RESILIENCY: A NECESSARY SKILL FOR GLOBAL HIGHER EDUCATION LEADERS DURING COVID-19

Robert E. Waller
Columbus State University
Pamela A. Lemoine
Troy University
Thomas J. McCormack
Columbus State University
Christopher J. Garretson
Columbus State University
Michael D. Richardson*
Global Tertiary Institute

ABSTRACT
The modern world is changing rapidly in many unanticipated ways. Stability has given way to innovation, creativity, and diversity in contemporary society. Progressively frenzied environments, including COVID-19, mandate global higher education leaders become more resilient. Resilience is an underlying and complex variable that enables global higher education leaders to better face challenges. Sustaining the past model of higher education in changing environments, mandates and challenges has become untenable. In today's higher education world leaders look for ways to manage in an imbalanced environment where the focus is on leading for resilience, where the future is unpredictable, capacity is uncertain and unknown, and learning is an issue of social and economic security.

Key Words: Resiliency, leadership, global higher education, change, COVID-19.

1. INTRODUCTION

Uncertainty is at the forefront of many crises, disasters, and emergencies, and the COVID-19 pandemic is no different (Daniel, 2020). Today's global higher education leaders are faced with continually evolving change and turbulence (Waller, Garretson, Lemoine, & Richardson,2020).Resilient global higher education leaders are those who challenge what others take for granted and imagine multiple ways to accomplish what needs to be done by envisioning multiple answers to problems (Suryaningtyas, Sudiro, Eka, & Dodi, 2019). Resilient leaders perceive circumstances as a testof their skills and abilities to face the challenge of disruption in a competitive environment (Wang, Li,& Li, 2017).

Managing change is criticalfor today's global educational leaders who must be positive, organized, adaptable and flexible (McCormack, Lemoine, & Richardson, 2020a).International trends in higher education as well as the dynamic external environment createmany challenges for global higher education leaders who must find a way to face external disruptions like

COVID-19 in order to make their universities perform better globally (Said, Ahmad, Mustaffa, & Ghani, 2015). In order to meet the demands of an increasingly complex and dynamic environment many university leaders have begun searching for ways to be resilient in order to stay competitive (Bartz&Bartz, 2017).

Then came COVID-19. What were global higher education leaders expected to do? Did they have decisions to make or were decisions made for them? Leadership exhibited by global higher education leaders is gaining importance in the difficult times of the COVID-19 pandemic when global higher education has to face many unusual challenges (Fernandez& Shaw, 2020). In these unsettling times, leadership solutions and approaches are receiving extra scrutiny (Waller, Lemoine, Garretson, & Richardson, 2020a).Organizational and leadership research has focused on man-made threats such as crime and civil unrest;however, little is known about leadership challenges and organizational outcomes emerging from the threats posed by the COVID-19 pandemic (Dirani, Abadi, Alizadeh, Barhate, Garza, Gunasekara, Ibrahim, &Majzun, 2020).

COVID-19: Global Pandemic

Disruption presents a tremendous challenge for global higher education institutions and their leaders, particularly the disruption caused by COVID-19 (Lemoine, Waller, Garretson, & Richardson, 2020). Some have advocated that disruption is the force that permitted global higher education to expand and prosper(Korsakova, 2019). Other researchers have focused on the use of e-learning as a major consequence of the COVID-19 pandemic (Johnson, Veletsianos, & Seaman, 2020). COVID-19 led to significant innovationand change in universities regarding the processes used for teaching and learning (Carver,2020; Rahim, Burrell, & Duncan, 2020).

The outbreak of COVID-19 created a unique dilemma and tremendous opportunities for global higher education institutions(Mseleku, 2020).The pandemic produced the opportunity for global higher education to embrace new delivery systems for instruction, most often using e-learning (Mondol& Mohiuddin, 2020). Obviously, most institutions had not planned for COVID-19 nor the possibility of using e-learning as an alternative to face-to-face instruction and most faculty were not prepared to effectively deliver high-quality instruction remotely (Dhawan, 2020).The challenge for global higher education leaders became how to improve the quality of online teaching and adequately prepare their faculty to deliver instruction in a new environment (Bozkurt& Sharma, 2020). Given the expansion of electronic supported teaching, the crucial question is how and to what extent e-learning will change the quality of teaching and learning.

As a result of the COVID-19 outbreak, teaching in universities needed to be quickly transitioned from regular on-campus classes into technology-enhanced teaching formats which required urgent changes to the plans for global higher education (El Masri&Sabzalieva, 2020). Although online learning already played an important part in some universities, the COVID-19 pandemic required expansion of the existing infrastructure and highlighted areas that universities should focus on in their digitalization strategy(McCormack, Lemoine, & Richardson, 2020b). Furthermore, this challenge greatly accelerated the digitalization of the global higher education sector although some global universities were not adequately equipped to handle the transformation towards fully digital forms of education (Karalis, 2020). However, the

implementation of online learning posed different risks, problems and challenges to both the teachers and students, especially in global higher education institutions (Moon, 2020).

A key challenge for global higher education leaders in response to the COVID-19 pandemic was managing the abrupt move of teaching and learning from face-to-face to online delivery (Roache, Rowe-Holder, &Muschette, 2020). While global higher education is no stranger to the turbulence brought on by major social, political, and economic change, the scale and scope of COVID-19 is unprecedented in an era when higher education is widely available on a global scale (Mayo, 2020; Richardson, Jenkins,& Lemoine, 2017).With the advent of the COVID-19 pandemic most global higher education institutions were forced to quickly adapt online learning for all coursework (Khan, Niazi, &Saif, 2020). The key question was whether or not the institution, faculty and students were prepared for the transition. Most were not (Houlden&Veletsianos, 2020).

The unexpected change to e-learning became a measure of the leaders' and the institutions' agility because adapting to the "new reality" of COVID-19 requires improvisation and engagement. But what is the future for global higher education while continuing to face COVID-19 (Lederman, 2020)? The pandemic is not gone so how will universities adapt? Will some open for face-to-face instruction and face renewed outbreaks? Will others stay completely online? The future is unclear except for one thing: online learning provided a reliable method for advancing instruction in higher education in a period of disruption caused by COVID-19 (Korkmaz &Toraman, 2020; Riggs, 2020; Yan, 2020).

Leadership

Leadership implies the ability to anticipate and envision the future, maintain flexibility, think strategically and initiate changes that will create a competitive advantage for the future (McChrystal, Collins, Silverman, &Fussell, 2015).The essence of leadership is managing human, intellectual, and social capital. The lessons of leadership in a crisisapply to leadership generally: good governance, personal integrity, developing capacity, equipping staff, effective mobilization, good communication, being present and responding to needs are essential (Bennis, 2009; Gigliotti, 2019).

As society changes, its leaders are also changing, which has caused views of leadership to change. "Leaders are born, not made," has been replaced with the understanding that people can learn and practice behaviors that will help them to be successful, effective leaders. Leadership is personal, behavioral, and yet, it is also learned and practiced skills (Northouse, 2016).

According to Warren Bennis, "Leaders are people who do the right thing; managers are people who do things right" (Bennis, 1992, p. 167). In the time of COVID-19 global higher education needs leaders, not just managers. A good leader manages but must also possess additional competencies and an understanding of the organization to be led. Quality leaders are ones who possess special qualities to lead (Chawla&Lenka, 2018). They draw upon their strengths yet accept their weaknesses and develop ways to compensate for them or build weaknesses into strengths.

In order to lead effectively in the present climate, leaders in global higher education are required to intentionally develop new skills in themselves and in their institution (Bynander&Nohrstedt,2020). A changing world is forcing a shift from an approach based around problem solving and planning aimed at reducing uncertainty, to a world where progress is made by actively engaging with uncertainty, requiring higher levels of leadership ability, agility, and adaptability (Drysdale&Gurr,2017). As a result, leaders do not automatically rely on past solutions and instead place increased value on new, temporary solutions, in response to an unpredictable climate such as that faced by COVID-19. Today's leader is not someone who knows all the solutions or answers because in this world that is impossible. Rather, leadership bridges the gap between strategy and performance (Hunter& Lovelace, 2020).

Crises such as COVID-19 present numerous challenges for leaders who have to assess issues in a rapidly changing environment and analyze a dynamic threat with limited information (Izumi, Sukhwani, Surjan, & Shaw, 2020; Lemoine&Richardson, 2020). The need to navigate change and adapt during COVID-19 is widespread in global higher education. The challenge of leading uncertainty in the global higher education environmentinvolves the courage to take action when the way forward is unclear (Koehn, 2020). The swift pace of change demanded by COVID-19 and the complexity of the challenges facing global universities is immense and is testing the abilities of institutional leaders (Marshall, Roache, & Moody-Marshall, 2020). Consequently, the playbookof the past does not offer a sustainable path forward for all leaders and institutions. COVID-19 has provided many opportunities to observe and reflect on leadership at the international, national and local levels (McGuinness, 2020).

Resilience

Resilience describes an individual's ability to persist by responding and adapting to changes, both internal and external (Foerster&Duchek, 2017). The basic tenet of resilience theory is that change is inevitable andperpetual (Mrig&Sanaghan, 2017).Resilienceis the ability of educational leaders to withstand and recover from stresses, such as social change, economic disruptions or the upheaval created by COVID-19 (Southwick, Martini, Charney, & Southwick, 2017). When massive transformation is inevitable, resilient leadersadvocate the need for organizational development to meet the challenges (Breen, 2017).

The key to managing change successfully during COVID-19 is to acknowledge it and prepare thoughtful, adaptive and agile responses (Patterson, Goens, & Reed, 2009). Resilience theory embraces the reality of continuous, unpredictable future change, and requires individuals to look for ways to adapt and survive irreversible changes (Lee,McCann, &Selsky,2009).Resilience includes the capacity to absorb and permit the inclusion of new ideas, the capacity to change and create new opportunities, and the capacity to address the unexpected (Richardson, Garretson, Waller, & Lemoine, 2019). Resilience encompasses an individual's attitudes, values and behaviors that enable the individual to overcome obstacles (Lewin, Li, & Välikangas,2020).

Resilience is often described as a personal quality that predisposes individuals to bounce back in the face of loss. Resilient leaders, however, do more than bounce back—they bounce forward (Grey, 2013). With speed and diligence, resilient leaders take action that responds to new and ever-changing realities; even as they maintain the essential operations of the organizations they lead (Doerfel&Prezelj, 2017). Resilient leaders understand themselves and their organization because they understand that the status quo is unsustainable; they also use it to inspire others (Lane, McCormack, & Richardson, 2013).

The Current Need for Resilient Leaders in Global Higher Education

Global higher education has grown increasingly unstable, unpredictable, and unbalanced in the current era of rapid and sustained change caused by COVID-19 (Hilton, 2020).These aspects of change often create untenable conditions for leaders--where context and conditions change rapidly and where the purposes and processes of leadership are not necessarily shared or understood by superiors or followers (Tichy& Bennis, 2008). The need to navigate change and adjust to it is widespread in global higher education during the COVID-19 global pandemic (Rowland, Casimir, Pivcevic, 2020).

Resilient global higher education leaders are necessary. The concepts of leadership in the 21st century need to be consistent with the type of society that is emerging (Bosire&Amimo, 2017). The most significant changes in leadership reflect the transformations that are occurring in society--a society that is evolving from a structure of hierarchies and standard answers to one that is constantly changing, connected, networked, interactive and increasingly complex (Waller, Lemoine, Mense, Garretson, & Richardson, 2019). Global higher education leaders have enormous responsibility to successfully lead change in and for their organizations, particularly as they deal with COVID-19 and its ramifications.Global higher education leaders have two basic choices in preparing for, managing and mitigating crises like COVID-19: they can try to anticipate and avert them and/or become *resilient* (Waller, Lemoine, Garretson,& Richardson,2020b).

Lemoine and Richardson (2019)point to the challenge of leading uncertainty in the higher education environment, which involves the courage to take action when the longer-term way ahead is unclear. In addition, Grote(2019) stated that the ability to guide change is the ultimate test of a leader. According to Ledesma (2014), resilience is a crucial resource for leaders as it contributes to their survival, adaptation and success, especially in a complex working environment necessitated by COVID-19 (Heifetz & Linksy, 2017).In order to thrive amidst the COVID-19 unknown, resilient leaders must embrace innovative ways of interacting consistent with change (Cowen, 2020).

Resiliency in global educational leaders implies personal determination and persistence to do whatever needs to be done to make the university successful. Resilient global educational leaders are mature, self-effacing, efficacious, empathetic leaders who are unlikely to succumb to the stress of leadership (Denney, 2020). Milstein and Henry (2008) stated that resilient leaders are "like rubber bands; they bounce back from adversities stronger and faster, learn from experiences, gain more self-confidence in the process, and develop new skills" (p. 1).

Resilience includes the capacity to absorb and permit the inclusion of new ideas, the capacity to change and create new opportunities, and the ability to address the unexpected (Gigliotti& Fortunato, 2017). A resilient leader's key challenge is the ability to be flexible, adaptable, and innovative within an increasingly complex and dynamic environment and to be the leader of change who is prepared to take risks (Vera, Samba, Kong, & Maldonado, 2020). Resilient leaders actively foster good working relationships, clear communication, and strong buy-in at all levels of the institution (Breen, 2019). During this time of COVID-19 resilient leaders in global higher education must communicate that change is now constant. Understanding change and the future means to be open to unpredictable events and experiences, and to construct promising strategies and feasible solutions for complex challenges (Amaya & Melnyk, 2020).

Resilient leaders sustain the moment and provide keys for the future (Stern, 2017). Resilient leaders must be knowledgeable, be able to think critically, and take action. Global higher education leaders must be able to make sense of emerging issues surrounding COVID-19. During the COVID crisis, resilient higher education leaders need agility--the ability to embrace new models, new organizational relationships, and new technologies is essential (Lane, McCormack, & Richardson, 2013).

A resilient leader pays attention to relevant data and recognizes both opportunities and omens of disaster. Resilient leaders draw on diverse perspectives to make well-informed decisions that ultimately create new realities in global higher education institutions (Cheese, 2016). Resilience does not require a precise capacity to predict the future; only a capacity to absorb events regardless of their magnitude or severity, meaning that resilience is the capacity to change (de Oliveira Teixeira, & Werther, Jr., 2013).

The current COVID-19 crisis is having, and will continue to have, a huge impact onthe individual, institutional, societal, and global levels.At the institutional level, the pandemic brings into focus the role of leaders in leading their organizations to survive during and after the crisis (Fernandez & Shaw, 2020). It means to lead through the crisis with enough agility to absorb adversity and improve responsiveness to arising challenges (Dartey-Baah, 2015). Resilience acknowledges that there is no one-size-fits-all approach to facing organizational challenges. Moreover, it is built on the assumption that not all crises are the same, and different situations require different sets of responses (Bhamra, Dani, & Burnard,2011).Furthermore, some might argue that times of crisis, in general, represent an opportunity for goal-driven, strategic leaders to turnchallenges into opportunities and eventually give their institutions competitive advantage (Blumenstyk,2020.

Resilient leaders must be decision-makers, unhesitant in dealing with the uncertainty of change such as COVID-19 (Evans, 2020). Sorting out the complexity of issues is a constant challenge; there is no normalcy except change.Resilient leaders need to have fortitude to take the volatility of pressures for complex change and realize change will bring ambiguity and challenges that come with setbacks, stress, and crises (Darkow, 2019). With the challenges of COVID-19 global higher education leaders need to be tough, courageous, know their own

strengths, and be able to capitalize and build strong supportive relationships. Leadership is a process, not an event, and leadership skill sets can be taught.

2. CONCLUSIONS

1. Resilient leaders are able to overcome the unexpected like COVID19.
2. Resilient leaders perceive sustainability as survival and resilience as thriving amid chaos.
3. Resilient global higher education leaders absorb disturbance and adapt, and create an environment for dealing with ambiguity, change and uncertainty.
4. Resilient leaders strive for an innovative organization capable of managing unpredicted changes relying on the capacity of the organization not only to absorb shocks but to evolve.
5. Resilience isessential for a global higher education leader to succeed in the face of adversity driven by COVID-19.
6. To be successful, global higher education leaders must be agile learners with high resilience and frustration tolerance to recover from adversity, such as COVID-19.
7. Global higher education leaders must sustain motivation and develop resilience during uncertainty to achieve organizational goals.
8. The COVID-19 pandemic has inadvertently created an opportunity for global higher education leaders to build resilience, tolerance to frustration, and collaborative working relations inside and outside the institution.

REFERENCES

Amaya, M., & Melnyk, B. M. (2020). Leveraging system-wide well-being and resiliency in higher education during the COVID-19 Pandemic. *Building Healthy Academic Communities Journal*, *4*(1), 7-16.

Bartz, D. E., &Bartz, C. E. A. (2017). The resilient and focused manager. *International Journal of Business and Social Science*, *8*(9), 1-7.

Bennis, W. G. (1992). Managing the dream: Leadership in the 21st century. *Management Decision*, *30*(6), 166.

Bennis, W. G. (2009). Crises reveal the quality of leadership. *Leader to Leader*, *2009*(54), 27-31.
Bhamra, R., Dani, S., & Burnard, K. (2011). Resilience: The concept, a literature review and future directions. *International Journal of Production Research, 49*(18), 5375-5393.

Blumenstyk, G. (2020, March 11). Why coronavirus looks like a 'black swan' moment for higher ed. *Chronicle of Higher Education.* https://www.chronicle.com/article/ Why-Coronavirus-Looks-Like-a/248219?cid=cp275

Bosire, J., &Amimo, C. (2017). Emerging issues and future prospects in the management of transnational education. *International Journal of Higher Education*, *6*(5), 143-154.

Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Corona Virus pandemic. *Asian Journal of Distance Education, 15*(1), i-vi.

Breen, J. M. (2017). Leadership resilience in a VUCA World. In *Visionary leadership in a turbulent world*. (pp. 39-58). Bingley, UK: Emerald Publishing Limited.

Breen, J. M. (2019). Thriving in higher education: Creating the new normal through resilience. In *Management and Administration of Higher Education Institutions at Times of Change.* (pp. 85-98). Bingley, UK: Emerald Publishing Limited.

Bynander, F., &Nohrstedt, D. (Eds.). (2020). *Collaborative crisis management: Interorganizational approaches to extreme events.* New York, NY: Routledge.

Carver, L. B. (2020). Supporting learners in a time of crisis. *Advances in Social Sciences Research Journal*, *7*(4), 129-136.

Chawla, S., &Lenka, U. (2018). Leadership in VUCA environment. In *Flexible strategies in VUCA markets* (pp. 213-224). Singapore: Springer.

Cheese, P. (2016). Managing risk and building resilient organisations in a riskier world. *Journal of Organizational Effectiveness: People and Performance, 3*, 323–331.

Cowen, S. (2020, March 16). How to lead in a crisis. *The Chronicle of Higher Education*. Retrieved from https://www.chronicle.com/article/How-to-Lead-in-a-Crisis/248253

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects.*https://doi.org/10.1007/s11125-020-09464-3

Darkow, P. M. (2019). Beyond "bouncing back": Towards an integral, capability-based understanding of organizational resilience. *Journal of Contingencies and Crisis Management*, *27*(2), 145-156.

Dartey-Baah, K. (2015). Resilient leadership: A transformational-transactional leadership mix. *Journal of Global Responsibility, 6*(1), 99-112.

Denney, F. (2020). Compassion in higher education leadership: Casualty or companion during the era of Coronavirus? *Journal of Higher Education Policy and Leadership Studies*, *1*(2), 41-47.

De Oliveira Teixeira, E., & Werther, Jr, W. B. (2013). Resilience: Continuous renewal of competitive advantages. *Business Horizons*, *56*(3), 333-342.

Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems, 49*(1), 5-22.

Dirani, K. M., Abadi, M., Alizadeh, A., Barhate, B., Garza, R. C., Gunasekara, N., Ibrahim, G., &Majzun, Z. (2020). Leadership competencies and the essential role of human resource development in times of crisis: A response to Covid-19 pandemic. *Human Resource Development International*, *23*(4), 380-394.

Doerfel, M. L., &Prezelj, I. (2017). Resilience in a complex and unpredictable world. *Journal of contingencies and crisis management*, *25*(3), 118-122.

Drysdale, L., &Gurr, D. (2017). Leadership in uncertain times. *International Studies in Educational Administration, 45*(2), 131-159.

El Masri, A., &Sabzalieva, E. (2020). Dealing with disruption, rethinking recovery: Policy responses to the COVID-19 pandemic in higher education. *Policy Design and Practice*. DOI: 10.1080/25741292.2020.1813359

Evans, M. (2020). COVID-19 exposes sector's vulnerability. *Advocate: Journal of the National Tertiary Education Union, 27*(1), 4-5.

Fernandez, A. A., & Shaw, G. P. (2020). Academic leadership in a time of crisis: The coronavirus and COVID-19. *Journal of Leadership Studies*, *14*(1), 39-45.

Foerster, C., &Duchek, S. (2017). What makes leaders resilient? An exploratory interview study. *German Journal of Human Resource Management*, *31*(4), 281-306.

Gigliotti, R. A., & Fortunato, J. A. (2017). Crisis leadership: Upholding institutional values. In *A guide for leaders in higher education: Core concepts, competencies, and tools* (pp. 299-323). Sterling, VA: Stylus.

Gigliotti, R. A. (2019). *Crisis leadership in higher education: Theory and practice*. New Brunswick, NJ: Rutgers University Press.

Grey, J. (2013). *Executive advantage: Resilient leadership for 21st-century organizations.* London, UK: Kogan Page.

Grote, G. (2019). Leadership in resilient organizations. In *Exploring resilience* (pp. 59-67). Cham, Switzerland: Springer.

Heifetz, R., & Linksy, M. (2017). *Leadership on the line: Staying alive through the dangers of change*. Boston, MA: Harvard Business Review Press.

Hilton, J. (2020). Resilient leadership. *Management in Education*, *34*(1), 24-25.

Houlden, S., &Veletsianos, G. (2020). Coronavirus pushes universities to switch to online classes – but are they ready? *The Conversation*. https://theconversation.com/coronaviruspushes-universities-to-switch-to-online-classes-but-arethey-ready-132728

Hunter, S. T., & Lovelace, J. (2020). *Extending the charismatic, ideological, and pragmatic approach to leadership: Multiple pathways to success*. New York, NY: Taylor & Francis Group.

Izumi, T., Sukhwani, V., Surjan, A., & Shaw, R. (2020). Managing and responding to pandemics in higher educational institutions: Initial learning from COVID-19. *International Journal of Disaster Resilience in the Built Environment*. https://doi.org/10.1108/IJDRBE-06-2020-0054

Johnson, N., Veletsianos, G., & Seaman, J. (2020).US faculty and administrators' experiences and approaches in the early weeks of the COVID-19 Pandemic. *Online Learning, 24*(2), 6-21.

Karalis, T. (2020). Planning and evaluation during educational disruption: Lessons learned from Covid-19 pandemic for treatment of emergencies in education. *European Journal of Education Studies, 7*(4), 125–142.

Khan, A. A., Niazi, S., &Saif, S. K. (2020, March 26). Universities were unprepared for switch to remote learning. Retrieved from: www.universityworldnews.com: https://www.universityworldnews.com/post.php?story=20200326141547229

Koehn, N. (2020, April 3). Real leaders are forged in crisis. *Harvard Business Review*, https://hbr. org/2020/04/real-leaders-are-forged-in-crisis

Korkmaz, G., &Toraman, Ç. (2020). Are we ready for the post-COVID-19 educational practice? An investigation into what educators think as to online learning.

International Journal of Technology in Education and Science (IJTES), *4*(4), 293-309.

Korsakova, T. V. (2019). Higher education in VUCA-world: New metaphor of university. *European Journal of Interdisciplinary Studies*, *5*(2), 31-35.

Lane, K. E., McCormack, T. J., & Richardson, M. D. (2013). Resilient leaders: Essential for organizational innovation. *International Journal of Organizational Innovation*, *6*(2), 7-25.

Lederman, D. (2020, April 1). Preparing for a fall without in-person classes. *Inside Higher Ed.* https://www.insidehighered.com/digital-learning/article/2020/04/01/ preparing-quietly-fall-semester-without-person-instruction

Ledesma, J. (2014). Conceptual frameworks and research models on resilience in leadership. *Sage Open, 4*(3), 4.

Lee, J., McCann, J., &Selsky, J. (2009). Building agility, resilience and performance in turbulent environments. *People and Strategy, 32*(3), 44-51.

Lemoine, P. A., & Richardson, M. D. (2019). Creative disruption in higher education: Society, technology, and globalization. In *Educational and social dimensions of digital transformation in organizations* (pp. 275-293). Hershey, PA: IGI Global.
Lemoine, P. A.&Richardson, M. D. (2020). Planning for higher education institutions: Chaos and the COVID-19 pandemic. *Educational Planning* (Centennial Edition)*, 27*(3), 43-57.

Lemoine, P. A., Waller, R. E., Garretson, C. J., & Richardson, M. D. (2020). Analyzing uncertainty and change in the advancement of global higher education.*International Journal of Education Humanities and Social Sciences*, *3*(4), 208-223.

Lewin, A. Y., Li, P. P., & Välikangas, L. (2020). Resilience, resilience, resilience. *Management and Organization Review*, *16*(2), 225–227.

Marshall, J., Roache, D., & Moody-Marshall, R. (2020). Crisis leadership: A critical examination of educational leadership in higher education in the midst of the COVID-19 pandemic. *International Studies in Educational Administration*, *48*(3).

Mayo, P. (2020). Higher education in the time of COVID-19. *Counterpunch*. Retrieved from: https://www.counterpunch.org/2020/03/23/highereducation-in-the-time-of-covid-19/html.

McCormack, T. J., Lemoine, P. A., & Richardson, M. D. (2020a). E-learning during COVID-19: Global search for meaning. *International Journal of Education Humanities and Social Sciences, 3*(6), 26-33.

McCormack, T. J., Lemoine, P. A., & Richardson, M. D. (2020b). Online teaching and learning in global higher education during COVID-19. *International Education and Research Journal, 6*(10), 33-35.

McChrystal, S. A., Collins, T., Silverman, D., &Fussell, C. (2015). Team of teams: New rules of engagement for a complex world. New York, NY: Portfolio/Penguin

McGuinness, J. (2020, May 12). 4 COVID-19 leadership lessons. *Chief Executive*. Retrieved from: https://chief executive.net/4-covid-19-leadership-lessons/

Milstein, M. M., & Henry, D. A. (2008). *Leadership for resilient schools and communities*. Thousand Oaks, CA: Corwin Press.

Mondol, M. S., & Mohiuddin, M. G. (2020). Confronting COVID-19 with a paradigm shift in teaching and learning: A study on online classes. *International Journal of Social, Political and Economic Research*, *7*(2), 231-247.

Moon, M. J. (2020). Fighting against COVID-19 with agility, transparency, and participation: Wicked policy problems and new governance challenges. *Public Administration Review, 80*(4), 651–656.

Mrig, A., &Sanaghan, P. (2017). The skills future higher-ed leaders need to succeed. *Academic Impressions.*https://www.academicimpressions.com/PDF/future-skillset.pdf.

Mseleku, Z. (2020). A literature review of e-learning and e-teaching in the era of Covid-19 pandemic. *SAGE*, *57*(52), 6.

Northouse, P. (2016). *Leadership: Theory and practice* (7th ed.). Los Angeles, CA: SAGE.

Patterson, J. L., Goens, G. A., & Reed, D. E. (2009). *Resilient leadership for turbulent times: A guide to thriving in the face of adversity.* **Lanham, MD: Rowman & Littlefield.**

Rahim, E., Burrell, D. N., & Duncan, T. (2020). Best practices and emerging trends for knowledge-based organizations and academic institutions around e-learning. *International Journal of Smart Education and Urban Society (IJSEUS)*, *11*(2), 16-27.

Richardson, M. D., Jenkins, W., & Lemoine, P. A. (2017). Planning for innovation and disruption in a global environment. *Educational Planning*, *24*(3), 11-24.

Richardson, M. D., Garretson, C. J., Waller, R. E., & Lemoine, P. A. (2019). Building capacity for quality in global higher education. *International Journal of Advanced Research and Publications, 3*(10), 28-34.

Riggs, S. (2020, April 15). Student-centered remote teaching: Lessons learned from online education. *EDUCAUSE Review*. https://er.educause.edu/blogs/2020/4/student-centered-remoteteaching-lessons-learned-from-online-education

Roache, D., Rowe-Holder, D., &Muschette, R. (2020). Transitioning to online distance learning in the COVID-19 Era: A call for skilled leadership in higher education institutions (HEIs). *International Studies in Educational Administration*, *48*(1), 103-110.

Rowland, D., Casimir, S., and Pivcevic, P. (2020). Covid-19 pandemic: Now is the time for emergent leadership. *LSE Business Review* Available at:https://blogs.lse.ac.uk/businessreview/2020/ 04/30/covid-19-pandemic-now-is-the-time-for-emergent-leadership/.

Said, H., Ahmad, I., Mustaffa, M. S., & Ghani, F. A. (2015). Role of campus leadership in managing change and challenges of internationalization of higher education. *Mediterranean Journal of Social Sciences*, *6*(4), 82.

Southwick, F. S., Martini, B. L., Charney, D. S., & Southwick, S. M. (2017). Leadership and resilience. In *Leadership today* (pp. 315-333). Cham, Switzerland: Springer.

Stern, E. K. (2017). Crisis, leadership, and extreme contexts. In *Leadership in extreme situations* (pp. 41-59). Cham, Switzerland: Springer.

Suryaningtyas, D., Sudiro, A., Eka, T. A., & Dodi, I. W. (2019). Organizational resilience and organizational performance: Examining the mediating roles of resilient leadership and organizational culture. *Academy of Strategic Management Journal*, *18*(2), 1-7.

Tichy, N., & Bennis, W. (2008). Crisis leadership. *Leadership Excellence*, *25*(5), 3-4.

Vera, D., Samba, C., Kong, D. T., & Maldonado, T. (2020). Resilience as thriving: The role of positive leadership practices. *Organizational dynamics*. doi.org/10.1016/j.orgdyn.2020.100784

Waller, R. E., Garretson, C. J., Lemoine, P. A., & Richardson, M. D. (2020). Examining technology uncertainties in global higher education. *International Journal of Education Humanities and Social Sciences, 3*(3), 24-32.

Waller, R. E., Lemoine, P. A., Mense, E. G., Garretson, C. J., & Richardson, M. D. (2019). Global higher education in a VUCA world: Concerns and projections. *Journal of Education and Development*, *3*(2), 73.

Waller, R. E., Lemoine, P. A., Garretson, C. J., & Richardson, M. D. (2020a). Global higher education: Complexity and uncertainty. *International Education and Research Journal*, 6(4), 57-58.

Waller, R. E., Lemoine, P. A., Garretson, C. J., & Richardson, M. D. (2020b). Disruption and innovation in global higher education: Through the lens of complexity theory. In M. Khosrow-Pour (Ed.). *Handbook of research on modern educational technologies, applications, and management.* (pp. 677-700). Hershey, PA: IGI Global.

Wang, Z., Li, C., & Li, X. (2017). Resilience, leadership and work engagement: The mediating role of positive affect. *Social Indicators Research, 132*(2), 699–708.

Yan, Z. (2020). Unprecedented pandemic, unprecedented shift, and unprecedented opportunity. *Human Behavior and Emerging Technologies, 2,* 110–112.