject	Education
Specific subject area	Higher education; Diversity Policies and Practices; Institutionalisation; University Quality Rankings
Type of data	Tables, Figures
How data were acquired	Data were gathered using a check-list applied in a content analysis procedure, and an online questionnaire.
Data format	Raw and analysed.
Parameters for data collection	Check-list and questionnaire were built taking into account a list of 24 indicators for institutionalisation of diversity in higher education, which was previously validated in another study conducted in the frame of national project number EDU2017–82,862-R [2].
Description of data collection	First, the check-list was used by researchers to collect data on area 1 of institutionalisation of diversity (philosophy and policy) from 167 institutional documents that had been previously selected and downloaded from university websites. Second, the questionnaire was used to collect data on areas 2–9 of institutionalisation of diversity (practices). The link to the questionnaire, administered through an online platform, was sent via email to chief diversity and equality officers at Spanish universities. Information from content analysis was hand-coded using the check-list and translated into an SPSS software table, while data from the questionnaire were downloaded from the online platform and imported into an SPSS table.
Data source location	Spanish universities listed at the Register of Universities, Centers and Titles (RUCT, Spanish Acronym) (https://www.educacion.gob.es/ruct/home).
Data accessibility	Repository name: Mendeley Data Data identification number: • Sample 1: http://dx.doi.org/10.17632/wck98bvrwz.1 • Sample 2: http://dx.doi.org/10.17632/bg8dfsx8pn.1 Direct URL to data: • Sample 1: http://dx.doi.org/10.17632/wck98bvrwz.1 • Sample 2: http://dx.doi.org/10.17632/bg8dfsx8pn.1
Related research article	J.L. Álvarez-Castillo, C.M. Hernández-Lloret, H. González-González, L. Espino-Díaz, G. Fernández-Caminero, Exploring the Status of Diversity in Policies and Practices of Spanish Universities. An Asymmetric Dual Model, Heliyon. 7 (2021), e06450. https://doi.org/10.1016/j.heliyon.2021.e06450

Value of the Data

- Datasets can be used for further analysis of institutionalisation of diversity with a focus on the philosophy and policy, and practice areas in higher education institutions.
- Researchers, policy makers and practitioners could benefit from datasets by focusing on specific Spain's regions, institutions or areas of institutionalisation of diversity within the higher education's policies and practices.
- Datasets represent a baseline of evidence obtained according to a validated, previous list of indicators on diversity. Qualitative studies are needed with deductive and inductive coding procedures to refine the original indicators and corresponding data.
- Datasets will be useful for higher education leaders to innovate philosophies, policies, and practices to enhance institutionalisation of diversity.
- Datasets are of the highest value for (a) a continuous monitoring of the state of higher education in Spain in terms of institutionalisation of diversity; and (b) any further international research in this field.

1. Data Description

The institutionalisation of diversity in the higher education stage, specifically in the university context, requires a system of indicators and areas that allow assessing its global scope in terms of inclusion [1,3]. Having said that, the reason for datasets described in this paper is an extension of our recent study on diversity in policies and practices of Spanish universities that we conducted in the frame of a national project (project number EDU2017–82,862-R) [1]. Besides, it contributes to the call of Elsevier on conducting research to tackle the potential commitment for action in inclusion and diversity [4].

According to both datasets (see them in Mendeley Data repository), in the first place and in order to check the status of diversity policy (Sample 1), we used a check-list with five indicators about philosophy and policy area. Specifically, these indicators were "Institutional statement", "Strategic planning", "Definition of diversity", "Institutional culture" and "Accreditation and professional promotion" (see Table 1), that were analyzed in official documents. Moreover, this dataset encompasses the following other variables: name of Spanish universities, avalilability of data about institutionalisation of practices, university ownership (public or private), index of institutionalisation of diversity policy, index of institutionalisation of diversity practice, *U*-Ranking global scores and its three areas (Teaching, Research and Innovation), standardised *z*-scores of diversity indexes (policies and practices), and differential *z*-scores ($z_{\text{policy\_index}} - z_{\text{practice\_index}}$).

Secondly, in order to check the status of diversity practices (Sample 2), we used a questionnaire with 19 indicators related to eight areas of institutionalisation (5-point response scale, except for two indicators with a dichotomous scale) which was sent online to chief diversity and equality officers at Spanish universities. These eight areas were "Access for students from all protected groups, as well as the strategies for their participation and progress" (items 6, 7, and 8), "Leadership in favour of inclusion and equity" (items 4 and 13), "Support services for members of protected groups" (items 14, 15, and 17), "Processes to foster evaluation, research and innovation in inclusion and equity" (items 11, 12, 18, and 19), "An inclusive academic curriculum" (item 9), "A climate and culture of inclusion" (items 3, 5, and 16), "Projection of this inclusive culture within the community" (items 1 and 2) and "Staff training" (item 10) (see Table 2). Along with individual responses given by chief diversity or equality officers in the 19 items, averages were calculated for each item when responses were received from both types of officers. Averages across the corresponding items for the eight practice areas were obtained, as well as general means for diversity indexes of institutionalisation (policy and practice). As in the first dataset, *U*-Ranking global scores and its three areas (Teaching, Research and Innovation), as well as scores in the five diversity policy indicators were also included in this second dataset. Furthermore, information on the name of Spanish universities and institution ownership (public or private) was registered.

The total of 24 indicators grouped into nine areas of institutionalisation of diversity were taken from a previously validated list which was used in an international sample [2].

Table 1
Frequencies of diversity indicators according to philosophy and policy area by type of university.

Indicators for institutionalising diversity	*N*	%		
		Public	Private	Total
Ind 1. Institutional Statement	81 (50 publics and 31 privates)	66.00	67.74	66.67
Ind 2. Strategic planning		94.00	29.03	69.14
Ind 3. Definition of diversity		54.00	54.84	54.32
Ind 4. Institutional culture		72.00	19.35	51.85
Ind 5. Accreditation and professional promotion		34.00	9.68	24.69

Table 2
Descriptive statistics of diversity indicators according to practice areas by type of institutions.

Diversity Practice Areas	Indicators for institutionalising diversity	Response Options	N	Mean			Std. Deviation		
				Public	Private	Total	Public	Private	Total
Area 2. Access for students from all protected groups, as well as the strategies for their participation and progress	Ind 6. Diversity access and retention mechanisms	Totally disagree (1) Disagree (2) Neither disagree nor agree (3) Agree (4) Totally agree (5)	33	3.63	3.08	3.53	1.04	1.10	1.09
	Ind 7. Community support according to the need			4.35	3.67	4.23	0.62	1.14	0.80
	Ind 8. Visibility of career advancement or learning achievements			3.41	3.00	3.33	0.99	1.04	2.03
Area 3. Leadership in favour of inclusion and equity	Ind 4. Leadership in Attention to Diversity (AD) by the university community			3.81	3.42	3.74	1.05	0.93	1.05
	Dichotomous item			% Public	% Private	% Total			
	Ind 13. Administrative leadership in AD	Yes No		85.19	50.00	78.79			
Area 4. Support services for members of protected groups	Ind 14. Support and advice in AD	Totally disagree (1) Disagree (2) Neither disagree nor agree (3) Agree (4) Totally agree (5)		4.30	3.83	4.21	0.86	0.90	0.90
	Dichotomous item			% Public	% Private	% Total			

Table 2 (*continued*)

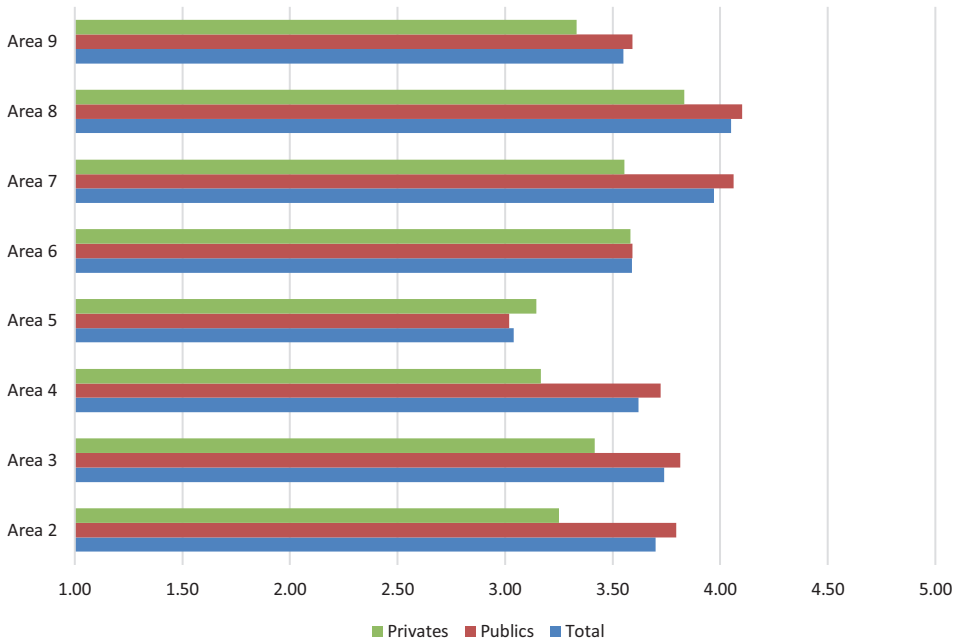| Diversity Practice Areas	Indicators for institutionalising diversity	Response Options	N	Mean			Std. Deviation		
				Public	Private	Total	Public	Private	Total
	Ind 15. Formal unit AD	Yes No		96.30	83.33	93.94			
	Ind 17. Resources management in AD	Totally disagree (1) Disagree (2) Neither disagree nor agree (3) Agree (4) Totally agree (5)		3.15	2.50	3.03	0.91	1.26	1.03
Area 5. Processes to foster evaluation, research and innovation in inclusion and equity	Ind 11. Innovation in AD			2.81	2.92	2.83	0.98	0.61	0.94
	Ind 12. Research in AD			3.09	3.08	3.09	1.06	1.30	1.13
	Ind 18. Institutional evaluation in AD			3.17	3.25	3.18	1.01	0.69	0.97
	Ind 19. Institutional transfer			3.00	3.33	3.06	0.76	1.25	0.89
Area 6. An inclusive academic curriculum	Ind 9. Allusion AD in study plans			3.59	3.58	3.59	1.08	0.73	1.04
Area 7. A climate and culture of inclusion	Ind 3. University community awareness			4.15	4.00	4.12	0.86	0.58	0.83
	Ind 5. Incentives, rewards and recognition			3.70	3.17	3.61	1.07	0.90	1.08
	Ind 16. Recipients formal unit			4.33	3.50	4.18	0.87	0.96	0.96
Area 8. Projection of this inclusive culture within the community	Ind 1. Institutional context			3.93	3.25	3.80	1.09	0.69	1.07
	Ind 2. Collaboration with external entities			4.28	4.42	4.30	0.74	0.45	0.71
Area 9. Staff training	Ind 10. Training in AD			3.59	3.33	3.55	0.96	0.55	0.92

Fig. 1. Mean of diversity practice areas (2–9) in 33 Spanish universities.

1.1. Descriptive statistics of diversity indicators by areas and type of university

Table 1 shows descriptive statistics, specifically frequencies of diversity indicators according to philosophy and policy area by type of university (public and private).

Table 2 shows descriptive statistics of diversity indicators under eight practice areas. It allows us to know which indicators present higher means compared to others by type of university, considering their deviation standard as well.

1.2. Descriptive statistics of diversity practice areas by type of university and individual institutions

Fig. 1 represents the mean of each diversity practice area according to the set of all participating higher education institutions at this stage of the study ($N = 33$), considering the type of university (public and private). Finally, Fig. 2 breaks the mean for each practice area (2–9) down by each specific university.

1.3. Comparison among standard scores (z-scores): philosophy and policy index, and practice index vs. U-Ranking index

Figs. 3 and 7 show a graphical comparison of standardised scores of the philosophy and policy, and practice indexes with the standardised global scores of the *U*-Ranking index [5]. Some universities did not participate in the 2018 *U*-Index. Therefore, figures include universities for which both types of data were available. On the other hand, Figs. 4–6,8,9 y 10 again compare diversity indexes (philosophy and policy, and practice) with the three disaggregated areas of *U*-ranking that coincide with three university missions (teaching, research, and technological innovation and development).
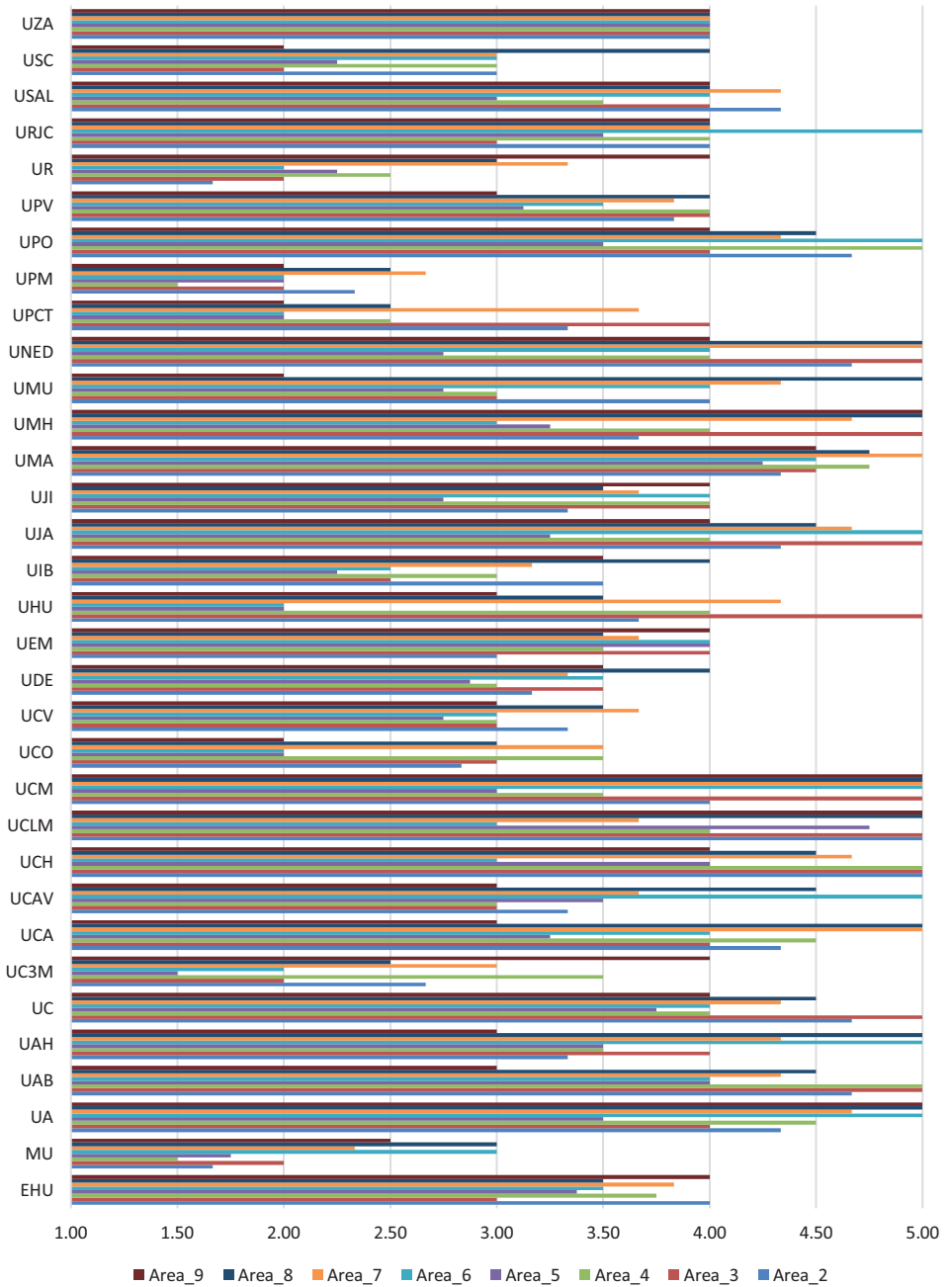
Fig. 2. Average of diversity practice areas (2–9) according to each of the 33 participating Spanish universities.
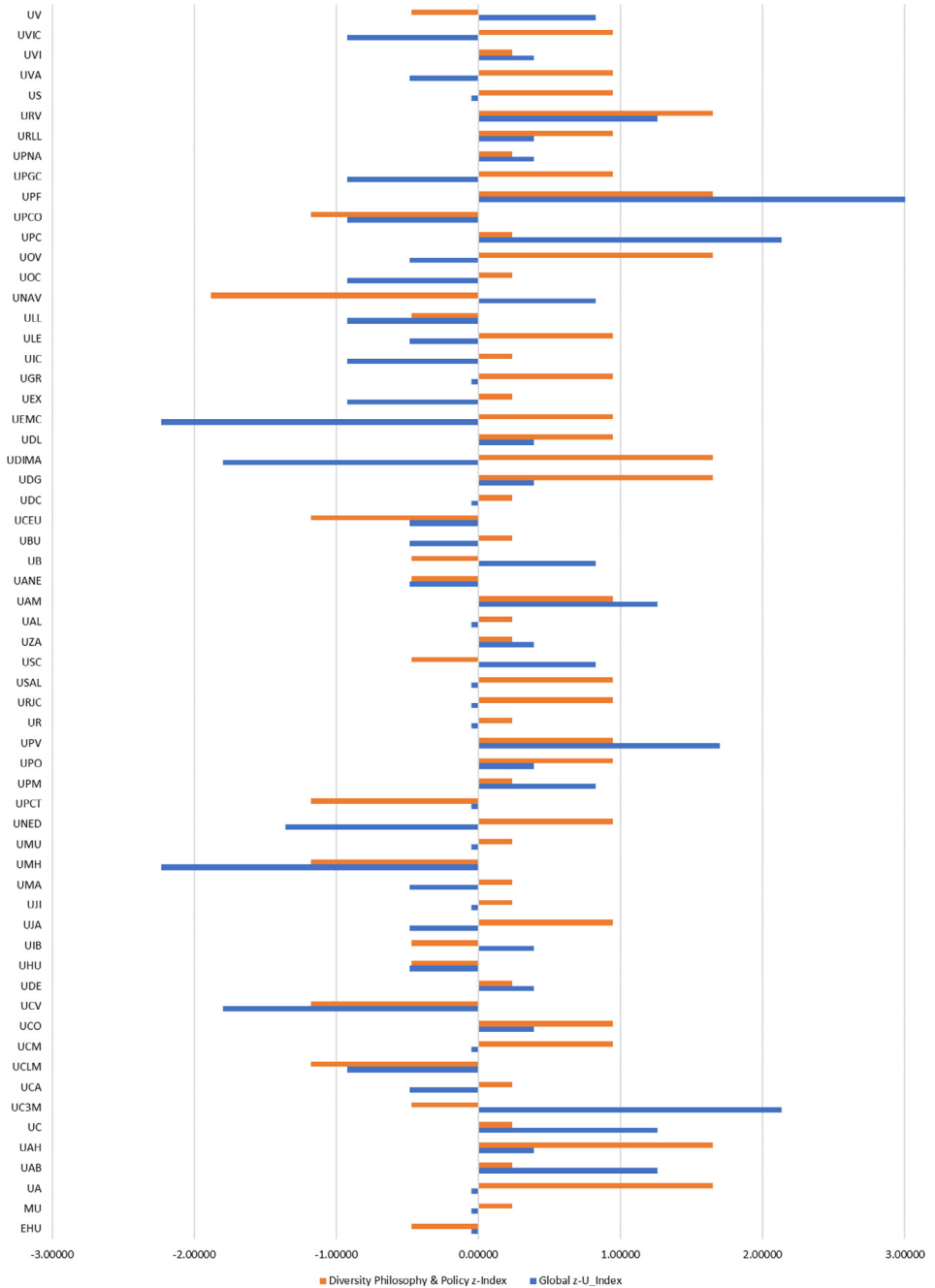
Fig. 3. Comparison between the standardised scores of Spanish universities in the philosophy and policy index and the standardised global scores in the *U*-Ranking (*N* = 61).
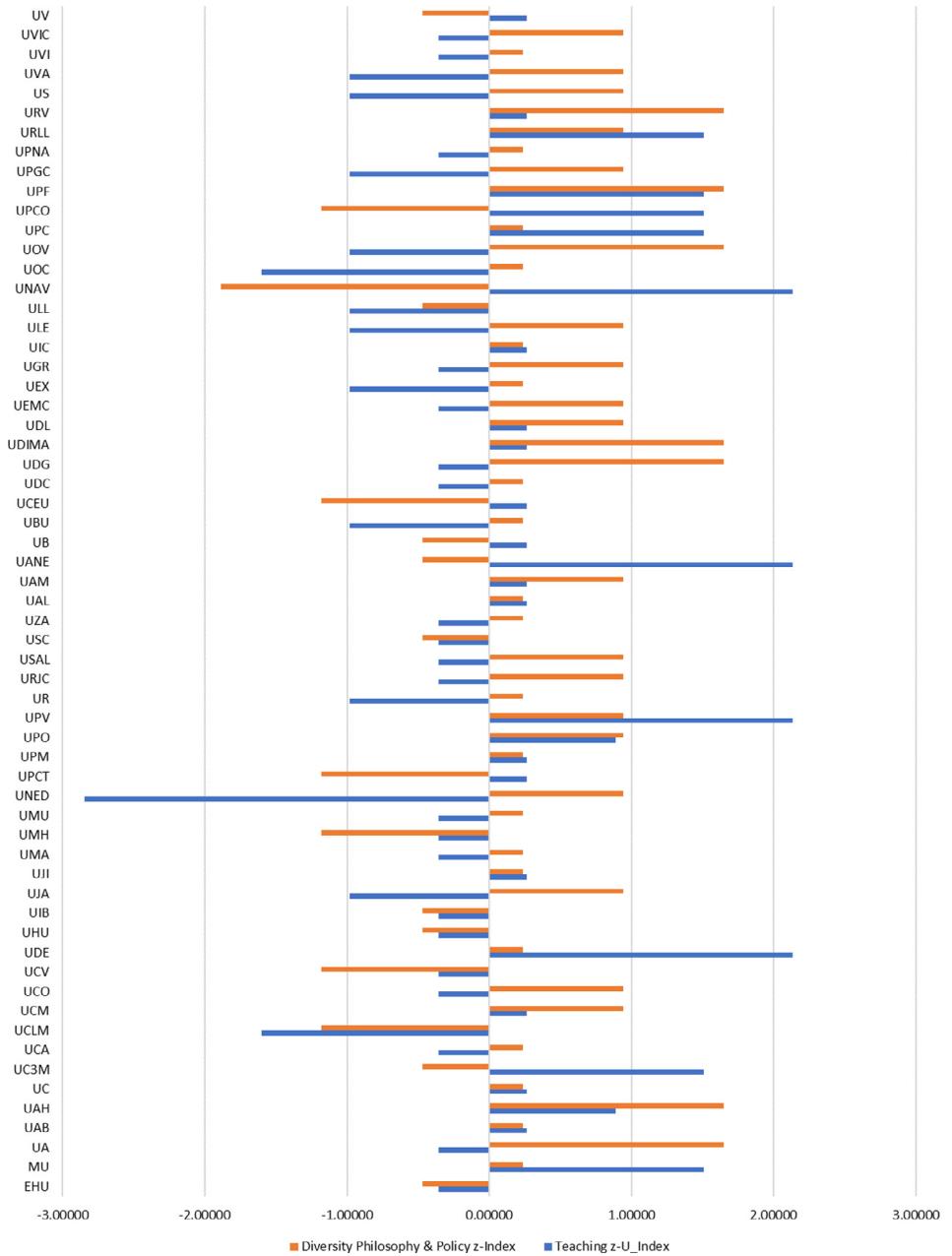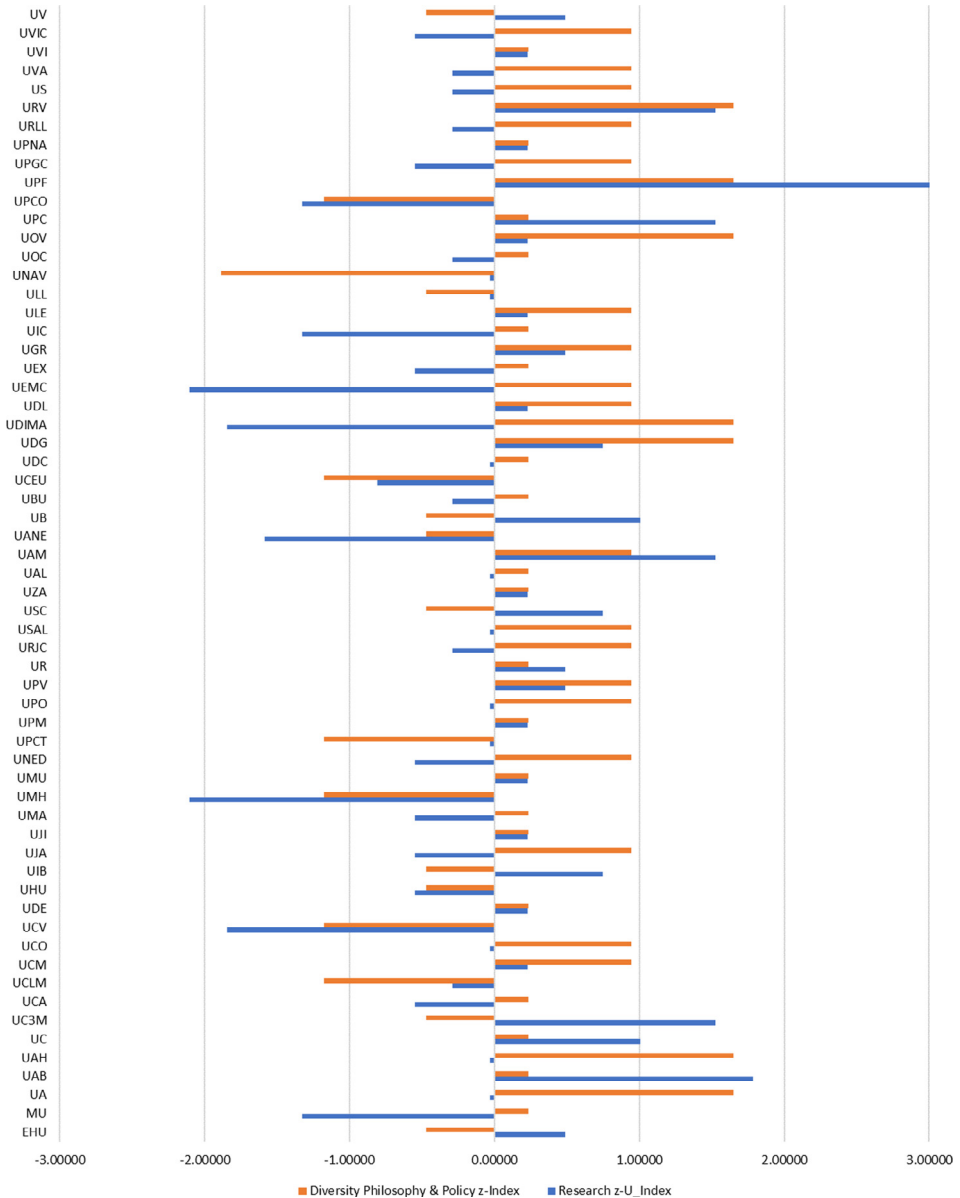
Fig. 4. Comparison between the standardised scores of Spanish universities in the philosophy and policy index and the standardised teaching scores in the *U*-Ranking (*N* = 61).
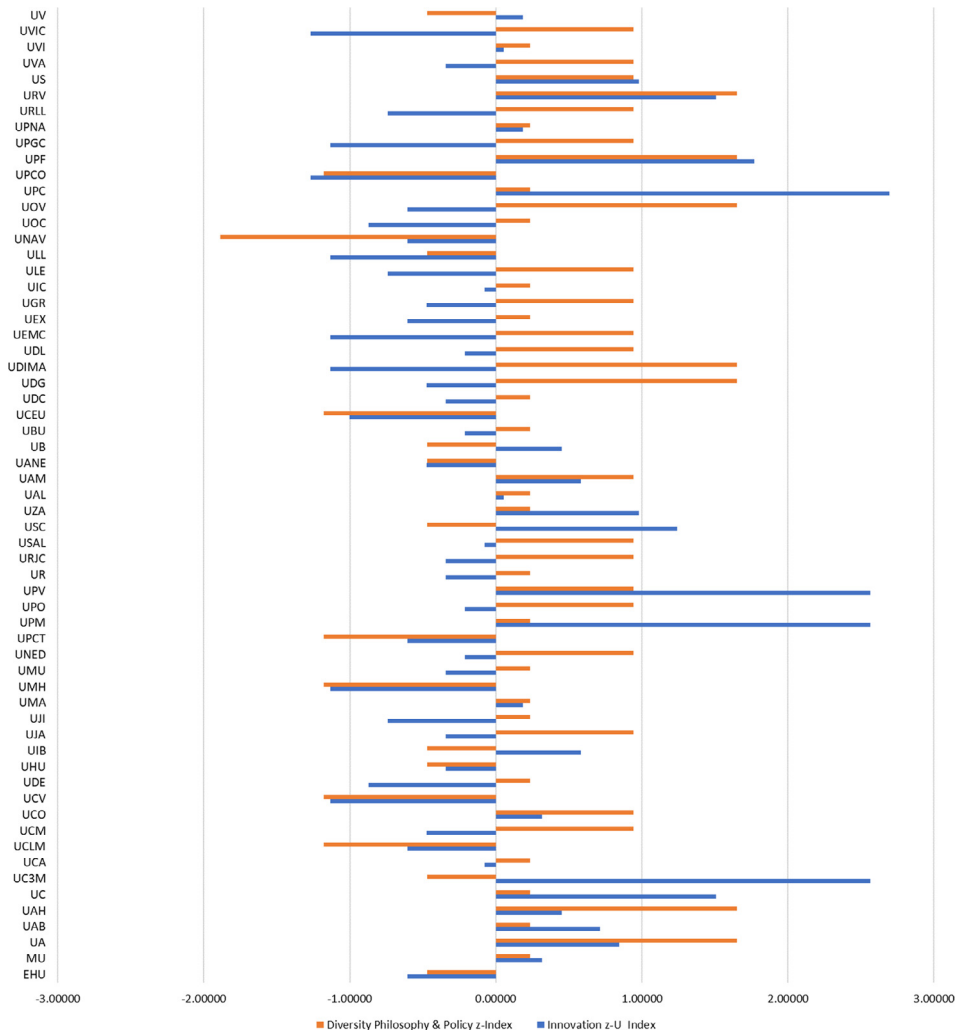
Fig. 5. Comparison between the standardised scores of Spanish universities in the philosophy and policy index and the standardised research scores in the *U*-Ranking (*N* = 61).

The data support a lack of relationship between diversity and *U*-rankings of quality of universities. Variability among universities is high as seen in figures, where it is shown through a graphical comparison that diversity and productivity indexes are both above or below the mean in less than 50% of universities, while both types of indexes follow a reverse trend in more than half of the institutions.

Fig. 6. Comparison between the standardised scores of Spanish universities in the philosophy and policy index and the standardised innovation scores in the *U*-Ranking (*N* = 61).

2. Experimental Design, Materials and Methods

A descriptive and correlational design was used to evaluate the presence and characteristics of policies and practices to institutionalise diversity in Spanish universities (both public and private), using a check-list and a questionnaire as tools to gather data. Both supplementary materials are displayed [1]. The initial number of Spanish universities considered in this study (*N* = 84), according to Register of Universities, Centers and Titles, were included as population.

Firstly, for the purpose of the first stage of the research, five indicators corresponding to area 1 of institutionalisation (philosophy and policy) were included on the check-list (Table 1). In order to detect the presence of this indicators, a total of 167 official documents (strategic plans or, failing that, bye-laws; diversity plans; and equality plans) were extracted from 81 institutional websites (three institutions were discarded due to the lack of information provided on their websites). Using the software Atlas.ti (v.7) we proceeded to the systematic reading of each
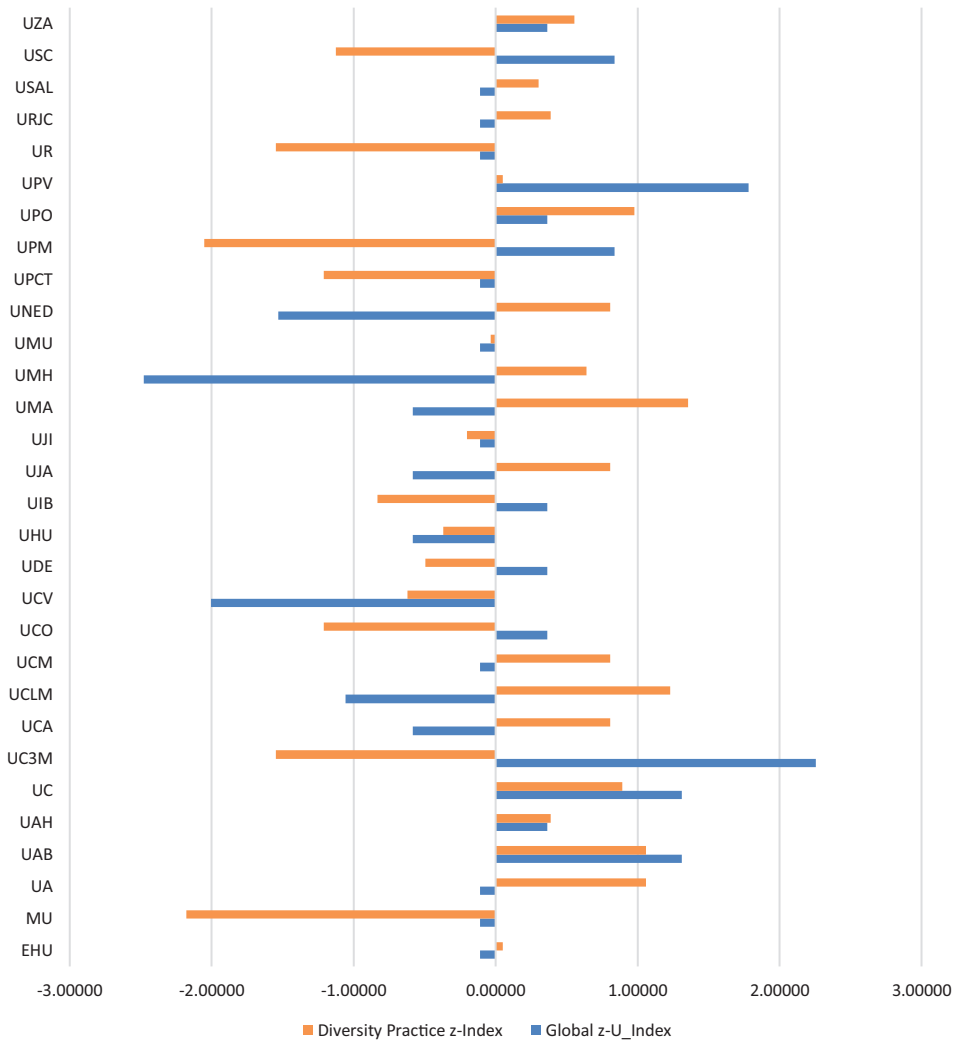
Fig. 7. Comparison between the standardised scores of Spanish universities in the practice index and the standardised global scores in the *U*-Ranking (*N* = 30).

of them, as well as to deductive coding. Moreover, we could build an index of institutionalisation of diversity through the addition of indicators identified in the regulatory documentation for each university, which ranged from 0 to 5.

Secondly, Questionnaire (Likert scale of 5 points, except for two indicators, where the response was dichotomous [Yes/No]) was designed by adapting the remaining 19 indicators from the original list [2] in eight areas. Google Forms was used to administer it online to chief diversity and equality officers at Spanish universities, considering ethics principles (informed consent, voluntary participation, privacy and anonymity of responses and independence and impartiality in the dissemination of results) [6], but only responses from 33 institutions were received. Data were downloaded in the ".xlsx" format, and imported them into IBM SPSS Statistics 25 (See Table 2, Figs. 1 and 2).
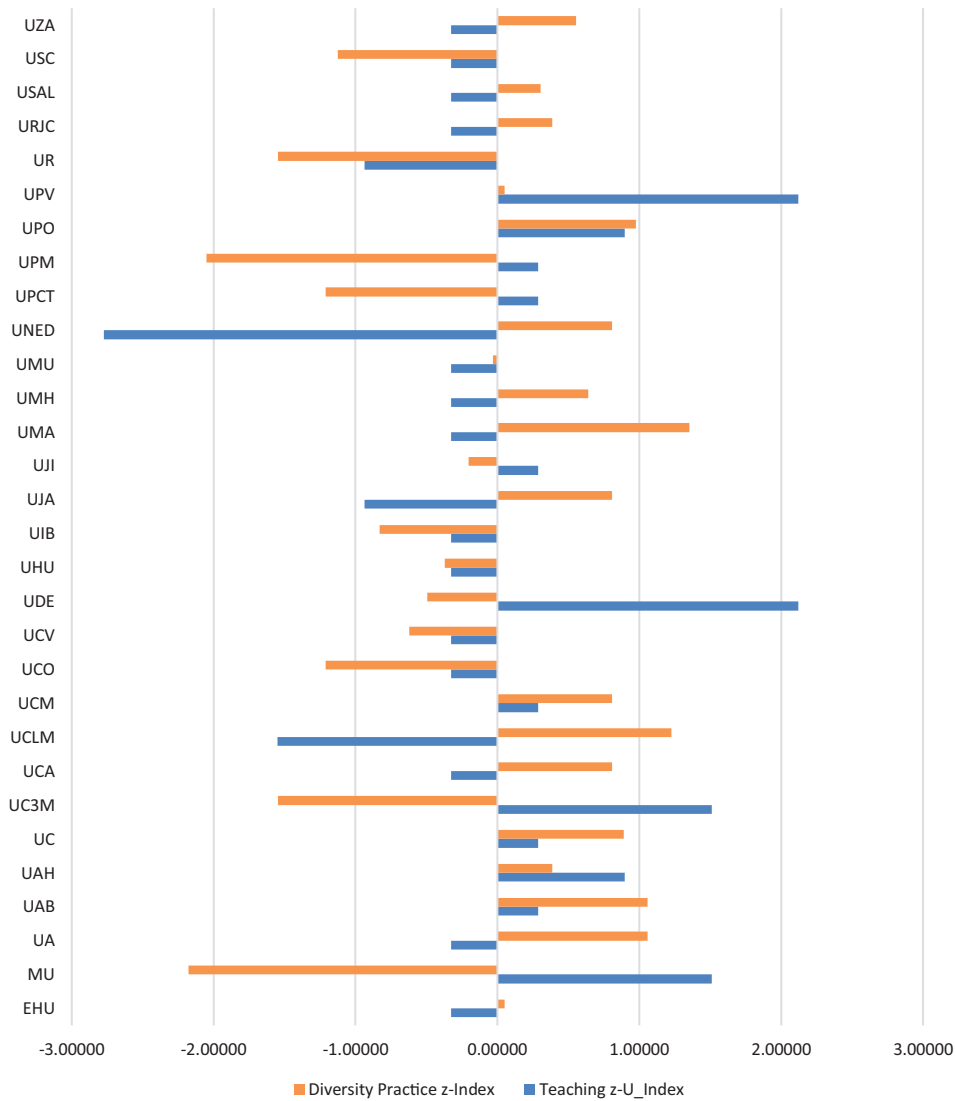
Fig. 8. Comparison between the standardised scores of Spanish universities in the practice index and the standardised teaching scores in the U-Ranking ($N = 30$).
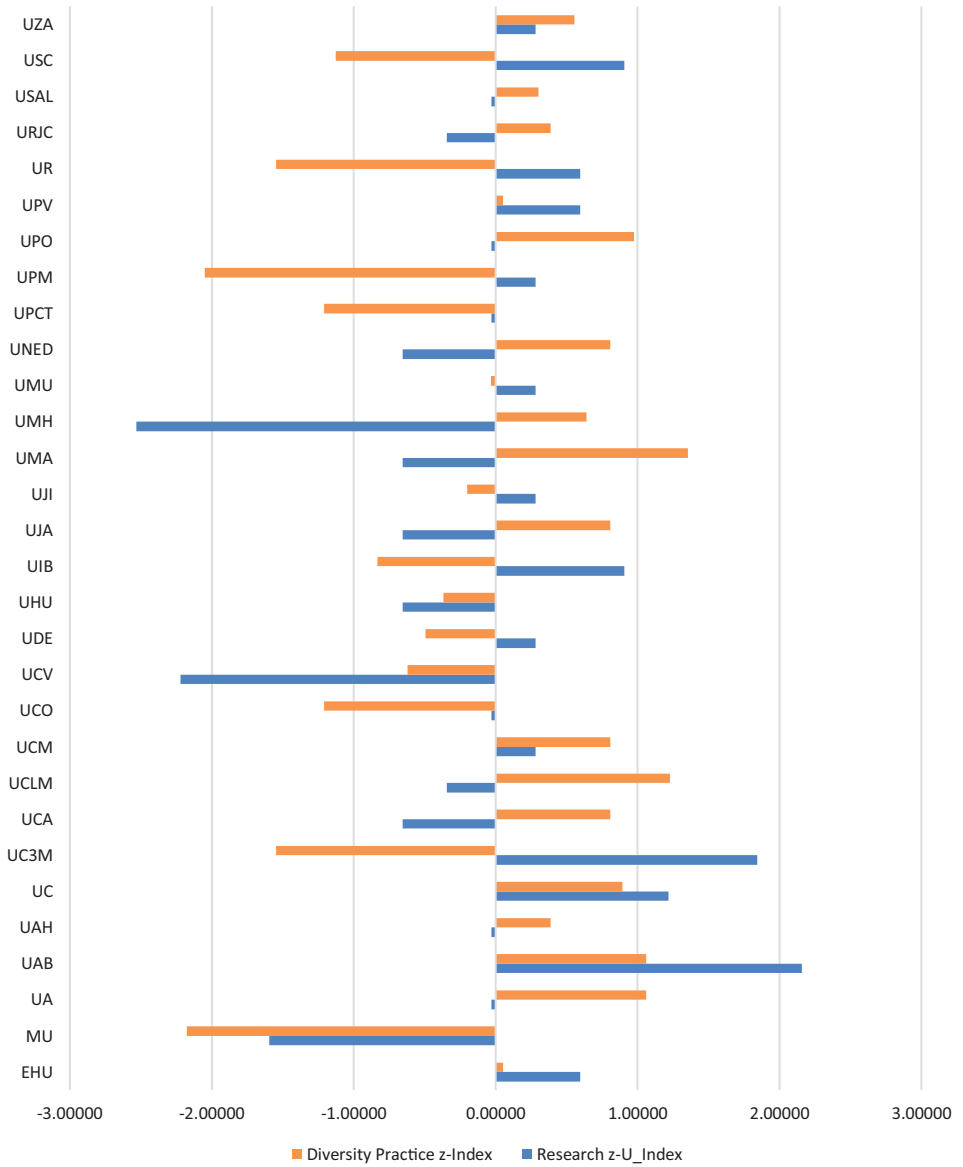
Fig. 9. Comparison between the standardised scores of Spanish universities in the practice index and the standardised research scores in the *U*-Ranking (*N* = 30).
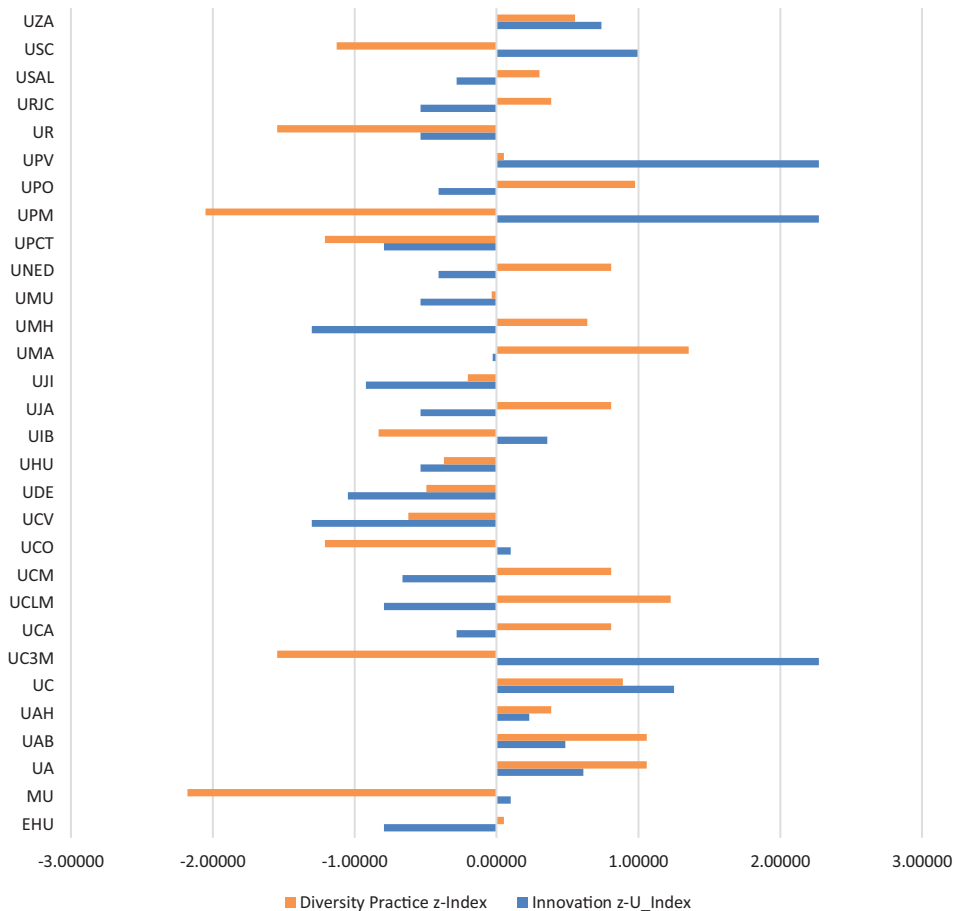
Fig. 10. Comparison between the standardised scores of Spanish universities in the practice index and the standardised innovation scores in the *U*-Ranking (*N* = 30).

Finally, the scores of both resulting indexes were standardised together with the scores of the global index of the U-Ranking and of its three main areas (teaching, research, and innovation) [5]. The standardised scores (*z*-scores) allowed the comparison of variables (diversity and *U* indexes), whose scores had been measured with dissimilar scales [7] (See Figs. 3–9 and Fig. 10).

Ethics Statement

We confirm that the study to which both datasets belong meets ethical guidelines and adheres to the legal requirements of the study country, and that it was prospectively approved by the University of Cordoba Bioethics and Biosafety Committee.

CRediT Author Statement

Carmen-María Hernández-Lloret: Data collection, Data curation, Methodology; **Gemma Fernández-Caminero:** Data collection, Data curation, Methodology; **Hugo González-González:**

Data collection, Data curation, Methodology; **Luis Espino-Díaz:** Data collection, Data curation, Methodology; **y José-Luis Álvarez-Castillo:** Conceptualization, Methodology, Writing, Supervision.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships which have or could be perceived to have influenced the work reported in this article.

Acknowledgments

Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.dib.2021.107024.

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