



# Resilience Meets Sustainable and Spiritual Background Into an Initial Review for the New Normal After the COVID-19 Pandemic

Ricardo Luiz Fernandes Bella 1\*, Douglas Vieira Barboza 2\*, Osvaldo Luiz Gonçalves Quelhas 2, Marcelo Jasmim Meiriño 2 and Sergio Luiz Braga França 2

#### **OPEN ACCESS**

#### Edited by:

Ubiratã Tortato, Pontifical Catholic University of Parana, Brazil

#### Reviewed by:

Luciana Londero Brandli, The University of Passo Fundo, Brazil Pedro Miguel Alves Ribeiro Correia, Universidade de Lisboa, Portugal

#### \*Correspondence:

Ricardo Luiz Fernandes Bella ricardobella@id.uff.br Douglas Vieira Barboza douglasvbarboza@gmail.com

#### Specialty section:

This article was submitted to Sustainable Organizations, a section of the journal Frontiers in Sustainability

Received: 07 December 2020 Accepted: 02 February 2021 Published: 17 May 2021

#### Citation:

Bella RLF, Barboza DV, Quelhas OLG, Meiriño MJ and França SLB (2021) Resilience Meets Sustainable and Spiritual Background Into an Initial Review for the New Normal After the COVID-19 Pandemic. Front. Sustain. 2:638570. doi: 10.3389/frsus.2021.638570 <sup>1</sup> Institute of Science and Technology, Federal Fluminense University, Rio das Ostras, Brazil, <sup>2</sup> Laboratory of Technology, Business Management and Environment, Federal Fluminense University, Niterói, Brazil

**Objective:** This work aims to generate an initial basis for a discussion of the strategic structuring of values that impact the perspective of planning at its different levels within the scope of organizational human relations. The value highlighted in this article is an intersection between organizational resilience and spirituality at work, through which production systems can maintain internal quality even after conforming to external pressures from the environment and moving toward sustainability.

**Design/Methodology/Approach:** The methodology applied in this research consists of consulting and organizing a previous knowledge base of a research and development group in technology and sustainability. This knowledge base is based on research, articles, and books on sustainability and corporate responsibility. Then, this more sedimented knowledge base finds the most recent construction of the concept of spirituality in the workplace for the topic of interest from a triangulation of the concept of resilience, corporate sustainability, and spirituality at work.

**Results:** The main findings of this research, if in the reflections on the impact of attribute resilience in the development and maintenance of productive systems. The main issue observed is the correspondence of the identity of the human being with identity, enabling the production of a predictable planning environment in the aspects of motivation and engagement to overcome moments of crisis.

**Originality/Value:** The originality of the article involves the construction of an abstract approach system to understand an attribute that, according to the literature, can be developed and articulated to achieve a perennial organizational performance in society.

Keywords: crisis, resilience, management, sustainable development, human relations

1

# INTRODUCTION

Several works and researches are endeavoring to take a different look at the current context to support society in overcoming the crisis caused by the COVID-19 pandemic. Practical and theoretical perspectives are articulated to build a knowledge base of practical and innovative actions in the development of a near-future called a new normal (Ratten, 2020).

Since January 2020, the rapid spread of COVID-19 has created disruptions in supply chains around the world. WHO (2020) highlights that it is a great challenge to maintain a regular supply of food and medical instruments, including masks and medicines.

There is, then, an opportunity to discuss an emblematic issue for organizations: how to fly over a crisis so as not to destabilize itself in such a way that at the end of it there is a scenario of resumed growth. With external variables in favor of organizations, it is a matter of making good forecasts, but when uncertainty changes the scenario to a context of low predictability, the focus on the present and essential needs allow for a flight of maximum autonomy (Correia et al., 2020a).

In this context, it is essential to articulate values that guide collective and individual action in organizations through objective measures to minimize the harmful reflexes of external pressures on the internal environment (Ratten, 2020).

Thus, this work aims to conduct a literature review on three axes of knowledge-resilience, sustainability, and spirituality-to strengthen organizational practices that contribute to overcoming the current world crisis caused by the pandemic and future crises (Wamsler et al., 2018).

These three themes are particularly interesting to focus on the essential needs of the present. Resilience translates a skill, spirituality a perspective, and sustainability an objective for those who are interested in overcoming moments of uncertainty without impairing their ability to regenerate and prosper in the future.

Thus, the central point of this article is organizational resilience as the ability of organizations to return to their natural state, after some critical situation (Appe, 2019). For this, the scientific literature was revised and sustainability and spirituality brought interesting contributions to the articulation of this organizational value (Wamsler et al., 2018).

#### **METHODS**

The methodology used involves an inductive approach, as it allows us to expand of an existing theory. Through this methodology it is possible to observe particular phenomena, identify patterns, and generalize the investigated object.

To achieve the proposed objective, the approach adopted can still be classified as exploratory, since it aims to provide greater familiarity with the theme. This is a type of approach often used to: determine the magnitude or extent of a specific phenomenon, problem, or behavior; generate initial ideas about the phenomenon, or test the feasibility of the phenomenon.

The applied method consisted of consulting and organizing a previous knowledge base of a research and development group in technology and sustainability. This knowledge base was based on research, articles, and books on sustainability and corporate responsibility.

A literature review distills the existing literature in a subject field; the objective of the literature review is to summarize the state of the art in that subject field (Rowley and Slack, 2004).

Conducting a literature review is a means of demonstrating an author's knowledge about a particular field of study, including vocabulary, theories, key variables and phenomena, and its methods and history. Conducting a literature review also informs the student of the influential researchers and research groups in the field. Finally, with some modification, the literature review is a "legitimate and publishable scholarly document" (LeCompte et al., 2003).

In general, literature reviews are produced in one of three contexts: A literature review can be an end in and of itself; it can be a preliminary stage in a larger research project, and it can be a component of a finished research report. In any of these contexts, literature review can address either theoretical or practical questions (Knopf, 2006).

Then, the most sedimented knowledge base meets the most recent construction of the concept of spirituality in the workplace to approach the topic of interest from a triangulation of the concept of resilience, corporate sustainability, and spirituality at work.

The main limitation of the research is the review structure that is not structured in a single systematic review, being accessed from the expertise of the researchers involved.

Approximately 130 articles were analyzed in their titles and abstracts, a complete reading was performed in  $\sim$ 20 articles that are cited in the analyzes and discussions. The Scopus database was used to search for the latest articles on the intersection between the keywords COVID and resilience. This literature was discussed in the light of theoretical references and presented in the perspective of the current scenario of organizations.

# **BACKGROUND**

# **COVID-19 Pandemic**

The response actions of the governments, with measures of social isolation and the impediment of the opening of commerce and of organizations not considered as of first necessity, results the economic and social contours for the pandemic (Ratten, 2020).

Organizations have developed contingency and business continuity plans in the midst of this scenario. As the interruption of the operation for a long period is not commonly mapped in the companies' risk analysis, passively accepting the risk and ending activities was the path adopted by many of them. The result was a direct impact on the job offer, leading a large number of people to a situation of social vulnerability (Sharmeen and Ahmed, 2020).

Of the companies that adapted, the measures that were first employed were teleworking or remote working technologies. Activities continued, but financially the mismatch between payables and receivables increased (Toscano and Zappalà, 2020).

Government interventions and support from financial institutions brought a boost to cash flow. On the business side, labor actions such as workload reduction and vacation anticipation were employed (Toscano and Zappalà, 2020).

Complex supply chains have been impacted by being reduced or closed. The provision of various types of services have adapted to the digital resource and the reflection on the value of occupying high-cost spaces in urban centers now involves the decision to return or not to these spaces (Mehta and Wang, 2020).

## Resilience

Resilience is a word of Latin origin and means "to return to the normal state," however human and social resilience goes beyond the concept of material resistance, also considering overcoming despite difficulties (Luthans and Youssef-Morgan, 2017).

According to Häring et al. (2017), resilience is "the human capacity to face, win and be strengthened or transformed by adversity experiences." Thus, in the organizational scope, resilience can be defined as "the ability to recover from setbacks, adapt well to changes and continue to face adversity" (Linnenluecke, 2017).

According to Truong et al. (2020), organizational resilience is described as an ideal context for innovation and technological diffusion in a space of transition where ideas and technologies can be tested and critically examined according to their suitability and relevance to practice, reducing resistance to change and learning, presenting itself flexibly according to the human innovation process (Hosseini et al., 2016).

With the situation caused by COVID-19, many organizations have ceased to exist and many others are at risk of disappearing. On the other hand, crises also generate opportunities where new companies have emerged and those that adapt have become stronger and more aware of their resilience (Ovans, 2015).

In this sense, organizational resilience demands that organizations incorporate practices of self-perception and flexibility to articulate their resilience in a practical way. Self-perception serves to understand the limits of the organizational system and its nature, while flexibility allows the movement of these boundaries (Appe, 2019).

## Sustainability

The point highlighted by the term of sustainability is that the actions taken today must not compromise the ability of future generations to meet their needs. These needs consider the integrality of the human being and were initially modeled after the triple bottom line (Elkington, 2006).

The term triple bottom line is a metaphor derived from the business vocabulary Bottom Line, which means to represent the net profit of several transactions initially separated, adding the benefits and costs in a common metric (Brown et al., 2006).

Thus, the TBL is based on the analysis and accounting of three areas that were previously treated separately–Social, Economic and Environmental–so that they can be interpreted on the same metric. In addition, the model highlights a long-term vision that balances these three areas and ensures corporate sustainability (Andrade and Bizzo, 2018).

In this sense, most executives know that how they respond to sustainability challenges will profoundly affect the competitiveness and even the survival of their organizations (Cancela et al., 2020).

The study of sustainability as part of the organization's strategy is justified by analogies to the past. Where, pioneering companies in the development of quality theories have obtained great competitive advantage in the market until their competitors adapt to the new paradigms (Landrum and Ohsowski, 2017).

However, most of these executives are debating the launch of a mix of initiatives without a comprehensive view. What does not constitute a lack of strategic vision, but a lack of capacity to see the outcome of this story (Papoutsi and Sodhi, 2020).

# **Spirituality**

From the worker's point of view, maintaining productivity requires an effort of self-motivation that goes beyond financial rewards (Poulsen and Ipsen, 2017). To support employees in this motivational task, organizations are making efforts with different approaches (Garcia-Zamor and Haensel, 2018).

One of these approaches is discussed in the literature on organizational changes for spirituality in the workplace, which was defined as "the recognition that employees have an inner life that nourishes and is nurtured by meaningful work that takes place in the context of the community" (Ashmos and Duchon, 2000).

Spirituality in the workplace consists of manageable human factors, expressed by relationship needs on three levels: intrapersonal, interpersonal and institutional, corresponding to three dimensions of inner life, purpose at work and sense of community (Bella et al., 2018).

This spirituality can refer to an individual's attempts to live his values more fully in the workplace or refer to the ways in which organizations are structured to support the spiritual growth of employees (Ayoun et al., 2015).

The main ways that current organizations use to deal with spirituality are through leaders in the institution, organizational culture, policies and work design (Cavanagh, 1999).

# DISCUSSION

## First Impression

Based on Karataş and Tagay (2021), from these three thematic axes, an intersection environment can be built that contributes to the theoretical understanding of the possibilities of applying the organizational value of resilience within the planning actions.

When one reads about sustainability, one soon realizes that the continuity movement proposed in this concept is only possible through resilience, as it is necessary that individuals and organizations be flexible to changes (Béné, 2020). This flexibility or adaptability when equipped with self-perception maintains the essence of the object even after its revision or transformation. Like the water that presents itself in different physical states depending on the temperature, but does not denature.

Intersections continue when looking at spirituality. In this case, resilience is connected to the maintenance of the internal psychological structure, as well as the climate and sense of community (Olsson et al., 2015). When it comes to the context of crisis, there is a very strong emotional influence on decisions, of which self-perception contributes so that small losses are faced in a natural way given the chaotic circumstances. For example,

when landing a plane in a breakdown, it is natural for there to be breakdowns, however it is the people inside who matter most.

Ultimately, we have the intersection of the three themes, where it is clear that resilience is ultimately about maintaining what is valuable, this value being intrinsic to human beings and their relationships. That is, his life and the nature to which he is symbiotically linked. Thus, in order to maintain this relationship, it is necessary to pay attention to all elements of it, where the concept of the triple bottom line, that is, economy, society and environment, is taken up (Brown, 2014).

Based on this previous analysis of conceptualization and intersection of contents, we now proceed to analyze the developments and contributions that these principles can generate for individuals and organizations in this context of the current and post-pandemic.

The **Table 1** shows the relationship between the three themes in this article. As you can see, the three themes can be defined based on three dimensions. These dimensions are supported by some of the most relevant references in defining the themes. The relationship between the dimensions that make up the themes is one of affinity, where the nature of the topic is at the intersection of a human relationship perspective. The intrapersonal, interpersonal and institutional dimensions reflect the nature of the topics that define the concepts of resilience, spirituality and sustainability. It is a scheme of understanding that leads to the realization that human life is permeated by three major relationship challenges: with oneself, with others (informal communication) and with institutions (formal communication).

The intrapersonal dimension concerns internal processes of consciousness, where resilience speaks of autonomy, spirituality speaks of inner life and sustainability speaks of impacts on the environment. Now, this dimension speaks of a perception of personal identity, perceiving the system that it is. The interpersonal dimension concerns relationship processes, where there is an awareness of cohabitation, of another who shares life. For resilience the emphasis is on social skills, for spirituality it is the sense of belonging to a community and for sustainability the impacts on human collectives.

The institutional dimension concerns organizational processes, where there is an awareness of predictability of results in interactions. For resilience, goal setting is the main driver in this dimension. For spirituality it is the sense of purpose that guides the action. In sustainability, there is the pillar of the economy for the organization of relations.

# New Forms of Organization to Face the Moments of Crisis

The public, private and non-profit sectors can increasingly use information and communication technology to act in a coordinated manner to resolve sustainable issues. Emergency demands and contingency plans in crises and catastrophes can be addressed through structures of shared and solidary economy (Kontogiannis, 2021).

The constant reduction in financial and logistical transaction costs leads organizations to approach society with policies of exchange of benefits and cooperation. Cleaner production remains an important agenda to preserve productivity gains in line with sustainability demands (Khurana et al., 2021).

Organizations that manage to survive the crisis will emerge stronger, consolidating leaner industries, with more qualified employees and greater use of technologies (Ding et al., 2020). For this, it will be necessary to plan for the coming years, adapting to new business processes and more competitive environments.

# Human Resource Management in Resilient Organizations

According Medel et al. (2020) the resilient organizations bring the appreciation of their employees, perceiving them and relating to them based on a logic of solidarity and sustainability. Even in times of crisis, companies of various sizes worked to maintain their permanent staff.

At this point, human resilience needs to come in line with organizational resilience so that employees often need to assume new roles in the organization without prior preparation or even an analysis of personal behavioral adherence to activities (Eichhorst et al., 2020).

In agreement with Barton et al. (2020), these are times of adaptation and the encouragement of creativity and coresponsibility in solving the new problems and circumstances faced by the organization strengthens the chances of overcoming the crisis. If this moment is well-used, it can foster a greater spirit of body, strengthening the organizational and individual identity.

The main points of attention here come from spirituality, so that managers and employees need to cultivate a relationship of mutual support and sensitivity so that both parties can bear the pressure without breaking the system (Van Assche et al., 2020).

Resilience then involves articulating issues of emotional intelligence, communication and leadership. The ability to solve problems, combined with creativity and interpersonal skills, stand out for overcoming definitions in environments of high uncertainty.

This same discourse has several parallels, as seen in the groupings of the dimensions of the relationship between resilience, spirituality and sustainability. In fact, the overlap between the themes marks a necessary pattern for experiencing life's experience, which can easily be extrapolated to associations.

# **Changes in Marketing and Communication Trends**

As reported by Yang et al. (2020), the organizations mobilized their employees totally or partially according to an alternative for remote interaction with customers. They soon adjusted to the use of digital platforms. The concept of a digital platform is delimited by a model that uses technology to connect people and promote interactions.

In this new scenario, the engineering for better communication of value propositions through digital media has intensified, and high-density spaces for businesses and shopping centers are undergoing transformations where the consumer ends up directing which items remain composing the product mix he wished to use prompt delivery with customer pickup (Strange, 2020).

TABLE 1 | Relationship between resilience, organizational spirituality and sustainability.

Dimension	Intrapersonal	Interpersonal	Institutional
Resilience (Krovetz, 1999)	Autonomy: Ability of a person to possess his/her own identity, to behave independently and to establish control on his/her environment.	Social competence: Ability to create positive impressions in others and thus to establish positive relationships with both adults and their peers.	Having goals and sense of future: Sense of having some goals, educational expectations, hope and bright future.
Spirituality (Ashmos and Duchon, 2000)	Inner life: necessity to organize existential issues such as values, self-image and belonging.	Community: necessity for reciprocity and respect for individuality	Purpose: necessity to recognize meaning in daily actions
Sustainability (Elkington, 2006)	Environmental protection	Community and equity	Economic growth

Conforming to Grace and Tham (2021), the shopping experience is still rooted as a social entertainment event, so shopping centers remain attractive despite all the health restrictions imposed by governments and regulatory agencies in the market. However, the strength of info products as potential substitutes in the consumption of family incomes is growing.

Following this trend, social networks have innovated the communication of product offerings, digital shopping spaces are increasingly blending into an entertainment experience. In addition, logistical efficiency has encouraged the growth of ecommerce (Koerber, 2021).

The mix of entertainment with the shopping experience also modifies the marketing process, giving more weight to the opinion while the information is in the background. As a result, niche markets are strengthened and the capacity for dialogue and interaction with diversity decreases. Which negatively affects the resilience potential of an individual or organization as it has less permeability to diversity.

# Governance, Management and Ethics of Resilient Organizations

The crisis can reduce credibility in institutions, society in turn starts to respect authority less and makes its decisions more and more in a self-centered way. In this scenario, the influence of social media has been weakening social cohesion based on the polarization of opinions and a decrease in democratic dialogue due to the increase in disinformation and the strong performance of opinion-forming individuals, who often establish strategies of defamation and disinformation that aggravate the situation. polarization of society (Finsterwalder and Kuppelwieser, 2020; Zhou, 2020).

Themes such as governance and ethics are once again essential for maintaining the credibility of organizations that reflect the behavior of their leaders, who direct the company's strategic movement in the market (Upadhaya et al., 2020).

The concepts of multilevel and collaborative governance can contribute to solutions not only in companies, but also in the public sector, since government demand is high and the scenario is complex and uncertain, demanding an effective response that requires interinstitutional and intergovernmental coordination, given that each decision is implemented by a multiplicity of agents, who are at different

hierarchical levels and embrace different organizational values (Correia et al., 2020b).

#### CONCLUSION

This study sought to identify the recommendations from the literature review to reduce the impacts of COVID-19. It is a theoretical essay based on a literature review, through analysis of articles and books.

Considering the uncertainty of being in control, strategies are suggested to mitigate unfavorable impacts on organizational activities, such as: recognizing that the organization has resilience and that it depends on the structuring of organizational environments that foster worker satisfaction in meeting their needs spiritual. Emphasizing that the spiritual issue is not about religion, but a vision centered on the human being, based on self-awareness, life purpose, and community involvement. The main contribution of this article is the integration of the concepts of resilience and organizational spirituality, contributing to sustain and structure the organization for the post-pandemic.

The organization needs to recognize that employees have an inner life that nurtures and is nurtured by meaningful work in the context of a community. This research contributes socially while stimulating the quality of life associated with the quality and balance of the working environment, to guarantee a dignified life for the worker, with the achievement of health, safety, and wellbeing. It prescribes that Organizations need a structural model for the protection of the work environment and the possibility of responding to changes in environmental conditions in balance with socio-economic needs.

# **AUTHOR CONTRIBUTIONS**

OQ: elaboration of the initial concept and introduction. DB: literature review and method review. RB: methodological development and results. MM and SF: conclusion and final review. All authors contributed to the article and approved the submitted version.

# **ACKNOWLEDGMENTS**

The authors acknowledge the Coordination of Higher Education Personnel (CAPES) for supporting research in Brazil.

# **REFERENCES**

- Andrade, V. F., and Bizzo, W. A. (2018). Comparative analysis of social responsibility management standards and their comprehensiveness. Gestão Produção, 25, 807–825. doi: 10.1590/0104-530x3866-18
- Appe, S. (2019). Reflections on sustainability and resilience in the NGO sector. Admin. Theory. Praxis 41, 307–317. doi: 10.1080/10841806.2019.1621658
- Ashmos, D. P., and Duchon, D. (2000). Spirituality at work: a conceptuality and measure. *J. Manag. Inquiry* 9, 134–145. doi: 10.1177/105649260092008
- Ayoun, B., Rowe, L., and Yassine, F. (2015). Is workplace spirituality associated with business ethics? *Int. J. Contemp. Hospitality Manag.* 27, 938–957. doi:10.1108/IJCHM-01-2014-0018
- Barton, M. A., Christianson, M., Myers, C. G., and Sutcliffe, K. (2020). Resilience in action: leading for resilience in response to COVID-19. BMJ Leader 4, 117–119 doi: 10.1136/leader-2020-000260
- Béné, C. (2020). Resilience of local food systems and links to food security a review of some important concepts in the context of COVID-19 and other shocks. Food Secur. 12, 805–822. doi: 10.1007/s12571-020-01076-1
- Brown, D., Dillard, J., and Scott Marshall, R. (2006). "Triple bottom line: a business metaphor for a social construct," in *Understanding the Social Dimension* of Sustainability, eds J. Dillard, V. Dujon, and M. C. King (New York, NY: Routledge). p. 2–8.
- Brown, K. (2014). Global environmental change I: a social turn for resilience? *Prog. Hum. Geogr.* 38, 107–117. doi: 10.1177/0309132513498837
- Cancela, B. L., Neves, M. E. D., Rodrigues, L. L., and Dias, A. C. G. (2020). The influence of corporate governance on corporate sustainability: new evidence using panel data in the Iberian macroeconomic environment. *Int. J. Account. Inform. Manag.* 28:4, 785–806. doi: 10.1108/IJAIM-05-2020-0068
- Cavanagh, G. F. (1999). Spirituality for managers: context and critique. J. Org. Change Manag. 12, 186–199. doi: 10.1108/09534819910273793
- Correia, P. M. A. R., Mendes, I. O., Pereira, S., and Subtil, I. (2020a). The combat against COVID-19 in Portugal: how state measures and data availability reinforce some organizational values and contribute to the sustainability of the national health system. Sustainability 12:7513. doi: 10.3390/su12187513
- Correia, P. M. A. R., Mendes, I. O., Pereira, S., and Subtil, I. (2020b). The combat against COVID-19 in Portugal, part II: how governance reinforces some organizational values and contributes to the sustainability of crisis management. Sustainability 12:8715. doi: 10.3390/su12208715
- Ding, D., Guan, C., Chan, C. M. L., and Liu, W. (2020). Building stock market resilience through digital transformation: using google trends to analyze the impact of COVID-19 pandemic. Front. Bus. Res. China 14:21. doi: 10.1186/s11782-020-00089-z
- Eichhorst, W., Marx, P., and Rinne, U. (2020). Manoeuvring through the crisis: labour market and social policies during the COVID-19 pandemic. *Intereconomics* 55, 375–380. doi: 10.1007/s10272-020-0937-6
- Elkington, J. (2006). Governance for sustainability. Corp. Governance 14, 522–529. doi: 10.1111/j.1467-8683.2006.00527.x
- Finsterwalder, J., and Kuppelwieser, V. G. (2020). Equilibrating resources and challenges during crises: a framework for service ecosystem well-being. *J. Serv. Manag.* 31, 1107–1129. doi: 10.1108/JOSM-06-2020-0201
- Garcia-Zamor, J. C., and Haensel, K. (2018). "Spirituality's relationship with ethics and religion and its role in the workplace," in: *The Palgrave Handbook of Workplace Spirituality and Fulfillment*, eds S. Dhiman, G. Roberts, and J. Crossman (Cham: Palgrave Macmillan). p. 925–941. doi:10.1007/978-3-319-61929-3\_34-1
- Grace, R., and Tham, J. C. K. (2021). Adapting uncertainty reduction theory for crisis communication: guidelines for technical communicators. *J. Bus. Tech. Commun.* 35, 110–117. doi: 10.1177/1050651920959188
- Häring, I., Sansavini, G., Bellini, E., Martyn, N., Kovalenko, T., Kitsak, M., et al. (2017). "Towards a generic resilience management, quantification and development process: general definitions, requirements, methods, techniques and measures, and case studies," in: Resilience and Risk. NATO Science for Peace and Security Series C: Environmental Security, eds I. Linkov, and J. Palma-Oliveira (Dordrecht: Springer). p. 21–80. doi: 10.1007/978-94-024-1123-2\_2
- Hosseini, S., Barker, K., and Ramirez-Marquez, J. E. (2016). A review of definitions and measures of system resilience. *Reliability Eng. Syst. Saf.* 145, 47–61. doi: 10.1016/j.ress.2015.08.006

- Karataş, Z., and Tagay, Ö. (2021). The relationships between resilience of the adults affected by the covid pandemic in Turkey and Covid-19 fear, meaning in life, life satisfaction, intolerance of uncertainty and hope. Pers. Individ. Dif. 172:110592. doi: 10.1016/j.paid.2020.110592
- Khurana, S., Haleem, A., Luthra, S., Huisingh, D., and Mannan, B. (2021). Now is the time to press the reset button: helping India's companies to become more resilient and effective in overcoming the impacts of COVID-19, climate changes and other crises. *J. Clean. Prod.* 280:124466. doi: 10.1016/j.jclepro.2020.124466
- Knopf, J. (2006). Doing a literature review. Polit. Sci. Polit. 39, 127–132. doi: 10.1017/S1049096506060264
- Koerber, A. (2021). Is it fake news or is it open science? Science communication in the COVID-19 pandemic. J. Bus. Tech. Commun. 35, 22–27. doi: 10.1177/1050651920958506
- Kontogiannis, T. (2021). A qualitative model of patterns of resilience and vulnerability in responding to a pandemic outbreak with system dynamics. Saf. Sci. 134:105077. doi: 10.1016/j.ssci.2020.105077
- Krovetz,. M. L. (1999). Fostering resiliency: expecting all students to use their minds and hearts well. Corwin Press Inc., California
- Landrum, N. E., and Ohsowski, B. (2017). Identifying worldviews on corporate sustainability: a content analysis of corporate sustainability reports. *Bus. Strategy Environ.* 27, 128–151. doi: 10.1002/bse.1989
- LeCompte, M. D., Klinger, J. K., Campbell, S. A., and Menke, D. W. (2003). Editor's introduction. *Rev. Educ. Res.* 73, 123–124. doi: 10.3102/00346543073002123
- Linnenluecke, M. K. (2017). Resilience in business and management research: a review of influential publications and a research agenda. *Int. J. Manag. Rev.* 19, 4–30. doi: 10.1111/ijmr.12076
- Luthans, F., and Youssef-Morgan, C. M. (2017). Psychological capital: an evidence-based positive approach. Ann. Rev. Organ. Psychol. Organ. Behav. 4, 339–366. doi: 10.1146/annurev-orgpsych-032516-113324
- Medel, K., Kousar, R., and Masood, T. (2020). A collaboration-resilience framework for disaster management supply networks: a case study of the Philippines. J. Hum. Logistics Supply Chain Manag. 10, 509–553. doi:10.1108/JHLSCM-09-2019-0066
- Mehta, D., and Wang, X. (2020). COVID-19 and digital library services – a case study of a University library. Digit. Libr. Perspect. doi: 10.1108/DLP-05-2020-0030
- Olsson, L., Jerneck, A., Thoren, H., Persson, J., and O'Byrne, D. (2015). Why resilience is unappealing to social science: theoretical and empirical investigations of the scientific use of resilience. *Sci. Adv.* 1:e1400217. doi: 10.1126/sciadv.1400217
- Ovans, A. (2015). What resilience means, and why it matters. *Harvard Business Review*. Available online at: https://hbr.org/2015/01/what-resilience-means-and-why-it-matters (accessed December 06, 2020).
- Papoutsi, A., and Sodhi, M. M. S. (2020). Does disclosure in sustainability reports indicate actual sustainability performance? *J. Clean. Prod.* 260:121049. doi: 10.1016/j.jclepro.2020.121049
- Poulsen, S., and Ipsen, C. (2017). In times of change: How distance managers can ensure employees' wellbeing and organizational performance. Saf. Sci. 100, 37–45. doi: 10.1016/j.ssci.2017.05.002
- Ratten, V. (2020). Coronavirus (covid-19) and social value co-creation. Int. J. Sociol. Soc. Policy. doi: 10.1108/IJSSP-06-2020-0237
- Rowley, J., and Slack, F. (2004). Conducting a literature review. Manag. Res. News 27, 31–39. doi: 10.1108/01409170410784185
- Sharmeen, N., and Ahmed, Z. (2020). Immediate socio-economic impact of COVID 19 on youth: a case of Bangladesh. J. Crit. Rev. 7, 2135–2145.
- Strange, R. (2020). The 2020 Covid-19 pandemic and global value chains. *J. Ind. Bus. Econ.* 47, 455–465. doi: 10.1007/s40812-020-00162-x
- Toscano, F., and Zappalà, S. (2020). Social isolation and stress as predictors of productivity perception and remote work satisfaction during the COVID-19 pandemic: the role of concern about the virus in a moderated double mediation. Sustainability 12:9804. doi: 10.3390/su12239804
- Truong, N. T., Dang-Pham, D., McClelland, R. J., and Nkhoma, M. (2020). Service innovation, customer satisfaction and behavioural intentions: a conceptual framework. J. Hospitality Tourism Tech. 11, 529–542. doi:10.1108/JHTT-02-2019-0030
- Upadhaya, B., Wijethilake, C., Adhikari, P., Jayasinghe, K., and Arun, T. (2020). COVID-19 policy responses: reflections on governmental financial

- resilience in South Asia. *J. Public Budget. Account. Finan. Manag.* 32, 825–836. doi: 10.1108/JPBAFM-07-2020-0130
- Van Assche, K., Duineveld, M., Jeff Birchall, S., Deacon, L., Beunen, R., Gruezmacher, M., et al. (2020). Resilience, reinvention and transition during and after quarantine. Space Cult. 23, 230–236. doi: 10.1177/12063312209 38628
- Wamsler, C., Brossmann, J., Hendersson, H., Kristjansdottir, K., McDonald, C., and Scarampi, P. (2018). Mindfulness in sustainability science, practice, and teaching. Sustain. Sci. 13, 143–162. doi: 10.1007/s11625-017-0428-2
- WHO (2020). COVID-19 and Food Safety: Guidance for Food Businesses. World Health Organization. Available online at: https://www.who.int/publications/i/item/covid-19-and-food-safety-guidance-for-food-businesses (accessed December 05, 2020).
- Yang, Y., Liu, H., and Chen, X. (2020). COVID-19 and restaurant demand: early effects of the pandemic and stay-at-home orders. Int. J. Contemp. Hospitality Manag. 13, 3809–3834. doi: 10.1108/IJCHM-06-2020-0504

Zhou, X. (2020). Organizational response to COVID-19 crisis: reflections on the Chinese bureaucracy and its resilience. Manag. Organ. Rev. 16, 1–12. doi: 10.1017/mor.2020.29

**Conflict of Interest:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2021 Bella, Barboza, Quelhas, Meiriño and França. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.