Reflecting on educational leadership during COVID-19: Experiences of Finnish higher education leaders and lessons for future crises and emergencies

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ABSTRACT

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Crisis leadership research as a field has a long history in business, but less so in education, especially higher education. Existing educational crisis leadership research has highlighted the importance of adaptive leadership, collaboration, communication, complex decision making, context, and well-being. The SARS-CoV-2 virus's arrival in 2019 caused a multi-year global crisis. Unfortunately, most crisis leadership pre-COVID-19 focused on acute, short-term crises, which raises the questions: how did university leadership manage this chronic crisis, what lessons can be learned from these experiences, and how does existing crisis leadership theory align with these experiences?

These questions were investigated at a Finnish university using qualitative methods: nine leaders varying in institutional hierarchy and unit participated in semi-structured interviews. Interview transcripts and collected documents were triangulated and analyzed descriptively (to identify which groups directed campus discourses) and thematically (to identify how leadership was conducted, including lessons learned and alignment with existing theory).

Results supported the main concepts of existing crisis leadership theory and identified new, or highlighted the importance of previously identified, elements important for successful leadership during chronic crises: time, information flow, metrics, and culture. The themes identified in this study were integrated into a model for crisis leadership that includes time, culture and context, preparation, information flow, and adaptive leadership as core elements. The importance of revising governance structures, and careful attention to metrics, is discussed, along with the need to ensure equity and fairness when practicing crisis leadership.

Keywords: COVID-19, crisis, educational leadership, Finland, tertiary education

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1 INTRODUCTION AND BROAD THEORETICAL BACKGROUND

This is not an easy task. Leadership is your burden, and your leadership is the hope of education, and therefore the hope of the nation. (Terry Sanford, 1971)

1.1 Overview

The COVID-19 (COVID) pandemic that began in early 2020 upended educational systems across the globe. Educators and educational administrators whose crisis management plans had typically focused on acute crises, such as in-school violence, unexpected student or staff deaths, and natural disasters, suddenly found themselves tasked with teaching and leading during a protracted emergency situation the likes of which had not been seen in the Global North for generations.

While public discourse on education during the pandemic frequently focused on primary and secondary schools (e.g., Martikainen & Sakki, 2021), tertiary educational institutions were not spared from the crisis. Higher educational systems across the globe varied in their response; Uganda, for instance, shut down its entire tertiary education system nationally for more than a year, while also nearly precluding a switch to distance education through overly complex new regulations (AP News, 2021; Kabahizi, 2020), while others, such as the United States, created no national guidelines and instead let local governments or individual institutions decide on their preferred course of action (Freeman et al., 2021).

In Finland, the response of the government progressed from authoritative central control to a more distributed style. In March 2020, the government, through the Emergency Powers Act, unilaterally closed on-campus operations of tertiary education institutions for two months (Neuvonen, 2020). After this closure, tertiary institutions were allowed to hold on-campus courses, frequently with recommendations to maintain online education (Government Communications Department, 2020), and future restrictions were either scaled to the regional

state of the pandemic (March 2021; YLE News, 2021a) or simply strong recommendations (December 2021; YLE News, 2021b). This transition to more local control meant that institutional leaders found themselves with considerable flexibility in their response, resulting in challenging educational leadership decisions.

Educational leadership is the field of study that examines the phenomenon of leadership within educational institutions. While educational leadership research has studied leadership during times of acute crisis (Striepe & Cunningham, 2021), relatively little research has been done on tertiary educational leadership during times of chronic crisis, and thus educational leaders in Finland and elsewhere faced this emergency without a research knowledge base to guide them.

This study examines the experiences of Finnish higher education leaders at one university during COVID, focusing on who most influenced crisis decision making, how crisis leadership was practiced, and lessons, both practical and theoretical, that can be gleaned from the leaders' experiences.

This chapter of the introduction continues with broad theoretical background, briefly summarizing relevant educational and leadership theories to provide context and illustrate the researcher's perspectives. The second chapter explores crisis leadership theory from both a business and education perspective. The third chapter outlines the structure of the Finnish higher educational system, its policy environment, and the pre-COVID leadership structures extant at the university under study. The fourth and final chapter of the introduction provides background on the COVID pandemic, including the disease itself and how the pandemic progressed in Finland.

1.2 A theory of education

Works discussing education frequently use the term without definition and without clarification on the theoretical basis on which their views of education rest (e.g., Hallinger, 2011, Male & Palaiologou, 2015). I will use Uljens and Ylimaki's (2017) non-affirmative theory of education to provide a theoretical framework on which to base discussions and analyses of educational practices. This theory, which is grounded in western democratic and academic traditions, states that education is a process that involves a learner changing their internal understandings of the world in response to a call to learn issued by another. Additionally, Uljens and Ylimaki's (2017) theory stipulates that education should be non-affirmative, meaning that it neither affirms nor denies a priori any particular way of knowing or knowledge base, instead facilitating critical thinking and dialogue to allow learners to decide, for themselves, what knowledge they will integrate into themselves.

The non-affirmative theory of education helps clarify what is involved in leading learning: recognizing that others are free, issuing summons to learn that inspire learners, and creating an environment that is conducive to individuals doing the personal work required to change their own understanding of the world. Leadership of learning is thus a dynamic and ever-changing process: the particular calls to learn (e.g., what should the organization invite others to learn, and how does the organization carry this out?) and the specifics of what will encourage others to learn (e.g., what techniques will work with this group of learners and what do these learners need at this time?) depend on the environment in which the educational activity is taking place, which, as we will see in the next section, is ever-changing.

1.3 The environment of education

The environment that education is occurring within should be viewed as including both the particular location ("classroom," traditionally) where education is taking place (e.g., which students are there, what these particular students need,

what physical conditions they are working in, what risks are present) as well as the broader circumstances the particular location is found within (the cultural, social, political, biological, and physical environment). This broad view of the educational environment, combined with the non-affirmative theory of education, facilitates an understanding of educational leadership as a broad phenomenon, one that goes beyond what is needed to transfer a fact from a textbook to a room of students, to a view that includes how entire educational organizations sense and adapt to the environment to best support learning by those who come to their doors.

Ongoing, simultaneous changes in the world along multiple axes (e.g., globalization, climate change, information availability) complicate educational leadership. Modern Finnish educational leadership researchers (e.g., Alava et al., 2012; Risku & Tian, 2017) conceptualize this changing environment as a change from a "Newtonian paradigm" to the current "quantum paradigm," stating that the world has undergone a shift to one where the environment is changing so rapidly and unpredictably that older styles of operational management, which assume a more stable environment, are no longer functional. This view of the world as being in the quantum paradigm helps frame the challenges leaders face in educational environments.

1.4 Educational leadership

In this work, "educational leadership" will be defined as the all-inclusive phenomenon of leading the educational process(es) of others, including all elements related to ensuring education is possible in the given context of study. Educational leadership can encompass a wide range of tasks, such as management of daily operations, budget administration, organizational mission development, curriculum creation and modification, human resource management, professional development, influencing (*inspiring!*) others, and pedagogical work. Educational leadership is a term that can be applied at many scales (a student's personal tutor is an educational leader, as is the minister of education of a nation)

and without respect for the formal power or titles of individuals (educational leaders may or may not have had institutional or societal power bestowed upon them; Ballo (2020)).

Those who practice educational leadership are called "educational leaders." As with leadership in general, defining the criteria by which one is considered a leader is challenging, and this work does not attempt a firm definition besides referring to a leader as one who influences others in the organization (see Bass and Bass (2008) for a range of possible conceptualizations; Ballo (2020)). Of relevance to the considerations of leadership in this work is that whether someone is a leader depends both on the person's actions and on the perceptions and responses of those around them; leadership is neither defined by nor limited to the possession of formal institutional power or titles (although those who have such power and titles typically have the potential to take strong roles in educational leadership in their institutions, should they choose to do so). Whether someone is a leader is also subject to spatial and temporal variation; a person may be a leader in a particular context at a particular time, but may not be a leader in other contexts at the same time, and may not even be a leader in the same context at other times.

Contingency organizational theory and sensemaking leadership theory both have relevance to the leadership discussions of this research project. Contingency organizational theory stipulates, roughly, that the optimal organizational structure is dependent on the environment of the organization (e.g., Donaldson, 2001). Sensemaking leadership theory focuses on the importance of organizational culture and the meaning those in the organization give to events, processes, and other items in the organizational environment; leadership via sensemaking involves influencing how people "make sense" of the world around them, and through such influence altering the dynamics of the organization (e.g., Brown, 2021; Jäppinen, 2017; Louis, 2010; Smircich & Morgan, 1982). During times of crisis, the importance of organizational leaders sensing the new environment, altering their organizational structure to align with that environment, and helping those around them make sense of the environment, is paramount.

1.5 Pedagogical leadership

"Pedagogical leadership" will be used to refer specifically to the process of leading the topics of instructional focus of (i.e., "content" or "curriculum" in most western traditions) and practices used by educators to help others learn (i.e., "pedagogy" and "andragogy"), including the mechanisms by which both the topics of instructional focus and educational practices can be adapted, evaluated, maintained, and improved. Pedagogical leadership is a subset of educational leadership.

Nordic pedagogical leadership, the term I use for the style of pedagogical leadership found in Finland, has its roots in the 20th century Nordic welfare states. Nordic pedagogical leadership focuses on leaders collaboratively developing a learning culture with teachers and clients (learners and the community they are in) (Alava et al., 2012; Male & Palaiologou, 2015). All parties involved (leaders, staff, and clients) are engaged in the process of collaboratively building the organizational mission, vision/strategy, culture, and curriculum (Alava et al., 2012). Nordic pedagogical leadership frequently uses knowledge management theory and distributed leadership as core elements of its operation, and also explicitly recognizes that the changing environment must be constantly evaluated and responded to by those in the organization (Alava et al., 2012). Leaders in Nordic pedagogical leadership are not viewed as determiners of their organization's core elements (mission, vision/strategy, culture, and curriculum), but instead as guides who are responsible for ensuring that an organizational culture is created that collaboratively, and continually, determines the organization's core elements (Male & Palaiologou, 2015). Curriculum developed within Nordic pedagogical leadership is typically flexible, intended to be modified and adjusted by teachers to suit the needs of their particular learners, which should allow Finnish educators to adapt rapidly and effectively during times of crisis.

2 LEADERSHIP DURING CRISIS AND EMER-GENCY

This is a time for enlightened educational leadership. We need to bring together the thinkers, the doers, the feelers, the activists, the gradual reformers, the radical reformers, and the revolutionaries. We need to involve anyone who will attract or seek out or conceive creative [ideas] who can try and experiment and try again and accomplish. (Terry Sanford, 1971)

2.1 Definition of crisis and emergency

A crisis is an unexpected circumstance wherein the individual or individuals involved feel that they are unable to manage a situation through routine mechanisms and fear that major negative consequences will result, especially if the situation is not handled adequately. A crisis may affect just the individual(s) involved, in which case it is a personal crisis, or the situation may affect many or all of all those associated with an organization, in which case it is an organizational crisis (Cornell & Sheras, 1998); this research deals exclusively with organizational crises. Precisely defining what constitutes a crisis is challenging, as crises come in many forms, involving different threats (external, internal, human-caused, natural, etc.), timelines (rapid and short lived to slow-building and long-term), predictabilies (unpredictable to highly predictable), repeatabilities (one-time or recurring), and constituents (from a select group within an organization to everyone in an organization) (Buama, 2019; Coombs, 2002; Cornell & Sheras,1998; Pedraza, 2010; Striepe & Cunningham, 2021; Ulmer et al., 2007).

Ulmer et al. (2007) define an organizational crisis as "a specific, unexpected, and nonroutine event or series of events that create high levels of uncertainty and threaten or are perceived to threaten an organization's high-priority goals" (p. 7). Coombs (2002) differentiates problems from crises by stating that crises must involve either significant operational risks or significant reputational risks (or both) to the organization. Pedraza (2010) similarly focuses on operational and reputational risk, and adds that crisis situations attract media attention:

A crisis is an abnormal situation, or even perception, which is beyond the scope of every-day business and represents a real threat to the operation, safety and reputation of any

business organization. A crisis situation disrupts the way an organization conducts business and attracts significant new media coverage and/or public scrutiny. (Pedraza, 2010, pp. 1-2)

All of these definitions of a crisis derive from business-focused researchers, who discuss crises ranging from natural disasters and industrial accidents to financial problems and unethical leadership (e.g., Buama, 2019; Coombs, 2002; Pedraza, 2010; Ulmer et al., 2007).

As in the business world, a wide range of educational phenomena have been labeled as crises. Published reports of educational crises include threats of violence (Fast & Fanelli, 2003; Llewellyn, 2004), actual violence on campus (Dishman et al., 2011; Liou, 2015; Llewellyn, 2004), violence near campus (Parks, 2013; Perea & Morrison, 1997), natural disasters (Bishop, 2013), fires on campus (Parks, 2013), sudden death or illness of a student or staff member (Cornell & Sheras, 1998; Dupps, 2019; Parks, 2013), epidemics (Aefsky, 2021), teacher or student behavior (Parks, 2013), gang activity on campus (Shaw & Meaney, 2015), social justice related issues (Cornell & Sheras, 1998), personnel issues (Murray & Kishur, 2008), financial concerns (Murray & Kishur, 2008; Sanford, 1971; Zender & Lochmiller, 2019), political issues (Murray & Kishur, 2008), calls for reform (Sanford, 1971), and even reputation concerns (Murray & Kishur, 2008). Thus, while the term crisis is useful in the context of defining a time when organizational leadership is especially needed (and defining the associated field of leadership), the term is overly broad for the purposes of contextualizing this research.

An emergency can be viewed as a crisis that involves imminent and significant risk to the health and welfare of those involved. Emergencies are frequently viewed as acute phenomena (e.g., a fire or threat of violence) that require immediate responses by those involved, especially leaders, but can also be long lasting (e.g., fire, disease, war; Haffajee et al., 2014), and the duration of the emergency may not be clear when the emergency begins (e.g., the first COVID regulations in March of 2020 were widely expected to last a few days or weeks; Aefsky, 2021). Emergency is frequently used in a medical context, where it refers to the treatment of "unforeseen injury or illness" (AECP Board of Directors, 2016, p. 142) that requires immediate care (Dexter et al., 2016), but it is also used in other

contexts, such as a governing body legally declaring an emergency (Sunshine et al., 2019) or in conjunction with disasters (e.g., Simon et al., 2015). Haffajee et al. (2014) write that US states commonly define emergencies as "an occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from a natural phenomenon or human act" (p. 986). Published work that labels itself as focusing on leadership during emergency is rarer, especially in education (though see, for example, Llewellyn (2004) and Burde et al. (2017)) and despite the lack of use of the term "emergency," much "crisis leadership" research clearly deals with leadership during emergency (this is likely at least partially due to "crisis leadership" being the widely used name of the discipline).

In this research I will focus on educational leadership during times of chronic crisis and/or emergency, defining leadership during emergency as the sub-discipline of crisis leadership that focuses on the phenomenon of leadership during crises that require rapid response and involve the potential for significant harm to the health and well-being of those involved. As with Wu et al.'s (2021) definition of crisis leadership ("a process in which leaders act to prepare for the occurrence of unexpected crises, deal with the salient implications of crises, and grow from the disruptive experience of crises", p. 3), emergency leadership entails leadership before, during, and after the emergency. Emergencies may be acute (crises where the situation requiring rapid response is short-lived, e.g., a fire in a campus building) or chronic (crises where the situation requiring rapid response is long-lived, e.g., a wildfire nearby, an epidemic, or a war). Emergencies can lead to long-term crises (e.g., a wildfire destroying multiple campus buildings and killing multiple campus personnel, leading to a long-term crisis involving institutional and personal recovery from the emergency), and longterm crises can include one or more emergency phases (times when immediate action is needed in an otherwise long-lasting crisis). While the boundary between crisis and emergency is blurry (and some have used the term "major crisis" instead of "emergency" to make a similar distinction; e.g., Parks, 2013), it is nonetheless a useful distinction to make regarding leadership studies, since leadership

during emergency (as opposed to crisis) must necessarily involve rapid decision making and communication on matters that have significant personal safety consequences (and thus broader "crises" like mission concerns, financial issues, reputational concerns, or the long-term existence of the organization are excluded from the scope of leadership during emergency).

2.2 Crisis and emergency leadership research in business contexts

Crisis leadership is the phenomenon of leading organizations during crises, and has been heavily studied in a business context (see four recent reviews: Bundy et al., 2017; Jong et al., 2016; Schaedler et al., 2022; Wu et al., 2021), albeit frequently as a secondary focus of studies examining overall crisis management theories (see Wu et al., 2021). Wu et al.'s (2021) bibliometric review identifies three core themes of current crisis leadership research: leader psychological and behavioral responses (sensemaking, leadership style, leadership characteristics), studies of strategic leadership (focusing on characteristics and behaviors of corporate boards and top management teams), and gender (typically examining the glass cliff phenomenon, wherein women tend to be disproportionately promoted to leadership during times of crisis).

Many of the trends in business crisis leadership research share strands with educational leadership research. Business research on leadership during crises frequently uses a sensemaking approach to leadership, examining how leaders help those around them understand, and thus respond, to the crisis (Wu et al., 2021). Sensemaking as a conceptualization of leadership is decades old (Smircich & Morgan, 1982), and a common approach to analyzing leadership in educational institutions (e.g., Jäppinen, 2017; Liou, 2015). Leaders using transformational leadership and charismatic leadership styles (both discussed in educational leadership research, e.g., Tian & Huber, 2019), are generally associated with positive organizational outcomes during crises, though the research in crisis settings is limited (reviewed in Wu et al., 2021). Identity and agency, both popular topics

in educational leadership and education research (e.g., Eteläpelto et al., 2015; Rajala & Kumpulainen, 2017), have also been the focus of study in crisis leadership (showing that, for example, agentic leaders are preferred in crisis situations requiring dramatic change, Kulich et al., 2018). In potential conflict with the distributed leadership model that predominates Nordic pedagogical leadership (e.g., Alava et al., 2012), crises have been shown to lead to increased central control of organizations (Staw et al., 1981; Stoker et al., 2019), though whether this happens in educational institutions is not clear. While the role of care and emotions in leadership is widely discussed in an educational context, especially during crisis (e.g., Aefsky, 2021; Striepe & Cunningham, 2021), Wu et al. (2021) report that emotional leadership (including "a focus on the emotions of leaders and key stakeholders, particularly the emotion management process through which leaders can mitigate the negative emotions and restore the positive emotions of stakeholders during a crisis", p. 16) is an understudied topic in crisis leadership.

Recent leadership research advocates for viewing crisis leadership broadly to include leadership before and after the crisis, not solely during crises (e.g., Buama, 2019; Pedraza, 2010; Wu et al., 2021). In this framework, crises are divided into three phases: pre-crisis (including planning for potential crises and actions taken place when problems are identified that have not yet become crises), incrisis (the time when the crisis poses significant risks to the organization or people, and requires immediate actions by leadership), and post-crisis (during which the organization recovers from the crisis, but also often seen as a time for leadership to help the organization learn and grow from the crisis experience and shape the perceptions of how the organization performed during the crisis; Buama, 2019; Pedraza, 2010; Wu et al., 2021). Wu et al. (2021) reports that most crisis leadership research focuses on in-crisis leadership, with less than 20% of published crisis leadership addressing either the pre- or post-crisis stages.

Multiple authors (Buama, 2019; Pedraza, 2010) propose that crisis leaders use an enquiry-based approach to response to a crisis, a style of management that should be quite familiar to practitioners of Nordic pedagogical leadership (e.g., Risku & Tian, 2017). Buama's (2019) model includes three interlinked phases of

crisis response: diagnosis of the crisis, planning and implementing the response, and then adjusting to changes as needed. Pedraza's (2010) model includes threat and risk assessment, developing strategies and systems for a response, implementation of the response, and then maintenance and revision of the response.

The importance of communication during a crisis is emphasized by many researchers (e.g., Buama, 2019; Coombs, 1998; Coombs, 2002; Dunn & Eble, 2015; Pedraza, 2010; Ulmer et al., 2007). General trends are that communication strategies should be chosen based on the situational context (Coombs, 1998; Coombs, 2002), communication should be rapid (with some sources, that are clearly focusing solely on acute crises, specifying that communication must "be delivered in the first hour after a crisis," Buama, 2019, p. 10; Pedraza, 2010), accurate (Buama, 2019), useful (Ulmer et al., 2007), consistent (Buama, 2019), and positive (Ulmer et al., 2007). Recent critically-inspired scholarship has pointed out that crisis communication should be viewed through a lens of power (with most crisis communication research to date focusing, unfortunately, on just the organization's perspective), and conducted in such a way that it does not "unfairly marginalize or altogether silence alternative discourses" (Dunn & Eble, 2015, p. 1).

Practically all the crisis leadership research discussed above has taken place in corporate, for-profit business environments, and thus this literature review will now turn to examining crisis leadership in an educational context.

2.3 Crisis and emergency leadership research in educational contexts

Given the relatively unique mission and structure of educational organizations (facilitating learning in organizations closely integrated with their communities where staff often have significant agency), crisis leadership in education can be viewed as constituting a separate field of study from business crisis leadership (Striepe & Cunningham, 2021; Uljens & Ylimaki, 2017). Unfortunately, crisis leadership in education is much less well studied than business crisis leadership, and existing educational leadership theories lack core concepts (e.g., time as a

key limiting factor) that render them unable to explain or be satisfactorily applied to crisis situations (reviewed in Striepe & Cunningham (2021)).

Frameworks for successful educational leadership during crises vary. Cornell and Sheras (1998), in their analysis of five case studies of crises in schools (mostly focusing on school violence in US secondary education, with one case of a social justice crisis), identified three themes of successful leadership during educational crises: leadership (taking control, dealing with uncertainty, and communication), teamwork (establishment of a crisis response team), and responsibility (knowing who is in charge, and responding rapidly). However, their limited scope (one level of education and only two types of crises) raises questions about the generalizability of this model to other contexts. Liou (2015) proposes using a dynamic crisis response model to better understand educational organizational responses to a crisis (evaluating the model via a case study at a K-12 school in the US). Liou's (2015) dynamic crisis response model highlights that organizations can go back and forth between crisis stages (which Liou models as prodromal crisis, acute crisis, chronic crisis, and crisis resolution), and concludes that "Flexibility, collaboration, and self-correcting mechanisms" (p. 275) along with "readiness" (p. 278) are essential for successful crisis response by schools. As with Cornell and Sheras (1998), the model was evaluated solely in the US K-12 educational setting studying only a single crisis type (sudden death of a student on campus), and thus its applicability to chronic emergencies in tertiary education is uncertain.

The most thorough recent review of educational leadership during crisis was conducted by Striepe and Cunningham (2021), and they identified six major leadership themes that were key in educational crisis response:

- "Providing crisis care" (focusing on the well-being of all members of the school community; p. 137)
- "Adapting roles and responsibilities" (leadership comes from many sources during a crisis, and leadership must be flexible during a crisis; p. 139)

- "Collaborating between stakeholders" (ensuring that key intra- and extra-school groups work together during the crisis; p. 140)
- "Multidimensional communication" (quick establishment, and consistent use, of communication to all stakeholders using a diversity of mechanisms that is inclusive of minorities; p. 141)
- "Complex decision-making" (balancing the need for rapid decisions and following procedures, as well as realizing that crises may require "radical decisions"; pp. 141 & 142)
- "Contextual influences" (crises are unique and many factors affect a particular school's response, including the school community, school culture, and leaders' identities; p. 142)

These six themes provide a lens through which educational crisis response can be analyzed, but as with the prior studies, the research was conducted almost exclusively in the K-12 environment in a relatively limited subset of countries (Australia, Japan, New Zealand, and the USA) on a relatively limited subset of crises (mostly natural disasters, with no health crises included), and thus its applicability to chronic crisis and emergency in tertiary education is uncertain.

Studies of crisis leadership in higher education are rare and are typically lacking in methodological rigor and/or theoretical depth. Murray and Kishur (2008) conducted a survey-based study focusing exclusively on United States community college presidents, studying how they attempted to prevent problems from becoming crises; their study lacked communication with anyone besides the college presidents, and included only financial, personnel, political, and public-relations crises. Pekkola et al. (2021) conducted a survey of Finnish university leadership during March 2020, but included no individual below the level of dean, provided no details of their open-ended survey questions, and, due to their timing, only evaluated the first week or two of the in-crisis phase (never mentioning the pre-crisis phase). Mock case studies (intended for use when teaching leadership courses) have also been published (school shooting on campus - Eaker & Viars (2014); gang violence on campus - Shaw & Meaney (2015)),

but typically do not include significant theory development, and, of course, lack real data on actual crises.

Crisis response plans, documents that schools create to outline how leaders should respond during crises, are a common element of school crisis leadership, including frequently being required by law (Fast & Fanelli, 2003; Razi & Dechillo, 2005). However, the utility of these plans, especially if they are not regularly reviewed by leaders, has been called into doubt, as the plans are frequently "shelf documents" that are not used during a crisis (Fast & Fanelli, 2003, p. 1) and often do not consider the contextuality and uniqueness of crises (as highlighted in Striepe & Cunningham (2021)).

3 STRUCTURE AND POLICY ENVIRONMENT OF THE FINNISH HIGHER EDUCATION SYSTEM

3.1 Overview of the structure of the Finnish higher education system

As the context of this study will be Finnish higher education, a brief overview of the Finnish higher education system is in order before progressing to a discussion of the COVID pandemic in Finland. Finnish secondary education consists of either general upper secondary schools or vocational upper secondary schools, both of which confer degrees that allow students to petition for admission to all forms of higher education in Finland (Finnish National Agency for Education, 2018; Louko & Blomqvist, 2018). The Finnish higher education system consists of 14 public universities (*yliopisto*) and 24 public universities of applied sciences (*ammattikorkeakoulu*, generally known as "polytechnics" in English before 2016), almost all of which are governed by the Ministry of Education and Culture (Louko & Blomqvist, 2018; Ministry of Education and Culture, 2022). Both types of institutions award bachelor's and master's degrees (European Qualification Framework (EQF) level 6 and 7), while only universities award doctoral and licentiate degrees (EQF level 8; Louko & Blomqvist, 2018).

While the general degree structure and other institutional requirements are specified in Finnish law, and the Ministry of Education and Culture dictates overall policy and funding (thus retaining strategic power), Finnish universities and universities of applied sciences are largely independent organizations with the operational power to decide on their own goals and degree programs while controlling their own management and institutional finances (Louko & Blomqvist, 2018; Pekkola et al., 2021; Yliaska, 2015).

Many other groups and government bodies play a role in influencing governance at Finnish tertiary institutions. The rectors of the universities and universities of applied sciences form national bodies that serve as advisory and policy groups for their respective institution types: Universities Finland (UNIFI, for

the universities) and Arene (for the universities of applied sciences; Arene, 2022; Pekkola et al., 2021). The Finnish National Institute for Health and Welfare (THL), Regional State Administrative Agencies, joint municipal authorities for hospital districts, and municipalities all have powers outlined in the Communicable Diseases Act (2016) that allow them to control portions of operations at tertiary institutions during epidemics (e.g., mandating closure of facilities).

3.2 Policy environment of crisis leadership at Finnish universities

Definitions of policy vary widely, and thus to discuss policy necessitates first defining what policy includes (Adams, 2014; Ball 1993). This research views educational policies as texts (e.g., laws, procedures, published guides, and formal / informal agreements) and other agreements (e.g., orally-agreed-upon procedures) that are a product of discourses surrounding educational implementation and decision making, created with a goal of altering the discourses and actions taken by those involved in education (teachers, leaders, staff, local government members, community members, etc.) in a particular context (Adams, 2014; Ball, 1993).

Global policy trends have influenced Finnish educational policy. While neoliberalism has had an influence in Finland, the country's strong history of being a Nordic welfare state moderated its impact (Harvey, 2005; Risku, 2014). With specific regard to universities, even after more than 40 years of neoliberal influence, all universities in Finland are still publicly funded with no tuition required from Finnish students (though the government university funding formula does include market-esque competitive elements, such as research grants obtained and international rankings of publications produced) (Opetus- ja Kulttuuriministeriö, 2023a). New Public Management is primarily associated in Finland with "results-based management," meaning that programs, leaders, and workers should be evaluated on how well they are able to meet targets set by the political establishment (Yliaska, 2015).

In 2021 the Finnish government published the "Education Policy Report of the Finnish Government" (Finnish Government, 2021). Written after the start of COVID ("corona" is mentioned 6 times and "COVID" 7 times), the 98-page document repeatedly refers to the educational challenges that need to be addressed as a result of the COVID crisis, focusing especially on learning loss, mental health challenges, and the transition to online education. However, the document does not mention "crisis" at all outside of specific contexts like the "coronavirus crisis" or "global learning crisis." The words "emergency" and "contingency" do not occur in the document at all, "risk" is never used in an organizational risk-management sense at all, and while multiple "plan"s are discussed, none of them are related to crisis or emergency planning, operations, or outcomes.

The 228 page-long 2019 overall government policy document (for Sanna Marin's then-new government) does mention risk management, but only at a broad government level:

As part of its strategy work, the Government will improve risk management in public administration and reinforce the public administration's ability to respond to crises that occur in normal conditions (Finnish Government, 2019, p. 197).

The section on education (3.7) does not mention crisis / emergency planning or response at all (Finnish Government, 2019).

Finland has two primary laws that relate to emergency planning at universities: the Rescue Act (2011) and the Universities Act (2009). The Rescue Act (2011) deals with many issues surrounding municipal emergency planning (such as the provision and regulation of rescue services, the building of civil defence shelters, and chimney sweeping), and the main portion relevant to universities is that the law obligates building owners and operators to create emergency plans to facilitate evacuations and occupant safety during crises. These plans are focused on ensuring the safety of the building occupants during events like fires and accidents, not on maintaining organizational operations or evaluating risks outside those that concern the particular building in question. Thus, while this law obligates universities (and all other building owners in the country) to create

and post detailed plans for managing acute emergencies in buildings, the law is generally not relevant to the planning for operational or chronic crises.

The Universities Act (2009) implemented major, New Public Management style, reforms of the Finnish university system. The law enshrined operational autonomy in law, but mandated a more managerial structure, including codifying requirements of the rector, university board, university collegium, and even the administration of the university's various units into law. In true New Public Management fashion, the law requires the Ministry have "quantitative and qualitative targets of pivotal relevance to education and science policy" (Universities Act, 2009, section 48) for each university and that these be evaluated regularly; creates results-based funding targets for the university (section 49); and requires the university carry out regular evaluations (both internal and external) of their operations (section 87). Potentially relevant to crisis planning and response is section 41a, which states that "Students have the right to a safe learning environment," (Universities Act, 2009, section 41a) including granting the university permission to create rules and procedures to ensure the learning environment is safe.

The Universities Act (2009) is relatively silent regarding crisis leadership and planning. The sole section that discusses crisis planning directly is section 90, included here in full (unofficial English translation):

Section 90. Contingency plans

- 1. The universities must ensure that in emergency conditions and abnormal or exceptional situations the disruption caused to the university's operations remain as minimal as possible, and shall do so by use of contingency plans, proactive preparation of operations and by other means.
- 2. The Ministry of Education and Culture supervises the contingency planning. Where shortcomings are identified in the plans, the Ministry of Education and Culture may order the shortcomings to be redressed. (Amendment 954/2011) (Universities Act, 2009, p.34)

These contingency plans, *valmiussuunnitelmat* in the official Finnish translation, appear to be the only organizational-level crisis planning mechanism mandated of universities at the state level in Finland. The requirements for the contingency plans in the Universities Act are exceptionally vague, and the Ministry

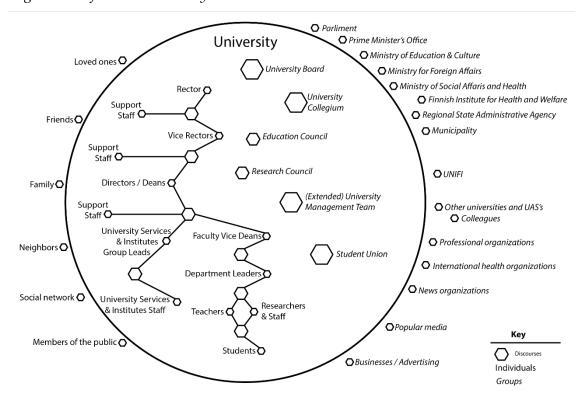
of Education and Culture has similarly vague requirements, with no set requirements for contents of the plans other than that operations should be continued during a crisis as much as possible (Opetus- ja Kulttuuriministeriö, 2023b; T. Halonen, personal communication, December 22, 2022). Contingency plans were a new addition to the Universities Act in 2009, as the prior version of the act (Universities act, 1997) lacks any mention of contingency plans, crises, or emergencies.

3.3 Pre-COVID leadership structure of the university under study

The unnamed university under study (see section 6.1 for more details) had a New Public Management-inspired leadership structure at the time of this investigation (Figure 1), the overall structure of which was dictated by the Universities Act (2009; university website (uncited for anonymity)). The University Board is responsible for setting direction and policy, leaving the rector with the power and authority to make operational decisions at the campus. The University Collegium is a body consisting of representatives from professors, professional- and expert-staff (often termed "other" staff), and students; among other roles, the Collegium appoints Board members. The Student Union is a separate body from the rest of the campus administration, which owns and manages some of the student housing in the area and has multiple elected bodies, all focusing on student-related issues.

Figure 1

Diagram of the university structure, illustrating both the general hierarchal structure as well as locations where discourses between the hierarchical levels would occur. Major groups on campus have been included, along with external groups whose discourses might also influence university actions.



The campus had a vice rector for education and a vice rector for research, who each chaired respective councils for education and research. The university was divided into functional units (faculties, institutes, and university services), each of which had their own director or dean. Leadership structures of functional units varied, with most faculties having vice deans for education and vice deans for research, and then typically department chairs and vice chairs for education and research for each department. Non-faculty unit leadership structures varied widely (due to varying widely in unit size and scope), but frequently entailed dividing the unit into groups, each of which had their own leader. Most functional units (faculty and non-faculty) frequently had management or leadership groups that consisted of the director/dean, vice-directors/deans, and group/department heads.

The university had two, related, groups for coordinating unit leaders. In this report I will call these the University Management Team and the Extended University Management Team. The University Management Team consisted of the rector, vice rectors, deans of all the faculties, head of University Services, and development director, roughly 10 people. The Extended University Management Team consisted of the Management Team plus the directors of all University Services units, institutes, and other major groups at the university, for a total of roughly two dozen members. The Extended University Management Team will be referred to in this work as the Extended Management Team, for succinctness, though note that participants would sometimes leave off the "extended" label and refer to it as the Management Team when discussing the group.

4 THE COVID-19 PANDEMIC

To help place the experiences of leaders during COVID in context, this section will introduce basic information on COVID, discuss the progress of the pandemic in Finland, and summarize national COVID-specific regulations related to higher education in Finland.

4.1 General information on the pandemic

Virions that cause COVID were first isolated in late December 2019 from patients at hospitals in Wuhan, China (Zhu et al., 2020). The virus was formally named Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in early 2020 (Gorbalenya et al., 2020), and falls into the betacoronavirus group of viruses, a genus that includes the SARS virus that was responsible for the 2003 epidemic and the MERS virus that was identified in 2012 (Zhu et al., 2020).

COVID is an airborne pathogen that has killed more than 6.9 million people globally since its emergence (WHO, 2023b). In Europe, COVID case fatality rates were as high as 10% during the early stages of the pandemic (Ghayda et al., 2022). While vaccines, which first became available in 2020, reduce the risk of severe illness and hospitalization from COVID, that there can be long-term health consequences of severe COVID infections is well-documented (including significantly increased risk of death even 12 months post-recovery; Alhumayn et al., 2022; Mainous et al., 2021), and even "mild" COVID infections can lead to negative health outcomes long after the infection has resolved, having "major consequences for work and daily functioning" (Kessel et al., 2021, p. 165). Many individuals, such as people with immune diseases, organ transplants, or diabetes, remain at high risk of death or serious illness despite vaccines (e.g., Niemann et al., 2022).

Controlling COVID has been challenging for many countries. Roughly 35% of all COVID infections are completely asymptomatic, but these infected individuals can still spread the virus (Sah et al., 2021), meaning that measures focused

solely on individuals who are presenting symptoms will not be effective at control (unlike the 2003 SARS virus, which was only observed to spread post-symptom-presentation; Bell & WHO, 2004). Non-pharmaceutical interventions such as masking, travel restrictions, and facility closures were implemented by many countries, and were shown to be effective at limiting the spread of the disease (e.g., Gokmen et al., 2021; Jamison et al., 2021). Data collected during the early phase of the pandemic from multiple European countries showed that voluntary societal reduction of mobility decreased mortality rates from COVID by 9%, and government restrictions (such as travel restrictions, face mask requirements, closing businesses, and canceling events) reduced COVID mortality by 14% (Jamison et al., 2021).

Unfortunately, while early strains of the virus required long periods of time spent in a shared space with others for transmission, the Omicron variant (first isolated from patients in the Netherlands in early November 2021; Araf et al., 2021) had a notable increase in contagiousness over prior strains and thus requires a reevaluation of safety measures, such as distancing, that worked for earlier variants (Rowe et al., 2022). Despite public debate on the effectiveness of masking, properly worn masks have been shown to be highly effective at stopping the spread of COVID as, for example, a study of nurses working in COVID wards found that FFP3 masks dramatically reduced nurse infection risk (with a 100% reduction in infection risk "most likely") (Ferris et al., 2021, p. 9). Additionally, non-pharmaceutical interventions need not be personally disruptive, as modifications to building ventilation systems have the potential to dramatically reduce the likelihood of COVID transmission in indoor spaces (Lipinski et al., 2020; Srivastava et al., 2021).

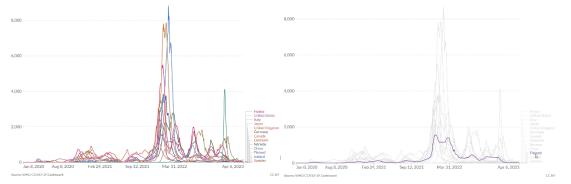
The non-pharmaceutical interventions implemented to control COVID have significantly reduced the harm caused by other diseases. For example, non-pharmaceutical interventions were shown to have reduced the spread of seasonal influenza in Asian countries (Davis et al., 2022). In Finland, the implementation of COVID restrictions was associated with the early end of the influenza season in 2020 (Kelloniemi et al., 2021) and a dramatic reduction in the 2020-2021 flu

season (from an average of 463 cases per 100,000 person-years for the prior three seasons to 0.9 cases per 100,000 person-years in 2020-2021) (Kuitunen, 2021). Given that, pre-COVID, it was estimated that seasonal influenza killed between 290,000 and 645,000 people globally every year (Iuliano et al., 2018), this reduction in influenza incidence likely saved many lives.

All research cited in the prior five paragraphs was published by April 2022, and thus available to leaders during the Omicron wave of the pandemic. Subsequent research has continued to reveal the risks that COVID infections pose to all members of the population, such as increases in the risk of onset of autoimmune conditions like type I diabetes or vasculitis (Sharma and Bayry, 2023), long-lasting changes in arterial structure in young, healthy men who had mild infections (Podrug et al., 2023), increases in cardiovascular health problems and death up to a year after infection even in non-hospitalized patients (DeVries et al., 2023; Wan et al., 2023; Xie et al., 2022), and changes in birthweight and growth patterns of babies exposed to COVID prenatally (Ockene et al., 2023). COVID was a leading cause of death among individuals under 20 (Flaxman et al., 2023), with school-based infections playing a large role in community transmission of COVID (Manica et al., 2022). The risks of individuals suffering from long COVID are only partially reduced by vaccination, with even vaccinated individuals who had mild infections having significantly increased risks of death and other negative long-term outcomes (Al-Aly et al., 2022). Perhaps unsurprisingly, considering these findings, O'Regan et al. (2023) recently published a preprint indicating that individuals who had COVID were three times more likely to take more than a month of sick leave over the nine months following their infection than a noninfected comparison group.

4.2 The COVID-19 pandemic in Finland

Figure 2Daily confirmed COVID cases in a selection of countries as of April 8, 2023; Finland is highlighted in the right-hand panel. Graphs from Our World in Data (2023).



COVID was first identified in Finland on January 29, 2020 (Haveri et al., 2020). While case counts are a popularly used measure of the spread and impact of the pandemic (and can be seen in Figure 2), due to many confounding factors (including the extreme limitation in testing capability early in the pandemic and the development of at-home tests and subsequent unreliability of official reporting of case counts in 2022 and 2023), I will use deaths from COVID as my primary metric for pandemic control. This decision allows for a quantitative, relatively fair comparison of Finland's pandemic control with other countries', but necessarily ignores excess deaths caused by the pandemic but not recorded as being caused by COVID in official records (though see analysis of those data, below), the potential for grave personal and societal harm caused by extended disability from COVID infection (popularly known as "long COVID"), as well as the potential wellness, economic, and other consequences of COVID restrictions and COVID infection. Table 1 illustrates the death rates at four key points in the pandemic: the first year (2020), through the rough start of the Omicron wave (which I define as December 1, 2021), through the entire pandemic (data collected on April 8, 2023), and during the Omicron wave (between December 1, 2021 and April 6, 2023).

Table 1Number of deaths attributed to COVID per 100,000 people in a selection of countries at various points in the COVID pandemic. The table is sorted by the total number of deaths through April 6, 2023. Data from Our World in Data (2023), with Finnish data confirmed with THL (2023).

	Through December 31, 2020	Through November 30, 2021	Through April 6, 2023	Omicron wave: December 1, 2021 - April 8, 2023
Japan	2.8	15	60	45
Norway	8.0	21	98	77
Denmark	21	49	143	94
Finland	11	26	163	137
Sweden	91	144	226	82
United Kingdom	111	217	313	96
United States of America	104	229	331	102
Hungary	96	346	489	143

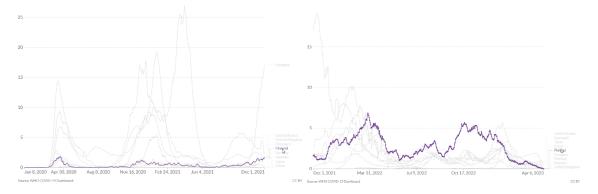
Finland controlled COVID fairly effectively in the early stages of the pandemic, with only 11 deaths from COVID per 100,000 people in 2020 (607 total deaths; data from THL, 2023). For comparison, the United Kingdom, United States, and Hungary had an order of magnitude more deaths (108, 105, and 99 per 100,000 people, respectively), but there were countries that managed the pandemic better than Finland on this metric: Japan reported only 2.8 deaths per 100,000 people (Our World in Data, 2023). In the 92 weeks before the emergence of Omicron in early November, 2021, Finland registered only 22.8 deaths per 100,000 people from COVID (1,465 total deaths from the start of the pandemic through November 28, 2021; data from THL, 2023), again having a full order of

magnitude fewer deaths than Hungary, the United States, and the United Kingdom (319, 223, and 206 deaths per 100,000 people, respectively) over the same time period (Our World in Data, 2023).

However, despite the introduction of vaccines and better knowledge about how non-pharmacological measures reduce the spread of COVID, Finland's COVID control worsened dramatically in the Omicron wave (Figure 3). As of April 8, 2023, in the 71 weeks since the emergence of Omicron Finland had recorded 136 deaths per 100,000 people from COVID (7,632 deaths), a quintupling of the mortality rate in less than three-quarters of the time (data from THL, 2023). The death rate in Finland from COVID since December 1, 2021 has been on the same scale as countries with the highest death rates from COVID pre-Omicron, such as the United Kingdom (96 deaths per 100,000 people since December 1, 2021), the United States (102 per 100,000 people), and Hungary (143 per 100,000 people) (Our World in Data, 2023). Despite popular sentiment to the contrary, Japan has illustrated that maintaining a low death rate was possible during the Omicron wave, with a death rate of only 45 people per 100,000 since December 1, 2021, two-thirds lower than Finland's over the same period (Our World in Data, 2023).

Figure 3

Deaths per million people from COVID before December 1, 2021 (pre-Omicron wave, left) and after December 1, 2021 (Omicron wave, right), highlighting Finland. Other included countries are the same as in Table 2. Graphs from Our World in Data (2023).



While questions have been raised about the accuracy of COVID death statistics (in Finland they have been created by identifying all people who died within 30 days of a positive COVID test) (YLE News, 2022c), quantifying the excess deaths that have occurred in a country is another way of estimating the mortality effects of the COVID pandemic. Excess deaths are calculated by comparing the death rates in a country to its historical death rates, with positive numbers indicating more deaths than would be expected from historical trends. Excess death rates thus indicate deaths from any cause, and can include deaths directly from COVID, deaths as a result of long-term effects of COVID, and deaths resulting from lack of access to medical or other care during COVID. Finland's average monthly excess death rate was dramatically lower than the EU average in 2020 (2.9% vs. 11.9%) and 2021 (7.1% vs. 14.0%), but far higher in 2022 (16.5% vs. 10.2%) and had in fact one of the highest excess death rates in 2022 of all EU countries (with only Cyprus and Malta having higher rates) (Table 2; Eurostat, 2023). Excess death rate data thus support the validity of reports of high COVID-caused death rates in Finland in the Omicron phase of the pandemic.

Table 2Average monthly percentage of excess deaths in the year indicated, as compared with the same months in 2016-2019; data from Eurostat (2023). Larger positive numbers mean more excess deaths occurred.

	2020	2021	2022
France	10.5 %	9.0 %	11.2 %
Denmark	1.6	6.5	10.4
Finland	2.9	7.1	16.5
Hungary	8.7	19.5	5.2
Italy	16.2	10.2	10.3
Norway	-0.2	3.3	12.3
Sweden	7.6	0.9	4.1
EU average	11.9	14.0	10.2

In summary, based on this analysis of death rates during COVID, it can be argued that Finland was one of the more successful countries in the world at controlling COVID in the pre-Omicron stages of the pandemic. However, Finland's control of COVID became dramatically worse during the Omicron phase, with a death rate from COVID on the same scale as or higher than countries that had done far worse earlier in the pandemic, along with one of the highest 2022 excess death rates in the EU.

4.3 National regulations relating to higher education during COVID-19 in Finland

On March 16, 2020, the Finnish government implemented wide-ranging restrictions under the Emergency Powers Act, including mandating the closure of all non-early-childhood-education schools (Neuvonen, 2020). The measures were initially planned to last a month, but the mandated closure of higher education institutions was not lifted until May 14, 2020, though the removal of the closure mandate came with a recommendation to continue holding classes online until the end of the term (Government Communications Department, 2020). The Fall of 2020 saw no major government restrictions on higher education institutions, but in March of 2021 the government implemented a three-week "partial lockdown" that included a recommendation for higher education institutions to hold classes solely remotely when their region was in either the acceleration of spreading phase of the pandemic (YLE News, 2021a); this recommendation was left in place for most of the spring term, and it was left up to regional and local authorities whether to actually implement a full or partial closure of higher education institutions. The Fall 2021 semester saw no change in national government recommendations or restrictions on higher education institutions, but in late December 2021 the national government issued a recommendation that all higher education institutions again teach classes remotely (YLE News, 2021b), with the recommendation being rescinded January 18, 2022 (University of Jyväskylä, 2022). The Finnish Institute for Health and Welfare (THL) rescinded its general mask recommendation for the country on April 14, 2022 (YLE News, 2022a).

5 RESEARCH TASK AND RESEARCH QUESTIONS

This study examines the research problem of identifying, and helping facilitate resolution of, the wide variety of higher education leadership challenges during times of crisis and emergency, such as COVID. The crisis brought about by the COVID pandemic is so different from those explored in prior crisis research that it is unclear how useful the lessons of prior crises were for educational leaders, and it is likely that new elements important for crisis leadership will be uncovered. The goal of this research is thus to provide both theoretical contributions to the educational crisis leadership literature and practical suggestions for educational leaders who are looking for research-based methods regarding how best to achieve (and even potentially reconsider) their institutional missions during times of emergency. The two primary research questions of this study are:

- 1. How was crisis leadership practiced at the university during COVID: which people and groups, through what discourses and actions, were shaping the organization's COVID response?
- 2. What can we learn about crisis leadership from the university's COVID experience?

6 RESEARCH IMPLEMENTATION

The scientist has no other method than doing his damnedest. (Percy Bridgman, cited in Phillips (2011))

This research project is a case study of educational leadership at a single Finnish university, using qualitative methods inspired by phenomenology and nexus analysis (Aarnikoivu, 2020; Case & Light, 2011; Scollon & Scollon, 2004; Van Manen, 1990). The project was approved by the researcher's thesis advisors in the spring of 2022 and carried out between August 2022 and May 2023.

6.1 Research context

The study was conducted at a single Finnish university, which is unnamed to protect the anonymity of the research participants. The university had more than 5,000 students enrolled at the time of the study. The university's more than 800 staff members were a roughly equal mix of research staff, teaching staff, and professional- and expert-staff, at least 4% of which were of international background. The university had international master's degree programs taught in English and international student exchange programs at the start of 2020.

This research was conducted from the perspective of objectivist critical realism (e.g., Moon & Blackman, 2000; Sayer, 2000). Critical realism states that social phenomena, such as leadership, are real and able to be studied using scientific techniques, though human bias and the limitations of human research techniques restrict our ability to fully understand social phenomena. Importantly, critical realism informs the research perspective that knowledge obtained through this research should be of at least some value to assisting leaders in other contexts.

Uljens and Ylimaki's (2017) non-affirmative theory of education (see section 1.2) provides a lens for evaluating educational leadership practices. An understanding of Nordic pedagogical leadership (see section 1.5) helped conceptualize

the elements involved in leading learning at Finnish higher education institutions. Contingency organizational theory and sensemaking as a conception of leadership (see section 1.4) provided a lens through which crisis leadership was analyzed, looking both at whether the organizational structure was able to respond to the changing environment and how leaders attempted (successfully or not) to help others make sense of the chaotic environment. The quantum paradigm as a conceptualization of the constantly changing, challenging environment that we find ourselves in now (see section 1.3) was also useful in evaluating the responses of higher education staff during COVID.

On a more personal note, the researcher approaches this topic with a background as a biologist, having spent nearly two decades as a community college biology professor in California, USA, including occupying some leadership positions and teaching both lectures and labs remotely for more than a year during COVID. In mid-2021 the author left California to study educational leadership in the Educational Sciences program at the University of Jyväskylä. This professional experience has shaped the author's conceptions of higher education governance and allowed the researcher to talk with Finnish university leadership as something of a peer (albeit with an easy excuse to ask "dumb" questions about the Finnish context). The author's natural sciences background informs his critical realist worldview, and has allowed him to, through reading biological and medical work on COVID, appreciate the mechanisms through which respiratory virus infection risks can be mitigated as well as understand the risks SARS-CoV-2 poses to those who are infected by it. Of note on this topic is that the author created and taught a multi-week virology unit for his major's biology course, and authored a summary of COVID's biology, including implications for its spread and control, for students and others at his campus on March 3, 2020.

6.2 Research participants and research data

Research data consisted of semi-structured interviews (Tracy, 2020) with nine participants, press releases released by the university, and documents provided by the research participants and others at the university.

The research participants were identified via selective snowballing out from an initial interview with a participant in a leadership position at the university (a modification of Tracy, 2020). The initial participant was selected by convenience (Tracy, 2020), as they had an existing professional relationship with the investigator. Potential participants suggested by prior interviewees were filtered for selection to be invited to participate using a model intended to facilitate obtaining variation in position in the institutional hierarchy as well as variation in type of unit the participants worked in (especially seeking variation in unit characteristics relevant to leadership during COVID, such as ease of transitioning to remote work).

All participants selected for inclusion were contacted via an email with background on the project and a request for an interview (in-person or online, at the participant's choice). Participant titles and demographic data are withheld to protect participant confidentiality; all participants were permanent employees in formal leadership roles at the university, ranging from direct supervisors of a few individuals (*lähiesihenkilöt*) or faculty who were members of shared-governance committees to heads of entire units (e.g., deans of faculties). Participants were members of six different organizational units on the campus. Participant age, gender, and background data were not collected. One participant (the initial one) was known to the researcher at the time of interview, but the remainder had no existing relationship with the researcher at the time of the study. Participant pseudonyms were selected haphazardly for each participant from a list of the 10 most common male and female names given to babies in Finland in the 1970s.

All Finnish- and English-language press releases published by the university from January 1, 2020 to August 1, 2022 were collected from the university website and stored in a local database.

To help partially circumvent the many challenges of interview-based studies (see, for example, Alvesson, 2003), documents were reviewed to provide triangulation and confirmation of claims made. Documents were all made available by research participants voluntarily. Examples include the university's Contingency Plan (*valmiussuunnitelma*), selected meeting slides from the university's Extended Management Team meetings during COVID, newsletters distributed by one of the units to their staff during COVID, and the Rectors' Council of Finnish Universities' (UNIFI) Scenario Planning Group's reports (UNIFI, 2020; UNIFI, 2021).

6.3 Data collection

The nine participants were invited by email to participate in semi-structured interviews. Interviews were chosen as a technique to allow nuanced, rich discussions of the phenomenon to occur that allowed individual contexts and discourses to be explored (Tracy, 2020). Semi-structured interviews were chosen as an interview technique to allow the interview to dynamically adapt to the particular leadership and crisis experiences of the individual being interviewed (Tracy, 2020). Interviews were held either in person or online, depending on participant preference (notably, two interviews were moved to online at the last minute as the participants had become ill). Participants were informed via email before the first interview that two themes would be discussed in the interview:

- 1) Who (which individuals and which groups) was involved in making decisions about COVID at the institutional level? What types of interactions occurred, how were decisions come to, and how were they shared with others?
- 2) What, in your opinion, are the lessons we can learn from your experiences of leadership during COVID? What do you think were the greatest successes of [the university] leadership during COVID, and what do you think were the areas that could have used the most improvement?

Interviews were conducted in English and lasted between one and two hours. One research subject did not complete the interview in the first time slot, and a second interview, a continuation of the first, was scheduled. At the conclusion of the first interview each participant was asked if they were willing to be interviewed a second time, to see preliminary results and give feedback on draft themes; all participants agreed, and three core participants were interviewed a second time (or a third time, in the case of the one participant whose first interview was split into two interviews). In total, 13 interviews were conducted that generated approximately 880 minutes of recordings for analysis.

An interview guide was constructed to structure the first interview, using suggestions contained in Tracy (2020). The interview guide contained four sections: introduction (starting questions designed to build trust and obtain the participant's work history), theme 1 (mapping the landscape of COVID leadership discourses at the campus), theme 2 (leadership lessons), and wrapup (openended follow-up questions). Participants were provided with a timeline of COVID restrictions at the university under study created through analysis of university press releases (see Table 3, section 7.2; the provided timeline did not include phase designations). While specific questions and flow of the interviews varied widely, at some point during the interview all participants were asked some variant of the following questions:

- What do you think was the best success of [the university's] leadership during COVID?
- What do you think was the biggest leadership area that needed improvement during COVID at [the university]?
- What was one thing that you personally learned from COVID for your own leadership?
- If you had a time capsule that you could put something into for the next leader of your unit that they would open at the start of, or just before, the next crisis, what would it be?

Follow-up interviews, conducted with an eye to obtaining participant reflections (Tracy, 2020), were conducted by first asking questions to clarify issues that came up during analysis of the participant's first interview. Once clarifying questions were answered, the researcher then shared the draft results of the analysis and

prompted the participant for how their perceptions aligned with the presented themes and other results.

Press releases published by the university were obtained using an automated system. A custom script written by the researcher (Python v. 3.10) was run on August 3 and 4, 2022 that downloaded all HTML pages, and all images and PDFs linked to from those pages, that were contained on the university website's public news archive page for 2020, 2021, and 2022. HTML pages were parsed using Beautifulsoup (v. 4.11.1) to identify link tags (only tags underneath the institution's archive page URLs were followed for archiving) and to create plain-text versions of the pages for analysis. Links and page text were stored in a local SQLite database for further analysis.

Documents to be analyzed were frequently volunteered, unprompted, by interview participants during the interview, or were requested by the interviewer from participants who were known to have access to them.

6.4 Data analysis

Interviews were transcribed word-for-word from audio recordings using a custom-written Python (v 3.10) script employing Whisper's (v. 1.0.0.1; Radford et al., 2022) machine learning language recognition model (medium model; 769 M parameters) to create plain-text draft transcripts (Teams interviews used Microsoft Teams's built-in transcription feature to create draft transcripts). Draft transcripts were imported into MaxQDA Plus (v. 22.5.0), where they were manually corrected by the researcher (including adding in indications of some non-speech cues, such as pauses and laughs, but only where relevant for meaning) before a thematic analysis was conducted following the guidelines in Braun and Clarke (2006). The thematic analysis began with theory-derived codes, using the six educational crisis leadership themes identified by Striepe and Cunningham (2021) as a starting point:

- Adapting roles and responsibilities
- Collaboration

- Communication
- Complex decision making
- Context
- Providing crisis care

The first round of coding, which began as transcription correction was occurring, involved assigning these six theory-based codes to relevant utterances in all first interviews. As the theory-based codes were being assigned, inductive (data-driven) codes were also created, which were, if possible, placed into one of the existing six theory-based themes. Inductively created codes that did not fit easily into one of the six theory-based themes were placed into an "emergent" category. As coding progressed the codes (especially the "emergent" category codes) were regularly evaluated and reorganized into different thematic structures, searching for structures that helped explain the experiences of the participants, with the theory-based themes and provisional emergent themes frequently building off each other.

As an example, when the first round of coding was roughly one-third complete, the well-being theme had six sub-codes with no organization within the theme, but by the completion of two rounds of coding the well-being theme had 15 sub-codes organized into three primary categories (leading well-being, staff well-being, and student well-being), as well as some codes that previously had been in the well-being theme having been used to form, or form links with, the emergent information flow theme. Once the second round of coding was complete and provisional final themes had been identified, interviews were read over again to test alignment of the themes with the interviews (and passed by participants in second-round interviews).

The university press releases were not coded for use in the thematic analysis, but instead were analyzed both manually (to build a timeline of COVID-related regulations at the university) and computationally. Computational analysis included using additional Python scripts to process the stored html and plaintext data for each page to extract the date of the page, the category of the page (folder, news, event, or dissertation defence), and remove the page's menus and

other structural (non-content-related) text to create a "processed text" version of the page that could be used for analysis. SQLlite's "like" command was used to search all pages' "processed text" for relevant keywords, or combinations of keywords (e.g., "corona or COVID" and "korona or COVID").

Documents provided by participants were not coded and were primarily used to triangulate and confirm information obtained from interviews. Documents provided by participants in Finnish were auto-translated from Finnish to English using either GoogleTranslate or DeepL. Translations of key sections of Finnish text were confirmed with a native Finnish speaker, where required.

6.5 Ethical solutions

All participants were provided, before meeting the interviewer, with a research notice, privacy notice, and consent form modified from University of Jyväskylä templates. Informed consent was obtained via e-mail beforehand and confirmed at the start of the interview (Lewis and Graham, 2007). Permission to record the interview was explicitly obtained at the beginning of each interview before recording began, with participants being informed that all data would be analyzed pseudonymously, and that any identifying information would be removed before data were shared or published. Participants were informed that they could revoke their consent at any time in the study. All data were stored in a secured folder on a password-protected computer, with original recording and pseudonym-linking documents planned to be destroyed within six months of project completion. While direct harm was unlikely to occur during the interviews, participants were monitored during the interview and overly stressful or delicate topics were navigated away from intentionally. Data included in this thesis was screened to reduce the likelihood of deductive disclosure (Tracy, 2020), and multiple statements / quotes have been left unattributed as a result.

No external funding was provided to support the study, and study participants were not provided any renumeration or other compensation for their participation.

7 DESCRIPTIVE ANALYSIS: LEADERSHIP PRAC-TICE AT THE UNIVERSITY DURING COVID

The chapter will first explore the structure of leadership at the university during COVID, as determined via descriptive analysis, focusing primarily on addressing the first half of the first research question: who was influencing crisis leadership decisions at the university. The chapter will then conclude with an analysis of the timeline of COVID regulations and communications at the university. The subsequent results chapter will explore how crisis leadership was practiced and how that practice aligns with existing crisis leadership theory. As stated in section 6.5, some quotes have been left unattributed to protect the confidentiality of the participants.

7.1 Leadership structures and information sources during COVID

Interviews with participants confirmed that the leadership structure outlined in the introduction (section 3.3) was in fact in place. Regarding the breakdown of responsibilities within units, which was not clear from the website, one vice-dean described it thusly:

We have a dean in the faculty who's responsible for economics, HR, basically all big stuff. And then we have two vice deans. One, like me, is responsible for the education, which means that all education related business, I basically make the decisions and guide the vice heads [of education] of the departments and so on, and then the other vice dean is responsible for the research and outreach activities. (Unattributed participant)

7.1.1 Internal leadership structures during COVID

Operational authority during COVID rested almost exclusively at the rectorate level. As one member of the Extended Management Team said,

Researcher: Who is formally making that call [decisions on core crisis matters] at the university?

Tapio: In the end, it's the rector. But in matters concerning teaching, learning, education it is the vice rector [for education] ... and in matters related to research it's the vice rector responsible for research.

Other participants summarized it more succinctly: "the rector has the main responsibility" (Johanna) and "[the final decisions] were made by the rector" (Hannele). However, the rector's decisions were nearly universally agreed upon to have been strongly influenced by the discussions and recommendations made by the Extended Management Team:

So, these kind of things were discussed, I think in a very open and constructive way. And even though this extended leadership group has no formal power to make decisions, it actually made the preparations for the formal decisions made by the rector. So, if you think about power, I think there are at least two different dimensions. It's the formal structure for decision-making structure, and then then this power that is, well, that is influence on decisions (*vaikuttusvalto*, in Finnish). So even though this extended group did not have formal power, it had very much influence on decisions. (Tapio)

The choice of the Extended Management Team as the central body for crisis leadership was reportedly not specified in the prior contingency plan, but instead was viewed as being simply the clear best choice (note the emphasis on bilateral information flow in this quote, a topic that will be returned to in section 8.5.3):

All the deans, all the heads of specialized institutions, and the university services are represented here. Other groups, for example smaller groups, so if there is lacking for example some faculties or some units, the channel is not valid. At the same time, they [the members of the University Extended Management Team] are giving the information [about what is going on in their units]. It's part of the situational awareness. But, vice versa, when the decisions are done, these are the most important staff members and people to implement these decisions. (Kristian)

This function of the Extended Management Team as the central node for decision making on campus was a change from prior operating procedure, a change that has subsequently been undone:

I was part of this this group and I'm still part of this group, but now this group has moved closer to its original task, which is, uh, sitting there and listening to the rector and other important people talk. Well, there is room for discussion but not that much. Because during pandemic, this extended group was focusing in practically only on pandemic matters. (Unattributed participant)

Early in the pandemic the Extended Management Team met extremely frequently and even late into the evenings, a characteristic "which is very exceptional in Finnish university." (Tapio)

I think the good part was that we had some regular meetings, like this [Extended] University Management Team: we met a lot [strongly emphasized "a lot"]. And very often during the very beginning. Even though it was quite exhausting, we might have been meeting at nine o'clock in the evening, but it was at the very beginning because it changed so quickly so it was almost on a daily basis at the very beginning when we had to do the changes. (Unattributed participant)

Information from the Extended Management Team propagated down to vice deans and department/unit heads quickly through rapidly scheduled meetings or non-meeting communication channels, often when topics were seen to be coming up for discussion or before formal decisions were published, which lower-level leaders found advantageous:

Researcher: So, with the university instructions, how were those coming down to you?

Unattributed participant: Well, the dean is member of the university [Extended Management Team]. So, quite often the dean communicated them to us at first. And of course, the university also published the general instructions at some point, but usually we get some sort of a heads up from the dean because he's a member of the [Extended Management Team] and they get it first. So, he quite often like immediately after meeting, we had a meeting or he wrote us an email or called us and okay this was decided, be prepared to think what it means for us, and then we discussed. So, I think this was like a especially, when the situations sometimes during the COVID they changed quite fast, so this was that we got the preliminary information from the dean and then we had sort of like time to think before the university published the instructions to everyone. And we were prepared for the questions that they may rise.

All participants who were members of the Extended Management Team reported feeling that their input was listened to and taken into account during the meetings, though there were indications that more time for taking input from the various leaders would have been preferred:

Researcher: Do you feel you were listened to [at the Extended Management Team]?

Member of the Extended Management Team: Mmm, yes, but maybe the part could be bigger. Because it's mostly in the end of the meetings, there was a few minutes for every unit to take, uh, greetings.

The Extended Management Team created a working group that had various names throughout the crisis (no participant was confident what the name of the group was, even those on the group itself), but will be referred to here as the Corona Monitoring Group, which monitored the situation and prepared recommendations for the Extended Management Team; university planning staff played a major role in gathering information as a part of and/or for this monitoring group. The Education Council was involved in giving information to the Corona Monitoring Group and Extended Management team:

We [the Corona monitoring group] had a close connection with the Education Council and the vice deans of education [in] the faculties So because they were the ones who raised the questions and also share the experiences that this was working out in our faculty and this wasn't and so on. So, they were sharing the information. (member of the Corona Monitoring Group)

But the Education Council was not the core location of crisis management leadership, as illustrated by this leader specifically routing decisions that needed rapid resolution away from the Education Council:

Mostly it was like that that if we had something that we are not happy and we are not sure how to deal with, it was the easiest to communicate it to dean, who can immediately tell it to the University Management Team. ... But sometimes we had the general discussions with the Education Council as well. But not maybe that much because [the Education Council] only like meets once a month and the things that we were raising questions [about] were quite acute. We need fast responses. And it was like too slow. (inaudible). So, I think the role of the University Management Team was more significant than, for example Education Council, in making the decisions. (Anneli)

Of the three participants who were on both the Extended Management Team and Education Council, two spent far more time discussing the Extended Management Team than the Education Council, and one did not mention the Education Council at all during their entire hour and a half interview (an interview wherein much of the time was spent going back through emails and Teams boards to show the actual leadership dialogues that occurred during COVID).

The Research Council was not mentioned in a decision-making context during the crisis by any of the participants. The Student Union was referred to primarily when discussing student well-being issues, frequently in the context of 2021 and 2022 decision making. The Collegium was not mentioned voluntarily by any participant (although no participants were on the Collegium during the crisis); when asked directly about the Collegium's role, Kristian replied:

Researcher: What about other groups on campus? We've talked a lot about the Extended Management Team. How much of a role did like say the Collegium play?

Kristian: Not Collegium, but some others. For example, part of the university services, there was small group looking after the traveling, international operations ...

7.1.2 Influence of groups external to the university

Outside groups, such as the Ministry of Education and Culture, the Finnish Institute for Health and Welfare (THL), and regional / municipal bodies did play a role in informing university decisions and were mentioned repeatedly by participants.

but for example, like I mentioned, this is very important with outside groups ... for example, these regulations, the regional, local, national level, but also collaboration with

outside groups that we had groups among the universities, the [UNIFI] COVID scenario group ... (Kristian)

And then also a lot of communication with other universities. Like a vice rector was in contact with other vice rectors of the universities, UNIFI, the rectors board. The vice rectors for education have an own group there within the UNIFI. So [they were] in close contact with other universities. And I have my colleague network from other universities. So we were sharing a lot of information with one another. (Hannele)

National guidelines played a prominent role in the early days of the crisis, while regional and local decisions became more relevant after the first few months (when Finland switched to more regional-based restrictions). The multiple levels of government bodies that could potentially regulate the university sometimes created issues when they issued conflicting regulations:

It was not always clear between the different national, regional, and [municipal] level at what is the current status of for example restrictions. And we also a couple of times put questions to them that, okay, is it you who is in charge of this situation now? And sometimes we, if the situation was unclear, we made our own decisions as good as possible that so we didn't stop our actions but we went through and we took probably some risks as well. (Kristian)

UNIFI, the Finnish Rector's Association, played a prominent role, as it facilitated rapid coordination and communication between upper-level leadership at all universities in Finland. This coordination included facilitating frequent formal and informal meetings, creating spreadsheets where universities shared what their upcoming COVID-related policies were going to be, and the creation of a scenario group that developed two detailed reports on potential future directions the pandemic could take (the first, in spring 2020, attempting to look a year ahead, and the second, in 2021, attempting to examine what the post-pandemic environment might look like). UNIFI was mentioned by more than half of the participants, including many who had no stated official role with UNIFI.

Other national coordination groups were important for university functioning during the pandemic as well, for example in the spring of 2020 a national group was formed to facilitate coordination between universities on entrance examination policies (which are set by the universities individually, but which require copious coordination to ensure consistency).

International organizations' and news websites were used to keep up to date with the international COVID situation. The World Health Organization's

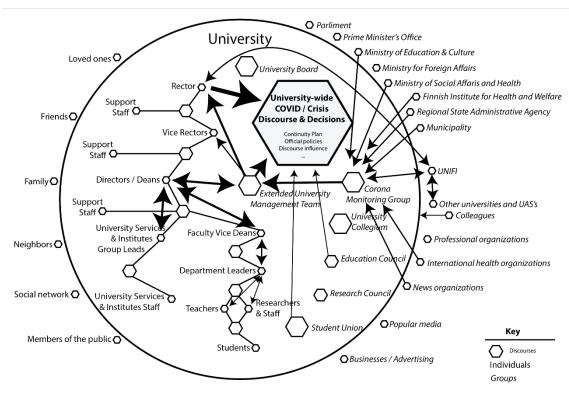
and Johns Hopkins's COVID webpages were mentioned repeatedly as a key source of information for understanding the global situation (their information was regularly shared with the Extended Management Team at its meetings), and an array of trusted news media sites, both Finnish and international, were also mentioned in this context.

Personal connections (e.g., people on the left side of Figure 1, page 26) were almost never mentioned as sources of information. One participant had a spouse working for another Finnish university and reported comparing university decision-making timelines and communication strategies with their spouse. Another (Hannele, quoted above) indicated discussions with their colleagues at other universities as playing a role in their information gathering and decision making.

7.1.3 Summary of COVID leadership discourse influence

A visual summary of these results can be found in Figure 4. Figure 4 illustrates the approximate strength of influences of various groups on the university-wide COVID discourse as indicated by the participants.

Figure 4Complexities of COVID leadership: An approximation of the influence various groups had on the university-wide crisis leadership discourse, as observed in this study. Thicker lines with arrows indicate stronger connections / more influence. See Figure 1 for a version of this figure without influence indicated.



7.2 Timeline of COVID restrictions at the study university

English-language university press releases were used to assemble a timeline of the COVID pandemic at the university (Table 3), which indicates that the COVID crisis went through multiple cyclical phases at the university. The COVID crisis was first mentioned in press releases in early February 2020, indicating that the pre-crisis period likely started at that time. The pre-crisis phase lasted at least five weeks, then transitioned into an emergency phase on March 12. This first emergency phase, which included a complete campus closure including locking the doors of all campus buildings to prevent all but "critical" access, lasted two months. At the end of the first emergency phase the risk to the community was perceived as being lower, and thus it could be argued that the situation transitioned into a chronic crisis phase that involved on-campus teaching and more

historically-normal operations, albeit with COVID-related restrictions such as reductions in the number of people allowed in rooms (along with an "extensive" mask recommendation initiated in the fall of 2020). This crisis phase lasted until January 2021, when a second emergency phase emerged requiring the closure of campus facilities and again brought about the transition of most courses to remote learning. This second emergency phase lasted through April 2021 (though the full campus closure lasted only a few weeks), after which a second chronic crisis phase, that included a return to on-campus operations (with restrictions), continued through December of 2021. In December 2021 the Omicron variant initiated a third emergency phase, which again resulted in moving all classes to remote teaching, though without an accompanying closure of campus facilities. This third emergency phase ended in late January, and a third crisis phase followed. A potential date for the start of the post-crisis phase, based on press releases, is April 2022, when all COVID-related restrictions and recommendations were removed, though the removal of most restrictions in February 2022 could also be considered as a start date for the post-crisis phase.

Table 3A summary of the COVID timeline at the university, constructed from university press releases, with phases added using concepts discussed in sections 2.1 and 2.2.

Dates	Phase	Summary
February 4 - March 12, 2020	Pre-crisis	Concern focused on those returning from travel to areas where COVID was known to be spreading. The last pre-crisis decision was the March 12 announcement that all planned public events would be moved to an online format for the spring term.
March 13 - May 13, 2020	Emergency 1	Operational shutdowns were announced March 13, with contact teaching suspended March 16 and all facilities locked as of March 19 (only critical activities were allowed to occur on campus).
May 14, 2020 - January 26 2021	Crisis 1	Campus activities reopened; fall teaching occurred as a mix of remote and on campus in small groups. Frequent updates regarding status were shared. Spring 2021 planned and started as the same mix of online and on-campus education as Fall 2020.
January 26 - April 29, 2021	Emergency 2	Contact teaching suddenly stopped on January 26, initially only until the end of January, then extended 6 times. Campus facilities were locked and only accessible for critical activities from January 31 through February 14.
April 29, 2021 - December 22, 2021	Crisis 2	Teaching remained online through the end of spring, but campus facilities were open. Fall 2021 teaching was a mix of remote and on-campus. It was announced repeatedly that Spring 2022 would be the same as Fall 2021.
December 22, 2021 - January 26, 2022	Emergency 3	On December 22 remote teaching was implanted for all courses through the end of January. In mid-January the restriction was extended to be valid until the end of February. On January 26 the remote teaching recommendation was revoked.
January 26, 2022 – April 21, 2022	Crisis 3	University removed all COVID restrictions except facemask obligation on Feb. 17.
April 22, 2022 - ?	Post-crisis?	University removed the face mask obligation on April 8, and then removed its face mask recommendation on April 22.

7.3 COVID-related university press release counts and frequency

While press releases were primarily used to build a timeline of the university's actions and to act as triangulation for statements made by leaders, a brief quantitative analysis of them is presented here to illustrate the approximate volume of public COVID-related communication carried out by the university. In total, 2,309 Finnish and 1,035 English press release pages were downloaded for analysis. Of the Finnish language press releases, 43% were classified as news pages, and 24% as event pages. Of the English language press releases, 47% were classified as news pages and 7% as event pages.

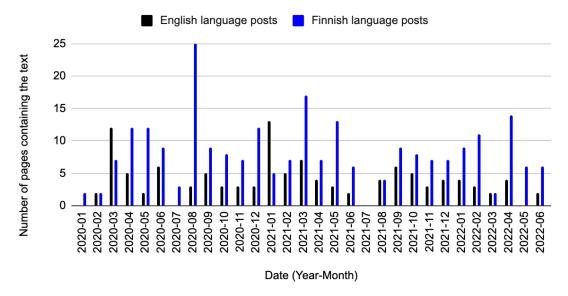
The university published more than 100 press releases in each language that referenced COVID or k/corona. The distribution of posts by type can be seen in Table 4, and a timeline of the posts can be seen in Figure 5. During the period analyzed, the university posted an average of 5.7 COVID/korona referencing news posts per month in Finnish, and 3.6 COVID/corona referencing news posts per month in English.

Table 4Number of press release pages containing the words COVID or k/corona in Finnish and English at the university between January 1, 2020 and August 3, 2022.

	Number of pages containing the words (percent of total pages for that type of page)		
Type of page	English - Corona or COVID	Finnish - Korona or COVID	
News	112 (23.2%)	177 (17.9%)	
Event	3 (4.4%)	69 (12.5%)	
News and Event combined	115 (20.9%)	246 (16.0%)	

Figure 5

Timeline of university news and event press releases containing either "korona" or "COVID" (Finnish language) or "corona" or "COVID" (English language).



8 THEMATIC ANALYSIS: ALIGNMENT OF LEAD-ERSHIP EXPERIENCES WITH EXISTING CRISIS LEADERSHIP RESEARCH

This section of the results focuses on the second half of the first research question (how leadership was practiced at the university) as well as the second research question (identifying lessons for crisis leadership). This section will begin by exploring the overall thematic results, then examine how these leaders' experiences align with themes found in existing crisis leadership research, and finish by discussing new themes that emerged from the data.

8.1 Overall thematic analysis results

Conversations with participants were highly variable, and thus more than 100 codes were identified while conducting the thematic analysis. The codes were categorized into 10 themes, which are described briefly in Table 5 and will be discussed further in subsequent sections. Table 6 contains a list of quantitative data regarding identified themes, but as the analysis was not carried out with quantification as a goal, these numbers should be used solely to indicate that each theme was discussed many times by multiple leaders and included multiple codes. As just a few examples of the limitations of these counts, coded utterances were of highly variable length and relevance to the conversation, and individual utterances could be included multiple times in the same theme (e.g., if used for two different codes within the same theme).

Table 5 *Themes identified in this study, along with approximate descriptions.*

Theme	Description	
Communication*	Information flowing down the decision-making hierarchy or to outside the organization, often as completed decisions	
Adaptive leadership*	Changes to leadership structure or function as a result of the crisis	
Complex decision making*	Changes to decision-making protocols or procedures during the crisis	
Contextual influences*	Unique factors, or factors that may not be present elsewhere, that affected leadership or other characteristics of the crisis, on any scale (individual staff member to university- or system-wide)	
Collaboration*	Interaction of different individuals or groups for mutual benefit on any scale – from within the same unit to interactions with someone or some group outside the university	
Well-being*	Discussions relating to the physical or mental health of individuals, in either a personal or work-related context	
Metrics / justifications	Factors used while making decisions during the crisis	
Information flow	Information flowing up the leadership / decision-making hierarchy; information gathering / environmental sensing activities (as distinguished from communication)	
Culture	The social norms and typical practices of the organizational group	
Planning / preparation	Planning and other activities to enhance readiness for upcoming potential situations. In this context, either discussing pre-COVID plans, plans made during the crisis to help with the crisis itself, or plans made for future crises	
Time	The effects of the passage of time, and time-related discussions	

^{*} Theory-based theme

Table 6Counts of coded utterances for each theme across all interviews. Note that the analysis was not conducted quantitatively, and thus these counts should not be compared to each other or extrapolated from.

	Counts		
Theme	Total # of coded utterances	Total # of codes included in the theme	Number of leaders with a coded utter- ance in the theme
Communication*	68	10	9
Adaptive leadership*	84	12	9
Complex decision making*	101	11	9
Contextual influences*	73	8	9
Collaboration*	67	12	6
Well-being*	106	15	8
Metrics / justifications	53	12	9
Information flow	61	5	9
Culture	39	6	9
Planning / preparation	113	13	9
Time	61	7	9

^{*} Theory-based theme

8.2 Planning/preparation

Was it Winston Churchill or... or, who was the general? But anyway, somebody said that the plan is not important, but the planning is important. (Kristian)

While planning / preparation was not included in the initial set of theory-based codes (derived from Striepe and Cunningham (2021)), it emerged as a theme during the analysis, and is clearly a theme that is already widely present in the crisis leadership literature (see section 2.2). All nine leaders interviewed discussed planning at some point during their conversation (Table 6), and the importance

of universities conducting rigorous planning for crises was strongly supported by the dataset.

However, five of the interviewed leaders made statements clearly indicating that the university itself was not prepared for the COVID crisis (with the rest mostly failing to discuss pre-COVID crisis planning).

Like I mentioned before, now, thinking back. We could have been more prepared for something to happen. We could have been more prepared for crisis management. And that was one of the lessons learned, I think. (Hannele)

I was part of a group who was planning a strategy for [my unit] three years ago or four years ago. And we then had to have scenarios what might happen. But I think we didn't have such a bad scenario that we had pandemia and war in Europe within next four years. No, I don't think anyone was so pessimistic. (Maria)

So, actually, one lesson to learn already is that we kind of were warned that this sort of pandemia will happen, we knew that right from the beginning and we were not prepared. Because pandemias have been there, like over the past 100 years at least three or four pandemias have been around the globe, ... So, scientists were warning us that please be aware that there will be a pandemic sooner or later. Be prepared. But we were not. So, kind of unexpected, well, this was not unexpected. (Petteri)

While the Ministry of Education and Culture requires contingency plans (see section 3.2) to be prepared by all universities, and the university had drafted one in 2012 (carrying out "a little" (Kristian) update in 2017), the existing contingency plan was viewed as not a useful document:

Researcher: So, was the contingency plan that was available, that [the university] had made before COVID, was that useful at the start of COVID? Did you use it?

Kristian: No, no. ... Before COVID, we had the security policy, and not very long one, and it recognized different, like, different possible scenarios or cases that we are able to face. And main ideas that how we have to act. ... it was more focused on communication. But for example, how to create the leadership and kriisijohtaminen at that time [was lacking in the plan], so [we] created the main idea when COVID was starting.

In addition to lacking overall crisis leadership plans, lack of preparedness extended to such topics as administrative procedures that required staff to be oncampus as well as a lack of digital licenses for software important for remote work.

And we had the idea before COVID that we need to work on campus, because students are on campus, because academics are on campus, we have to be here. So, we didn't have any practices for remote work practically at all. (Hannele)

We had Teams, but we had licenses for 300 people. We had, I think, 150 simultaneous licenses for Zoom. And we have [redacted] staff and [redacted] students.And you

know, the bandwidth wasn't enough. Licenses. So, our IT department had to act really quickly and kind of make sure that we at least have the basic tools. (Johanna)

The lack of planning for a crisis such as COVID can also be seen by the copious long meetings and uncertainty at the beginning of the in-crisis phase in mid-March. See the pre-crisis discussion (below) for more on this topic.

Despite initial planning generally not being considered sufficient, multiple unit leaders facilitated detailed planning by their unit members early in the crisis. A recurring theme when discussing planning was creating redundant, resilient systems where no single person or system is critical for operations. While multiple leaders discussed this concept, Hannele illustrates this well, including how the idea for redundancy emerged during COVID and has subsequently been integrated into their unit's operation:

Like I mentioned in my organization, these teams. The main idea is that the team is responsible for some things, not the individuals only, because we didn't know at the beginning of COVID. We didn't know who is going to be sick or who is not. We didn't know how sick we would be. We didn't know, so who is going to be away for three months? So, we were trying to figure out who is going to replace who, so that we wouldn't be so vulnerable and dependent on individuals. But we are having at least the very important jobs to be shared by a group of people. So, if one member of the group is away, the whole thing is not going to collapse. So, that's one lesson learned that we're trying to establish more. (Hannele)

In 2022 the university revised its Contingency Plan, creating a much longer and more detailed document, that included far more on leadership theory and structure, focusing copiously on discussions of how to lead during crises. Communication strategies are highlighted, as are general plans for maintain institutional crisis preparedness. Discussions of a few potential crisis scenarios are included, though they do not make up the bulk of the document. The entire document is planned to be updated annually.

This post-crisis planning also extended down to the unit level, with some unit leaders discussing creating their own unit-focused contingency plan:

But we have been trying to do [this] in our unit as well. So, some kind of contingency plan for if something unexpected is going to happen. What we are going to do. How are we going to ensure that students, for example, get their degrees, even though somebody is away or ... we have been more careful thinking about these replacements system. (Hannele)

In 2022 the university ran a day-long crisis leadership drill with upper management and a few selected units. The drill included two separate, overlapping, crises, illustrated via fake newspapers and news videos. Managers involved in the exercise were not informed of the particulars of the crises ahead of time and were forced to deal with them in a mock situation room. The outcome was reported to be very positive:

And our experience from that exercise and generally is that our academic leaders, and leaders of the university services ... was that they really act very well. It was very high level. And pandemic time, of course, raised the level of crisis management and leadership. And with this exercise with our plan, but especially our planning, and the other daily discussions, formal and informal, absolutely has raised that. I think that we are quite well prepared to face different kinds of crises or cases. (Kristian)

8.3 Crisis phases: Pre-crisis, in-crisis, and post-crisis

My feeling was that we were not very well prepared for it. It was still a kind of a surprise when it started and even [though] we had the science already in 2019 in December or early January 2020. The science group [was] already there, [but] everybody was still kind of very hopeful that it's a Chinese problem: it will not come here it will go away like this bird flu or nothing, no reason to change anything just continue business as usual. But only a month later it was here. So, we were not prepared to that and our faculty and university was not very well prepared, so it was a crisis that we needed to handle without being very well prepared to it. (Petteri)

While not separated out as a theme of their own in the final analysis, the idea of a crisis having phases is widely discussed in the crisis leadership literature. Phase-related discussions were grouped in with the "planning" theme in the analysis (see section 0) but are reported separately here due to their relevance to both the crisis response and crisis leadership theory.

In-crisis topics dominated the discussion, with, for example, the pre-crisis code only having 29 utterances across all interviews. Pre-crisis discussions were almost exclusively "stories of the start" – personal stories of leaders' experiences before the national restrictions and university lockdowns in mid-March. These stories typically involved some sort of actual or planned travel, with concerns about being able to get home ranking high on people's priorities. Nearly all participants' reflections on the start of COVID-related leadership work at the university align with the university lockdown discussions taking place in mid-March, with discussions frequently focusing on the chaos and franticness of the early lockdown days:

And then then things started going south here as well. But still, it was a complete surprise. It was the 16th of March when, yeah, like you said, teaching suspended. ... So then we got a heads up message from the rector on I think it was a Sunday. I don't remember now, but it was like you said, during the weekend. [They] sent us a message saying that be-prepared, we will have a long meeting this evening. And everybody was like, what? (Unattributed participant)

Other than travel-related recommendations and restrictions, 8 of the 9 leaders did not discuss any leadership actions taken by them or others before mid-March 2020. The remaining leader, integrally involved in the campus's leadership crisis response, did discuss some non-travel-restriction-related actions taken before mid-March: a discussion, as a side topic, at a unit planning meeting on February 13, 2020 and a visit from another higher education institution on March 5, but no formal action was reported to come out of either discussion. Concrete discussions on planning responses and creating leadership structures were reported by this leader to not have started in earnest until the week of March 9, only days before the campus lockdown discussions occurred. University press releases echo this trend, with press releases from before March 10 focusing on individuals traveling to or from, or having contact with others who travelled to or from, other countries with COVID infections present.

This apparent lack of pre-crisis phase work is evident from many leaders discussing having to make extremely rapid, unplanned, changes the weekend the lockdowns were announced, illustrated by Hannele's comment:

And then when during one weekend, we needed to change everything online. So that meant that quite a many people needed to do a lot of work to change the plans from on campus teaching to remote teaching and cancel the room reservations and helping teachers. (Hannele)

While the pre-crisis phase is relatively easy to define for COVID, given that the in-crisis phase clearly started with the national and university-instituted lockdowns in mid-March 2020, the post-crisis phase of COVID is far more difficult to define. Thus, while the post-crisis code, indicating relatively explicit discussions of post-crisis topics, only had 19 utterances tagged, many topics blurred the boundary of in-crisis and post-crisis, and thus an exact count of post-crisis utterances is not attainable. However, in the overall analysis post-crisis topics were rarely brought up compared with in-crisis topics, and leaders generally lamented the lack of time for reflection on the lessons learned from COVID. That said,

leadership at the university was working on identifying lessons from COVID, particularly in the vein of revising the university's contingency plan and strengthening other elements of its crisis preparation (see section 0).

A rough view into the time window when the university started reducing its focus on COVID, and thus an estimate of when the university could be viewed as entering the post-crisis phase, can be seen from its management of internal Teams channels, as explained by Johanna:

Johanna: Because I think there was a conscious decision at some point from our rector. Say [scrolling through the Teams channel messages] here this is it. 28th of March [2022], two years later. So here is the secretary saying that we have changed this room [the crisis channel], the space into this. And now all these files that we have will be transferred to a different channel. ... but since this COVID situation is not normalized. So, there will be one channel that's called the COVID situation from this on. So, where we could just kind of find information or upload information as we see fit. So, it hasn't kind of vanished, but it's there. But we kind of as THL is saying it's no longer a pandemic, but it's an endemic. So, we are kind of living in that endemic time now.

Researcher: So, like this March 28th is a good marker to say this is, by this point It's like, OK, it's no longer we're going to have a special channel for it. But this major high-level discussion...

Johanna: ... is shifted. And here you see Russia.

Researcher: Ahh, yes. [A post made on] March 9th [2022].

Johanna: Yes. Our focus shifted from COVID to the war in Ukraine and all that.

8.4 Striepe and Cunningham's educational leadership themes

Overall, it was observed that leaders' shared experiences relevant to all of the themes identified by Striepe and Cunningham (2021) (see section 2.3). As the analysis progressed the names of the themes were revised to better align with the concepts being discussed (e.g., "providing crisis care" became "well-being"). Additionally, "complex decision making" was merged with "adapting roles and responsibilities" into a single "adaptive leadership and complex decision making" theme due to the copious overlap between the two concepts in participant discussions. Each of the resulting five themes will be explored, briefly, below.

8.4.1 Communication

Not the same advice can be given to every crisis. But I would say [one thing] that is common to everything is the communication. Remember to communicate. Remember to communicate even when you don't know the answers, then communicate that this hasn't been decided yet, because it is the leaders, we leaders, we always know at least a little bit more than everybody else. And when there's no communication, there are sort of different assumptions going on. And then in my experience it's better to say that you don't know or if this hasn't been decided or this is under discussion. It is better to say that and not only communicate when there is some kind of new information to communicate. (Hannele)

The importance of clear, frequent, open communication during a crisis was supported by the data. All but one participant emphasized the importance of communication (with the one participant who did not discuss communication instead focusing more on bilateral information flow).

The university communications during the crisis were repeatedly praised, with the communications department being highlighted. Multiple leaders cited the importance of decisions being rapidly, publicly posted on the university website as being critical for knowing what the current status of regulations at the university were and helping their staff understand the current situation. The copious communication from the campus was widely praised; however, filtering all the communications coming from the various campus units was also highlighted as an important role of leadership, as multiple leaders discussed how they needed to highlight the core issues relevant to staff in their areas since the communication volume was frequently overwhelming. Along similar lines, communicating draft decisions to mid-level leadership before the decisions were published was highlighted as important for mid-level leadership to update their own policies, evaluate impacts, and plan communications before the public release of a decision (see quote by unattributed participant, page 47).

Units varied widely in their communication strategies. Some unit leaders barely discussed their communication strategy, others relied on occasional all-hands meetings and emails, while others actively used Teams, regular meetings, and newsletters. One unit leader created an entirely new communication structure in their unit during COVID, including a start-of-the-week all-staff online meeting and a weekly newsletter that any staff member could share information

in, both of which are still going on (with more than two thirds of staff reportedly still attending the start-of-the-week online meeting).

For instance, every Monday morning I have an online opening of the week. Every Monday. And I will tell what are the most important things in current week. What has done last week, what happened there, and some things, explanation. Why we did some decisions last week. Opening the backgrounds of the decisions. And then we open our current week. And it's an open information event lasting about 30 minutes. Every Monday. And that was started, that activity, on the COVID time. And it's still going on. (Unattributed participant)

Discussions of communication frequently blended with well-being support, with multiple leaders discussing how they emphasized caring and support of their staff through their messaging:

So, you can see that a lot of our pressure we put to giving information and interaction. We have regular meetings, regular activities to people. And most important is the feeling. Feeling in the information. It's not just the facts. It's a lot of our emotional information to the people. That "keep on going, we will survive this. Don't give up." Those kind of activities. "This is hard for us. This is hard for the students, but we will survive." (Antero)

8.4.2 Well-being

Well-being of both staff and students was a frequent topic of discussion by leaders, and both played a key role in leaders' reflections on the crisis. Staff well-being discussions generally focused on the challenges staff members faced during the remote work periods in 2020 and 2021. As stated in the communication section, attempting to enhance staff well-being was a frequent focus of leaders' communication strategies. Leaders sensed, through direct discussions with staff members and reports from lower-level leadership, that staff were having well-being challenges; the campus annual well-being survey of units was cited by leaders as a useful comparison with other units, but was not what leaders referred to when discussing how they knew if there were well-being problems. Leaders frequently discussed the challenges of sensing well-being, and that they felt they were becoming disconnected from their staff:

And then I just tried to check in with people individually every now and then. But not often enough I think. I think I lost a lot of touch with the people during COVID. I think it would've been good to do that more but [trails off]. (Kristiina)

Staff well-being challenges discussed were typically related to increased workload, social isolation, and challenging family situations. Attempts to enhance staff well-being by leaders generally focused on occasional delivered meals or gifts, free tickets to sporting facilities, outdoor meals / group events, encouraging messaging, and casual Zoom gatherings such as "coffees" (which in most cases were short-lived, though one unit is still holding them). Within-unit meetings and communications, both all-hands and of sub-groups, were used as a source of staff community building during the crisis (see the communication section), with one unit leader specifically encouraging on-campus operations of their unit (as much as was allowed by university regulations) to allow for more face-to-face interaction and thus a reduction in staff social isolation. Later in the pandemic the return to on-campus-work of staff members (many units required or requested staff to work on campus at least 50% of the time) was carried out, according to many leaders, to attempt to improve staff well-being. Reductions or reallocations of workload were generally not discussed as a solution to wellbeing challenges, with a notable exception being when the campus decided to allow teachers to no longer offer Zoom or hybrid offerings of their courses in early 2022:

In terms of teaching, the biggest problems were like some teachers they felt that this is an extra burden, an extra task, they are running out of time they are running out of energy because they had to reorganize everything. And particularly when we started opening a little bit, then there was this face-to-face teaching and hybrid type of teaching and then online teaching. And some teachers felt that this is now becoming too overwhelming that there's three ways of giving each course: to one third of the students face-to-face teaching to two thirds of the students that were not capable of coming to the, or were too much afraid to attend the, physical teaching occasions ... But we decided to go, we decided to prioritize our work well-being, from the teachers perspective here. (Petteri)

Staff well-being was understood by multiple leaders to be highly individual, depending not just on work situations but also individual situations, a topic that will be discussed further in the "context" section.

Student well-being was discussed almost exclusively in the context of reduced student well-being later in the pandemic motivating the decision to return to on-campus teaching as quickly as possible.

Because we know that that uh, that during pandemic. Very many students stayed at their homes. They don't even move to [the university city].... And also all this national studies showing that students and pupils in schools are feeling anxiety. Having mental problems,

having feelings of not belonging to a student group. So, we wanted to give as a university a clear message that now we will return back to normal university. And that was officially announced by the by the rector, but, well, nobody resisted that in the management group because we all were concerned that we are really, that we are really losing these two generations or two cohorts, of our students who started their studies during the pandemic. (Tapio)

Leaders recognized that students were split between those performing well in the remote environment and those not performing well:

We were aware of the consequences to some extent. What are the consequences, for example, of closing down the university and not giving any face to face physical teaching here at the university campus. So, we had a kind of idea that approximately, I don't exactly remember the exact numbers, but let's say that one third of students felt that it's totally OK and even better that they can organize their daily activities because we had online teaching and lectures were also recorded so they can attend the lectures whenever they want. They could go to work ... were very capable of kind of organizing their daily activities and benefited from this closing down the system. And then there was the opposite end of the students that just disappeared. We don't really know what happened with them. We didn't have any contact with them. They didn't appear to online courses. They didn't do any credit points. They just disappeared from the system. And this information that we got from the, I think it was student union who collected it. We know that some students, a group of students, they had serious mental problems during the COVID pandemic. They were really suffering from being excluded from the social interactions between their peers or between the students. And then there was in between those students there were people who were capable of coping with but were not totally happy. (Petteri)

Leaders discussing the poor well-being of students focused almost entirely on the mental health effects of isolation, and how a return to on-campus teaching was the solution to this problem. There was also fear that without a return to campus that students would be "lost" and not feel part of the campus community. Students who did not want to return to campus were cast as "frightened", and no leader voluntarily discussed issues surrounding students who were personally at high risk of death or disability from COVID or students with close associates, such as family members, who were at high risk of death or disability from COVID when discussing student well-being (or staff well-being, for that matter). When prompted specifically on this topic during a second interview, one leader explained that such individuals are not a priority of university planning:

Researcher: when you think about the people the university serves, you've got all your students, you've got all your staff, and some fraction of those members are going to maybe have family members who are really at high risk of COVID or maybe they're at high risk of side effects of COVID themselves [such as those who have cancer] ... has the university [been] thinking about how to help them at all?

Unattributed participant: I think that first if we think about our staff members and who has personally cancer, then we come to that that, okay, we have this health care, what university provides. Terveystalo, and YTHS to students. Then, of course, when we come

to staff member, for example, his or her family member has serious disease. I think it's more leadership thing that I know my staff members. I'm open that if they have worries, I can help. They can take a few days off or leave days, etc.

Unattributed participant: But I think and that's my personal view as well that university, our main focus is to teach, do research and strengthen the societal impact. We are not able to solve all the problems from coming from all the staff members, all the students extending to their family members, their relatives, their pets, etc. So there are for sure some limits. The important thing, of course, is how we are able to provide, for example, hyvis, or goodies, and support them for different kind of cases linked to mental status. But we are not able to solve all. But leadership is very important. I think that it does not cost anything.

Leaders repeatedly cited student well-being surveys that had been carried out by the Student Union and campus student life experts as sources of their information regarding student well-being, but despite repeated inquiries, these surveys and their results were not able to be obtained at the time of writing.

8.4.3 Collaboration

While collaboration was talked about by the fewest number of participants, it was still an essential part of university leadership's response to the crisis. Collaboration was divided into two sub-themes: collaboration with groups external to the university, and collaboration within the university.

External collaboration was introduced in section 7.1.2, and thus will only be briefly discussed here. UNIFI served as a central hub for collaboration between universities, with multiple leaders citing the importance of its role. Collaboration with other higher educational institutions also took place separately from UNIFI, though direct staff-to-staff contacts or through regional or local associations. Comparisons between university responses was mentioned multiple times, both at an official / UNIFI level as well as at a personal level (via connections through colleagues or family), though actual collaborations (compared to information gathering) were more often mentioned in the context of organizations like UNIFI. Having staff members present at, or being sent information directly from, local, regional, and national health authorities was cited as being critical for timely information transfer.

Internal collaboration was discussed less than external, though it was highlighted as one of the best elements of university leadership by two separate leaders. Then other thing is that earlier, many years ago, units were more separated, more in silos. And we have been able to take these off. But during this, the cooperation and how deep and how open it was, went to, raised to different level as well. (Kristian)

Colleagues helping colleagues, either through casual interactions, quickly formed working groups, teamwork arrangements, or other already-existing structures, was highlighted as an important part of the crisis response. Teachers getting support, from both more experienced colleagues running trainings as well as the Open University, which already had been running online education for years, was cited by multiple leaders. Multiple leaders also felt that having staff arranged in small teams or working groups helped facilitate positive outcomes during the crisis, as it facilitated collaboration, well-being, and redundancy.

8.4.4 Context

And that was also very good because I think at the university level, the university is so large and diverse that they can't be very detailed instructions and things, but kind of an overall policies and overall guidelines should be there at the university level. So, something that I could as a dean base my decisions on, but that was then discussed at the faculty and we went down to the department level because departments are so different and then collected the ideas and creative guidelines of the faculty and then it was the department who eventually made the decisions, because the best knowledge of things how to get things organized in a reasonable way, is at the department level. (Unattributed participant)

Context is a broad category that can encompass many meanings, from individual personalities and family situations through to the influence of past leadership choices regarding policy and procedure at the university and in the country.

Broadly speaking, the role of context as an important factor in crisis leadership was well supported by the data. Leaders primarily discussed context in relation to personal contexts, decisions made before COVID that influenced responses, and variation between units within the university. Discussions of organizational culture, which could be considered as context, will be discussed separately in section 8.5.2.

Leaders recognized that their own and their staff's personal contexts, e.g., their family and living situations, their employment status, and their personalities, played a key role in their experiences of work during COVID, and that their personal contexts were more complicated than a single factor could explain:

All these things are intersections. It's not just about having small kids, it's not just about being in a fixed term contract. It's not just about being working part time. It's not just about something. It's when these things are intersecting, then they accumulate. (Kristiina)

International staff were felt to have been excluded from some of the communications and support offerings (an observation supported by the press release data in section 7.2)

Some of [the international staff] felt really isolated because they didn't have this kind of social scenario here necessarily. And many of the communications within the institution's departments could have been only in Finnish for instance. ... And that's something that we then highlighted that this has to be corrected. (Johanna)

One leader found it challenging to determine when it was acceptable to take into account personal contexts when making decisions:

This is always the problem when you start thinking about, okay do I treat people differently, do I give some people more rights? But I think that if somebody is going through a tough spot, and is trying to take care of as a single parent of two or three kids, trying to take care of stuff, it's OK to give them some flexibility, really. (Kristiina)

Decisions made before COVID that influenced the experiences of those in individual units were discussed by more than half of the respondents. These included technology-supply issues (e.g., an earlier decision to buy all staff laptop computers), technology utilization (e.g., the use of online teaching and/or coordination in a unit already), procedural (e.g., a unit that had administrative procedures that took on-campus operations as a base assumption) and organizational (e.g., multiple units had already divided staff into small teams that shared responsibility for core tasks) issues.

Units within the university had extremely different operational characteristics and responses to the crisis. Units varied widely in how much teaching, research, outreach, and student/staff support they conducted, with some units focusing nearly exclusively on just one of those, while others conducted all of them simultaneously. The crisis helped university upper leadership recognize that the units in the university were in fact very different, as one leader pointed out as one of the best leadership lessons from COVID.

The first thing is the fact that our university leadership became more conscious of the differences inside university. And I think that that's especially useful for the people in the services [area]. (Tapio)

The differences between units required complex decision making when setting university policy, as units exhibited many different operational characteristics (e.g., some units could entirely go to remote work, while others had external contracts or other situations that mandated on-campus facilities remain operational). Among dean-level leaders, university-level guidance was generally agreed upon to have been flexibly worded enough to allow for implementation decisions to be made at appropriate levels, often even at the department-level (see lead quote for this section). Dean-level leaders viewed this as an example of the trust placed in them by upper leadership, a topic that will be returned to in the culture section.

Each unit's leadership response to COVID was unique. Responses varied in how much on-campus work was encouraged or required (from on-campus work being encouraged even during the early phases of the pandemic through to a unit that still encourages remote work in 2023), how communication was handled (frequency of meetings / emails, use of Teams for discussions, use of shared leadership structures), and how much staff community building was encouraged (from nearly none to designing a multi-pronged approach to building online community among remote-working staff).

8.4.5 Adaptive leadership and complex decision making

I think we in that crisis situation, we were able to make quick decisions. And I think that went well because we could make decisions. We sort of noticed that there is something that we need to solve and then we tried to solve it and make a decision. It may not always have been the best possible decision on Earth, but it's some kind of, because we kept everything going on (Hannele)

The final two crisis leadership themes that Striepe and Cunningham (2021) include are adaptive leadership (e.g., that leadership structures need to be flexible and responsive during crises) and complex decision making (e.g., that existing decision-making systems will likely need to change). Leaders at the university frequently discussed both topics with such overlap that the two are grouped here into a single, overarching theme that combines the two: crisis leadership entails adaptive leadership that makes complex decisions. Some topics related to this theme, such as information flow and metrics, will be explored further in the following sections.

Dynamism and flexibility were highlighted as a key characteristic of the response by the university. The most prominent occurrence of adaptive leadership changing decision-making structures was the rapid increase in importance of the Extended Management Team, discussed in section 7.1. But dynamism and flexibility were reported at all levels, with leaders especially highlighting the importance of being flexible early in the crisis. Leadership structures in many units changed rapidly, with new working groups being formed and frequent meetings / emails reported nearly universally. Dean-level leaders universally agreed that they had at least some flexibility in their decisions when it came to implementation of university-level policies. However, flexibility was viewed in a nuanced way: on the one hand, deans recognized the need for flexibility, and embraced that flexibility to run their units in very different manners (see quote that leads section 8.4.4), but that led to challenges when different groups implemented things differently and thus calls for common policies also occurred. The need for flexibility down to the individual level was reflected on by Kristiina, who linked the lack of flexibility in response to cultural norms:

So I think the university should be able to, and should have the guts to, make a decision to treat people a bit differently depending on their situation. And in Finland we have this really difficult relationship with equality. We think that when we say that we are an equal society, we are an equal society ... then we very easily go to saying things like we can't start treating people differently because that would be unequal. And, like, really? I mean you could also take a different viewpoint. (Kristiina)

Some individuals who were sub-dean level reported not believing they had flexibility in their responses.

Frequent meetings were exceptionally important for allowing campus leadership to evaluate the situation, debate policy possibilities, and get input regarding how possible decisions would affect particular units. While all leaders on the Extended Management Team acknowledged that it met a lot (at least twice a week at the start), none expressed regret at the frequent meetings, and they typically appreciated the ability for input and gaining awareness of upcoming decisions.

Decisions to be made during the pandemic were frequently referred to as difficult, and the use of scenarios was repeatedly discussed as a mechanism to evaluate potential courses of action and facilitate decision making. Scenarios discussed by leadership were both pandemic-related (e.g., possible directions the pandemic might take) and policy-related (e.g., what different policies could look like). Scenarios were created and used as a tool at multiple levels: the UNIFI (inter-institutional) level, the Extended Management Team level, and the individual unit level.

8.5 Emergent leadership themes observed

Multiple emergent themes arose from the data while conducting the thematic analysis of the interviews; these themes will be explored in this section.

8.5.1 Time

I think everybody had the same idea that we had to do it. So when you have to do it, you have to do it. (Hannele, discussing what facilitated rapid decisions early in the crisis)

We couldn't take any sort of rapid decisions and we got some negative feedback on changing it too quickly. Because people were beginning to be quite tired and that the teachers, they wanted to have some kind of consistency of the decision. So, it was quite difficult because everybody was hoping the situation would be over sooner than it was. (Hannele, discussing later in the crisis)

The effects of time were seen throughout the analysis, and participants regularly reflected on the difference between the various time periods of the pandemic. The early weeks and months of the pandemic were typically referred to as chaotic, exceptionally busy, and filled with uncertainty / worry, but ultimately were discussed in highly positive terms like "pleased," "proud," "it worked well," and "success". Participants discussed how there were frequent changes, lots of communications, and constantly changing guidelines and expectations, but did not mention these in a negative light; they expressed an appreciation that much was unknown, and change was to be expected.

And I remember I was actually really also very pleased with the university because it seemed that the university was very proactive. (Kristiina)

In contrast, when participants discussed 2021 and 2022, a sense of weariness, with phrases like "tired" and "fatigue" being much more common. Some

leaders sensed these changes and respond to them, for instance by facilitating a unit reorganization or, as in the example below, by increasing communication:

The first Christmas I sensed towards the end of the term that people were really tired because it seemed that OK it's not going anywhere. And it seems that even though we thought already in August that things. [fades off] So then what I did was I wrote every staff member. (Johanna)

While changes in university policy were nowhere near as rapid as during the start of the crisis, expressions of frustration at changing regulations and policies were far more common in this period.

So, the intent was really good. But then what it resulted in was this kind of people getting really upset that OK: back or not back. And we did that like I think saying that now we'll come back. No, no, no, we don't come back. And then again too soon we'll come back. No, we can't come back. So that was probably, thinking back, a bit too hasty. But then again, if you think of why, then the reason still stands. (Johanna, discussing the changing regulations in early 2021)

As the crisis progressed, a need for consistency was cited more often:

But there was something that because it went on and off, because we were trying, we were hoping to open to campus as soon as possible, we were hoping to have as much teaching on the campus as possible. But then it was also obvious that it was really, really hard work for teachers, but not only teachers, but also the students, because they couldn't change it from one month to another. There has to be some kind of consistency. (Hannele)

Another group of time-related experiences, which also relate to adaptive leadership, was the need to recognize the varying timescales on which decisions needed to be made. So, for example, at the start of the crisis decisions frequently needed to be made with hours, or possibly days, worth of time to gather input and debate possible options. Some decisions that were extremely time sensitive were made by a very small group of upper leadership without consulting the Extended Management Team or other groups. Even at the dean level, leadership reflected on how little time there was to collect feedback:

Well there was not that much time to really collect the kind of entire faculty staff members opinions, so I trusted the department heads and particularly when considering teaching related issues it was [a vice dean] that I called and discussed with what is [their] feeling (Unattributed dean)

As the crisis progressed there were times when this time-sensitivity reemerged (e.g., the outbreak of Omicron in late fall 2021, the attempt to open the campus in Spring 2021), but there were also many decisions that were able to be debated more methodically, gathering more input using more of the existing formal decision-making systems at the campus, such as the discussion to potentially return to on-campus teaching in the fall of 2021.

We already started to prepare the autumn, how we will open the autumn, in March and April. And we gave the information that well, be prepared that things will go like this way. (Kristian)

8.5.2 Culture: Agency, consensus, and trust

So people really kind of had that sense of belonging to a community. And sharing their responsibility and the weight of the whole issue. I think that was what happened, but it's not my doing. It's in this institution and in the culture that we have here. (Johanna)

Culture has many possible definitions, but here it is used to mean the social norms and typical practices of the organizational group in question. Topics related to culture, both individual units and the Finnish higher education professional working environment, were repeatedly brought up by leaders. While culture could be considered a sub-theme of context (and was in Striepe and Cunningham (2021)), it is broken out here as a separate theme in the results due to its importance in the interviews. The main elements of culture referred to most often by leaders were trust, agency, and collaborative / consensus-based decision making.

All dean-level leaders mentioned trust as an important component of their leadership during the crisis, and trust was repeatedly mentioned as one of the best successes or lessons of the crisis. Trust was discussed by these leaders both in the context of their organizational superiors trusting them, as well as them trusting those under their supervision.

And then, and also, I highly appreciate this kind of trust and flexibility at the faculty level. So the university admin, I have a feeling that there was 100% trust on us. That you can organize things, given these frames, within these kind of guidelines. (Unattributed dean)

Trust was also intermixed closely with agency, with dean-level leaders feeling highly agentic (e.g., the quote above). This trust and agency came with responsibility, which was transferred down the institutional hierarchy:

And like the rector really kind of wanted to hear that, OK, this is not really working for us. So could we do it like this? And [they] said yes. But then [they] put a lot of responsibility on us. We had to. I had to with my own signature say that if we allow our staff

members to enter these buildings, it's on my watch. And that also is good leadership in a way, because then it made me kind of very invested in that. And I made sure that our staff knew that, OK, this is this is a privilege, really. And let's not destroy it by not following these rules and steps. (Another unattributed dean)

Agency was rarely mentioned by name, but clearly expressed in dean-level leaders' discussions of trust placed in them, that they had flexibility to respond as appropriate for their units, and that they were listened to by upper-level leadership. But not all individuals felt agentic; for example, this lower-level leader:

And what I think during the first couple of months. Actually, a lot happened that trickled down to us and at that point I didn't really feel that I was even in a leadership position. I was more like in an employee position waiting for instructions from the above because we didn't really have, we had some meetings of the steering group, which means leaders of all the other units here. But mainly it was waiting for instructions from the university board and the university, I don't remember what it was called, some crisis group. (Unattributed participant)

Collaborative, consensus-driven decision making was common to leadership decisions at the university. Leaders varied in how they carried out collaborative decision making, with some focusing on collaborative decision making more in leadership teams while others used shared governance structures or allhands meetings to discuss core issues. Anneli describes it as one of the best elements of the crisis response:

I think the best thing was that we were quite united in that sense. That we didn't have like arguments or no one was disagreeing or we had like a, especially in our faculty, I think we had a uh, well, I don't know the English word but, everyone was like together in the situation. And everyone felt that we have to deal with this together there's no like room for argument or, even if we disagreed we discussed and it was really good discussions and good viewpoints and then we get a nice compromise in quite many cases. So, I think that was that was a good thing in my opinion. (Anneli)

8.5.3 Information flow: Environmental sensing and situational awareness

I knew [that] there was a kind of a suggestion from the university level management board from this smaller group of people who prepared, there was already made a kind of a suggestion how do how do we do it. And then I had some time to discuss within our faculty. I shared the document with the vice deans and the heads of department, and they collected ideas from their closest professors and teachers of the department, and then we had a discussion before the meeting. (Unattributed participant)

And so we were looking at it because I believe in systemic thinking. So we were really looking at the whole ecosystem that we function in and looked at that. But it was through that extended management group. And then we had our own kind of [unit] level management group. And then through that we were able to just kind of really make sure that everything in [the unit] was working fine. And through that we were able to look at the whole universe. (Johanna)

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Information flow as a theme was developed by recognizing that leadership reg-

ularly discussed not just how they communicated decisions out to their staff or

students, but also how they collected information from those same groups to

make informed decisions. Information flow could be viewed as a portion of

adaptive leadership and complex decision making, but its prominence in discus-

sions and importance in the leadership response of the university warranted

splitting it out into its own theme.

Leaders often gathered information from their staff both via formal and in-

formal mechanisms. Formal mechanisms most frequently entailed meetings

with leadership teams that were immediately subordinate to the leader (e.g., a

dean meeting with vice deans and department chairs), though unit heads also

reported that all-staff meetings of their units were used for information gathering

(though less when time was of the essence). No leader reported using a survey

for information gathering purposes from their staff, though surveys were used

by some working groups on campus to identify needs of certain groups (e.g., a

survey asking what teachers needed).

Researcher: So it wasn't like you were running surveys.

Petteri: No, no. We didn't have time for that.

Informal mechanisms of information gathering entailed personal contacts

with individuals, frequently targeting contacts that the leaders thought would be

most likely to be able to provide the needed information. These informal mech-

anisms were used at all levels of leadership - from the rector down to department

chairs and lower-level groups – and were frequently mixed with official channels

as well (e.g., a formal meeting of leadership in a unit leading to informal infor-

mation gathering at the lower level; see lead quote for this section).

The term "situational awareness" was used by multiple leaders, especially

in the context of gathering information about factors external to the university,

such as national or regional regulation changes, the pandemic's status, and what

other organizations were doing. It was also understood that the uncertainty with

which the environment could be sensed was often lower than desired, and this

was a significant challenge to leadership, as Kristian referenced by saying, "is our situational awareness 90% correct, or is it 40% correct?"

While copious work was done to collect information about the current status, especially in the first year and a half of the crisis, it should be noted that environmental sensing was not always successful, and leadership was sometimes surprised by the response of their staff:

Well, our first attempt to return back to campus was 2021. Autumn term. When the COVID situation looked like it's getting better. So, university was encouraging people to come back to university and they started this first face to face teaching. But I think that everybody was quite surprised in the extended leadership team, and including myself, that our colleagues were not that enthusiastic of returning back to office work. (Unattributed member of the Extended Leadership Team)

Multiple leaders commented on the need to have a more formalized information gathering system in place:

Perhaps also something that we could have done better is to have kind of a ready thought procedures, how to collect this information from faculty members (Petteri)

8.5.4 Metrics and priorities

A graphic included in all reviewed Extended Management Team meeting slides described the priorities of the university during the crisis, which had been decided in March 2020. The university's stated priorities were described by Kristian:

So first number one is that, so this is quite big thing, that our top objective was not for example to continue top research. Top objective was that with our own actions we are trying to limit the extension of COVID at the university but also generally [in the community], for example, because we as big organization we have a big impact. Continuation with the digital way, distance connection, prioritized actions at the campus site and preparedness for post COVID time. And then fourth, later on, was about well-being. (Kristian)

When asked about priorities during COVID, the majority of leaders did not mention limiting the spread of COVID, but instead stated that their priority focused around ensuring that students would be able to progress in their studies and graduate:

I think one of the top priorities was to think about that the graduation and the advancement of studies for the students is not limited. So that they can advance their studies. At first it was so that okay we need to make sure that that they can advance their studies somehow, they have something to do. Then maybe on later stages it's when we realized

that okay, this will continue forever then it was about the well-being of the students as well. (Anneli)

Leaders expressed universally that as the pandemic progressed there was a growing concern about student well-being, which began influencing decisions as early as the fall of 2020 and continued influencing them as late as fall 2022.

And especially when the new students came and there was this discussion that how do we make sure that the students commit to their studies if they never see anyone, or if everything is online? So, there was some specific [guidelines] so that the first year students can come to the campus, they can have these small meetings, but other older students need to stay away. Yeah, so that was, that was also a policy. I think that's the first autumn [2020] that was the policy. Maybe also in 21 [researcher's note: documents confirm it was]. (Anneli)

And like now [in late 2022] we have very strong emphasis on campus teaching, and that was because we had some surveys of the student well-being at a university level, but also following really, really carefully the surveys on the national level about the student well-being. And that was a very strong emphasis, that during, that we are going to sort of emphasize campus based teaching this autumn [2022]. And I'm really happy that it has been sort of going well and the students are back on campus because it was really, really difficult time for students. (Hannele)

Yeah. The reason behind [the rapid reopening in January 2022] was the huge worries coming from Suomen hallitus [the Finnish government] about the mental situation among the students. And if probably you have followed the newspapers as well, but if you go these to these weeks and check from the newspapers, the situation was that in the other hand, it would be good to be in remote teaching mode. But at the same time, the pressure coming from society, from some parents probably more than from the students, to open. So, it was kind of conflict between these different two different ideas. (Kristian)

When asked about metrics that were used to evaluate the success of the university or their unit's success at mitigating COVID (the university's stated top goal), answers nearly always started with a long pause. Student metrics such as graduation rate were tracked, but this happened later and in a post-hoc manner, as Petteri states:

What else did we monitor? [pauses] So then later on, we'd be monitoring what were the likely effects on students: how many credit points they got, and how many, what was the rate of graduation, how many bachelor's degrees, do we see any sign of COVID in our bachelor's degrees, and also master's degrees. So that's what we monitored. (Petteri)

The staff well-being survey, a no-more-than-annual instrument, was referred to by multiple leaders when discussing metrics

The second metric was the from the staff side we had the staff well-being survey. And that was in twenty one. In the spring I think. And I was really worried. And we had [a good score]. And that for me was really important. Then I was checking what our kind of sick absence days were. The Terveystalo statistics. What were the reasons our staff members were away or contacted Terveystalo. (Johanna)

But these metrics were not used on a daily, or even monthly, basis:

Researcher: For the things like the sick leave absence days and like the TerveysTalo stats. How often were you looking at those and are you still looking ...?

Johanna: I am. All the time. I get that data automatically every year.

The metric that appeared to be most used for real-time tracking of success at mitigating COVID and evaluating success during COVID was counts of the number of reported infections in each unit:

So the deans in our university Extended University Management Team were reporting about if the COVID has been spreading in the teaching or on campus. And we were monitoring the COVID numbers at the very beginning at least for some time. That was one measure that we wanted to prevent. The strategy of the university was to help to prevent the expansion of the COVID on campus. And that was a success because we didn't have too many COVID incidents that had been spreading in our teaching or in our locations. (Hannele)

These data were collected frequently, and shared at the beginning of each Extended University Management Team meeting:

So what we had to do is we had to report. So every separate institute and faculty had a chart. Where we I think every third day reported the cases, the use of facilities, the needs, if there are any concerns. And we [the Extended University Management Team] always started, we had meetings I think twice a week, at least, sometimes even more frequently. And then we everything that you noted in that your own chart was just kind of brought up in that meeting. (Unattributed dean)

This data collection drove decision making at the unit level, as multiple leaders indicated that they constructed complicated systems to plan and track which personnel were in which room at which time, and why, with the explicit goal to minimize disease transmission and facilitate infection tracking in the event of an exposure. One dean-level leader described how they personally verified that their workers' spreadsheet logs were accurate by aligning them with electronic door logs. This collection and public sharing of infection counts in each unit was continued until roughly the Omicron wave hit, when infection tracing ceased in the city and when the concern over infections diminished "it was [when Omicron came], it little by little, it came as normal thing that people had these infections" (Kristian). After the infection-count data collection was ceased, no clear set of metrics or data appear to have been chosen by leadership to evaluate the success of leadership decisions regarding the crisis. Unfortunately, the precise date on

which unit infection counts and reporting at the Extended University Management Team stopped has been unable to be determined.

9 VOICES OF THE LEADERS

But think of how think how little we knew. We just started seeing those people being hospitalized, people without any real reason, just getting the virus and then boom, ER, and then intensive care unit. And so, it was really scary. (Johanna)

This section of the results will focus on giving voice to the interviewed leaders, sharing their own thoughts on the personal lessons about leadership they learned during the crisis and the advice they would give to future leaders facing crises. These are unattributed to prevent participant identification and presented with only a minimum of analysis to allow the voices to each stand on their own.

9.1 Personal lessons learned about leadership

The second-to-last question of each first interview typically asked participants to identify lessons about leadership they had personally learned during COVID. Topics discussed in response to this question varied widely, ranging from comments on leadership style to the importance of trust and communication.

Some leaders talked about their experiences during COVID altering some of their core assumptions about leadership, such as how much personal situations should be taken into account, how much can be accomplished at any given time, and how important informal leadership actions can be:

I think I've learned that I have to take into account people's situations even more. Like, we have this tradition of keeping work life and private life separate, and I think it's perfectly OK. People don't have to tell me anything about their private lives. But if somebody opens up about something, then I have to take it seriously. I have to acknowledge that it's a part of, it affects their life. It has to be taken into account.

For me, COVID was quite a hard individual lesson. Because maybe I worked as much as I could. I found my limits. Maybe I went over to my limits. Maybe I learned that less is more. Before COVID, I tried to make quite many reforms at the same time. But maybe it increased my understanding for staff members that less is more. Less is more for them, less is more for me. So, I tried nowadays to focus more on just the priorities.

What I learned as well is that there are formal ways of work, formal ways to do leadership or to lead people. But very important is also informal ways. Like rector had phone calls, [they] called every now and then to deans, how are you? How is your unit? So, it's not only followed by the formal structures, formal meetings, but what are between of those. Working together and trust were the most mentioned personal lesson learned. Leaders reported realizing that no one alone has all the knowledge or skills (or time) to address all the issues that need to be dealt with during the crisis, and thus trust and collaboration were keys to successful crisis management.

Perhaps it was kind of a very practical, I knew already before this pandemic that whenever there is, that there are important decisions to make, you have to involve people somehow. But this was really kind of a must that at the university level, and I personally realized that this is something that I can't make the decisions by myself only. I have to listen to what people say. And I kind of knew that already before, but because it was largely a question how to organize things in practice. I realized that I don't know, I don't have the knowledge. I don't know what are the requirements of people's everyday life. Everyday working here at the university. I don't know. They are their own expert. They are the best experts, and I have to listen to them. That was perhaps something that I started understanding more deeply.

I think it's very clear that we need to work together. I mean that we need to create structures where people can meet, that you meet to maintain structure where people can meet, and we need to emphasize the good sides or the benefits of seeing people working together. Also in informal context. Community in that sense.

Trusting the staff. And you know, the whole idea that that you trust people and you trust your instinct.

I have a sort of management team in my unit. Those people are really involved also in everything. So, share and delegate things. It's not possible to do everything on your own.

You build trust and confidence on a daily basis. And that is a kind of base for everything that comes after that.

There's a lot of knowledge and ability in the group, so that you don't have to decide alone. And also that gives you feeling that I can rely that wise decisions are done. And maybe some people have little bit more information on something than I do have.

Communication was a commonly mentioned theme throughout the interviews, and unsurprisingly was mentioned by multiple leaders as a core personal lesson. Communication issues highlighted were the need to adjust communication mechanisms to match the needs of the situation, the changing expectations around communication (e.g., remote meetings being useful to reduce travel demands when people from different cities are meeting), and simply emphasizing the need for copious communication.

One of the lessons learned [is] that there can't be too much communication. There has to be communication, a lot of communication and also, communication and repeating the communication and communicating also if you don't know something. And that's something that is one of the lessons learned. So, I was trying to do that, but I now realize that I didn't do it enough. So, it's always a lesson learned to remember to communicate a lot.

I learned where the personal communication is essential. And I learned where the sort of Teams or Zoom or something like distance communication is maybe better than [those].

Like I said in those big meetings for where people are coming. I wouldn't like to travel to [another city] for two hour meeting. Not anymore, two times a week when it can be online. So, I learned where the online meetings are better. But I learned where the online meetings are not the best possible choice.

I would say as a semi-introvert person, that it it's quite easy to be at home [both laugh], and quite easy to communicate via email and Teams. And for example, leading the group remotely is maybe a bit challenging. Because if you are here they can come here and talk with me whenever they want. ... But I would say that you have to, like, in the research group sense you have to mark your calendar that you have to contact and ask how they are doing. Because it's easy to be at home and easy to be in the Teams meetings and just concentrate on your own things and not about the group things. Maybe in a sense it's also about the students. That if you don't meet them, it's maybe easier to just to like, you realize after one month that you haven't seen the person or heard anything and then you have to write an email and ask them. So, I think the leadership takes maybe a more effort if you are not around, if you are at home.

Two leaders emphasized the realization that they, and those around them, could accomplish far more than they thought possible, thus they left the crisis with an enhanced sense of ability and positivity:

Well, maybe this classical: Keep calm and carry on. In that sense, if somebody had said ten years ago that OK, you will have pandemia and you will have war and coming. ... no one was so pessimistic. But that took place. So, I think now at this point, I think it's kind of amazing that we can still work, function effectively and maintain our kind of sense of security.

And we survived it. We did it. So that I think is the biggest lesson. And that's what I tell our teachers and our staff. But also, I think I just kind of [pauses] the biggest lesson is that that it's amazing what kinds of situation we can survive, you know, when our lives are not really threatened, even though they were, but secondarily, but not primarily. I think that that's an empowering thought.

Of particular relevance to this report, one leader reflected on their observation that the challenges most people identified during COVID were not necessarily unique to the COVID era, but instead had been present all along and were just highlighted by COVID.

I think a lot of the things that we do during the crisis we also do during the normal times, we just don't realize that we don't do them as well as we could. [Laughs]. And then we pay attention to those things in the crisis situation, and it's not really helpful going back to the normal work, because then we end up repeating the same mistakes. ... like we pay attention to meeting people when we are in an online situation, but do we pay attention to that in a face-to-face world? I don't think we do. So, I think things that seemed difficult during COVID probably will go on being difficult also in normal times.

9.2 Suggestions for future university leaders for the next crisis

The final question of each first interview was the "time capsule" question, which asked participants to consider what they would put into a time capsule to help future leaders, especially leaders of units like theirs, during the next unforeseen

crisis. As with leadership lessons learned, responses varied widely, ranging from personal guides and licorice packages to organizational models and almost philosophical reflections. One such philosophical point was a message emphasizing that crisis leadership decisions in higher education almost always directly affect people.

Remember that these are people. Now we are talking about people, not some box of resources that need to be moved from one place to another. It's actually people with their situations. Remember that these people come back, so, we still have things that we have to solve in our everyday lives. And, like I said, in the contracts and in the ways that the university treats people differently based on whether they are temporary or fixed, or permanent, those things don't go away. So, it's not just about organizing the transition to online and back, but it's about what happens to the people all the time every day.

Taking time to be able to calmly (or as calmly as possible) reflect on what is happening was mentioned.

Breathe. Don't rush into decisions about things that you don't understand.

Don't fill your calendar too tightly. To have time to think and react. Because it was a kind of a... What really happened is that I had to reschedule everything. My calendar was too full of things. And that's perhaps a little bit more my personal problem, that I tend to have a calendar that is too full. I should reserve time just to prepare, to plan, and think.

One leader integrated the idea of calmness with the importance of being a visible leader while also creating shared-leadership structures to facilitate operations.

But I think that you lead from the front and you just have to show with your own example. If you start looking very anxious or if you start like creating this kind of air of uncertainty, so you definitely get it across [to] your staff. So I think it's like calming yourself first and then having these like really functional groups, not just groups for the sake of the groups, but functional groups that you know will be able to address this aspect of our actions.

As with personal lessons learned, messages of positivity, of "you can do it," were also mentioned:

Maybe such a message that we did it and we managed pretty well so don't lose your optimism. And of course, nobody knows so, but, so, maybe that kind of optimistic message that together we can make it.

Well, in general my guidance in life is that in the end everything will be fine. So, that's probably what I would say, that don't worry, it will it will be fine. It may take some time, but it will be fine.

One leader chose to focus on communication as their exclusive message, and their quote leads the Communication thematic analysis section (section 8.4.1).

Models and guides for leadership practice were a repeated suggestion, including models for decision making during crisis, daily routines for leaders during a crisis, models of organizational leadership, and strategies for building community and promoting self-leadership.

We devised loads of charts like things that help you analyze what is what to prioritize, for instance. So, I would probably put all that material in there so that they don't have to reinvent. ... and then because nobody can do leading alone. So how do you involve people in the kind of leading process? And how do you help people, every single person, to lead themselves? Because that kind of self leadership is really crucial. So, I would have one list for the director that this is your kind of every morning thing that you do and repeat in front of a mirror. This is the kind of structure that you build within your staff, the kind of supporting groups. And these are the materials that you can use. And then the social aspect that even though we're isolated, how do you create the sense of belonging and sense of purpose of amongst your staff? ... And then it would probably have some licorice.

I am coming to the same idea what we discussed earlier. And if you remember this framework, that organizational culture, management and processes, and leadership. And organizational structure. I would still like to strengthen both our leadership and to try to make more clear processes, roles, and responsibilities. Because by doing that, it will help us how the organizational culture is.

I put this paper [outlining a strategy for building online community during COVID] as a heritage for them. So maybe that's the important thing. Because it's not just for the time for crisis. This is useful for normal life. To have a structure, have a schedule, have a feeling that you have a good competence. You have a motivation. Those are important things to rise up even if we have no crisis.

And, to echo the prior section and close with a comment that is especially relevant to the topic of this report, one leader remarked that the most important crisis leadership task is not to focus on leading during a crisis, but instead to ensure that everyday operations are running as well as possible, to build capacity and trust that will be useful during crises.

Well, I think that the best way to prepare for the future is trying to do things as good as possible today. So that, and also think what is the plan B and plan C for different situations. But I think that the basic thing is that our organization, our communication, should be as good as possible today. Because then it's possible to build, and make changes, when there is trust among people. Trust in the leadership. Trust with our colleagues. And I think that this trust in leadership is enforced if leadership works well today.

10 DISCUSSION

The aim of this study was to determine how leadership was conducted at a Finnish university during COVID (research question 1), who influenced crisis leadership decisions (research question 1), and to identify lessons learned, both theoretical and practical, from leaders' experiences of crisis leadership during COVID at the university (research question 2). To achieve these objectives a descriptive and thematic analysis was carried out on transcripts of semi-structured interviews with nine leaders at a single Finnish university, the results of which were triangulated with documents provided by the leaders and publicly available documents such as press releases.

The descriptive analysis identified that while the rector of the university retained ultimate power over decisions, the leadership structure of the university changed during the crisis, with the Extended University Management Team switching from a passive to an active role that entailed frequent meetings and copious discussion (section 7.1). Existing crisis leadership themes of planning, crisis phases, communication, well-being, collaboration, context, and adaptive leadership and complex decision making, were all strongly supported as important elements of crisis leadership at the university during the crisis (see sections 0, 8.3, and 8.4). Newly identified themes that emerged from the data were time, culture, information flow, and metrics (see section 8.5).

In the following sections the identified themes will first be integrated into an overall model for leadership during crises and emergencies, after which highlights of the results will be discussed (such as the creation of a dynamically adapting organic information flow structure and the influence of metrics) along with a summary of some successes and missed opportunities of leadership at the university during the crisis. This discussion section will conclude with a discussion of strengths and limitations of the study, policy recommendations, and final thoughts.

10.1 Integrating existing theory with lessons from COVID: A model of crisis leadership

The findings of this study are consistent with existing leadership literature. The changing leadership structures and adaptive information flow at the university (sections 7.1.1 and 8.5.3) align exceptionally well with contingency organizational theory (e.g., Donaldson, 2001), and the concept of the current environment being highly unpredictable (e.g., Alava et al., 2012; Liou, 2015; Risku & Tian, 2017) was nearly ubiquitous in participant responses. Discussions of communication (section 8.4.1) often included clear indications of leaders using communication as a mechanism for leadership via sense-making (highlighted as key in crisis leadership by Wu et al., 2021; see sections 1.4 and 2.2) during the crisis (though, interestingly, sense-making actions seemed less prevalent later in the crisis). Elements of Nordic pedagogical leadership (e.g., Alava et al., 2012; see section 1.5) were evident throughout the crisis, such as agency (section 8.5.2), collaboration (section 8.4.3), a focus on flexibility (section 8.4.5), and a recognition of the importance of context in education (section 8.4.4).

More specifically focusing on crisis leadership, this study has shown strong support for many themes present in existing business and higher education crisis leadership theory (see sections 2.2 and 2.3), while also identifying new themes (see chapter 8). These existing and newly identified themes have been integrated into a model of crisis leadership that is intended to facilitate higher education institution preparation and response to crises and emergencies (Figure 6). The following text describes this model, relying extensively on background presented in Chapter 2.

Figure 6A model of crisis leadership based on integrating existing crisis leadership theory with the experiences of leaders at the university.



Time, referring broadly to such items as where the organization is in the current crisis timeline; how much time is available for decision making and other actions in the current operational environment; and the continual change of the world as time passes, is an overarching element of crisis response that interacts with nearly all other crisis leadership components (data are in sections 8.3 and 8.5.1). The crisis may be acute (short-lasting), chronic (long-lasting), or of uncertain duration, and all three of these require different responses. Chronic crises appear to have been understudied (e.g., discussion of them is lacking in recent reviews, such as Striepe and Cunningham (2021) and Wu et al. (2021)), and the term has even been used to refer to other concepts, such as Liou (2015) describing the post-crisis "clean-up" phase of a crisis as the "chronic stage" (p. 252). Crises have phases, which must be recognized and responded to appropriately and timely, especially the critical pre-crisis time (see more in section 10.6). Varying time pressure will also be a factor throughout the crisis: at some points, especially during emergencies (see definition in section 2.1), decisions may need to be made in minutes, while at other times, such as during non-emergency phases of chronic crises, decisions may be able to be made over the course months. In summary, decision-making structures, information flow structures, and planning practices

need to all be designed and implemented with the effects of time in mind. While time has not been a theme of prior crisis leadership research (outside the obvious limits of it in acute emergencies), Striepe and Cunningham (2021) discussed the probable importance of adding time limitations as an element to educational leadership theories to help them be applicable to crises. The results of this study support the importance of time for educational leadership theory, and suggest that the concept should be applied in a broad fashion (as described above), not a narrow one (limiting it to solely a lack of time during acute emergencies).

The **culture** and **context** of the organization and the crisis itself play a central role in the crisis response (data are in sections 8.4.3, 8.4.4, and 8.5.2). Planning, leadership structure (including how it will adapt to crisis situations), and information flow must take both the organizational culture (How are decisions made? How trusting are people? How much agency do people have / expect? Etc.) and the context of the potential situation (Has this happened before? How much of the university and society is the crisis effecting? Who are the particular leaders involved? Etc.) into account. The trust-based, collaborative-decisionmaking culture common to Finnish educational environments was central to how information was gathered and decisions were made at the university; these very same (successful) information gathering and decision-making structures could have been disastrous in other contexts or cultures. The interaction of culture and context with the other crisis leadership factors is bidirectional, though, as preparation, adaptive leadership, and information flow also work to change culture and context (including through, for example, leadership by sensemaking, by which leaders may both change the culture and alter people's perceptions of the crisis's context).

Preparation, meaning readying the organization for potential future crises and future stages of the current crisis, is essential to any organization successfully navigating crises (data are in sections 0 and 8.3). This work must not be limited to shelf plans (as the University's existing contingency plan appears to have largely been, and many other plans are (Fast & Fanelli, 2003)), but must entail useful preparation for a broad range of potential crises / circumstances by a

broad swath of the campus, not a few individuals in the campus planning office. Including all elements of crisis leadership in this planning is essential: for example, how leadership structures will adapt to crises, how information flow will occur and change during crisis, how well-being will be monitored and cared for during crises, how metrics for leadership decision making will be decided on, and how all of this will be implemented. Practicing crisis leadership skills is also essential. While it is tempting to attempt to plan for all possible scenarios in detail, that quickly becomes an impossible task, and thus plans that focus on general leadership practices and structures may be more useful, as long as they are regularly updated and planning / environmental sensing for high-likelihood crises also takes place.

Creating structures to support bidirectional information flow, including both outward communication from leaders to others as well as environmental sensing / information gathering by leaders, is also essential (data are in sections 8.4.1 and 8.5.3). While outward communication by leadership during a crisis has been discussed extensively in crisis leadership literature (e.g., Buama, 2019; Striepe and Cunningham, 2021; Ulmer et al., 2007; see also sections 2.2 and 2.3), determining how the organization will collect information (both about the internal and external environment) during the crisis, potentially under challenging circumstances and highly variable time requirements, is highly relevant operationally. Thus, in this model "information flow" replaces the more traditional "communication" component, recognizing that information flow must be bidirectional to allow for appropriate situational awareness to be developed by all involved in the crisis. Information flow must be maintained, revised, and evaluated throughout the crisis: it is not sufficient to collect copious information or rapidly share decisions early in a chronic crisis, only to let those mechanisms atrophy, or fail to adapt to changing needs, as the crisis continues (an example of the interaction of information flow and time). Information flow should also be viewed with a critical lens, aware of power structures and equity issues (see, for example, Dunn & Eble, 2015).

Adaptive leadership is the final component of crisis leadership identified in this study, and it involves recognizing that existing decision-making structures and leadership practices will almost certainly have to change during crises (data are in sections 8.4.2, 8.4.3, 8.4.5, and 8.5.4). As will be discussed below (section 10.2), decision-making structures adapted rapidly at the university, changing both the upper-level groups involved in influencing decisions as well as utilizing organic, non-managerial, information flow systems. Planning for leadership changes in a culture, context, and time-aware manner, and publicizing these changes both during preparations and during the crisis, will undoubtedly facilitate operation of these revised systems. Recognizing the power of collaborations (both within and outside the university), the impact of which metrics are chosen by leaders to evaluate success at crisis mitigation (see section 10.3 for more), that decisions will need to be made with less-than-ideal information, and the importance of attending to the well-being of all campus community members, are also key elements that will require adaptations in leadership practices during crises.

These separate elements: time; culture and context; planning; information flow; and adaptive leadership all interact with and build upon each other. Likewise, lack of attention to one can inhibit optimal responses in other areas.

10.2 Leadership structure and organic information flow

There was broad agreement by upper leadership that flexibility and dynamism was an essential component of the university response to the crisis (see data in sections 8.4.4 and 8.4.5), which is in agreement with existing crisis leadership theory (e.g., Liou, 2015; see more in section 2.3). The university was so large, with so many distinct operational units, that there were few one-size-fits-all solutions to problems. Instead, decisions were debated at the Extended Management Team and guidelines were proposed that attempted to be flexible enough to fit all the needs of the campus units through interpretation by leaders at multiple

levels. While this led to some challenges and beliefs that some units or individuals were getting advantages over others (when unit interpretations differed), the reflections of Kristiina (page 72) highlight that some in the organization were moving away from the cultural norm of strict equality towards a practice of recognizing that individual circumstances may warrant differential treatment.

Probably the largest organizational dynamic adaptation to the crisis was altering the role of the Extended Management Team from that of an occasionally meeting management group where unit leaders typically just listened into a frequently meeting group engaged actively in information flow (both gathering information about the status and needs of each unit as well as communicating out upcoming topics of discussion, draft decisions, and final decisions). This change created a more centralized leadership system, but a less directive one (at least at the dean level, due to the increased participation of unit leaders in decision making), and thus the alignment of this study with Stoker's (2019) finding that business leadership tends to become more directive during crises is uncertain. While the repurposing of the Extended Management Team remained within the existing Universities Act-inspired managerialism style of leadership (an existing committee was simply repurposed), a separate adaptation also appears to have occurred: the increasing use of organic communication networks for information gathering.

The need for rapid decision making during periods where time was of the essence led to the lack of ability to follow traditional bureaucratic, managerial procedural models of decision making, especially at lower levels of the organization. There was simply not time to arrange meetings, or put notes in newsletters, for all the potential groups that were affected. Instead, information was distributed to the heads of faculties and other units at the Extended Management Team (or via its Teams board), and these unit heads then quickly distributed this information down their organizational structure, using both formal and informal systems. An example of this informal system is described by leader in the quote that leads section 8.5.3, as they detail how they sent draft suggestions to vice deans

and department heads, who then sought out feedback from those in the organization they felt most able to provide useful feedback in a timely manner.

Thus, instead of formal meetings being used to distribute information, or formal polls or other information gathering systems being used, data suggest that in times of emergency, in at least some units, information was distributed rapidly down through leadership and personal networks, with decisions or input quickly gathered and then sent back up the networks to the representative who sat on the Extended Management Team (see section 8.5.3). It appears that at each node individuals took a dynamic approach to decision making: they processed the information they had received and decided if they could make a decision themselves, or if they needed to gather further input. If the information needed to be sent along or feedback gathered, committees and regularly-meeting groups were considered, but if time was of the essence, then individual contacts were chosen based on how relevant their experience was to the decision that needed to be made. This resulted in an environmental sensing and decision-making system that was able to rapidly issue proposals, distribute those to the most important individuals, and collect feedback from those individuals in a matter of hours or days, far faster than typical academic decision making occurs.

I term this type of system a dendritic, or organic, information flow system. There were still clear hierarchies (the unit head, e.g., the dean, was often the only one to receive proposals, and was often the only one with formal input into the final recommendation), but the managerialism-inspired committee structures of the campus were not always used, and the within-unit committee structures were at times bypassed in favor of the rapidity and efficiency of person-to-person connections. Just like the dendrites of the human immune system take information from one cell directly to another cell, each person in this system sought out specific individuals in their network who were best suited to deal with the information that needed processing. Rapid, low threshold communication occurred, and information transfer was exceptionally quick.

While the system worked well, especially during times of emergency, the greatest danger of this system from a leadership perspective is that people are

being left out of the organic network, and thus the information flow will be incomplete. This could lead to core information, or core options, not being obtained / considered, and could lead to people feeling left out of the "loop". For example, one leader reported that their opinion was never obtained by upper management, despite apparently being a core node in their superiors' organic information sensing system. Multiple leaders commented on the need to have a more formalized system in place (see the end of section 8.5.3).

Thus, a recommendation from this study is that, depending on the organizational culture and context of the crisis, it may be optimal to plan for extensive use of a dendritic network for decision making in crises, especially when time is of the essence. However, publicizing and/or formalizing this system, especially key nodes in the network, will ensure that individuals from all portions of the campus community have access to the organic network (both to get information into and out of it), addressing equity and fairness concerns while still allowing the rapid, efficient information processing allowed by the dendritic system. Of note, also, is that when time allows, using the more standard decision-making structures may be preferrable, as the university did when decisions with longer lead times were conducted (such as how teaching should occur in the subsequent term).

10.3 Metrics

While metric-based leadership may be scorned as an unfortunate result of New Public Management-inspired policies (see more in section 3.2), this study showed that active, thoughtful choice of metrics is likely key for successful crisis leadership (data discussed in section 8.5.4). This idea is in line with the existing crisis-leadership trend of encouraging an enquiry approach to crisis leadership (e.g., Buama, 2019; Pedraza, 2010).

When the university had clear, actionable, real-time metrics in place (before the Omicron wave stopped infection tracing in the community), university leadership's crisis response was clear, strong, and successful at mitigating the crisis. Leaders discussed the manifold ways they worked to ensure their unit's continuing crisis operations would not cause their metrics (infection counts in their units, reported at least twice a week) to worsen while doing their best to support student and staff success. This led to a direct link between mid-level leadership's actions and the stated top goal of the university: to limit the spread of COVID in the university and community at large.

Once the university's primary metric (infection counts in units) was lost, decisions were based on a wider range of phenomena. Most of these replacement phenomena, like student well-being, graduation rates, and staff illness rates, had data collected on such a slow timeline (and in the case of student well-being, were so relatively ill-defined) that they were impractical to use for time-critical decision making or progress evaluation. Post-Omicron, leaders did not discuss their decisions with anything similar to the clarity and purpose of the infection-metric period, and there was no clear response to the crisis or even apparent evaluation of how the university was doing at managing the crisis; the university moved to return to normal operations in response to external pressure (see section 8.5.4) at the start of a time when deaths from COVID in Finland would quintuple (see section 4.2). Students or staff, or close associates of those groups, dying or becoming disabled from infection with COVID was still very much a concern when the infection-counting metrics disappeared in late 2021, yet possibly as a result of the lack of replacement metrics to assess evaluation of operational decisions, these topics were not discussed by any participant as inputs into their decisionmaking process later in the crisis. Given the performance of the country as a whole during the Omicron wave (with 1.4 deaths per 1,000 people since December 1, 2021, see Table 1) and the risk of negative outcomes after COVID infections (see section 4.1), the risks to students, staff, and their close associates of a return to on-campus operations with minimal or no infection-control protocols were almost certainly not negligible.

While the metrics used by leaders during a crisis will necessarily depend on the particulars of the organization, its environment, and the crisis at hand, a thoughtful and explicit choice of metrics that can be evaluated on timescales relevant to leadership's needs should facilitate successful navigation of the crisis. This is especially true since the existing pre-crisis policy-based metrics the university has been using will frequently conflict with the needs of the organization during the crisis (e.g., national funding models that are based on graduation rates and research output may conflict with needs to close campus facilities during an emergency). Re-evaluation of the metrics as time progresses is, of course, also called for. And, while it should be obvious (since this entire study is qualitative), metrics need not be quantitative to be useful for crisis leadership: qualitative metrics, when thoughtfully implemented, have great potential (e.g., thoughtfully aggregating qualitative well-being data from a diversity of campus leaders, each of whom is gathering data from those they lead, could facilitate a rapid, responsive evaluation of crisis well-being).

Metrics chosen by leadership should reflect their goals for the organization. So, to take the Omicron period of the crisis at this university as an example, the organization could have set many goals, such as: reducing COVID's spread at the university, supporting the physical health of students and/or staff, supporting the mental health of students and/or staff, enhancing the workplace satisfaction and/or productivity of staff, maximizing the progress and completion rates of students, maximizing the learning gains of students, or encouraging the re-engagement of students and/or staff who disengaged during the first year of the crisis. Each of these goals could have been operationalized into measurable phenomena, which could then have had data collected on them regularly throughout 2021 and 2022 to help assess the organization's progress towards goal attainment, thus facilitating responsive, enquiry-based leadership.

10.4 Variations between units

Contrasting the experiences of particular units may provide a window into the importance of context (the particulars of each unit's prior operational characteristics and existing leadership) and the varying mechanisms that can be used to address staff well-being, in responding to crisis.

While many units did not spend particular attention on online community building among their staff (occasional Zoom coffees excluded), one did. The leader of this unit, which already had a shared governance structure in place with multiple committees consisting of members selected from across the unit, focused extensively on online staff community building. Core to these efforts were regular (short) start-of-the-week all-hands online meetings and a weekly or biweekly newsletter in which all shared governance groups and leaders shared recent news, to which anyone in the unit could contribute at any time. This work was structured by an overall framework the leader titled "the emergence of community in the digital environment," which the leader developed at the start of the crisis. This framework included creating common goals, enhancing motivation and the desire to work together, building a sense of competence, having structure and scheduling, providing supervisor support, creating shared leadership, and facilitating regular communication that included emotional support. A member of the unit reported that they still have Zoom coffees in 2023, and most of their unit still works remotely most of the time ("I think it works pretty well" was their summary of remote work in their unit). It is possible that if more university leaders had implemented similar strategies during the crisis, staff satisfaction with remote work and staff well-being during the crisis could have been less of a concern.

As a contrasting example, another leader focused almost exclusively on inperson interactions as a way to maintain unit cohesion and staff well-being during the crisis. This leader strove to build systems to allow staff to come to campus to work in COVID-safe ways, complete with copious tracking, and also discussed holding outdoor events for staff far more than any other leader. Teamwork was also a common element of this leader's strategy, with staff working in small groups on most projects to facilitate redundancy and well-being. Teams and online meetings did occur, but this leader discussed on-campus work much more than any other leader.

These two examples illustrate the wide variation in possible responses, and it is likely that the context of the two units, including their histories, their particular leaders, and their role in the university, all played roles in these two very different strategies appearing to be relatively similarly successful.

10.5 Factors associated with successful crisis leadership at the university

Participants reported that, despite the crisis being extremely challenging for all involved, overall they felt the university had weathered the crisis well and that leadership had generally functioned well. Frequently cited elements of this successful leadership included communication, flexibility, the overall leadership structure, leaders focusing on staff well-being, creation of redundant systems, and collaboration (elements common to crisis leadership literature; see sections 2.2 and 2.3).

The university's public communication to students and staff was high quality and frequent, with dozens of Finnish- and English- language press releases coming out per month during key points of the crisis (see section 7.3). In-unit communication was generally considered to be good as well, with interviewed participants reporting they felt well informed of what was going on. Communication by leaders frequently focused on emotional leadership, in line with existing crisis leadership work (Striepe and Cunningham, 2021) and validating the call of Wu et al. (2021) for additional research into emotional leadership during crisis.

There was broad agreement by upper leadership that flexibility was an essential component of the university response to the crisis. Decisions were debated at the Extended Management Team and guidelines were proposed that would be able to fit the needs of the campus through interpretation by leaders at

multiple levels, with many participants reporting feeling trusted by their superiors to flexibly interpret guidelines.

The revised leadership structure, which included leaders of all units intimately in the management of the crisis, was effective at facilitating bidirectional information flow. All interviewed dean-level leaders reported that they felt their voices had been heard when decisions were made at the university level. That this revised structure was maintained throughout the crisis, and even used for the following (Ukraine war) crisis, was testament to its utility.

Staff well-being was repeatedly discussed by the leadership. Even though the different leaders addressed this topic in very different ways (e.g., facilitating online community building vs. encouraging as much in-person work as possible), the attention to staff well-being and how regularly it was sensed (formal surveys were rare, but leaders regularly reported attempting to determine staff well-being in practically every meeting they held), especially in the beginning, likely facilitated enhanced operations and staff well-being during the crisis.

Redundant systems were frequently recognized as an essential component of the university's crisis response and as key for successful future operations. Multiple leaders discussed creating "survival plans" for their units at the start of the crisis, and many leaders modified their unit structures to enhance redundancy, thus allowing no single individual or system to be solely responsible for a core unit outcome. This redundancy helps during normal operations as well, since individuals and systems will still occasionally be unable to perform their duties for a wide variety of reasons, often unexpectedly. This redundancy should, ideally, enhance the well-being of staff, as staff will know that when they fall ill or have a personal crisis they are not obligated to come to work, as someone else can carry out their duties.

Collaboration between leaders, units, staff, and institutions was extremely successful. UNIFI facilitated collaboration between universities and allowed the creation of a functional, useful multi-university scenario-planning group (though it seems as though it could have kept operating beyond mid-2021). Collaboration

within the university was enhanced, and units that had previously been viewed as isolated reported feeling more appreciated and integrated into the university.

10.6 Missed opportunities

While mitigation of COVID was extremely successful in the beginning of the crisis, and operationally the university continued functioning throughout the emergency and chronic crisis phases (even increasing its number of graduates in 2020), some missed opportunities emerged from the data.

The first missed opportunity is the apparent lack of recognition of the potential severity, and potential operational impacts, of the COVID pandemic during the pre-crisis phase. None of the participants indicated any serious planning taking place in the pre-crisis phase, and this lack of attention to the pre-crisis phase mirrors the lack of crisis leadership research on the pre-crisis phase (Wu et al., 2021). Even if some upper leadership did recognize the potential impacts and began planning (press releases reveal that a monitoring group was paying attention at least to travel restrictions starting in early February), the planning and pre-crisis work never meaningfully reached the unit-level or lower leadership. Thus, unit-level and lower leadership was left entirely unprepared for the mid-March lockdowns, which universally came as a surprise to them, despite lockdowns having already taken place in countries across the globe weeks (Italy closed public schools in 10 towns on February 21) or months (China's lockdown of Wuhan started January 23) prior (Kantis et al., 2023).

Given that the severity of COVID was known weeks in advance of mid-March, this lack of preparation seems suboptimal, as even small actions could have had large positive benefits. For example, starting scenario discussions with the Extended Management Team in late February (say, after the Italy school closures) would have almost certainly allowed all units the time to start drafting plans for the worst-case scenario, and to recognize the increasing likelihood of its arrival as the global news got worse and worse. While hindsight is 20:20, even a few meetings and a few communications could have made a major difference in

the preparedness of the campus, and its staff and students, for the massive changes that were potentially coming. This could have led to a smoother transition to pandemic operations and lower stress levels, especially among leadership, during the early days of the in-crisis phase.

Another major missed opportunity of the university during the crisis was the opportunity to become, especially in the post-crisis time period, a more equitable education and employment provider. During COVID, societal awareness was raised regarding the long-known fact that some community members are disproportionally affected by infectious diseases. For instance, older people, members of marginalized ethnic groups, and people experiencing poverty have all faced increased risks from COVID infection. Immunocompromised individuals, such as some people who have had organ transplants, are being treated for cancer, or have certain genetic conditions, are especially susceptible to death or negative outcomes from infectious disease. Prior to COVID, immunocompromised individuals often led a sequestered life and frequently had difficulty, or had to take large risks, when gaining employment or education. However, during the first year of COVID, ironically, these individuals were sometimes more able to participate in employment and schooling due to the copious use of remote technologies and infection-control measures (e.g., limited densities in rooms, masking, enhanced ventilation, and people staying home when having even minor symptoms of illness; see discussion in Connelly et al. (2021)). Educationally, offering courses via online or hybrid modalities (hybrid here used to mean teaching a course with students attending both in-person and online simultaneously) allowed at-risk individuals, or those with at-risk loved ones, to participate relatively equally in employment and education offerings.

However, when the campus decided to return to on-campus operations as quickly as possible at the start of the Omicron wave, infection control measures were rapidly removed (the last measure, a mask recommendation, was removed in April 2022), most employees were asked to transition to working on campus at least 50% of the time, and an explicit decision was made to allow instructors to

no longer offer online or hybrid versions of their courses (see section 8.4.2), meaning that most students faced the prospect of at least one, if not many, faculty member(s) requiring that they attend class in person in environments with apparently no infection control measures. Thus, at-risk individuals, or those who care for at-risk individuals, faced a return to the pre-COVID world and a terrible decision: continue their school or work and put themselves or their close ones at risk, or stop their schooling or work.

While multi-modal teaching, providing multiple ways for students to attend the same course, frequently requires more work, the question that arises is this: what value do the university and the society place on equity and opportunity for all? Could the university have reallocated funding, altered staff loads, or altered course design to make such an environment feasible?

The return to the office was often billed as required for workplace community, yet while building online community among staff members is challenging, as one leader at the university showed (see section 10.4), it is far from impossible. Thus, the question arises again: what is the value placed on equity for all staff? Could the university have worked to promote initiatives to facilitate online community building and collaboration? Could the university have maintained at least some infection control measures at worksites (which could potentially even provide financial benefits, by reducing missed work time and use of sick leave)? These measures need not have been personally invasive or even implemented for everyone: enhancing indoor air ventilation / filtration / sterilization, normalizing remote work (especially when possibly ill), or creating "low infection risk" dedicated workspaces (akin to the already existing allergen-free workspaces) could all have allowed at-risk employees a safe place to work with relatively minimal disruptions to operations.

While the well-being concerns of those doing poorly in the COVID remote environment were addressed by leadership, the concerns of those who were themselves, or had close associates who were, at high risk of negative outcomes from COVID (or other) infections, did not appear to have had their well-being considered as seriously. And as is often the case in situations involving exclusion, the voices of those excluded will likely not be heard in the community anymore because they are likely no longer in the community (being dead, disabled, or having left due to the actual or perceived risks). It would almost certainly be fruitful to use a critical theory lens when exploring this topic, inquiring about the power structures that were involved in pushing for the return to on-campus operations with essentially no infection control measures. The data collected in this study have not been analyzed with such a lens, but future work on this topic would be interesting (perhaps following in the footsteps of Mullet (2018) and Dunn and Eble (2015)).

10.7 The post-crisis phase

While prior literature acknowledges the difficulties in differentiating between the in- and post-crisis phases (e.g., Wu et al., 2021), the lack of a clear end to the COVID crisis seems to be relatively unusual for crises examined by prior research. As of the time of this writing (early May 2023), the World Health Organization still considers COVID to be an emergency (WHO, 2023a). Yet as of July 2022, the Director of the Finnish Institute of Health and Welfare was saying that COVID "no longer meets the criteria" to be on the "list of dangerous common infectious diseases" (YLE News, 2022b, p. 1), and in December 2022 the Finnish Institute of Health and Welfare reported that "it will no longer maintain separate guidance for those suffering from Covid-19" (YLE News, 2022d, p. 1).

A question thus emerges: did the crisis end, and if so, when? Based on the definition of crisis developed in section 2.1, it could be argued that from the perspective of the university, the crisis ended in early 2022. Data collected in this study reveal that leadership transitioned away from an in-crisis mindset in early 2022, with February or March being the most likely month for the transition. COVID was no longer something unknown and uncertain, other potential crises (the Ukraine war) were emerging, and the operational and reputational risks to the university from COVID were dramatically reduced, since the society as a

whole was no longer meaningfully tracing (or even counting) infections, and most businesses and other organizations were following a similar opening trajectory. Yet this transition away from an in-crisis mindset occurred simultaneously with the country experiencing its worst health outcomes of the pandemic, an unsatisfying result that warrants further consideration when it comes to defining and discussing crises (although Finnish society in general no longer viewing COVID as a crisis by early 2022 does align well with the country experiencing its worst health outcomes of the pandemic).

Regardless of whether the risk from COVID was over, leadership viewed the crisis as being largely over as of early/mid-2022, and thus sometime in early/mid-2022 the transition from in-crisis to post-crisis phase occurred. While post-crisis planning and lesson-learning was occurring in the upper levels of the organization during 2022 (e.g., the university completely rewrote its contingency plan), interviews did not reveal details about post-crisis work occurring within campus units (though there were exceptions in particular units). It is possible that the fuzziness of the end of the in-crisis phase, combined with the societal desire to return to normal as quickly as possible, may have led to a relative lack of effort being spent on the post-crisis phase. Given the importance of an organization's evaluating its crisis response, shaping perceptions of its crisis response, and learning lessons for future crises in the post-crisis phase, organizations experiencing crises would likely benefit from recognizing the importance of a broad range of campus constituents actively working on post-crisis tasks during the post-crisis phase.

10.8 Strengths and limitations of this study

This study is a qualitative study designed to explore the structure and function of leadership at a single university and how the experiences of these leaders could contribute to crisis leadership theory and practice.

A primary strength is that this study was conducted via semi-structured interviews that allowed interviewees, with limited exceptions (see section 6.3), to

freely express their thoughts and reflections on leadership at the university, and their own leadership, over more than an hour with relatively little prompting or guidance. This allowed for rich reflections supplemented by discussion and clarifications, unconstrained by the pre-written questions, limited answer spaces, and lack of ability to ask for clarification of a survey.

Original participant statements were used as the primary data throughout the analysis and are included throughout the work, enhancing credibility. Participants regularly referred to original source material (meeting notes, e-mails, calendars, newsletters, Teams channel posts, etc.) during the interviews, enhancing the dependability of their statements and thus the study as a whole.

As much as possible, participant statements were triangulated with those of other participants and documents, such as those provided by leaders or those obtained publicly. Some participants were presented draft results and asked whether the drafts aligned with their own experiences and conclusions, enhancing credibility (notably, the centrality of the theme of culture emerged from one of these interviews). Participants came from a diversity of units and administrative levels of the university (see section 6.2), allowing for a multivocal, more complete view of leadership experiences than, for example, surveys focusing solely on upper leadership. It is the author's hope that the study aligns with many of the eight "big tent" criteria of Tracy (2020, p. 270).

This study is limited by its examination of a single university in Finland and the inclusion of only nine individuals who were selected non-randomly. As such, generalizations from these participants' experiences must be carried out with caution, as the study was not designed to have a representative sample or be generalizable to other contexts.

The small sample size also means that it is possible, if not likely, that key sources of input into the crisis leadership discourse and key elements of crisis leadership practice at the university were missed. Future research should endeavor to determine whether the experiences of these leaders, and conclusions of this study, are applicable to other educational leadership contexts and other cri-

ses, both within and outside of Finland, by researching crisis leadership at additional universities and during different types of crises with, ideally, larger sample sizes and a variety of methods. An immediately interesting first step would be to conduct a similar study at multiple other Finnish universities, to determine whether the lessons learned in this study align with those of the broader Finnish context.

This study is limited by its primary reliance on interviews, which entail significant risks of biased, incomplete, or misleading information being presented (Alvesson, 2003). Participants could easily have been filtering, consciously or unconsciously, the information provided in an attempt make themselves, their units, or the university sound good. A potential example of this is the lack of any participant mentioning social media or family who worked outside of academia as a source of information, and only one participant mentioning university reputation as a primary motivating factor of decisions (a motivation firmly in line with crisis leadership theory, e.g., Coombs (2002) and Pedraza (2010)). While triangulation to verify statements was attempted, the vast majority of topics discussed were unable to be verified externally, and thus conclusions are based largely on the statements of the interviewees. Future studies should attempt to explore additional mechanisms for collecting data on leadership during crises, such as ethnographically following leadership during an actual crisis, involving additional participants (e.g., asking subordinates to describe the leadership of their leaders, as was done in Stoker et al. (2019), and then possibly subsequently aligning those statements with leaders' statements), and seeking additional sources of information to determine whether leadership was successful (e.g., for COVID that might entail analyzing staff sick leave or death/disability rates, student success in each unit's program, etc.).

The reliance on semi-structured interviews meant that the interviewer's preferences and biases certainly influenced conversations and the topics covered in them, and thus the distribution of topics covered may not be reflective of the actual views of the participants or the leadership practices that occurred. The thematic analysis was carried out by a single researcher, possibly causing the

analysis to overlook potentially important codes and themes, as well as lacking the ability to have inter-rater reliability. Future studies using other data collection techniques, other interviewers, or other analysts could help to assess the level of bias introduced by the study author.

The conceptions of emergency versus crisis and chronic versus acute crisis have seemed fruitful in exploring the practices of leadership during COVID at this university. Future research could explore whether these conceptions are relevant to other contexts, and whether, in the spirit of Striepe and Cunningham's (2021) proposed addition of time as a concept to leadership theory, adding an element of risks to safety along with time may enhance the utility of leadership theories.

The influence of leadership via sensemaking was clearly visible in this study's data, but there were also tantalizing clues that it seemed to decrease in prominence and use as the crisis progressed. Exploring whether this change in use of sensemaking over time occurred, and whether it occurred in other contexts, could expand on a potentially interesting element of the effect of time in crisis leadership.

And, as mentioned in section 10.6, exploring crisis leadership responses to COVID, and other crises, at educational institutions through a critical theory lens would almost certainly be a fruitful avenue of exploration.

10.9 Policy recommendations

With the limitations of this study firmly in mind (see prior section), the author would like to respectfully suggest that a few policy recommendations appear to emerge from the findings of this study (see section 3.2 for background on the existing Finnish policy environment).

First, the existing Ministry of Education and Culture's guidelines for university Contingency Plans are reportedly vague. While this allows for the recognition that the context of each university in Finland is unique, some guidelines regarding Ministry expectations for key elements of crisis leadership preparation

and response (including the need to work on preparation at a wide range of levels in the university, not just the upper leadership level) would likely enhance the quality and utility of the contingency plans. What precisely these recommendations would entail must be discussed by those involved at the Ministry and university planning levels, but ensuring that the plans address core elements such as those discussed in section 10.1 may be worth consideration. Additionally, ensuring that crisis preparation activities, including but not limited to contingency plan creation, are funded would likely be wise.

Second, the Finnish university system, and many others worldwide, are regulated primarily via funding formulae that allow policymakers to direct actions at the universities. These funding formulae are frequently designed without crises in mind, and thus, as mentioned earlier, these funding formulae may motivate university leadership to act counter to the best interests of their staff, students, or community in a crisis due to the financial motivations placed upon the university. Including in funding formulae contingencies for crises, or recognizing that funding formulae may need to be modified during a crisis, could rectify this and remove one potential cause of mis-alignment between leadership's motivations and the best interests of those they lead.

10.10 In conclusion: There are no easy answers

This study found broad support for existing leadership theory and crisis leadership theory. For example, communication, supporting well-being, and adaptive leadership were all core elements of participants' reflections. The importance of metrics in driving decision making was highlighted, which aligns with New Public Management policy trends as well as the suggestion to have enquiry-based leadership during crisis. Time was identified as a core element of crisis response and planning, which includes recognizing that crises can be chronic, requiring leadership over the span of months or years with potentially blurred boundaries between the pre-, in-, and post-crisis phases, and that crises can vary in time sensitivity and emergency status throughout.

To bring this report to a close by discussing these lessons in the context of the studied university, leadership at the university appeared to manage the COVID crisis well, especially in the beginning of the in-crisis phase (though the lack of pre-crisis work likely resulted in a suboptimal start of this phase). Leadership adapted rapidly, created new information flow systems, and developed metrics to allow it to, nearly real time, determine how effective the organization's responses were at mitigating the crisis. Infection rates at the university were low and student success remained reportedly high in the pre-Omicron period when this system was operating optimally.

However, as the crisis wore on and the initially chosen metrics were no longer able to be used, leadership opted for a return to in-person campus operations, ostensibly to facilitate student and staff well-being, without appearing to choose metrics or other measures to determine the success or impacts of these decisions (see section 10.3 along with data in sections 8.4.2 and 8.5.4). As such, data are not available to evaluate the success of university leadership at mitigating the crisis during the Omicron phase, and questions remain about how many staff and students, or close contacts of those same, were harmed (either directly or via exclusion) by the decision to return to campus without compensatory safety measures in place and whether that potential harm could have been mitigated.

This is included in the final words of this study not to say that leadership failed, but instead to illustrate how exceptionally challenging crisis leadership can be: even a well-functioning university with a caring, skilled, and hardworking leadership team who performed laudably at the start of the crisis can *potentially* make suboptimal decisions later, as conflicting demands and desires pile up. The effect of time, especially, is cruel during chronic crises, as leadership and the community at large are worn down and fractures emerge in previously cohesive coalitions.

Educational leaders facing crises or emergencies have enormous burdens to bear, and hopefully the experiences of these Finnish leaders will assist, in some small way, those who are helping their own organizations navigate, plan for, or recover from a crisis. If you are one of those people, it is this author's sincere hope that the model in section 10.1 can be of at least some assistance: realizing the importance of and interactions between time, culture and context, preparation, information flow, and adapting leadership practices will hopefully help, as will using appropriate metrics, focusing on the well-being of all, collaborating as much as possible, and adjusting decision-making systems to the needs of the crisis.

Best of luck.

And we should be proud. And we talk about resilience and all that. So we proved that we are resilient. We are resilient as individuals, as [a unit], as the university. And that is the message that I want to give our staff ... So just take a bit of a moment, just one moment and think how well we really managed things. And then the very Finnish thing, too, is to just look at the points where you failed. And they are like this tiny part. And then this [successful] part is completely kind of somehow overlooked. (Johanna)

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