# Higher Education Sustainable Business Excellence

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Contributor: Aleksandar Djordjevic

Higher education has always been a driver of development for an entire society, as it influences the growth of the economy, culture and individual career development. Accordingly, higher education is an area that is constantly exposed to requests for the continuous improvement, competitiveness and sustainable development of all of the processes carried out in higher education institutions (HEIs). Sustainable business excellence (SBE) is based on a business excellence (BE) concept, meaning that the exceptional levels of performance that meet or go beyond the expectations of different groups of stakeholders are obtained and kept, with current resource usage, which will not compromise future generations' ability to meet their resource utilisation. SBE represents a concept with many influencing factors: participation, motivation, professional staff training, a focus on customers, strategic planning, a focus on innovation and continuous improvement, leadership, process management, and most crucially sustainable resource management.

sustainable business excellence

information and communication support

quality

leadership

## 1. Background

In order to benchmark SBE on a national and international level, different award models have been developed. The most popular and the best known are the MBA (Malcolm Baldrige Award) in the USA [1], the Edward Deming Award and European Foundation of Quality Management (EFQM) [2][3], and other national award models (Great Britain, Denmark, Australia, New Zeeland, Hungary, France, Serbia, Russia). The common characteristic of all of the award models is that they are based on a self-assessment approach, benchmarking, or an external assessment by the founders of the different models. Those models are not designed or appropriate for simulation purposes. The development of an appropriate SBE model for simulation focusing on HEIs is the primary goal of this entry.

For centuries, HEI professors have been giving lectures by traditional methods while trying to make them more interactive. In such circumstances, information and communication technologies (ICT) represent an adequate educational transformation technology because they provide applications and tools to help professors integrate the traditional teaching method into a state-of-the-art ICT-based effective education system [4]. HEI professors can access the recently published material in an intelligent ICT education system and break down the learning outline into activities and lessons in order to gain more content consolidation and rehearsal. The idea is that interactive lectures keep students motivated and satisfy their learning curiosity [5]. However, HEIs never took this combination of education and an intelligent ICT education system seriously. HEIs did not fully integrate the ICT into their education systems, which was concluded during the current world pandemic, COVID-19.

In recent years, humanity is facing a new challenge in the form of COVID-19. Most of the HEIs around the world are closed. This pandemic is forcing ICT into the limelight more than ever in order to adapt and help HEIs' educational needs. ICT provides a medium by which HEI professors, students, and other education community members can interact and improve the education system from the class level to the level of the national education sector. Having this in mind, the purpose of this entry is to define an integrative model of SBE related to ICT support, quality and leadership, and their impact on SBE in a transition economy. Transition economies are characteristic of countries that are in the process of moving or have recently moved from a centrally planned economic system to a market-driven system [6], and involve concepts such as the knowledge economy, digital economy and sustainable economy. The term is predominantly related to China, Eastern European countries and the former Soviet countries [7].

### 2. EFQM Model for Bussiness Excellence in HEIs

Initially, only industrial organisations used excellence models to achieve business excellence and success, such that business excellence was associated only with these organisations. These excellence models were constructed by particular bodies that have also helped industrial organisations to implement them <sup>[8]</sup>. The most prevalent BE models were the EFQM model in Europe and the Malcolm Baldrige model in the United States <sup>[9]</sup>. More than 59% of BE models worldwide, and 80% in Europe, were based on the EFQM BE Model <sup>[10]</sup>. The EFQM BE model has nine initial criteria covering enablers and results. Enabler criteria represent what an organisation does and how it does it, while result criteria represent what an organisation achieves <sup>[11]</sup>. The five enabler criteria include:

- Leadership, focusing on the ways in which leadership is developed and what it delivers to the organisation's future.
- Strategy expresses how the organisation accomplishes its mission and vision statements, and it includes stakeholders in strategy development.
- People demonstrate that organisations should be able to build an appropriate organisational culture that promotes the growth of the employees' competencies and endorses justice and fairness.
- Partnerships and resources characterise the ways in which organisations should examine their ecological and social impact effectively.
- Processes, products and services indicate that prominent organisations plan, manage and develop their processes in order to add value for stakeholders.
- The four results criteria include customer, people, society and business results:
- Customer results: excellent organisations accomplish and maintain extraordinary outcomes that meet or outpace customers' needs and expectations [12].

- People results: excellent organisations accomplish and maintain extraordinary outcomes that meet or outpace their employees' needs and expectations.
- Society results: this criterion concentrates on contribution to society in general and corporate social responsibility (CSR) in particular. CSR tends to focus on the organisations' attempts to attain environmental, economic and social sustainability [13].
- Business results: the conventional way to measure organisational performance is based on various criteria, such as the organisations' profitability, quality of products and services, and efficiency and effectiveness. However, various performance characteristics may contribute to a more holistic view of the organisation, and may be measured at the organisation, core process, or departmental level. Business results are divided into financial and non-financial results. Organisations should consider both in different situations, depending on the nature of their business and their structure [14].

Studies have shown that there has been more significant interest in the BE and EFQM model implementation from various public sector organisations in the last few years. This resulted in the EFQM developing a version of the model for the public sector [14]. Thus, the implementation of the EFQM excellence model represents an appropriate mean for the creation of the SBE model and self-assessment in HEIs. Furthermore, the EFQM model brings diverse tools for self-assessment, such as a questionnaire which requires employees to score their organisation against some statements from the EFQM model. There are various versions available, which allows the collection of opinions from many HEI employees [15][16]. In this entry, the point value scoring system was defined based on the model presented in [17], with slight modifications made in the Center for Quality at the Faculty of Engineering, University of Kragujevac.

The research area related to this entry is SBE and HEIs' overall performance. Some authors connected and based their research on the EFQM excellence model. The EFQM model, the 2013 version, was analysed <sup>[18]</sup> by describing the enablers (leadership, people, strategy, partnership and resources, as well as processes, products and services) and results (people results, customer results, society results and business results).

In the entry [19], the authors analysed HEI SBE initiatives, including research with a case study of the HEIs' quality management framework based on an adapted EFQM excellence model emphasising strategic development in the context of sustainability.

The connections and relationships of the different variables in the SBE model have an essential role. Zwan et al. investigated alternative arguments and directions for the analysis of HEIs' performance measurement. They concluded that it is necessary to consider internal dimensions, situational factors, external innovations, dimensions and outcomes. Starting from the EFQM model as well as previous research, the authors of this entry aimed at the third group of goals that we need to prove, i.e., that partnership and resources have a positive impact on customer results and society results, and that people results, customer results and society results have a positive impact on HEIs' business results.

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### 3. ICT Support in HEIs

The first research area related to this entry is ICT support for SBE in HEI organisations. The connection between ICT resources and e-learning has been researched in many entrys [21]. However, due to pressure from a range of the mentioned stakeholders for a more comprehensive and improved range of services from the higher education sector, related to a simultaneously increasing pressure on sustainable resource utilisation, HEIs are currently facing the challenges of reorienting their approaches to be more customer-focused and conducting their processes in a more business-like manner. While trying to meet the demands of stakeholders, HEIs applied self-assessment models with various questionnaires, matrix charts, workshops, pro-forma and award simulations, ultimately resulting in the achievement of a broad acceptance of the SBE concept through a range of different goals set. These goals include the achievement of the HEI's mission and vision, benchmarks and internal measures, best practice, community engagement, cost-effectiveness, customer/stakeholder satisfaction, making optimal use of all resources—financial, human and asset resources, and the positive atmosphere in staff and student environments —integration in teaching and research, the quality of teaching and learning, and (relative to the starting point) achieving targets [22]. HEIs' ICT resources and e-learning synergy within the teaching process is achieved by supporting an appropriate ICT infrastructure, implementing ICT strategy development, managing the relations connected with ICT implementation, and the ICT resource management process. The authors [23] presented the research results conducted on a sample of Serbian HEIs (the data sample of the examinees consisted of 38 HEIs), showing that there is a significant correlation between the selected variables, i.e., access to teaching, the degree of interactivity, school computerisation, school administration, teacher training, school reorganisation, and the quality of ICT implementation.

In contrast, the influence of ICT integration on a teaching process is significantly lower because the success of the ICT's integration into the teaching process does not depend solely on the conditions created for its use. The professor requires additional teaching strategies and methods to achieve learning objectives in the ICT classroom [24]. In this entry, the model of the management of the ICT resources was included based on resource-based theories. The authors started from the strategy, only for it to be followed by the definition and purchase of the needed ICT solutions. After the delivery of the ICT solutions, their practical implementation was observed. Finally, the contribution of the ICT to the fulfilment of the strategy related to different roles, disciplines, skills, knowledge, experience, teaching skills, behaviour and attitudes was evaluated at the human resources level in practice. According to this model, the ICT strategy balances business changes with ICT support.

The literature resources indicate a high correlation between ICT support and EFQM business excellence result criteria [14][25]. ICT mainly influences customer [26] and employee containment [27]. According to [11], one aspect of achieving SBE is contributing to society and creating a sustainable future. Having this in mind, it can be stated that ICT adaptation can help organisations to manage and coordinate sustainability challenges [28]. The connection between ICT and performance in business is well-proven. Studies have shown the positive influence of ICT support on tourism [29] and agricultural [30] business outcomes, meaning that ICT use and performance is not limited to any specific application field.

Furthermore, personal computers and the internet significantly influence today's HEI education systems, transforming and developing education when properly and adequately utilised. The internet, an essential part of ICT used to provide quality teaching, learning and research in an academic setup [31], has influenced education competently, thereby creating the conditions for e-teaching, e-learning, visual teaching/learning, e-training and innovative education. Through ICT support, innovative educational ideas and sustainable improvement are supported with a lower cost [32]. Thus, ICT presents a powerful tool that may provide economic value for HEIs [33]. The understanding and efficient use of ICTs are crucial causes of sustainable development and SBE.

ICT support has been added to the SBE integrative model, and it covers ICT-related leadership, people, strategy and partnership, and resources [34]. However, because the SBE integrative model, based on the EFQM, already encompasses leadership, people, strategy and partnership, and resources, it is difficult to determine the independent impact of ICT support. Thus, it is hard to recognise the role of ICT support because other factors also directly influence the leadership, people, strategy and partnership, and resources derived from the SBE model. Based on previous research, the authors stated several hypotheses (as well as the research goal in this entry) that need to be proved: ICT support is positively correlated to quality (processes and HEI services), partnership and resources, HEI strategy, professors and students.

On the other hand, ICT support could be observed as an aggregate variable composed of [35]:

- The quality of the ICT functioning, based on reliability, ease of use, possibility to access, usefulness, and flexibility.
- The satisfaction of ICT users (students and professors), based on the reliability of obtaining a needed service, the speed of receiving the correct answer, empathy, and competencies for the supplied information.

For the aggregation of the sub-variables, it is possible to use different approaches (weighted assessment, statistical techniques and fuzzy approaches). Regarding ICT support, the level of investment at the ICT level of the ICT strategy, the level of management quality, and the process quality level have significant impacts [36]. In this research, the authors observed ICT support in a broader sense than ICT equipment and support by people, similar to Tirto et al. [32], in which the term "ICT support" was used to present digital scientific infrastructure according to the priorities of Industry 4.0 and Education 4.0 concepts. Other similar assumptions were derived in Fonseca et al. [19], in which digital scientific infrastructure was characterised by the advanced digitalisation and integration of industrial manufacturing and logistics processes, and the use of the internet and "smart" objects (machines and products) which merge the physical and virtual worlds. Thus, as we are all deeply in the Industry 4.0 and Education 4.0 concept, ICT has to be extracted, improved and more widely covered in the literature. According to Tirto et al. [37], in terms of HEIs, ICT development is vital for the provision of open access to scientific data and knowledge, and the further commercialisation of research, innovation, products and services. Thus, we have further expanded the model presented in Calvo-Mora et al. [38].

According to the research [36][39], it could be concluded that the level of investment made in ICT, directly and indirectly (through ICT strategy), influences the quality of the implementation of ICT solutions in HEIs. In the listed research, it was on average proven through different case studies and theoretical analyses that, in HEIs, there is a positive influence between the level of investment in ICT and the quality of the ICT's implementation, with a higher or lower regression coefficient. The conclusion is that investments are meaningful and, when they are supported by an ICT strategy as an element of corporate strategy, show a higher level of quality in the implementation of the ICT solutions.

#### 4. Leadership in HEIs

The impact of leadership on HEI SBE has been analysed according to: (1) leadership on the executive level, (2) leadership on the middle management level, (3) the team leadership level, and (4) self-leadership. Leadership on the executive level could be transformational or transactional, inspirational, innovative, strategic, practical, ethical, or other types [40][41][42]. Leadership on the middle management level is dominantly transactional, effective, innovative and ICT leadership [43][44][45].

Consequently, in [46], the impact of higher education shared leadership on external stakeholders was that shared leadership enables HEIs to create meaningful and lasting changes in organisations that address external challenges. The authors approved the proposition that the shared leadership enhances teaching performance through its effect on the teaching process, and was based on cognitive, affective and motivational processes. Different authors researched leadership according to many different aspects: the relationship between transformational leadership and the dissemination of HEIs' goals [47][48][49], hierarchical levels and their correlations [50][51][52], transformational leadership and its variables [53][54], the effect of self-leadership [55][56], change and continuity [57][58], aspects of authentic leadership, creativity and innovation [47], approaches to transformational vs. non-transformational leadership in non-Western countries' HEIs [59], and leadership and job satisfaction [60]. Elrehail [47] analysed leadership styles (authentic and transformational) which influence the process and product innovation. They concluded with relatively high correlation (0.541–0.732) and regression coefficients (0.183–0.248). Transformational leadership has a higher impact on process and product innovation, while authentic leadership has a lower impact. Different authors aimed to define the connections and relationships between leadership and different concepts. In this research, the authors will attempt to prove that the leadership level is positively associated with strategy process outcome levels, partnership and resources, and ICT support in HEIs.

#### References

- 1. Aydın, S.; Kahraman, C. Evaluation of firms applying to malcolm baldrige national quality award: A modified fuzzy AHP method. Complex Intell. Syst. 2018, 5, 53–63.
- 2. Evans, J. Quality, Management, Organization and Strategy; South-Western Cengage Learning: Boston, MA, USA, 2011.

- 3. Escrig-Tena, A.B.; Garcia-Juan, B.; Segarra-Ciprés, M. Drivers and internalisation of the EFQM excellence model. Int. J. Qual. Reliab. Manag. 2019, 36.
- 4. Ghavifekr, S.; Rosdy, W.A.W. Teaching and learning with technology: Effectiveness of ICT integration in schools. Int. J. Res. Educ. Sci. 2015, 1, 175.
- 5. Paudel, P. Online education: Benefits, challenges and strategies during and after COVID-19 in higher education. Int. J. Stud. Educ. 2020, 3, 70–85.
- 6. Roztocki, N.; Soja, P.; Weistroffer, H.R. Enterprise systems in transition economies: Research landscape and framework for socioeconomic development. Inf. Technol. Dev. 2020, 26, 1–37.
- 7. Stal, J.; Paliwoda-Pękosz, G. Fostering development of soft skills in ICT curricula: A case of a transition economy. Inf. Technol. Dev. 2019, 25, 250–274.
- 8. Sinha, M.; Ringrose, D. Development of an organisational excellence framework. TQM J. 2013, 25, 441–452.
- 9. Samuelsson, P.; Nilsson, L.E. Self-assessment practices in large organisations: Experiences from using the EFQM excellence model. Int. J. Qual. Reliab. Manag. 2002, 19, 10–23.
- 10. Boulter, L.; Bendell, T.; Abas, H.; Dahlgaard, J.; Singhal, V. Reports on EFQM and BQF Funded Study into the Impact of the Effective Implementation of Organisational Excellence Strategies on Key Performance Results; University of Leicester: Leicester, UK, 2005.
- 11. EFQM. EFQM Model Criteria. 2013. Available online: (accessed on 9 June 2021).
- 12. Saunders, M.; Mann, R.; Grigg, N. Review processes for improving business excellence frameworks. Int. J. Qual. Reliab. Manag. 2008, 25, 928–942.
- 13. Jenkins, H. A 'business opportunity'model of corporate social responsibility for small-and medium-sized enterprises. Bus. Ethics Eur. Rev. 2009, 18, 21–36.
- 14. Kassem, R.; Ajmal, M.; Gunasekaran, A.; Helo, P. Assessing the impact of organisational culture on achieving business excellence with a moderating role of ICT. Benchmark. Int. J. 2019, 26, 117–146.
- 15. Tarí, J.J. An EFQM model self-assessment exercise at a Spanish university. J. Educ. Adm. 2006, 44, 170–188.
- 16. Tarí, J.J.; Espinosa, S.A.D.J. EFQM model self-assessment using a questionnaire approach in university administrative services. TQM Mag. 2007, 19, 604–616.
- 17. Moeller, J. The EFQM excellence model. German experiences with the EFQM approach in health care. Int. J. Qual. Health Care 2001, 13, 45–49.
- 18. Laurett, R.; Mendes, L. EFQM model's application in the context of higher education. Int. J. Qual. Reliab. Manag. 2019, 36, 257–285.

- 19. Medne, A.; Lapina, I.; Zeps, A. Sustainability of a university's quality system: Adaptation of the EFQM excellence model. Int. J. Qual. Serv. Sci. 2020, 12, 29–43.
- 20. Zwain, A.A.A.; Lim, K.T.; Othman, S.N. TQM and academic performance in Iraqi HEIs: Associations and mediating effect of KM. TQM J. 2017, 29, 357–368.
- 21. El Mhouti, A.; Erradi, M.; Nasseh, A. Using cloud computing services in e-learning process: Benefits and challenges. Educ. Inf. Technol. 2017, 23, 893–909.
- 22. Hides, M.T.; Davies, J.; Jackson, S. Implementation of EFQM excellence model self-assessment in the UK higher education sector—Lessons learned from other sectors. TQM Mag. 2004, 16, 194–201.
- 23. Nikolić, V.; Petković, D.; Denić, N.; Milovančević, M.; Gavrilović, S. Appraisal and review of elearning and ICT systems in teaching process. Physica A Stat. Mech. Appl. 2019, 513, 456–464.
- 24. Gerlič, I. Challenges of advanced technologies and school of the future. Organizacija 2010, 43, 49–54.
- 25. Fonseca, L.; Amaral, A.; Oliveira, J. Quality 4.0: The EFQM 2020 model and industry 4.0 relationships and implications. Sustainability 2021, 13, 3107.
- 26. Teryima, S.J.; Sunday, A. The role of information communication technology (ICT) in enhancing productivity in local government administration in Benue State, Nigeria. Int. J. Bus. Econ. Develop. 2015, 3, 110–124.
- 27. Webster-Trotman, S.P. A Correlational Study of Telework Frequency, Information Communication Technology, and Job Satisfaction of Home-Based Teleworkers. Ph.D. Thesis, Walden University, Minneapolis, MN, USA, 2010.
- 28. Prattipati, S.N. Sustainability and the rote of information and communications technologies. Bus. Renaiss. Q. 2010, 5, 23–40.
- 29. Peña, A.P.; Jamilena, D.M.F.; Molina, M.A.R. Impact of market orientation and ICT on the performance of rural smaller service enterprises. J. Small Bus. Manag. 2011, 49, 331–360.
- 30. Prajanti, S.D.W.; Soesilowati, E. Evaluation on benefits and development of information and communication technology (ICT) to improve the performance of agricultural extension in Central Java. Int. J. Organ. Innov. 2013, 6, 243.
- 31. Lytras, M.D.; Visvizi, A.; Daniela, L.; Sarirete, A.; De Pablos, P.O. Social networks research for sustainable smart education. Sustainability 2018, 10, 2974.
- 32. Boulos, M.N.K.; Wheeler, S. The emerging web 2.0 social software: An enabling suite of sociable technologies in health and health care education. Health Inf. Libr. J. 2007, 24, 2–23.

- 33. Sulisworo, D. Enabling ICT and knowledge management to enhance competitiveness of higher education institutions. Int. J. Educ. 2012, 4, 112.
- 34. Bandara, W.; Syed, R.; Ranathunga, B.; Kulathilaka, K.S. People-centric, ICT-enabled process innovations via community, public and private sector partnership, and e-leadership: The case of the dompe ehospital in Sri Lanka. In Business Process Management Cases; Springer: Berlin, Germany, 2018; pp. 125–148.
- 35. Lu, J.; Laux, C.; Antony, J. Lean six sigma leadership in higher education institutions. Int. J. Prod. Perform. Manag. 2017, 66, 638–650.
- 36. Nazri, S.; Ashaari, M.A.; Iskandar, Y.H.P.; Bakri, H. The impact of business intelligence adoption on organizational performance among higher education institutions in Malaysia. In Proceedings of the First ASEAN Business, Environment, and Technology Symposium (ABEATS 2019), Bogor, Indonesia, 2–3 December 2019; pp. 48–51.
- 37. Tirto, T.; Ossik, Y.; Omelyanenko, V. ICT support for industry 4.0 innovation networks: Education and technology transfer issues. In Recent Advances in Computational Mechanics and Simulations; Springer: Berlin, Germany, 2020; pp. 359–369.
- 38. Calvo-Mora, A.; Leal, A.; Roldán, J.L. Relationships between the EFQM model criteria: A study in Spanish universities. Total Qual. Manag. Bus. Excel. 2005, 16, 741–770.
- 39. Toquero, C.M. Challenges and opportunities for higher education amid the COVID-19 Pandemic: The philippine context. Pedagog. Res. 2020, 5, em0063.
- 40. Siddique, M.; Nawaz, A. The mediation of transformational leadership between transactional leadership and group management skills of academicians in HEIS of KPK, Pakistan. Int. Trans. J. Eng., Manag. Appl. Sci. Technol. 2019, 10, 1041–1051.
- 41. Bilal, A.R.; Fatima, T.; Imran, M.K. Does shared leadership fosters taking charge behaviors? A post-heroic leadership perspective in the public sector higher educational institutes. Int. J. Public Leadersh. 2019, 15, 137–154.
- 42. Ishak, A.K.; Kamil, B.A.M. Succession planning at Heis: Leadership style, career development and knowledge management practices as its predictors. Int. Rev. Manag. Mark. 2016, 6, 214–220.
- 43. Hamlin, R.G.; Patel, T. Perceived managerial and leadership effectiveness within higher education in France. Stud. High. Educ. 2017, 42, 292–314.
- 44. Ehrenstorfer, B.; Sterrer, S.; Preymann, S.; Aichinger, R.; Gaisch, M. Multi-tasking talents? roles and competencies of middle-level manager-academics at two Austrian higher education institutions. In Diversity and Excellence in Higher Education; Springer: Berlin, Germany, 2015; pp. 175–200.

- 45. Kallenberg, T. Academic middle managers shaping the landscape between Policy and practice. In Diversity and Excellence in Higher Education; Springer: Berlin, Germany, 2015; pp. 201–216.
- 46. Kezar, A.J.; Holcombe, E.M. Shared Leadership in Higher Education; American Council on Education: Washington, DC, USA, 2017.
- 47. Elrehail, H.; Emeagwali, O.L.; Alsaad, A.; Alzghoul, A. The impact of Transformational and Authentic leadership on innovation in higher education: The contingent role of knowledge sharing. Telematics Inform. 2018, 35, 55–67.
- 48. Ruiz-Mallén, I.; Heras, M. What Sustainability? Higher Education Institutions' Pathways to Reach the Agenda 2030 Goals. Sustainability 2020, 12, 1290.
- 49. Aleixo, A.M.; Leal, S.; Azeiteiro, U.M. Conceptualization of sustainable higher education institutions, roles, barriers, and challenges for sustainability: An exploratory study in Portugal. J. Clean. Prod. 2018, 172, 1664–1673.
- 50. McCarley, T.A.; Peters, M.L.; Decman, J.M. Transformational leadership related to school climate: A multi-level analysis. Educ. Manag. Adm. Leadersh. 2016, 44, 322–342.
- 51. Zacher, H.; Johnson, E. Leadership and creativity in higher education. Stud. High. Educ. 2014, 40, 1–16.
- 52. Balwant, P. Transformational instructor-leadership in higher education teaching: A meta-analytic review and research agenda. J. Leadersh. Stud. 2016, 9, 20–42.
- 53. Al-Husseini, S.; Elbeltagi, I. Transformational leadership and innovation: A comparison study between Iraq's public and private higher education. Stud. High. Educ. 2016, 41, 159–181.
- 54. Al-Husseini, S.; Elbeltagi, I. Evaluating the effect of transformational leadership on knowledge sharing using structural equation modelling: The case of Iraqi higher education. Int. J. Leadersh. Educ. 2016, 21, 506–517.
- 55. Buengeler, C.; Homan, A.; Voelpel, S.C. The challenge of being a young manager: The effects of contingent reward and participative leadership on team-level turnover depend on leader age. J. Organ. Behav. 2016, 37, 1224–1245.
- 56. Asrar-Ul-Haq, M.; Anwar, S.; Hassan, M. Impact of emotional intelligence on teacher's performance in higher education institutions of Pakistan. Futur. Bus. J. 2017, 3, 87–97.
- 57. Blanco-Portela, N.; R-Pertierra, L.; Benayas, J.; Lozano, R. Sustainability leaders' perceptions on the drivers for and the barriers to the integration of sustainability in Latin American higher education institutions. Sustainability 2018, 10, 2954.
- 58. Gora, A.A.; Ştefan, S.C.; Popa, Ş.C.; Albu, C.F. Students' perspective on quality assurance in higher education in the context of sustainability: A PLS-SEM approach. Sustainability 2019, 11, 4793.

- 59. Mattar, D.M. Lebanese cherishing a transformational educational leader. Int. J. Educ. Manag. 2016, 30, 1045–1071.
- 60. Alonderiene, R.; Majauskaite, M. Leadership style and job satisfaction in higher education institutions. Int. J. Educ. Manag. 2016, 30, 140–164.

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