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Decision-making in the Context of a Crisis: A Selected Review

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ABSTRACT

In the 21st century, organisations have to face pressing "big challenges" (George et al., 2016). These can include adverse events such as global pandemics and climate change. The impacts of these adverse events lead organisations and decision-makers to adopt new behaviours. Although these adverse events are inevitable, organisations do not respond in the same ways, and some organisations are better able to withstand and recover from such shocks than others (Van der Vegt et.al, 2015). High-risk events that at first appear to cause only local and isolated effects, can multiply in intensity and damage vital infrastructure, affecting events on a national or global scale. McFarlane and Norris (2006, p. 4) defined an adverse event as "a potentially traumatic event that is experienced collectively, has an acute onset, and is limited in time; it can be attributed to natural, technological or human causes". An adverse event is caused by factors external to the system, unforeseen, and requiring immediate action. Examples include hurricanes, tsunamis, earthquakes and pandemics. The traditional way of dealing with adverse events is to develop approaches and systems to identify risks. Now, scholars are shifting their attention from identifying and mitigating risk to attempting to increase resilience (Sutcliffe & Vogus, 2003). The term "resilience" almost always has the positive connotation of flexibility and strengthening: The desired result is better than the preparation needed to face disruptive unexpected events.

The purpose of this study is to understand the impact of strategic choices in response to adverse events on the life of organisations. Specifically, when their responses to adverse events occur in a non-adaptive or non-resilient way (inertia). In order to understand this, we based this study on a review of the literature specifically linked to adverse events and the way in which it is possible to confront them.

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2. Theoretical background

2.1. Organisational Resilience and non-adaptive resilience

In this section, we introduce decision-making in adverse events through a non-adaptive approach to resilience (inertia). Traditional approaches characterised by hierarchy and centralisation have been replaced by decentralised emergency management systems. Because of the fact that emergency management is characterised by complexity, urgency, and uncertainty (Aldunate, Pena-Mora, & Robinson, 2005), it is crucial for the participating decision-maker(s) to have a fast though smooth and effective decision-making process in responding to adverse events. Such decision-making has been widely addressed by scholars of the field (Rosenthal & Kouzmin, 1997; Useem, Cook, & Sutton, 2005). Since most of the decision-making processes, whether organisational, team or individual, boil down to the choices of individual decision-makers in organisations or agencies, it is quite common for individual decision-making to receive the most attention. Selected literature on decision-making processes suggest that organisational resilience focuses on adaptive resilience and non-adaptive resilience (inertia) (See Figure 1). Resilience is a new configuration that an organisation employs in response to environmental conditions in order to survive. There can be no simple theory of inertia, as its causes are multiple and varied. In organisation theory, inertia is usually conceptualised as a reduced rate of change (slow and/or insufficient response), relative to the occurrence of opportunities and threats in the task environment. As Hannan and Freeman (1984) write, "*structures of organisations have high inertia when the speed of reorganisation is much lower than the rate at which environmental conditions change (p.151)*". Although change in configurations can be influenced by many different challenging environmental conditions, we suspect that a small number of dominant conditions can influence them at any one time (Prajogo, 2016, Kleindorfer&Saod, 2005). The adverse events have been defined as "transient perturbations whose occurrence is difficult to foresee and whose impacts on organisations are disruptive and potentially inimical" (Matsuo, 2015, p. 515). These are adverse events that negatively affect the normal operation of an organisation, such as earthquakes, pandemics, or industrial disputes. If sufficiently large and/or frequent, they may trigger organisations to try to generate new configurations. In order to understand how these processes vary, we present the studies of McCarthy et.al (2017, p.37) in Figure 1. The studies propose an adaptive resilience model phylogram, with the branch

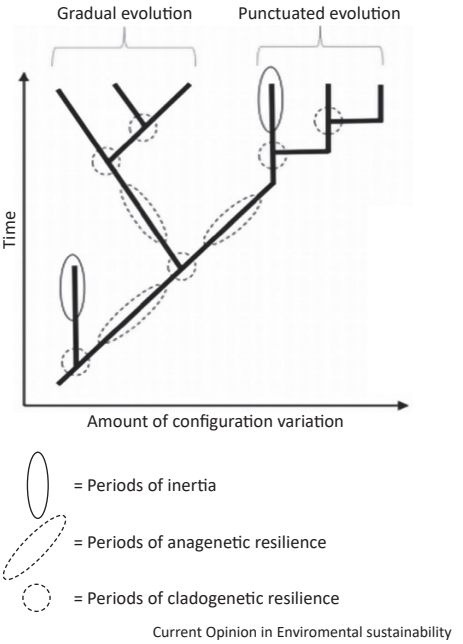

Fig. 1. A typology of adaptive organisational resilience

Source: *McCarthy et.al, 2017 p. 37.*

lengths and spacing conveying information about the amount and rate of configurational change. Phylograms typically include scales to specify the rate and amount of change by the length and divergence of the branches.

In Figure 1, adaptive resilience refers to the creation of a new organizational configuration, whereby a parent configuration branches off to produce a daughter configuration, and adds a branch to the form. In this way, the adaptive resilience involves one configuration evolving into another through a series of incremental changes along a branching lineage. Organisational inertia is generally defined as resistance to change, and involves an organisation persisting with its current configuration and repeating past strategies and practices. It occurs because a configuration is not exposed to significant enough forces for change, and thus it maintains its identity (see Figure 2). Consequently, we suggest in figures 1 and 2 that inertia is a type of non-adaptive or resistant resilience (inertia) that occurs when, in an evolutionary context, perseverance is seen among the existing characters, until an external challenging condition forces them to change (Comte & Olden, 2017).

Organizational Resilience (OR) is only manifested in a specific phase of adverse events (t2 – t3) (Ventura et.al.; 2020), without its being the only factor for survival. In fact, initially (0 – t1) the organisation has a consolidated structure, with defined routines and configuration. During the crisis (adverse event), the organisation shows its resistance. The time span (t1 – t2) is the latent period of the crisis, and in this phase, the first organisational inefficiencies can emerge in the modification of the decision-making process. The adaptive capacity of the organisation then emerges. The manifestation of the crisis (t2) – defined as vulnerability – in which the organisation becomes aware of the crisis,

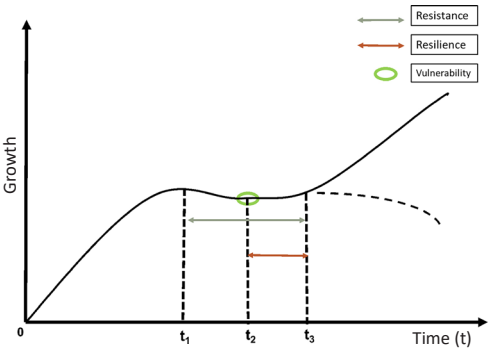

Fig. 2. The evolutionary cycle of organisational resilience

Source: *Ventura et.al, 2020, p. 118.*

is the most critical time; it is the final phase. The decision-maker is oriented to an organisational structure redesign, reconstructed routines, a new culture, and a new climate (change and innovation) or alternatively, to organizational inertia. In this second way, the decision-maker does not develop new capabilities, nor do they create new economic opportunities. Rumelt (1995), for instance, identifies five sources of inertia: distorted perception, dulled motivation, failed creative response, political deadlock, and action disconnect. From a different perspective, OR is not seen as the ability to take advantage of anticipated challenges and changes, but rather as the ability of an organization to remain inert to adverse events. Finally, through the progression of a major crisis, the organization must become resistant (t2 – t3), and becoming so is a long and complex process.

3. Methodology

The methodological approach allows for the collection, management and analysis of bibliographic data derived from scientific documents consistent with the research objective. The literature review adopts the principles of (1) mapping of the theoretical

field; (2) quality assessment; (3) data mining; (4) summary, and; (5) reflections. Consistent with previous studies (see Gravili, et al., 2020; Karamali, et al., 2020), the methodological process was composed of several phases. In particular, the literature review presented in this study was structured in three phases. The first phase was focused on data collection, through the consultation of two scientific databases (Web of Science [WoS] and Scopus). We selected two online databases of scientific documents widely used by scholars, Scopus and WoS, due to their coverage of peer-reviewed scientific journals, books and conference proceedings. At this stage, not all journals have been considered, but only those of high scientific relevance in the (i) Association of Business Schools (ABS 2018), (ii) Top 50 journals of The Financial Times and (iii) Class "A" ANVUR lists (Italian national agency for the evaluation of the university and research system). Furthermore, only journals from the areas of "General & Strategy", "Organisation Behaviour / Studies", "Human Resource Management" and "Industrial Relations" were taken into consideration. The second phase of the literature review was characterised by the creation of the search string, consisting of the following keywords: *Natural Disaster** OR *earthquake** OR *flood** OR *hurricane** OR *tornado** OR *volcano** OR *tsunami** OR *drought** OR *plague** OR *epidemic** OR *pandemic** OR *outbreak**. The keywords had to be present in the title, abstract or between keywords (for Scopus) and in topic (for WoS). The third phase involved selecting the scientific documents according to the PRISMA approach (Preferred Reporting Items for Systematic Reviews and Meta-Analyses). The flow chart (fig.3) shows the steps in the PRISMA literature review guideline.

The above flow chart (Figure 3) shows the steps followed for the identification of scientific documents. In the study, it was necessary to pay attention to duplicates, which were then removed from the databases. There were 26 relevant papers.

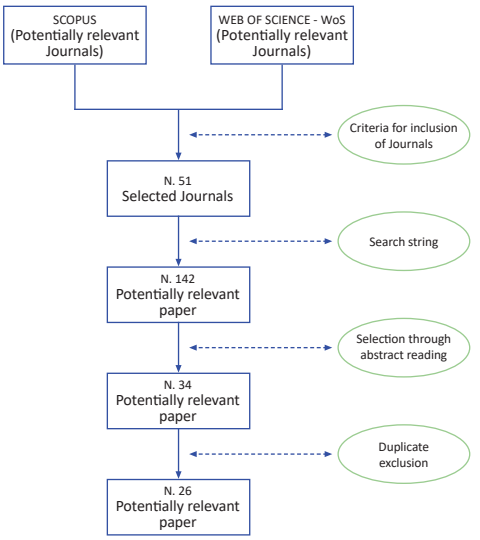

Fig. 3. PRISMA guidelines
Source: *Developed by the authors.*

4. First Results and Discussions

The results of our analysis represent a starting point in the ongoing debate within organizational studies on decision-making and adverse events. First, the selected pa-

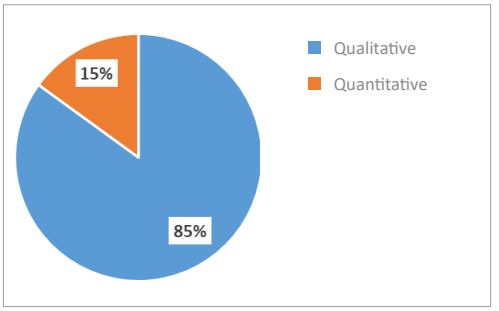

Fig. 4. Methodology used in the selected papers
Source: *Developed by the authors.*

pers were analysed in order to understand the methodology used by studies addressing the issue of adverse events, such as natural disasters, pandemics or economic crises.

The graph above highlights that the majority of the selected papers use qualitative methodology to address the issue of adverse events through an observation-based approach. Another reflection that emerges from analysis of the selected documents is an understanding of which phase of the adverse events the studies are focused on. Three phases were identified: preparedness, emergency and recovery.

From our analysis, 64% of the selected papers focus on the recovery phase, on post-disaster action, while just 28% of them focus on the emergency phase (action taken during the disaster), and 8% focus on the preparedness phase (action taken prior to the crisis). In focusing on resilience, several studies have spotlighted organizational resilience during adverse events. The analysis perspectives used are different, and, within the current state of literature analysis, a gap has emerged, with few studies focusing on organisational inertia. Our study highlights that, in addition to the characteristics of organisations, the behaviour of organisations in relation to a disaster plays a fundamental role. Our research highlights that more studies are needed on organizational resilience, disasters, and their impact on organisations. The findings of this study may offer new insights to scholars and managers, pushing forward the need for the next research agenda on this topic. For example, geographical location represents an important point for reflection, as does how the phenomenon is studied by scholars from different countries. This work is not without limits, the main constraint being the need for a non-exhaustive analysis of the selected papers. Yet, even with those limitations, we believe that this one contribution can serve as an initial point of reference, offering discussion points to interested scholars.

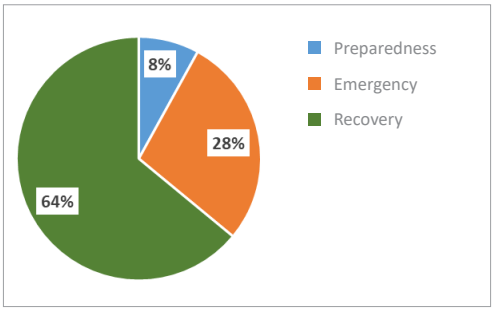

Fig. 5. Papers dedicated to different phases of a disaster

Source: *Developed by the authors.*

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