# RESEARCH ARTICLE





# Organisations' contributions to sustainability. An analysis of impacts on the Sustainable Development Goals

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## Abstract

Organisations have been driving sustainability, where some efforts have focussed on the organisation itself and some on how organisations contribute to society, such as addressing the Sustainable Development Goals (SDGs). Although organisations have been working to address the SDGs, there has been limited integration of the SDGs in organisation systems. This paper aimed at analysing how organisations have been addressing the SDGs. A survey was developed to investigate the impacts and contribution of organisations to sustainability, where 294 responses were obtained for the questions on organisations' impacts to the sustainability. The data were analysed using descriptive analysis: Friedman test to rank the impacts on the SDGs and divided into quartiles; a ratio analysis between positive impacts and negative impacts; and correlations. The results show that organisations' impacts on the SDGs are quite generalisable to all types of organisations, with three exceptions (SDGs 4, 5 and 16). The results also served to develop an SDG impact categorisation. The correlation analysis showed that organisations address the SDGs through a compartmentalised approach. The results helped to propose the 'organisations' impacts on the SDGs framework' focussing on the contribution of organisations to sustainability. This research shows that organisations can contribute directly to some of the SDGs, but not to others. Therefore, the discourse must change from integration of SDGs on organisations to the contribution that organisations can have on the SDGs.

#### KEYWORDS

impacts, management, organisations, Sustainable Development Goals

#### INTRODUCTION 1

Sustainable development (SD) and sustainability have appeared as concepts to help address the economic, environmental and social

Abbreviations: CSOs, civil society organisations: GRI, Global Reporting Initiative: HEIs, higher education institutions; PSOs, public sector organisations; SDGs, Sustainable Development Goals.

impacts from previous generations, on this generation and future ones through a holistic perspective (Hjorth & Bagheri, 2006; World Commission on Environment and Development [WCED], 1987).

One of the most recent initiatives for SD is the 17 United Nations (UN) Sustainable Development Goals (SDGs), and their 169 targets, which were agreed by 195 states and cover the most important points that modern societies need to address to become less unsustainable (UN, 2018, 2019). The SDGs are indivisible (UN Environment

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Programme [UNEP], 2022); that is, they need to be addressed as a whole, and not through a silo mentality. The SDGs were designed by government for government, as indicated in the Agenda 2030 declaration (see UN, 2018, 2019).

In parallel to governments, organisations (civil society organisations (CSOs), companies, education institutions, public sector organisations (PSOs) and hybrid ones) have been instrumental in driving sustainability (Barreiro-Gen et al., 2022; Holliday et al., 2002; Kim et al., 2016; Lozano, 2018).

A number of efforts have been focussed on different approaches to explain how organisations contribute to sustainability, some have focussed on the organisation itself (e.g., on employees and culture [Pennington & More, 2016; Temel et al., 2022], products and services [Rodríguez-Olalla & Avilés-Palacios, 2017], structures and plans, human resources and organisational behaviour [Lozano, 2008; Pennington & More, 2016], and sustainability reports and communication [Batista & de Francisco, 2018]), whereas some approaches have focussed on how organisations contribute to society (Lozano, 2018; Topple et al., 2017; van Zanten & van Tulder, 2021).

Organisations have the means to make societies more sustainable and advance the Sustainable Development Agenda by contributing to the SDGs through their strategies and operations and providing new solutions (Global Reporting Initiative [GRI] & UN Global Compact, 2018; Rosati & Faria, 2019; Topple et al., 2017; van Zanten & van Tulder, 2021); however, there has been limited integration of the SDGs in organisation systems (Grainger-Brown & Malekpour, 2019; Montesano et al., 2021; Schramade, 2017). This paper aimed at analysing how organisations have been addressing the SDGs.

The rest of the paper is structured in the following way: Section 2 presents the methods used; Section 3 discusses organisations' contribution and impact to sustainability; Section 4 provides the results; Section 5 offers the discussions; and Section 6 presents the conclusions.

# 2 | IMPACTS OF ORGANISATIONS ON THE SDGs

Organisations, including civil society, companies, education institutions, hybrid and public sector ones (see Barreiro-Gen et al., 2022; Holliday et al., 2002; Lozano & Barreiro-Gen, 2021), have been instrumental in driving sustainability (Holliday et al., 2002; Kim et al., 2016; Lozano, 2018).

A number of organisational sustainability definitions have been proposed to help explain this process. Four explicit definitions of sustainable organisations can be identified. Leon (2013) proposed a sustainable organisation to be '... an ethic and authentic economic entity that develops the appropriate structures and plans in order to become capable of achieving the objectives defined at the economic, environmental and social levels and to ensure its growth through a rational resource allocation'. Rodríguez-Olalla and Avilés-Palacios' (2017) definition states that organisational sustainability is '.... a multidimensional phenomenon that focuses on maintaining results, generating

knowledge, building capacity, establishing experiences with partners, and producing services and products based on the concepts of efficiency and effectiveness'. For Vargas-Hernández (2021), it is defined as '... a critical concern in designing and implementing strategies and practices and leveraging management vision and leadership aimed to organizational sustainable development'. Lozano (2018) posited that organisational sustainability is to be understood as: 'The contributions of the organisation to sustainability equilibria, including the economic, environmental, and social dimensions of today, as well as their interrelations within and throughout the time dimension (i.e. the short-, long-, and longer-term). This entails the continuous incorporation and integration of sustainability issues in the organisation's system elements (operations and production, strategy and management, governance, organisational systems, service provision, and assessment and reporting), as well as change processes and their rate of change. The system elements and change processes transform the inputs (in regard to material and resources that have economic, environmental, and social value) into outputs (products, services, and waste, with their economic, environmental, and social value). These fulfil the organisation's goal or objective, based on resource efficiency and effectiveness. The organisation is affected by the organisation's nonhuman and human resources (i.e. individuals, groups, culture, values, attitudes, and norms), its infrastructure, its supply chain (upstream and downstream), and the interactions with its stakeholders (internal, inter-connecting, and external)'. This definition is illustrated in Figure 1 and used in this paper since it provides a more complete understanding of how organisations contribute to sustainability.

A large body of literature on organisational sustainability has focussed on companies (Banerjee, 2011; Haugh & Talwar, 2010; Pennington & More, 2016), followed by education institutions, in particular higher education institutions (HEIs) (Dlouhá et al., 2013; Lozano et al., 2015). Limited, yet increasing, attention has been directed to PSOs and other CSOs (Domingues et al., 2017; Dumay et al., 2010; Guthrie & Farneti, 2008; Lodhia et al., 2012).

It should be noted that several publications consider organisations solely as companies (Batista & de Francisco, 2018; Vargas-Hernández, 2021; Wales, 2013; Zawawi & Wahab, 2019). This is incorrect since all companies are organisations, but not all organisations are companies.

Some efforts have been developed to help organisations with the SDGs, for example, the SDG impact assessment tool (GMV, 2019), the Sustainable Development tool, focussing on biodiversity (University of Cambridge et al., 2019), and the SDG compass, focussing mainly on companies (GRI et al., 2016).

In many cases, the SDGs have been adopted by communication or corporate social responsibility departments and have been addressed individually (van Zanten & van Tulder, 2021). Figure 2 shows the communication of SDGs in institutional company reports, where it can be seen that SDGs 8, 9, 12, 14 and 17 are the most communicated and SDGs 1, 2, 11 and 16 are the ones least communicated. This may be due to the former being direct SDGs for companies, whereas the latter indirect SDGs (as discussed by van Zanten & van Tulder, 2021).

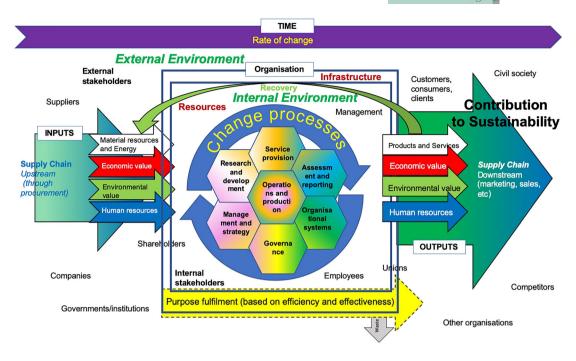
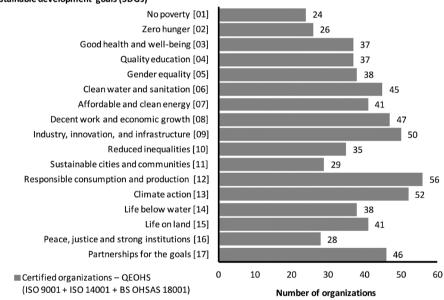


FIGURE 1 Organisational sustainability framework. Source: Lozano (2018)

**FIGURE 2** Communication of SDGs in institutional reports. *Source*: Fonseca and Carvalho (2019)

## Sustainable development goals (SDGs)



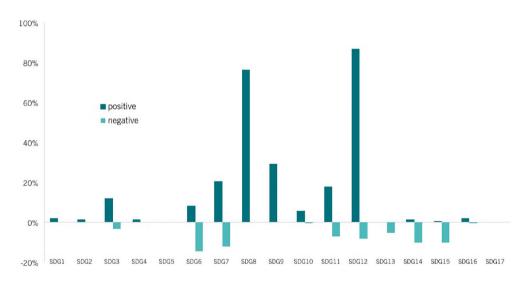
Most research on organisations' contributions to the SDGs has been on companies (Topple et al., 2017; van Zanten & van Tulder, 2021), followed by higher education institutions (HEIs) (e.g., Hansen et al., 2021; Mawonde & Togo, 2019; Perales Franco & McCowan, 2021; Vávra et al., 2022), PSOs (see Bolton, 2021; Soberón et al., 2020) and some efforts by CSOs (Fardet et al., 2020; Hassan et al., 2019).

Impact assessment can help to explain how an organisation contributes to the economic, environmental and social dimensions of sustainability (Haugh & Talwar, 2010; Topple et al., 2017). Impacts can be positive, negative or neutral (Schramade, 2017). Some organisations,

particularly companies, have engaged with the SDGs to avoid negative impacts (van Zanten & van Tulder, 2021). Impacts on the sustainability dimensions are interconnected (Haugh & Talwar, 2010), which in some cases may have synergistic interactions and in other cases conflicting ones (Yuthas & Epstein, 2012).

Figure 3 shows organisations impacts on sustainability (Lozano & Garcia, 2020). As it can be seen, the economic dimension is either very or extremely important in the medium and long terms, with the short term having slightly less importance. The environmental and social dimensions tend to be more important in the future.

FIGURE 3 Sustainability impacts of organisations. Source: Lozano and Garcia (2020)



**FIGURE 4** Industries' impacts on each SDG. *Source*: Schramade (2017)

Figure 4 shows companies' impacts on each SDG, where it can be observed that SDGs 8, 9 and 12 have the highest positive impacts, whereas SDGs 6, 7, 14 and 15 have the highest negative ones.

Organisations have the means to advance the Sustainable Development Agenda by contributing to the SDGs through their strategies and operations and providing new solutions (GRI & UN Global Compact, 2018; Rosati & Faria, 2019; Topple et al., 2017; van Zanten & van Tulder, 2021); however, there has been limited integration of the SDGs in organisation systems (Grainger-Brown & Malekpour, 2019; Montesano et al., 2021; Schramade, 2017).

### 3 | METHODS

A survey was developed to investigate the impacts and contribution of organisations to sustainability. The survey was applied using the online survey tool (Qualtrics, 2018). The data collection took place over the period October 2021 to March 2022. The survey consisted of seven sections (this paper focusses on sections 1 and 2):

- 1. organisation characteristics, including country of origin, size and product–service focus;
- 2. impacts of the organisation to the SDGs;
- 3. contribution to sustainability issues in the organisation;

- 4. engagement with sustainability in the organisational system elements; and
- 5. sustainability impacts in the organisational system elements.

The survey was sent to a database of 5299 contacts from different organisations obtained from the GRI list of organisations world-wide and personal contacts. Three reminders were sent out, one in November 2021, one in January 2022 and the last one in February 2022. From the total list of emails, 712 emails bounced back. From the total, 294 full responses were obtained for the questions on section 2.

The variables for the organisation characteristics had the following potential answers: 6 points for company (1 to 49, 50 to 249, 250 to 499, 500 to 999, 1000 to 4999 and more than 5000 employees); 6-point scale for the time working with sustainability (less than 1 year, between 1 and 3 years, between 3 and 5 years, between 5 and 10 years, between 10 and 15 years and more than 15 years); and 5 points for the use of the impacts on the SDGs ('extremely negative', 'somewhat negative', 'neither positive nor negative', 'somewhat positive' and 'extremely positive').

The data were analysed using descriptive analysis: Friedman test to rank the impacts on the SDGs and divided into quartiles; a ratio analysis between positive impacts ('extremely' and 'somewhat') and negative impacts ('extremely' and 'somewhat'); and correlations between the impacts on the SDGs. The analyses were done using SPSS (IBM, 2016), where the Cronbach alpha for the SDG questions was .897.

#### 3.1 | Limitations of the methods

The internal validity of this research might have been limited by the survey. The 5-point Likert scale may suffer from acquiescence problems, range of choices and desirability. The survey was sent out on the second year of the COVID-19 pandemic where there might have been survey overload. The survey was sent only in English, which may have limited the responses from non-English speakers. The number of respondents (294) may not allow a complete generalisation to all organisations. The generalisability of results to all organisations may be limited to the application of a non-random sampling procedure, where the respondents were chosen from the GRI Disclosure Database with additional input from personal contacts and 'snowballing' methods. A nonresponse bias may be caused by respondents who declined to complete the survey. Generalisability could be improved by a study based on a randomly selected sample drawn from the total number of organisations engaged with sustainability. Most of the respondents were from Europe, which may not represent the reality in other regions.

# 4 | RESULTS

From the 294 responses, 173 were from education (e.g., basic, higher level and vocational), 66 from corporations, 26 from PSOs, 7 from CSOs and 22 other types.

Figure 5 shows the respondents' organisations size in employee numbers, where 33% were between 1000 and 4999, more than 20% were larger than 5000, 15% between 1 and 49, 12% between 500 and 999, and 8% for both 50 to 249 and 250 to 499.

Most of the respondents have been proactively engaged with sustainability (52.4% to a large extent and 45.2% to some extent), and 2% indicated that they were not engaged with sustainability.

Figure 6 shows that the respondents indicated that they have been working proactively with sustainability for more than 3 years (almost 90%), which demonstrates the engagement of the responding organisations with sustainability. Note that 10 respondents did not answer this question.

As it can be observed in Figure 7, the organisations' impacts on the economic, environmental and social dimensions tend to be quite positive. The respondents indicated that their organisations tend to have more negative impacts on the environmental dimension than on

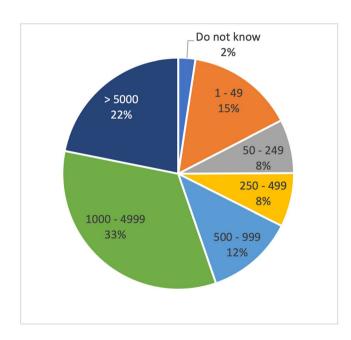
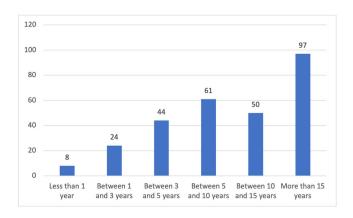


FIGURE 5 Organisation size in employee numbers



**FIGURE 6** Sustainability engagement years from the respondents' organisations

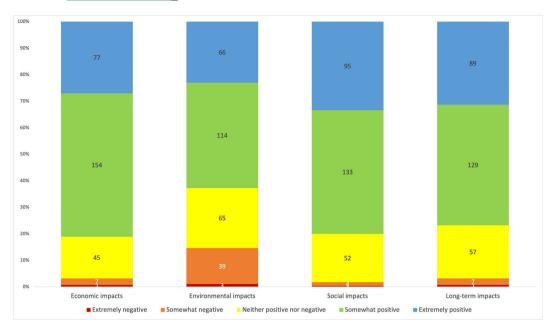


FIGURE 7 Organisations' impact on sustainability dimensions

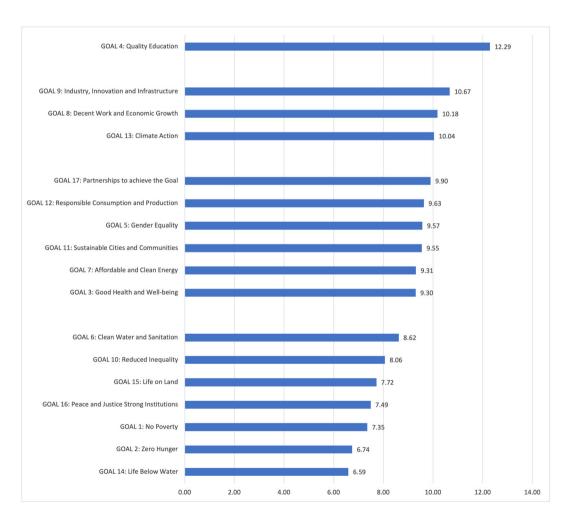


FIGURE 8 SDGs impact ranking (using Friedman test)

the other dimensions (39 organisations) and have fewer positive impacts. The results provide a change in the scale by having positive, neutral, and negative impacts, whereas Lozano and Garcia (2020) provide a 5-point scale from no impact to extremely important. The results show that the impacts on the environmental dimension tend to be more negative, whereas previous research highlighted that it was more important in the future. The results concur with the impacts in the long term, whereas the impact to the economic dimension tends to be higher.

Figure 8 illustrates the impacts on the SDGs divided into quartiles: first quartile (SDG 4); second quartile (SDGs 9, 8 and 13); third

quartile (SDGs 17, 12, 5, 11, 7 and 3); and fourth quartile (SDGs 6, 10, 15, 16, 1, 2 and 14).

Figure 9 shows the impacts on the SDGs sorted in ascending order, where the ones with the most positive impact are SDGs 4, 9, 11, 8 and 13, whereas the ones with the least positive impact are SDGs 2, 14, 16, 1 and 15. This differs from the proposal of Schramade (2017), who indicated that the main impacts were SDGs 12, 8, 9 and 8 (in descending order).

Figure 10 shows the ratio between the positive impacts and the negative ones on each SDG, where three groups can be observed: (1) direct (positively higher than 75% and negatively lower than 6%),

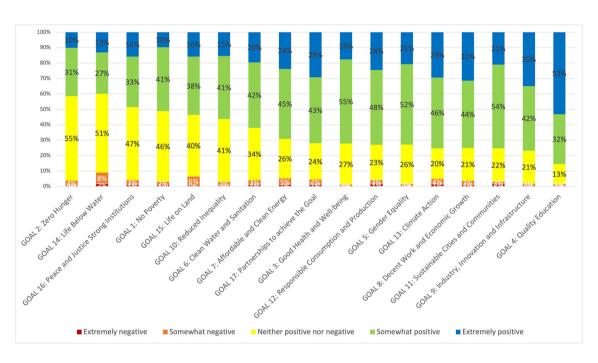


FIGURE 9 Organisations' impacts on the SDGs

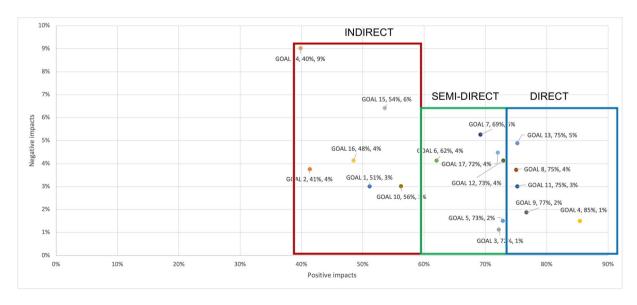


FIGURE 10 Organisations' impacts on the SDGs ratio (positive vs. negative)

	SDG SDG 16 17																	.552	2 5
	SDG 15																.347	.337	5
	SDG 14															.658	.325	305	4
	SDG 13														477	.525	.264	.370	9
	SDG 12													.587	.487	.414	.183	.413	7
	SDG 11											ı	44.	.445	.310	.338	.339	.443	က
	SDG 10										1	.359	.193	.224	.269	.313	.519	.457	4
	SDG 9										.268	.393	.310	.314	.246	.195	.209	.303	₽
	SDG 8									.519	.434	.369	300	.243	.246	.138	.351	.409	ო
	SDG 7								.281	.295	.122	.379	.407	.540	.360	.340	.107	.229	ო
SDGs	SDG 6							.529	.209	.224	.19	.349	.504	.499	.473	.509	.168	.273	9
Spearman correlation between the organisations' impacts on the SDGs	SDG 5					1	.147	.129	.367	.171	.490	.219	.175	.236	.218	.163	.387	366	1
	SDG 4					.342	.242	.163	.256	.316	.358	.211	760.	.193	960.	.194	.362	.344	0
	SDG 3				.357	.338	.354	.269	.274	.218	359	.324	307	396	.285	.340	.339	.318	0
	SDG 2			.359	.206	.299	.411	.148	.208	.073	.259	.204	.271	.267	.304	.415	.334	.288	က
n betwee	SDG 1	I	.661	.332	.256	.266	.224	.081	.351	.150	.349	.177	.138	.132	.192	.320	.375	.352	₽
TABLE 1 Spearman correlation		SDG 1	SDG 2	SDG 3	SDG 4	SDG 5	SDG 6	SDG 7	SDG 8	SDG 9	SDG 10	SDG 11	SDG 12	SDG 13	SDG 14	SDG 15	SDG 16	SDG 17	Number of correlations higher

Note: The colours illustrate the differences between the highest and lowest correlations (green for highest, yellow for middle and red for lowest).

with goals 4, 9, 11, 8, 12 and 13; (2) semi-direct (with positive between 60% and 75% and negatively lower than 5%), with goals 3, 5, 12, 17, 7 and 6; and (3) indirect (positively lower than 60% and negatively lower than 10%), with goals 10, 1, 2, 16, 15 and 14. These results highlight that organisations have more impact to the SDGs in the direct category than on the semi-direct and low indirect categories.

An ANOVA was conducted to test the mean differences between the following organisation types: (1) CSOs, (2) companies, (3) HEIs, (4) PSOs and (5) others. There were statistically significant differences (p < .01) in the impacts between organisation types to 3 of the 17 SDGs: 4, 5 and 16. Then, Tukey's post hoc test was done to identify which particular differences between pairs of means are significant. HEIs have the highest impact to SDGs 4 and 5 when compared against the other organisation types. CSOs have a higher impact to SDG 16 than the other organisation types, which are similar to each other.

Table 1 shows the correlation between the organisations' impacts on the SDGs. Some SDGs are highly correlated to other, for example, SDGs 1 to 2, 14 to 15 and 12 to 13, whilst some are not correlated to others such as 1 to 7, 2 to 9 and 4 to 12. It can be observed that four groups have number of correlations higher than .4 relative to the other SDGs: (1) highest (5 to 7): 12, 13, 6, 15 and 17; (2) medium (3 and 4): 10, 14, 7, 8, 2 and 11; (3) low (1 and 2): 16, 1, 2 and 9; and (4) no correlations above .4: 3 and 4.

Figure 11 shows the interrelations between the SDGs that had a correlation higher than .4, where it can be seen that SDGs 3 and 4 do not have any correlations higher than .4. There were two correlations higher than .6 (between 1 and 2, and 14 and 15), seven correlations between .5 and .6 (connecting SDGs between the three categories) and 15 correlations between .4 and .5.

Table 1 and Figure 11 highlight that organisations address the SDGs through a compartmentalised approach.

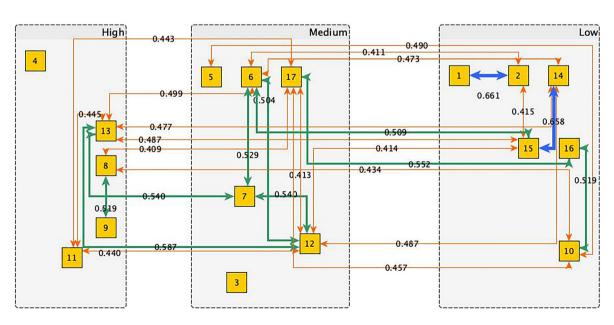
# 5 | DISCUSSION

The results show that organisations' impacts on the SDGs are different than those reported from industry as discussed by Schramade (2017), where, for organisations, the SDGs with the most positive impact were (in descending order) 4, 9, 11, 8 and 13, whereas for industry, these were (in descending order) 12, 8, 9, 7 and 3. The ANOVA between the organisation types resulted in differences only in SDGs 4, 5 and 16, where HEIs have the highest impact on 4 and 5 compared to other organisation types and CSOs to 16. This refutes Schramade's (2017) ranking of the SDGs.

The SDG impact categorisation from the positive to negative impact ratio analysis complements the van Zanten and van Tulder (2021) categorisation by adding the semi-direct category and providing more details into which SDGs belong to each category: (1) direct, with goals 4, 9, 11, 8, 12 and 13; (2) semi-direct, with goals 3, 5, 12, 17, 7 and 6; and (3) indirect, with goals 10, 1, 2, 16, 15 and 14.

The correlation analysis showed that organisations address the SDGs through a compartmentalised approach, in spite of their indivisibility base (as highlighted by UNEP, 2022) and the nature of the interconnectedness of impacts on sustainability (as argued by Haugh & Talwar, 2010). This may be because the SDGs were developed by government and for government (see UN, 2018, 2019), and organisations might not fully understand the different SDGs, their interconnections or how the organisation can contribute to them.

The correlation results show that organisations can have direct impact to some SDGs, and these can have impact on some semi-direct SDGs (e.g., 13 on 12 and 7), which in turn have impact on some indirect ones (such as 6 on 15, and 17 on 16), which can improve organisations' contribution to the SDGs (addressing the concerns of Grainger-Brown & Malekpour, 2019; Montesano et al., 2021; Schramade, 2017).



**FIGURE 11** Interrelations between the SDGs that had a correlation higher than .4. The red arrows show the correlations between .4 and .5, the green ones between .5 and .6 and the blue ones over .6.

**FIGURE 12** Organisations' impacts on the SDGs. The blue SDGs are direct, the green ones semi-direct and the orange ones indirect. The green arrows connecting the SDGs show correlations between .5 and .6 and the blue arrows correlations between .6 and .7.

Figure 12 synthesises the results and integrates them to the organisational sustainability framework (see Figure 1), where the three categories of organisation's impact to the SDGs are illustrated (direct in blue, semi-direct in green and indirect in orange). The blue arrows show the correlations between .6 and .7, which are only in the indirect category. The green arrows show the SDGs correlations between .5 and .6, where it can be seen that SDG 13 is interrelated to 12 and 7. These two are interrelated SDG 6, which in turn is interrelated to 15. SDG 17 is interrelated to 16, which in turn is interrelated to 10. Figure 12 expands Lozano's (2018) definition of organisational sustainability by providing details on the contribution to the SDGs (through categories and interconnections) and subsequently to Agenda 2030.

# 6 | CONCLUSIONS

SD and sustainability have appeared as concepts to help address the economic, environmental, and social impacts from previous generations, on this generation and future ones through a holistic perspective. One of the most recent initiatives for SD is the 17 SDGs. The SDGs are indivisible and were developed by governments and for governments.

In parallel, organisations have been striving to drive sustainability, where some efforts have focussed on the organisation itself and some on how organisations contribute to society, such as addressing the SDGs. Most research on organisations' contributions to the SDGs has been on companies, followed by HEIs, then by PSOs and some efforts by CSOs. Although organisations have been working to address the SDGs, there has been limited integration of the SDGs in organisation

systems. This paper aimed at analysing how organisations have been addressing the SDGs.

A survey was developed to investigate the impacts and contribution of organisations to sustainability, where 294 responses were obtained for the questions on organisations' impacts to the sustainability. The data were analysed using descriptive analysis: Friedman test to rank the impacts on the SDGs and divided into quartiles; a ratio analysis between positive impacts ('extremely' and 'somewhat') and negative impacts ('extremely' and 'somewhat'); and correlations between the impacts on the SDGs.

The results show that organisations' impacts on the SDGs are quite generalisable to all types of organisations, with the exceptions of SDGs 4, 5 and 16 (the former two are more relevant for HEIs and the latter for CSOs). The results also served to develop an SDG impact categorisation (direct, semi-direct and indirect). The correlation analysis showed that organisations address the SDGs through a compartmentalised approach. The results were used as a base to expand the definition of organisational sustainability by providing the 'organisations' impacts on the SDGs' framework detailing on the contribution to the SDGs (through categories and interconnections) and subsequently to Agenda 2030.

Although the SDGs were designed by government for government, this research shows that organisations can contribute directly to some of the SDGs (direct ones), but not to others (indirect). Therefore, the discourse must change from integration of SDGs on organisations to the contribution that organisations can have on the SDGs.

#### **CONFLICTS OF INTEREST**

None.

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#### **REFERENCES**

- Banerjee, S. B. (2011). Embedding sustainability across the organization: A critical perspective. Academy of Management Learning & Education, 10(4), 719-731. https://doi.org/10.5465/amle.2010.0005
- Barreiro-Gen, M., Lozano, R., Carpenter, A., & Bautista-Puig, N. (2022).
  Analysing sustainability change management in government owned companies: Experiences from European ports. Social Responsibility Journal, 14. https://doi.org/10.1108/SRJ-04-2022-0165
- Batista, A. A. S. A. d. S., & de Francisco, A. C. A. C. (2018). Organizational sustainability practices: A study of the firms listed by the corporate sustainability index. Sustainability (Switzerland), 10(1), 226. https://doi.org/10.3390/su10010226
- Bolton, M. (2021). Public sector understanding of sustainable development and the Sustainable Development Goals: A case study of Victoria, Australia. *Current Research in Environmental Sustainability*, 3, 100056. https://doi.org/10.1016/j.crsust.2021.100056
- Dlouhá, J., Huisingh, D., & Barton, A. (2013). Learning networks in higher education: Universities in search of making effective regional impacts. *Journal of Cleaner Production*, 49, 5–10. https://doi.org/10.1016/j. jclepro.2013.01.034
- Domingues, A. R. A. R., Lozano, R., Ceulemans, K., & Ramos, T. B. T. B. (2017). Sustainability reporting in public sector organisations: Exploring the relation between the reporting process and organisational change management for sustainability. *Journal of Environmental Management*, 192, 292–301. https://doi.org/10.1016/j.jenvman.2017.01.074
- Dumay, J., Guthrie, J., & Farneti, F. (2010). GRI sustainability reporting guidelines for public and third sector organizations. *Public Management Review*, November, 2012, 37–41. https://doi.org/10.1080/14719037. 2010.496266
- Fardet, T., Hütten, M., Lohmann, S., Medawar, E., Milucka, J., Roesch, J. H., Rolfes, J. D., & Schweizer, J. (2020). Making science organizations sustainable—The mission of the Max Planck Sustainability Network. Frontiers in Sustainability, 1, 567211. https://doi.org/10.3389/frsus. 2020.567211
- Fonseca, L., & Carvalho, F. (2019). The Reporting of SDGs by Quality, Environmental, and Occupational Health and Safety-Certified Organizations. Sustainability, 11(20), 5797. https://doi.org/10.3390/ su11205797
- Global Reporting Initiative, & United Nations Global Compact. (2018). Integrating the Sustainable Development Goals into corporate reporting: A practical guide. GRI; United Nations Global Compact. https://www.unglobalcompact.org/library/5628
- Global Reporting Initiative, United Nations Global Compact, & World Business Council for Sustainable Development. (2016). The guide for business action on the SDGs. Geneva, Switzerland.
- GMV. (2019). SDG impact assessment tool. University of Gothenburg and Chalmers University of Technology.
- Grainger-Brown, J., & Malekpour, S. (2019). Implementing the Sustainable Development Goals: A review of strategic tools and frameworks available to organisations. Sustainability, 11(5), 1381. https://doi.org/ 10.3390/su11051381
- Guthrie, J., & Farneti, F. (2008). GRI sustainability reporting by Australian public sector organizations. *Public Money & Management*, 28(6), 361–366. https://doi.org/10.1111/j.1467-9302.2008.00670.x
- Hansen, B., Stiling, P., & Uy, W. F. (2021). Innovations and challenges in SDG integration and reporting in higher education: A case study from the University of South Florida. *International Journal of Sustainability in Higher Education*, 22(5), 1002–1021. https://doi.org/10.1108/IJSHE-08-2020-0310

- Hassan, M. M., Lee, K. E., & Mokhtar, M. (2019). Streamlining non-governmental organizations' programs towards achieving the sustainable development goals: A conceptual framework. Sustainable Development, 27(3), 401–408. https://doi.org/10.1002/sd.1912
- Haugh, H. M., & Talwar, A. (2010). How do corporations embed sustainability across the organization? *Academy of Management Learning & Education*, 9(3), 384–396. https://doi.org/10.5465/AMLE.2010.53791822
- Hjorth, P., & Bagheri, A. (2006). Navigating towards sustainable development: A system dynamics approach. *Futures*, 38(1), 74–92. https://doi.org/10.1016/j.futures.2005.04.005
- Holliday, C. O. J., Schmidheiny, S., & Watts, P. (2002). Walking the talk: The business case for sustainable development. Greenleaf Publishing.
- IBM. (2016). SPSS software. IBM SPSS Statistics for Windows, Version 24.0.
  IBM Corp.
- Kim, W., Khan, G. F., Wood, J., & Mahmood, M. T. (2016). Employee engagement for sustainable organizations: Keyword analysis using social network analysis and burst detection approach. Sustainability (Switzerland), 8(7), 1–11. https://doi.org/10.3390/su8070631
- Leon, R.-D. (2013). From the sustainable organization to sustainable knowledge-based organization. *Economic Insights—Trends and Challenges*, II(2), 63–73.
- Lodhia, S., Jacobs, K., & Park, Y. J. (2012). Driving public sector environmental reporting: The disclosure practices of Australian commonwealth departments. *Public Management Review*, 14(5), 631–647. https://doi.org/10.1080/14719037.2011.642565
- Lozano, R. (2008). Developing collaborative and sustainable organisations. *Journal of Cleaner Production*, 16(4), 499–509. https://doi.org/ 10.1016/j.jclepro.2007.01.002
- Lozano, R. (2018). Proposing a definition and a framework of organisational sustainability: A review of efforts and a survey of approaches to change. Sustainability, 10(4), 1157. https://doi.org/10.3390/su10041157
- Lozano, R., & Barreiro-Gen, M. (2021). Disrupting the brave new world: COVID-19 effects on organisations' sustainability efforts. *Journal of Organizational Change Management*, 34(3), 613–628. https://doi.org/10.1108/JOCM-09-2020-0276
- Lozano, R., Ceulemans, K., Alonso-Almeida, M., Huisingh, D., Lozano, F. J., Waas, T., Lambrechts, W., Lukman, R., & Hugé, J. (2015). A review of commitment and implementation of sustainable development in higher education: Results from a worldwide survey. *Journal of Cleaner Production*, 108. https://doi.org/10.1016/j.jclepro.2014.09.048
- Lozano, R., & Garcia, I. (2020). Scrutinizing sustainability change and its institutionalization in organizations. Frontiers in Sustainability, 1(May), 1–16. https://doi.org/10.3389/frsus.2020.00001
- Mawonde, A., & Togo, M. (2019). Implementation of SDGs at the University of South Africa. International Journal of Sustainability in Higher Education, 20(5), 932–950. https://doi.org/10.1108/IJSHE-04-2019-0156
- Montesano, F. S., Biermann, F., Kalfagianni, A., & Vijge, M. J. (2021). Can the Sustainable Development Goals green international organisations? Sustainability integration in the International Labour Organisation. Journal of Environmental Policy & Planning, 1–15. https://doi.org/10. 1080/1523908X.2021.1976123
- Pennington, L. K., & More, E. (2016). Culture's role in organizational sustainability. Academy of Management Proceedings, 2016(1), 15415. https://doi.org/10.5465/ambpp.2016.15415abstract
- Perales Franco, C., & McCowan, T. (2021). Rewiring higher education for the Sustainable Development Goals: The case of the Intercultural University of Veracruz, Mexico. *Higher Education*, 81(1), 69–88. https://doi.org/10.1007/s10734-020-00525-2
- Qualtrics. (2018). Qualtrics. Provo, Utah, USA.
- Rodríguez-Olalla, A., & Avilés-Palacios, C. (2017). Integrating sustainability in organisations: An activity-based sustainability model. *Sustainability*, 9(12), 1072. https://doi.org/10.3390/su9061072

- Rosati, F., & Faria, L. G. D. (2019). Addressing the SDGs in sustainability reports: The relationship with institutional factors. *Journal of Cleaner Production*, 215, 1312–1326. https://doi.org/10.1016/j.jclepro.2018. 12.107
- Schramade, W. (2017). Investing in the UN Sustainable Development Goals: Opportunities for companies and investors. *Journal of Applied Corporate Finance*, 29(2), 87–99. https://doi.org/10.1111/jacf.12236
- Soberón, M., Sánchez-Chaparro, T., Urquijo, J., & Pereira, D. (2020). Introducing an organizational perspective in SDG implementation in the public sector in Spain: The case of the former Ministry of Agriculture, Fisheries, Food and Environment. Sustainability, 12(23), 9959. https://doi.org/10.3390/su12239959
- Temel, M., Lozano, R., & Barreiro-Gen, M. (2022). Making organizations sustainable through employee participation: An analysis of factors and their interactions. *IEEE Engineering Management Review*, 50(2), 93–109. https://doi.org/10.1109/EMR.2022.3162413
- Topple, C., Donovan, J. D., Masli, E. K., & Borgert, T. (2017). Corporate sustainability assessments: MNE engagement with sustainable development and the SDGs. *Transnational Corporations*, 24(3), 61–71. https://doi.org/10.18356/2ae5911c-en
- UN Environment Programme. (2022). Sustainable Development Goals are indivisible. https://www.unep.org/news-and-stories/story/sustainable-development-goals-are-indivisible
- United Nations. (2018). Implementation of Agenda 21, the programme for the further implementation of Agenda 21 and the outcomes of the World Summit on Sustainable Development and of the United Nations Conference on Sustainable Development A /73/204: Vol. A/73/204 (issue July).
- United Nations. (2019). Sustainable Development Goals knowledge platform: Resource library. https://sustainabledevelopment.un.org/ resourcelibrary
- University of Cambridge, Fauna & Flora International, Royal Society for the Protection of Birds, BirdLife International, & International Institute

- for Environment and Development. (2019). Sustainable Development Goals tool.
- van Zanten, J. A., & van Tulder, R. (2021). Improving companies' impacts on sustainable development: A nexus approach to the SDGS. *Business Strategy and the Environment*, 30(8), 3703–3720. https://doi.org/10.1002/bse.2835
- Vargas-Hernández, J. G. (2021). Strategic organizational sustainability. Circular Economy and Sustainability, 1(2), 457–476. https://doi.org/ 10.1007/s43615-020-00003-y
- Vávra, J., Dlouhá, J., Pospíšilová, M., Pělucha, M., Šindelářová, I., Dvořáková Líšková, Z., Hartych, M., Dlouhý, J., & Cudlínová, E. (2022). Local action groups and sustainable development agenda: Case study of regional perspectives from Czechia. Frontiers in Sustainability, 3, 846658. https://doi.org/10.3389/frsus.2022.846658
- Wales, T. (2013). Organizational sustainability: What is it, and why does it matter? Review of Enterprise and Management Studies, 1(1), 38–49.
- World Commission on Environment and Development. (1987). Our common future (1st ed.). Oxford University Press.
- Yuthas, K. J., & Epstein, M. J. (2012). Analyzing sustainability impacts. Strategic Finance. January.
- Zawawi, N. F. M., & Wahab, S. A. (2019). Organizational sustainability. Journal of Strategy and Management, 2(3), 12.

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