Disrupting the brave new world: COVID-19 effects on organisations' sustainability efforts

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Abstract

Purpose – Organisations have been working towards becoming more sustainable; where their efforts have been mainly on a steady state focussing on internal proactive changes. The purpose of this paper is to analyse how external events, e.g. COVID-19, affect organisations and their sustainability efforts.

Design/methodology/approach – A survey was sent to a database of 11,657 contacts, with a response rate of 5.60% obtained. The results were analysed using descriptive statistics, ranking and a ratio analysis comparing different types of organisations (corporations, higher education institutions, civil society and public sector organisations).

Findings – COVID-19 changed the organisation drivers for and barriers to sustainability perspective towards external stimuli, rather than internal factors. COVID-19 also affected the system elements negatively, with the exception of organisational systems. The results also show that the system elements are affected by an external event or crisis and are dependent on the type of organisation.

Originality/value – This paper proposes the "Organisational sustainability transition forced by exogenous events" framework to help organisations better understand and be prepared for unexpected external events. Organisations should learn from the experiences in dealing with COVID-19 and adopt a more humanistic approach to their sustainability efforts, rather than traditional approaches based on solipsism and techno-managerial centrism.

Keywords Organisations, Sustainability, Change management, Drivers, Barriers, Organisational systems
Paper type Research paper

Introduction

The COVID-19 outbreak has halted economic activities throughout the world (Muhammad *et al.*, 2020; Saadat *et al.*, 2020; WHO, 2020). Recent publications on COVID-19 have been on areas such as basic science, diagnosis, drug and vaccine development, social and economic impact and public health, with increasing research on sustainability and sustainable organisations (Barreiro-Gen *et al.*, 2020).

Organisations (civil society, companies and public sector ones (PSOs) (see Holliday *et al.*, 2002) are a key part of modern societies (Scott and Davis, 2015) and have been instrumental in driving sustainability (Danter *et al.*, 2000; Holliday *et al.*, 2002; Jennings, 2002; Jennings and Zandbergen, 1995). During the last decade, there has been increasing interest in organisational sustainability (Lozano, 2018; Pfeffer, 2010; Salimath and Jones, 2011) and organisational change management for sustainability (OCMS) (see Hoffman and Henn, 2008; Lozano, 2013, 2015; Turpin-Marion *et al.*, 2006).

Lozano (2018) posited that organisational sustainability framework is (see Figure 1): "*The contributions of the organisation to sustainability equilibria, including the economic, environmental, and social dimensions of today, as well as their inter-relations within and*

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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 non-human 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, interconnecting, and external)".

Most of the literature on OCMS has been on internal proactive changes and a steady state (see Hoffman and Henn, 2008; Lozano, 2013; 2015; Lozano and von Haartman, 2018; Turpin-Marion *et al.*, 2006). There has been limited research focussing on extreme external stimuli or events, such as the COVID-19, that affect organisations and their sustainability efforts. An example of such limited research is the work of Barreiro-Gen *et al.* (2020), who analysed the sustainability priorities changes in organisations and found that the COVID-19 outbreak resulted in positive changes on social priorities and economic ones; however, there were also negative impacts on environmental priorities. This is in contrast to a steady state, e.g. prior to the COVID-19 outbreak, where the priorities were centred on the economic dimension.

This paper is aimed at providing insights into the effects of an external event, i.e. COVID-19, on sustainability priorities, drivers for, barriers to and system elements of organisational sustainability.

The paper is structured in the following way: Section 2 discusses organisations and change management; Section 3 presents the methods; Section 4 focuses on the results; Section 5 presents the discussion and Section 6 provides the conclusions.

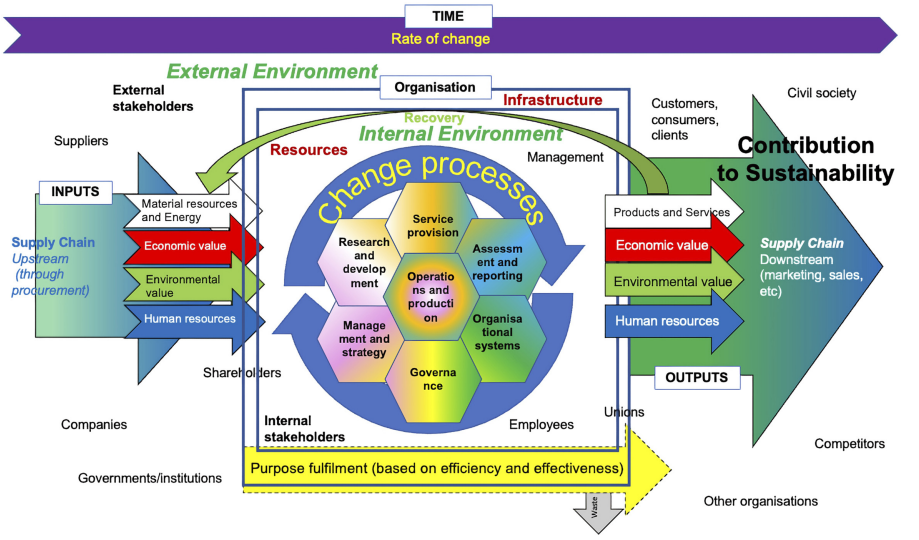

Figure 1.
Organisational sustainability framework (Lozano, 2018)

A brief review of organisational change management for sustainability

Addressing sustainability issues in organisations is a complex process (Hjorth and Bagheri, 2006; Rodríguez-Olalla and Avilés-Palacios, 2017) due to the set of inter-related system elements of organisations (Jones, 2013; Porter *et al.*, 1975; Rogers, 1962). This process requires a holistic perspective to balance the sustainability, i.e. the economic, environmental, social and time, dimensions (Jamal and Franco, 2007; Lozano, 2018).

Many sustainability approaches have been based on techno-centric solutions and managerial ploys, which neglect culture, supply chains and the interactions between the system elements (Lozano, 2012a, 2015). This has resulted in a limited number of organisations, in spite of many working for longer than five years on it (Lozano and Garcia, 2020), having successfully incorporated sustainability into their systems and culture (Hussey *et al.*, 2001; Linnenluecke and Griffiths, 2010; Lozano and Garcia, 2020; Siebenhüner and Arnold, 2007).

During the last decade, there has been an increasing interest in OCMS (see Hoffman and Henn, 2008; Lozano, 2013, 2015; Turpin-Marion *et al.*, 2006), which has been proposed as a way to explain how organisations can move to a more desirable state (Ragsdell, 2000; Salimath and Jones, 2011), e.g. to become more sustainable (Holliday *et al.*, 2002). Organisational change management ranges from minor to radical changes (Dawson, 1994).

Change in organisations is affected by internal and external forces (Hannan and Freemam, 1977; Hannan and Freeman, 1984; Scott and Davis, 2015). Such forces affect organisations' contribution and efforts to sustainability (DeSimone and Popoff, 2000). Organisations have a higher degree of control over internal changes, which are proactive, than over external stimuli, which are reactive (DeSimone and Popoff, 2000; Freeman, 1984; Lozano, 2013). Planned internal changes (as illustrated in Figure 2) are aimed at disrupting in a controlled way the status quo (SQ) and help move towards a more sustainability-orientated state (MSOS), in a continuously iterative process. In this process, the entire system and its elements (operations and production, strategy and management, governance, organisational systems, service provision and assessment and reporting), the drivers for and barriers to change need to be understood and addressed (Lozano, 2012b).

Drivers for sustainability in organisations have, traditionally, been divided into external and internal ones (Rankin *et al.*, 2011; DeSimone and Popoff, 2000). However, recent research (see Lozano, 2018; Lozano and Garcia, 2020) has provided more detailed by separating them into "only internal factors", "mainly internal factors, but with some external stimuli", "equally by external stimuli and internal factors", "mainly external stimuli, but some internal factors" and "only external stimuli"; where organisations have been driven, in general, equally by external stimuli and internal factors.

According to Lozano and Garcia (2020), in a steady state, i.e. when there is no major external event or crisis, sustainability changes in organisations start on (in descending order): management and strategy; governance; operations and production; assessment and reporting; organisational systems; research and development; service provision; supply chains and collaboration with other organisations. The major changes for sustainability are on (in descending order): governance; operations and production; collaboration with other organisations; management and strategy; supply chains; organisations systems; assessment and reporting; service provision and research and development.

Methods

A survey was developed to investigate how COVID-19 has affected organisations and their sustainability efforts. The data collection took place for four weeks starting on 2 April, 2020. The survey was sent in English and consisted of the following sections:

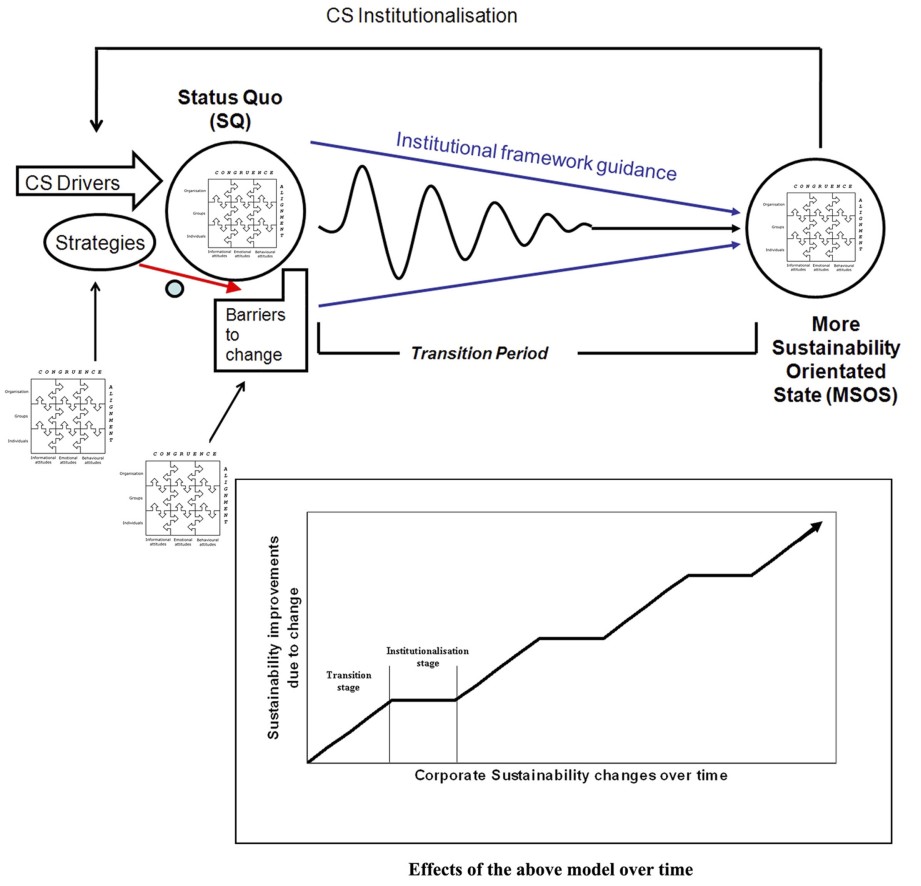

Figure 2.
Orchestrating change for corporate sustainability model

Source(s): Lozano, 2012b

(1) Organisation characteristics

(2) Sustainability questions, including the priorities prior to and during the COVID-19 outbreak

(3) Internal and external drivers and barriers affecting the organisation's sustainability efforts

(4) Impacts on system elements due to COVID-19

(5) Sustainability and digitalisation training and engagement.

This paper is focused on Sections 1, 3, and 4 of the survey (the results from section 2 can be found at Barreiro-Gen *et al.* (2020)).

The survey was sent to a database of 11,657 contacts from different organisations. One reminder was sent out, after which 653 full responses were obtained, i.e. 5.60%.

The questions on the priorities focussed on economic, environmental and social ones prior to and during COVID-19 were on a five-point scale (from not at all important to extremely

important). The drivers for and barriers to sustainability prior to and during COVID-19 were on a five-point scale (solely by internal factors, mainly by internal factors, but with some external stimuli, equally by external stimuli and internal factors, mainly by external stimuli, but with some internal factors and solely by external stimuli). The questions on the impacts on the systems elements were also on a five-point scale (extremely negative, somewhat negative, neither positive nor negative, somewhat positive and extremely positive).

The results were analysed using: descriptive statistics; ranking and a ratio analysis of positive results ("somewhat" and "extremely") and the negative ones ("somewhat" and "extremely") of the system elements (see Lozano, 2020) between different types of organisations (corporations, higher education institutions (HEIs), civil society and PSOs). These were done with IBM SPSS 24 (IBM, 2015).

Limitations of the methods

The survey was open during the four weeks of maximum lockdown for most countries, which resulted in a lower response rate than typically expected in surveys open longer periods of time. The response rate may have also been affected by the limited time available for potential respondents due to other priorities, self-isolation, COVID-19 infection among staff and staff with children having to stay at home to look after them. Reliability might have been affected by the perception of, usually, one respondent from each organisation and by issues with understanding the questions (which were only made available in English). The number of respondents (653) may not allow generalisation to all types of organisations. The generalisability of the results may also be limited due to using a non-random sampling procedure. A non-response bias may be caused by organisations that were contacted but which refused to complete the survey. Generalisability could be improved by a study based on a randomly selected sample drawn from the total number of organisations active in sustainability.

Results

From the responses, 28 organisations had been actively engaged with sustainability for less than one year, 59 between 1 and 3 years, 93 between 3 and 5 years, 154 between 5 and 10 years, 93 between 10 and 15 years and 187 more than 15 years.

Figure 3 shows the breakdown of the countries where the respondent's organisations have headquarters or are based. The respondents were from more than 40 countries, most of them from Europe, where the countries with most of the responses were Italy, Spain, Sweden, Germany, United States, Finland, United Kingdom, France and Portugal.

Of the 653 responses, 406 were HEIs, 139 were corporations, 75 PSOs (e.g. government and public agencies) and 33 were civil society organisations (e.g. faith based and non-governmental). The respondents categorised HEIs sometimes as civil society organisations and sometimes as PSOs; therefore, it was decided to analyse them as a new organisation type.

Figure 4 shows a comparison between the drivers for sustainability prior to and during COVID-19 for all organisations and each organisation type (corporations, HEIs, civil society and PSOs). Prior to the outbreak, the drivers in all organisations were skewed towards internal factors, with external stimuli accounting for 19% of the cases. During COVID-19, the external stimuli increased to 29%. This pattern is repeated for each organisation type. For instance, prior to the outbreak, external factors (solely and mainly) drove sustainability in PSOs in 17% of the cases. During COVID-19, external factors represented the 41%.

Figure 5 shows a comparison between the barriers to sustainability prior to and during COVID-19 for all organisations and for each organisation type. The percentages are more spread out in all the answers than in the drivers, but they have a similar pattern, with an

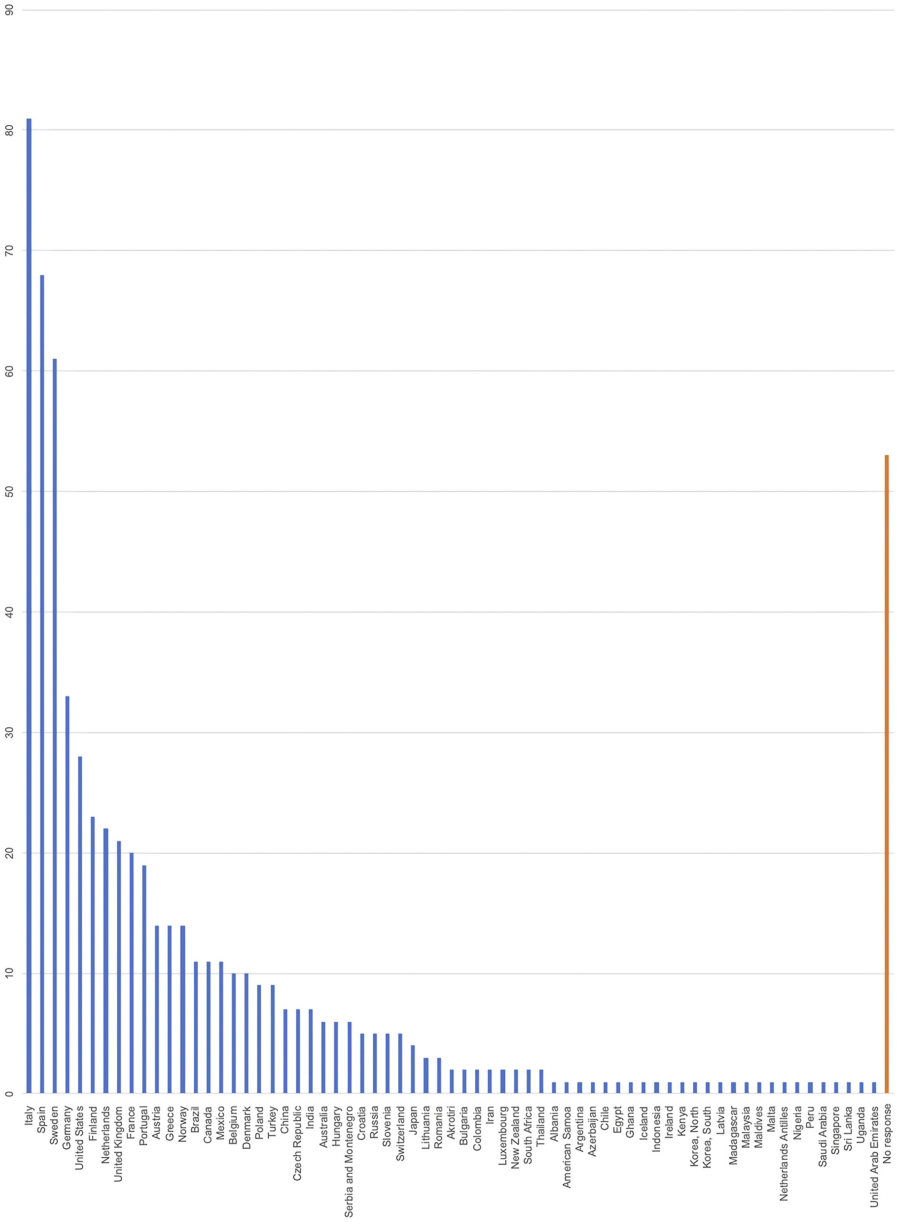

Figure 3.
Country distribution of the responding organisations

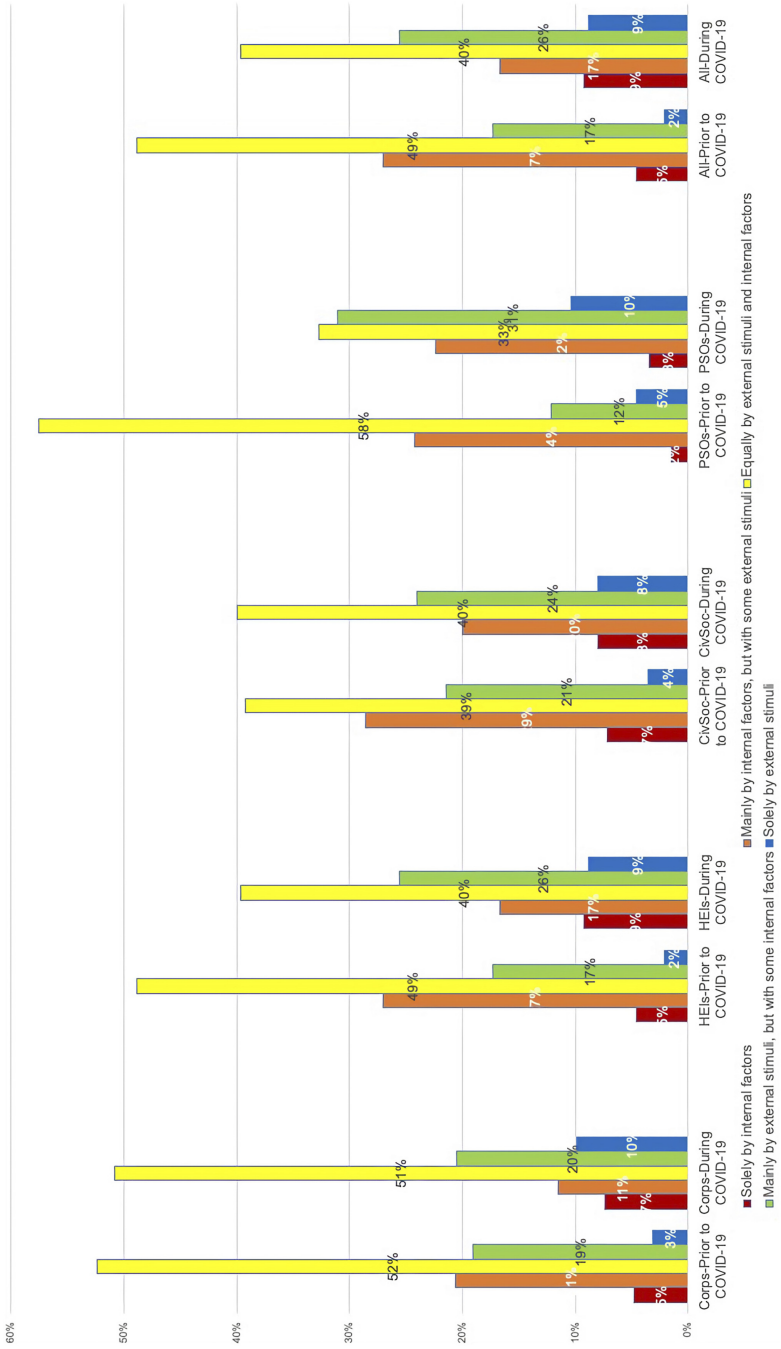

Figure 4.
Drivers for sustainability prior to and during the COVID-19 outbreak for each type of organisation (corporations, HEIs, civil society and PSOs) and for all organisations

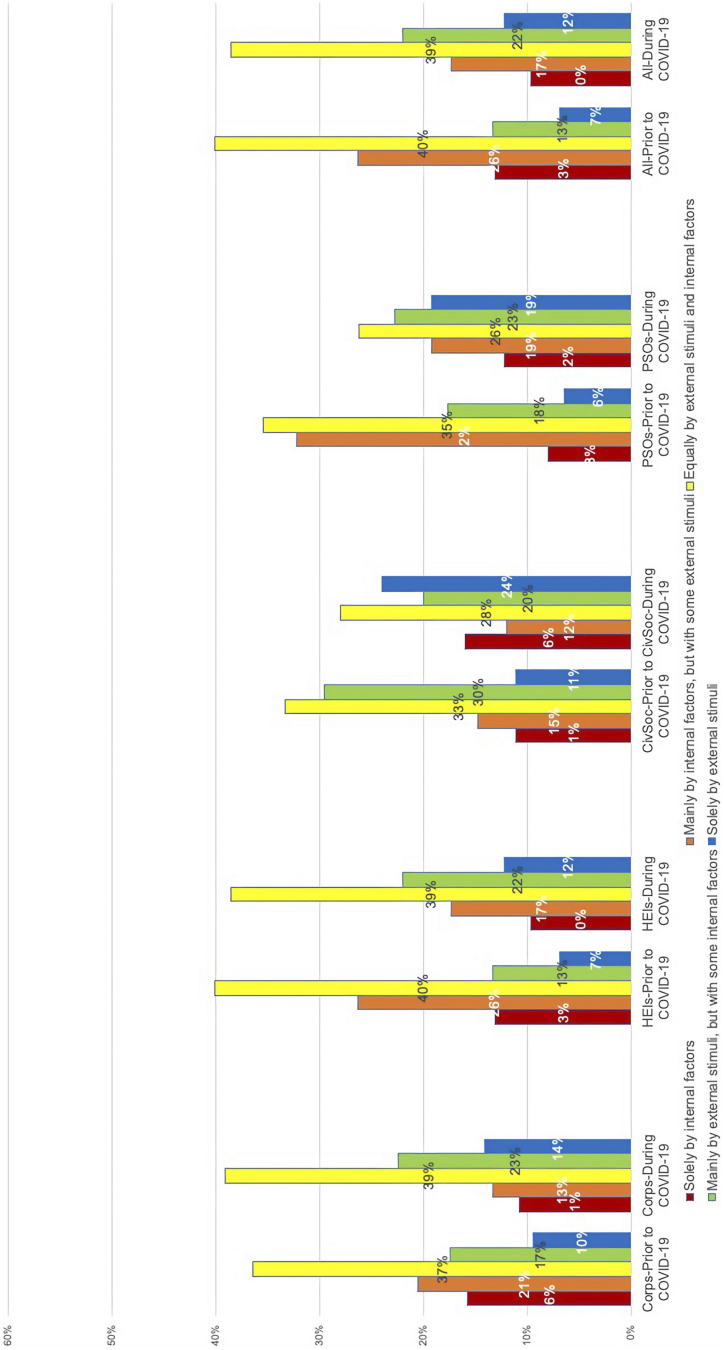

Figure 5.
Barriers to sustainability prior to and during the COVID-19 outbreak for each type of organisation (corporations, HEIs, civil society and PSOs) and for all organisations

increase of the external stimuli. The biggest change occurred in PSOs: Prior to the outbreak, external factors (solely and mainly) drove sustainability in 24% of the cases. During COVID-19, external factors represented the 42%.

Figure 6 shows the system elements sorted by organisation type. Two organisation system elements were affected in the same way by COVID-19 for all organisation types: Organisational systems, which was the most positively affected (somewhat positive and extremely positive) in corporations (39%), PSOs (34%), HEIs (29%), civil society (23%) and procurement and marketing, which was the most negatively affected, where all types of

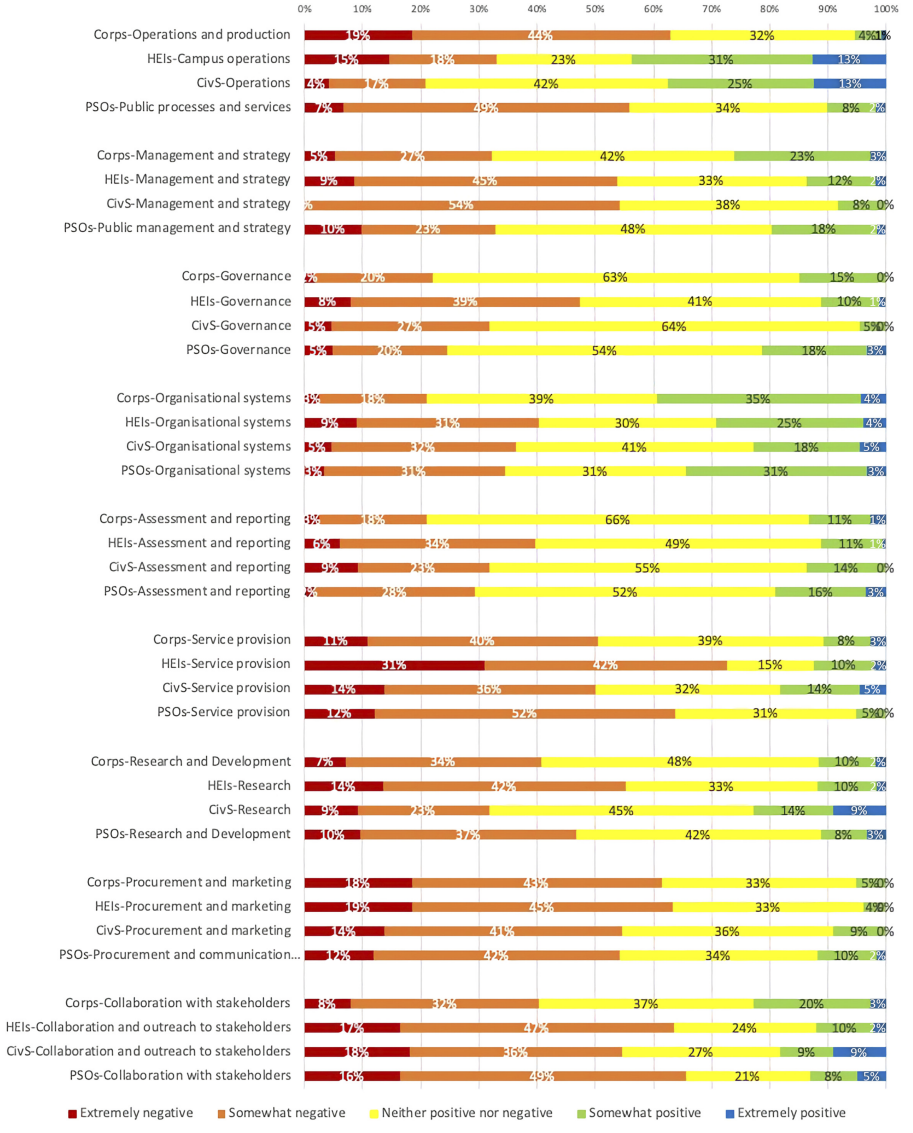

Figure 6.
Effects on the organisation system elements due to the COVID-19 outbreak for each type of organisation (corporations, HEIs, civil society and PSOs) and for all organisations

organisations had more than 50% of negative effects (extremely negative plus somewhat negative).

Some system elements had differences on how COVID-19 affected them by organisation type: collaboration had less negative effects (extremely negative or somewhat negative) on corporations (40%) than in other types of organisations (more than 54% each); operations and production had more negatively effects on corporations (63%) and PSOs (53%) than on HEIs (33%) and civil society (21%); management and strategy had more negative effects on HEIs (54%) and civil society (54%) than on corporations (32%) and PSOs (33%); service provision and Research had more negative effects on HEIs (73 and 56%, respectively) and PSOs (64 and 47%, respectively) than on corporations (51 and 41%, respectively) and civil society (50 and 32%, respectively) and governance and assessment and reporting had more negative effects on HEIs (47 and 40%, respectively) than the other organisations (32% and less).

Table 1 shows the positive ("somewhat" and "extremely") and the negative results ("somewhat" and "extremely") ratio analysis of the system elements for all organisations, for each organisation type and the average ratio for each element system. The "neither positive nor negative" responses are not included in this analysis.

There were differences between the system element ratios for all organisations and their average ratios (i.e. for the four types of organisations), see Table 1. The first and the last position were the same: organisational systems had the highest ratio, followed by operations and production, whereas service provision and procurement and marketing had the lowest ratios. The system elements that switched places were governance with management and strategy and research with collaboration. There were some ratios equal or higher than one: organisational systems in corporations (1.88) and PSOs (1.00) and operations and production in civil society (1.80) and in HEIs (1.33). The rest of them were lower than one, so the negative impacts were higher than the positive ones in most of the system elements for each organisation type.

Some system elements had similar patterns for all organisation types, as shown in Table 1, such as service provision and procurement and marketing, with negative ratios in all of them. Most system element in corporations and in PSOs had similar patterns, but the spread of the ratios (difference between the highest ratio and the lowest one) was relatively high for corporations (1.88 minus 0.08 resulting in 1.80) and relatively small for PSOs (1 minus 0.08 resulting in 0.92).

The biggest difference between organisations (see Table 1) was in operations and production, which had the highest ratio in civil society (1.80) and in HEIs (1.33), but some of the lowest ratio in corporations (0.08) and PSOs (0.18). Civil society had the most different pattern, with, for instance, a relatively high ratio for research (0.71) and considerably low ratios for governance (0.14) and management and strategy (0.15).

Discussion

The respondents categorised HEIs sometimes into civil society organisations and sometimes as PSOs, so a new type was created to complement the typology of Holliday *et al.* (2002).

The COVID-19 outbreak increased the respondents' awareness to external stimuli affecting the drivers for and barriers to sustainability due to an external event or crisis, which provides new insights into organisational change management for sustainability in a steady state literature (see Lozano, 2018; Lozano and Garcia, 2020).

Most of the system elements were affected negatively by COVID-19, with the exception of organisational systems, which in a steady state is one of the element least addressed in sustainability efforts by organisations (see Lozano and Garcia, 2020). The results highlight that organisational systems have the potential to make organisations more resilient (concurring with Lozano, 2012b, 2015). The results also indicate that solipsistic and techno-managerial centrist approaches, prevalent during a steady state, are disrupted by external

	Corporations Positive/negative	PSOs: Positive/negative	HEIs: Positive/negative	Civil society organisations Positive/negative		Average ratios (types of orgs.)	All: Positive/negative
Organisational systems	1.88	1.00	0.72	0.63		1.06	0.91
Operations and production	0.08	0.18	1.33	1.80		0.85	0.75
Assessment and reporting	0.63	0.65	0.28	0.43		0.50	0.37
Governance	0.68	0.87	0.24	0.14		0.48	0.34
Management and strategy	0.81	0.60	0.26	0.15		0.46	0.37
Research	0.28	0.24	0.22	0.71		0.36	0.24
Collaboration	0.57	0.20	0.19	0.33		0.32	0.26
Service provision	0.21	0.08	0.00	0.36		0.16	0.14
Procurement and marketing	0.09	0.22	0.06	0.17		0.13	0.09

Table 1.
Ratio analysis of the impacts on the system elements' results (some and good) versus the no and negative results for all organisations, for each organisation type (corporations, HEIs, civil society, and PSOs), and average for each system element

events, which force organisations to be reactive (concurring with DeSimone and Popoff, 2000; Freeman, 1984; Lozano, 2013).

The comparison analysis between organisation types show that external events affect the system elements of organisations in different ways; where the nature of the organisation determines the system elements that would be most affected and those that could make the organisation more resilient towards external stimuli (complementing the work of Lozano, 2018).

A new framework was developed, the "Organisational sustainability transition forced by exogenous events", by integrating the organisational sustainability framework (Figure 1), the orchestrating change for corporate sustainability model (Figure 2) and the results from the survey. The new framework shows organisational sustainability changes prior to and during an external event or crisis (Figure 7). The framework illustrates that when an external event or crisis happens, e.g. COVID-19, an organisation will react within a given time (response time) and changes will take place at the organisation's sustainability efforts affecting priorities, drivers for, barriers to and the system elements. This will change the organisation from the status quo (prior to the event/crisis) to the status quo novo (during the event/crisis). The sustainability priorities will be also affected, with the risk of neglecting one of the sustainability dimensions by focussing on the others, as can be observed by the change in colours in the environmental issues increasing in red colouring and the positive ones, in blue and green colours, on the economic issues and social ones. The changes on the drivers for and barriers to sustainability will be transformed from a focus towards endogenous forces to exogenous ones. Some of the elements will be affected positively (in olive green), some somewhat negatively (in yellow), some considerably negative (in orange) and some extremely negative (in red). The figure highlights that organisational sustainability has to take a holistic perspective during a steady state (see Jamal and Franco, 2007; Lozano, 2018), as well as during a transition period forced upon by an external event, e.g. COVID-19.

Conclusions

Organisations have been working towards becoming more sustainable. During the last decade, there has been increasing research on organisational change management for sustainability focussing on internal proactive changes in a steady state. The COVID-19 outbreak provided an opportunity to analyse change for sustainability in organisations in a transition stage forced by an external event. This paper provides insights into this phenomenon, where an external event or crisis disrupts an organisation status quo and forces it to react.

A survey was developed to investigate how COVID-19 has affected organisations and their sustainability efforts. The survey was sent to a database of 11,657 contacts from different organisations. One reminder was sent out, after which 653 full responses were obtained, i.e. 5.60%.

The results show that an external event, e.g. COVID-19, affects the drivers for and barriers to sustainability and forces organisations out of their insular approaches. The results also show that such an event affects the system elements differently than organisational changes in a steady state. The changes are dependent on the type of organisation. In general, the element most positively affected is organisational systems, whereas the other elements are negatively affected.

The "Organisational sustainability transition forced by exogenous events" framework can help organisations better understand their priorities, system elements, drivers for and barriers to sustainability in order for them to be better prepared for unexpected external events or crises and maintain and improve their contribution to sustainability even under the stressed of a externally forced transition.

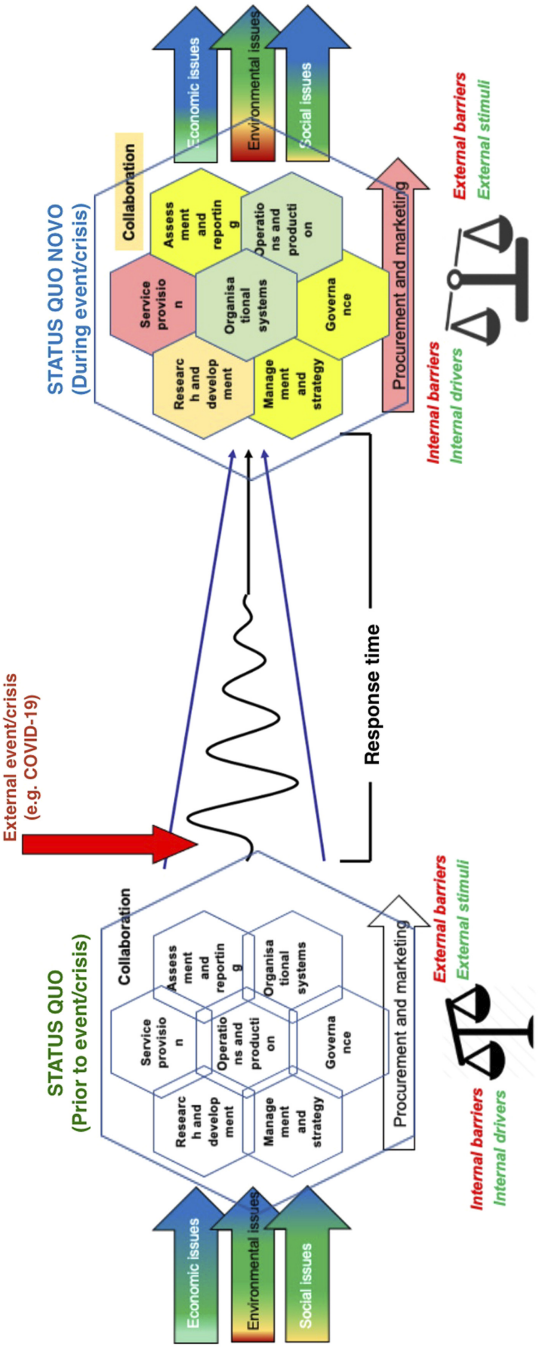

Figure 7.
Organisational sustainability transition forced by exogenous events framework. Positive effects on the system elements are shown in olive green, slightly negative in yellow, considerably negative in orange and extremely negative in red. A colour version of this figure is available online

The COVID-19 outbreak has disrupted the brave new world based on solipsism, and techno-managerial centrism. Organisations should take advantage of this and adopt a more humanistic approach to their sustainability efforts, where the focus is on the persons that compose organisations and societies, while at the same time being in harmony with technological and managerial approaches, as well as with environmental and social needs of societies.

Further research should be carried out on how environmental, social or economic events affect organisations and their sustainability efforts, priorities, drivers, barriers, system elements and organisational system issues. The effects of such events on employees and their wellbeing could also be analysed. A follow up study once COVID-19 is controlled should be carried out to compare the effects before, during and after on organisations and their sustainability efforts.

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