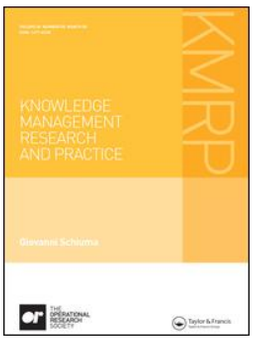

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ARTICLE

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An assessment of COVID-19's impact on Finnish University Leadership

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ABSTRACT

This article maps the management actions that Finnish universities have taken during the COVID-19 pandemic and studies how managers in Finnish higher education coped during the crisis and how they feel about it. The article uses action mapping and a survey that was administered to top- and mid-level managers at Finnish universities, and the findings highlight the importance of collegial coordination and maintenance work abilities among managers.

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Higher education; COVID-19; leadership; coordination; Finland

1. Introduction

A central feature of any crisis is the urgency in managing it: "Crises are borne out of short chains of events, often unpredicted and unexpected, but they develop with dynamic and unfolding events over months, days, hours or even minutes" (Farazmand, 2007, p. 150). It is necessary to determine what went wrong and identify viable solutions to a societal crisis through a retrospective analysis (Comfort, 2007. COVID-19 has affected all areas of society (see Tiirinki et al., 2020, for a health system's response in Finland), but we focus here on higher education because it provides an environment in which knowledge and its management play critical roles and in which the crisis induced major changes in coordination, management and governance. We believe that this context can provide important lessons on how to manage other knowledge-intensive organisations. Nevertheless, it is still too early to review management of the COVID-19 pandemic at universities holistically and determine what worked and what went wrong, as the pandemic's long-term impact on higher education systems and organisations is not yet known. It also is not yet possible to determine which approaches were effective or deleterious. However, it is possible to map the actions taken and determine how managers in Finnish higher education coped and how they felt about it.

Thus, in the present study, a survey was administered to top- and mid-level managers at Finnish universities, then decisions made by state agencies and an association of Finnish universities were mapped to generate a discussion about management, coordination and communication during a time of crisis in higher education. In this article, based on empirical findings, we generally are interested in how traditional vertical collegial structures are activated during a time of crisis, as well as the role of top-down managerial structures. In particular, we are interested in the flow of information used for sense-making and decision-making in knowledge-intensive organisations during the COVID crisis. The article is structured as follows: An overview of management responses to the COVID-19 crisis is provided by studying the management and steering of higher education in Finland. Then actions that the Finnish government and Finnish universities have taken during the COVID-19 pandemic are mapped. The methodology is introduced, and the findings are presented. The unique approach to managing higher education institutions (HEIs) is discussed in relation to the role of vertical and horizontal information flows, as well as individuals and managerial structures' roles in decision making during a crisis situation.

2. Conceptual and contextual backdrop

HEIs are classical examples of knowledge-intensive organisations that rely heavily on professional knowledge while being primary sources of information (Käpylä et al., 2011). Therefore, knowledge management (KM) is a critical management function of HEIs, and education is one of the most-studied areas of the KM field (Massaro et al., 2015; Quarchioni et al., 2020). The changing HEI environment requires transparency and competitiveness; therefore, KM can be used to provide an integrative understanding of HEIs' nature (Quarchioni et al., 2020).

Universities' activities increasingly are gaining public interest because they exert considerable societal and economic impact (Bleiklie et al., 2017). Furthermore, international management trends and new public

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management have transformed how universities manage their staffs and structure their internal decision-making (Carvalho & Santiago, 2010; Deem & Brehony, 2005; Siekkinen, 2019). Thus, universities have transformed their structures to be more efficient (Musselin, 2007) and have become "complete" organisations (Hüther & Krücken, 2016). A complete organisation is characterised by (ibid, p. 55): "identity (autonomy, collective resources, boundaries, being an organisation and being special); hierarchy (coordination and control, internal management); and rationality (setting objectives, measuring results and allocating responsibility)". The process of becoming an organisation includes several internal processes that are influenced by various global trends, challenges and uncertainties (Stensaker, 2018). In other words, during normal times, the importance of line management and direct performance-based management in universities has increased. However, a crisis challenges the management of the two basic functions of knowledge-intensive organisations, i.e., the exploitation of existing knowledge assets and an exploration of new alternatives (March, 1991).

A brief analysis of the Finnish higher education system is needed to determine the steps that were taken to contain COVID-19. In Finland, the Ministry of Education and Culture administers HEIs through interactions between HEIs and research facilities, as well as the formulation of agreement negotiations (Ministry of Education and Culture, 2020). Finnish universities have extensive autonomy and freedom, in which "the freedom of science, the arts and higher education is guaranteed", i.e., "universities are self-governing" (Constitution of Finland 731/(1999): Sections 16, p. 123). Under normal circumstances, the Ministry of Education and Culture guides HEIs via various mechanisms (i.e., information, laws/regulations and funding based on a specific funding model) (Pekkola & Kivistö, 2019a, 2019b). The funding model for universities is based on performance measurement. In addition, the Ministry of Education and Culture negotiates with HEIs every four years and agrees on each university's detailed objectives with regard to strategic funding. Each university has full autonomy over its management, institutional finances and educational responsibilities, such as the authority to establish degree programmes.

When the pandemic surfaced in March 2020, Universities Finland (UNIFI), an association of Finnish research universities that is represented by rectors, began to collect and coordinate nationwide information on universities to provide a platform for discussions, negotiations and coordination, e.g., by providing links to COVID-19-related webpage updates at each Finnish university. At the onset of the pandemic, rectors at Finnish universities started to communicate through UNIFI to increase joint collaboration and the actions taken in response to the crisis (Universities Finland (UNIFI), 2020a). The OHA forum, a specialist network of study services for Finnish universities, produced COVID-19 guidelines.

Updated guidelines on education institutions, dated March 17 2020 and published by the Regional State Administrative Agencies, led to a UNIFI recommendation that all campus-based teaching activities should be closed down. In terms of research and development (R&D) activities, "critical" research disciplines were permitted to use the research premises, such as laboratories, to a minimal extent. In a newsletter published on March 18 2020, a recommendation was made that all R&D should be conducted remotely whenever possible (Universities Finland (UNIFI), 2020b). On April 9 2020, through UNIFI, the universities' vice rectors for education determined the procedures for student admission and entrance exams during the crisis (Universities Finland (UNIFI), 2020c). A key decision was that traditional, campus-based entrance exams, which require applicants' physical presence, should not be administered; minor exceptions were made for small-scale exams. The consensus among the vice rectors, published in a statement, was that the start of the 2020–2021 academic year should be in accordance with the normal schedule (Universities Finland (UNIFI), 2020c). A depiction of education institutions' command hierarchy during the crisis is shown in Figure 1.

HEI activities increasingly are characterised by collaborations and networking (Figure 1). Autonomous universities have been encouraged to search for common ground and share knowledge with one another. The system and the actors themselves have adapted to the new institutional setting imposed by COVID-19-related restrictions and guidelines. Collaboration and knowledge sharing have taken place through UNIFI and other specialist networks, in addition to official guidance provided by the Ministry of Education and Culture. At the faculty and individual levels, this implies that there is increased trust within different university disciplines and faculties.

2.1. Data and methods

Universities, as knowledge-intensive organisations, are fascinating crisis management case studies for several reasons: (1) They have a public function, and they cater to masses of people; (2) they and their sub-units are autonomous; (3) they are characterised by professional autonomy and independent knowledge-related work; and (4) they commonly are thought to be ill-managed. According to Birnbaum (1989), colleges and universities are poorly managed, but highly effective, and wonders whether their effectiveness is a consequence of poor

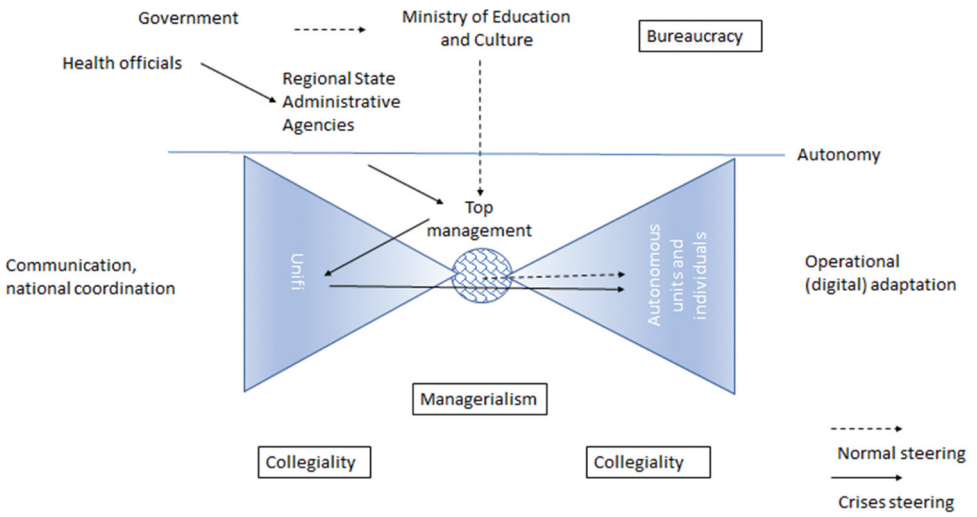

Figure 1. A hierarchal depiction of the management and guidance of Finnish higher education during the emergence of the COVID-19 pandemic in March 2020.

Table 1. Distribution of answers by rectors, vice rectors and deans.

	Rector	Vice rector	Dean	Overall
Faculty's/university's everyday (HR) management functioned well in digital form	M = 4.4 N = 5	M = 4.5 N = 4	M = 3.9 N = 25	M = 4 N = 34
Transformation of teaching into digital implementation was facilitated without difficulties	M = 4.2 N = 5	M = 4 N = 4	M = 4 N = 25	M = 4 N = 34
The university's teaching administration services functioned well under the state of emergency	M = 4.6 N = 5	M = 4.5 N = 4	M = 4.6 N = 25	M = 4.6 N = 34
Research activities continued without any interruption under the state of emergency	M = 3.8 N = 5	M = 4.3 N = 4	M = 3.7 N = 25	M = 3.8 N = 34
International activity continued despite the state of emergency	M = 3.2 N = 5	M = 4 N = 4	M = 3.2 N = 25	M = 3.3 N = 34
Societal impact and collaboration continued despite the state of emergency	M = 3.8 N = 5	M = 3.8 N = 4	M = 3.7 N = 25	M = 3.7 N = 34
Faculty's IT services functioned well under the state of emergency	M = 4.8 N = 5	M = 4.5 N = 4	M = 4.3 N = 25	M = 4.4 N = 34
The university's external communication functioned well under the state of emergency	M = 4.8 N = 5	M = 4.3 N = 4	M = 4.1 M = 25	M = 4.2 N = 34
The university's internal communication functioned well under the state of emergency	M = 4.6 N = 5	M = 4.5 N = 4	M = 4.4 N = 25	M = 4.5 N = 34
The university's management system functioned well under the state of emergency	M = 4.4 N = 5	M = 4.8 N = 4	M = 4.4 N = 25	M = 4.4 N = 34

management or occurs in spite of that. For these reasons, we chose higher education as a context in which to study how knowledge management research could help in elaborating COVID-19's impacts on coordination, management and governance. We were especially interested in how individual managers perceive the situation.

To determine how managers coped during the COVID-19 pandemic and how they felt about it, an electronic survey was administered to rectors (n = 10), vice rectors (n = 9) and deans (n = 32) at all Finnish universities in March 2020. The survey was part of a project funded by the Finnish Union of University Professors, the original aim of which was to evaluate professorial recruitment at Finnish universities. When the COVID-19 pandemic started to spread, questions relating to university management during a state of emergency were included. The project was overseen by Tampere University in Finland.

The survey included one structured and four open-ended questions relating to the COVID-19 pandemic. The quantitative, structured question was analysed using a descriptive statistical method. The structured question included 10 sub-questions with Likert-scale answers ranging from 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree) (see Table 1 and Figure 2 below). For each of the qualitative open-ended questions, 21–24 responses were received, which were analysed loosely using the direct content analysis method, in which the researcher constantly mirrors findings to the knowledge that already exists related to the theme (Hsieh & Shannon, 2005). An assessment of the managerial systems used and the deans and rectors' operational capabilities during the crisis is shown in Figure 2, but as the results were partial and confined to Finnish universities, they cannot be

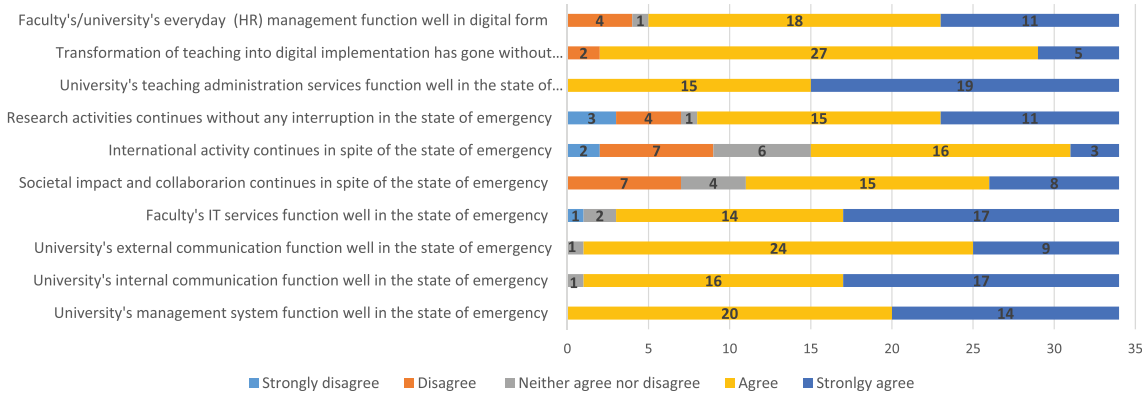

Figure 2. Coping strategies during the crisis included an assessment of the managerial systems and operational capabilities by the deans and rectors.

generalised and would need to be confirmed elsewhere.

3. Results

Generally, university top management (rectors and vice rectors) and middle management (deans) reported that the COVID-19 pandemic had been managed effectively at Finnish universities. Interestingly, the deans' responses were slightly more negative than those of rectors and vice rectors (Table 1), which might tell us how central a dean's position is within a university regarding crisis management.

The respondents "agreed" or "strongly agreed" with the contention that their universities' management systems (Mean 4.4) and teaching administration services (Mean 4.6) and their internal (Mean 4.5) and external (Mean 4.2) communication departments functioned well during the state of emergency. In addition, they were satisfied with the IT services provided by each university's administration (Mean 4.4). A few respondents disagreed with the claims that each faculty's/university's everyday management had functioned well (Mean 4), and that the transition to digital teaching was accomplished without difficulties during the state of emergency (Mean 4).

More critical responses were received regarding the extent to which research (Mean 3.8) and international activities (Mean 3.3) and societal impact and collaboration (Mean 3.7) continued during the state of emergency. Disciplinary differences between faculties might have played a significant role, considering that some of them were unable to continue their research because their laboratories had closed. In addition, considering that day care facilities for children and schools were closed, some parents found it impossible to work from home. International collaborations were interrupted, but soon resumed in digital form.

The open-ended responses provided a more nuanced picture of the actions taken and the communication and coping strategies used during the crisis, compared with the closed-ended questions. The responses mostly were aligned and, thus, differences between rectors, vice rectors and deans were not analysed. The respondents perceived the overall guidance provided and cooperation between the universities, ministries and other authorities to be challenging. The key difficulty, according to the academic leaders, was that the instructions from the authorities were ambiguous, leaving much room for interpretation. The respondents hoped for more open conversations and negotiations, and for the issues to be dealt with through more cooperation. It was thought that the instructions should have been tailored to each region, considering that COVID-19's impact, in addition to other circumstances, differed between regions and depended on the individual situation and university. Problems concerning national coordination between universities also were cited.

Regardless of primary operational functions' continuity, many academic leaders faced similar challenges in relation to crisis management, including: (1) a massive increase in emails and requests via electronic communications; (2) an uneven impact from the crisis on workload (i.e., key personnel were overloaded); (3) a lack of information on academics' performance and well-being; (4) the restrictive nature of formal communications about the crisis (i.e., the absence of face-to-face "coffee conversations" and adaptation to the new online format of "announcement mode" meetings); and (5) the stress of overlooking important information.

Communication plays a central role during a crisis (Garnett & Kouzmin, 2007). However, managers must invest considerable time and effort in it, as it is impacted negatively during a crisis. Although there may be an expectation that top and middle management at universities should provide concrete solutions to problems relating to academic work, they may not

be able to do so. This burdens managers who already are struggling with unclear communications and frenetic crisis management.

Nevertheless, the pandemic also positively impacted crisis management, which, to an extent, offset some of the challenges: (1) Online tools and the ability to work functioned better than expected; (2) people were forced to take a "digileap"; (3) meetings were shorter and more efficient; (4) people were more punctual and better prepared for meetings; (5) delegation was easier and decision-making was faster; and (6) some people had more time for research.

Universities' staffs were viewed as an asset during the crisis. Being autonomous, they were well-adapted to taking on several roles as part of their everyday work and can be viewed as "hybrid" professionals (Pekkola et al., 2020). It has been suggested that an adaptive and flexible attitude is needed during a crisis (Farazmand, 2007). Although their academic work and operational environment constantly were in flux (Siekkinen, 2019), managers and university staff generally were able to take appropriate action when needed.

Evidence of the impact from the virus on higher education management and the operational capacity of Finnish universities was only partly observable, as it is not yet fully known. Most institutions are managing to survive by practising social distancing, but based on the responses from academic leaders, it was evident that management was not fully aware of how its staff members were performing or coping. They were overloaded with information, and there were problems with the flow of informal information. Regardless of the seemingly small negative impact from the virus on university operations, along with evidence of positive impact, it is too early to determine how the pandemic is impacting universities, as well as asymptomatic carriers' impact. In the next chapter, an explanation is provided using an immune system analogy concerning why universities have coped so well during an unprecedented crisis.

4. Discussion and conclusion

To start with a comparison, the human immune system comprises innate and adaptive immunity. Innate immunity has developed through evolution and is initiated whenever the body is under attack, e.g., by external viruses. However, adaptive immunity develops when the body is under attack by a specific pathogen and needs to fight back. Similarly, governments and public organisations "innately" have prepared for crises that may surface, but failures might occur when they are forced to face a state of emergency. Considering that the cause of a crisis can vary, from a natural disaster to a global pandemic or war, infallible preparation is not possible. Thus, the chaos caused by a crisis cannot be managed with routine administration and governance (Farazmand, 2007, pp. 155–158). Based on their innate nature, HEIs are loosely coupled organisations (Weick, 1976) in which strict control and professional autonomy are combined. Thus, as in the human body, universities' innate immune systems are based on autonomous units: faculties; departments; and individual scholars running their classes and research teams.

In addition to the innate system, public sector management that utilises *adaptive surprise management* is needed in a crisis. Characterised as fluid, flexible and constantly changing, it involves cutting-edge knowledge, skills, attitudes and thought processes that are "out of the box" (i.e., not governed by rules, controls and procedures). If the government/public organisation fails to respond effectively and govern effectively during a crisis, negative consequences can arise, including the loss of its legitimacy and even a system breakdown (Farazmand, 2007, pp. 155–158). Regardless of chronic organisational problems, universities have demonstrated that they can accomplish tasks and retain their legitimacy efficiently (Ben-David & Zloczower, 1962, as cited in Tiplic, 2006).[1] This suggests that they respond to crisis situations using *adaptive surprise management*. However, this was based on the extent to which individual academics' activities and collegial *ad hoc* coordination were coupled loosely.

Recently, the higher education system's efficiency requirements have been paramount, and decision-making structures and organisational models have become highly centralised in HEIs. However, the situation at hand has shown that organisational fluidity is needed, especially during a crisis (Schreyögg & Sydow, 2010). The latter challenges the prevailing strategies for managing knowledge (i.e., centralised, formalised and rigid decision-making structures) in HEIs (Laihonen & Huhtamäki, 2020). Indeed, fundamentally different strategies and organisational mechanisms are needed for exploitation and exploration (Gupta et al., 2006). In addition to organisational ambidexterity, a crisis also seems to call for reconsideration of the balance between codification and personalisation strategies in HEIs (Hansen et al., 1999). Instead of formal, bureaucratic and centralised decision-making that is typical of HEIs, crisis management may necessitate greater reliance on collegial decision-making by individual academics and other education authorities, as well as on their judgment in decision-making. Furthermore, the deployment of new collegial mechanisms within autonomous institutions (i.e., rectors and vice rectors) to coordinate activities in the new situation may be needed when the government cannot command and provide guidance to

autonomous institutions. From a knowledge management perspective, it is a question of balancing vertical and horizontal knowledge flows, as well as developing structures and practices that support the needed collaboration.

Thus, it is important to determine the kind of adaptive practices that are needed to keep universities operational in times of crisis, but the solution is less likely to be surprising and more likely to be mundane and boring. Novel KM techniques or innovative management tools play only a secondary role in the present circumstances. Managers' primary interest in our data was in human capital. Literally, healthy managers are needed, and the COVID-19 crisis holds an important bearing on KM, as it reminds us that HEIs are human institutions in which academics are their most important asset (Enders, 2001), and that the system's adaptability can rely not only on codified knowledge, but also tacit knowledge (Hansen et al., 1999; Nonaka, 1994). Furthermore, balancing between exploration and exploitation (March, 1991) does not relate only to academic work, but also to administration, which clearly has proven its adaptive capabilities during the pandemic.

Currently, it seems difficult for higher education leaders to separate work and leisure clearly. Their workload has increased remarkably, and customary tasks, such as planning and teaching, are taking considerably more time and effort than they did previously. Many leaders are "constantly at work," considering that their work has shifted from the campus to their homes, creating the challenge of managing their working hours.

When asked what was required to survive the present crisis, nearly all the academic leaders cited exercise, outdoor activities and breaks between work periods. Detaching themselves from work in the middle of the day to exercise or recovering after a long day by going for a walk was critical to maintaining their ability to work. Planning and scheduling also were viewed as important. New routines and working online impacted their ability to work and their overall well-being. Keeping in touch with others also was fundamental to well-being. Communities managed to communicate via online tools and believed that being able to discuss work- and non-work-related issues with colleagues and friends was important.

Our paper pays particular attention to the following two aspects: First, during the COVID-19 crisis and in turbulent environments, individual judgment is further highlighted (cf. Spender, 2014). Second, the crisis seems to activate vertical collegial structures at the expense of managerial top-down structures. Both areas provide several interesting topics for future knowledge management research. For example, it would be interesting to study whether and how managers in a highly institutionalised context, such as public universities or the public sector more generally, are actually able and willing to use their own judgment to make decisions that may have long-ranging implications on society. Furthermore, it would be interesting to better understand how the logics of collegial (science-oriented) and managerial (performance-driven) governance models affect identity and knowledge formation in universities and how these are balanced when external shocks shake the status quo.

Note

1. However, the disadvantages of loosely coupled organisations include the fact that, for instance, lower coordination costs can equate to higher unit expenses, while an entrenched autonomy over tailor-made solutions might hinder the ability to learn good practices. Thus, the future of the leadership and management of loosely coupled organisations, such as HEIs, is not promising, as the management has an "autoimmune disease". When Bolden et al. (2009) studied distributed leadership in higher education in the UK, they identified numerous limitations to effective academic leadership (Gosling et al., 2009), which included that it was dislocated, disconnected, disengaged, dissipated, distant and dysfunctional.

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