Global crisis management and higher education: Agency and coupling in the context of wicked COVID-19 problems

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Abstract

Campus crisis management remains an understudied topic in the context of COVID-affected higher education. In this paper, we contrasted the ability to tame the wicked problems brought by the pandemic of COVID-19 in private and public universities in Bangladesh, Cambodia, Colombia, India, Kazakhstan, Uganda, and Ukraine. The cross-country analysis and diversity of institutional types allowed us to consider a wide range of challenges faced by academic leaders and their institutions during the global pandemic. By drawing on institutional policy reviews and interviews with university administrators, we have examined tensions between the human and institutional agencies on these crisis-stricken campuses given differing institutional coupling, sizes, resources, and missions. The focus on agential co-dependencies and institutional coupling lays the ground for conceptualizing campus crisis management as a culturally specific construct in the context of higher education affected by the global pandemic.

KEYWORDS
COVID-19, crisis management, global higher education, human agency, institutional agency
Effective campus crisis management depends on the capacities of institutions and administrators to understand and resolve problems and their causes. The COVID-19 pandemic has demonstrated how pernicious impacts spreading globally impede the institutional management’s ability to solve problems locally (Agasisti & Soncin, 2021; Jung et al., 2021). Managers also appear to succumb to “blind spots” (Blakeley, 2007) that reduce institutional manoeuvrability. As Shamsir et al. (2021) underscore, “The lack of clear planning frameworks and strategies for pandemic preparedness by institutions of higher education (IHE) has been exposed as a result of the COVID-19 pandemic” (p. 2).

Most of the higher education literature based on Anglo-Saxon models, have characterized universities as loosely coupled organizations (Weick, 1976) with multiple decision-makers, unclear technology, and competing goals that impede far-reaching solutions (Fernandez & Shaw, 2020; Jones & Oleksiyenko, 2011). Moreover, institutional responses can be held back by numerous social and political forces that are beyond managerial control (de Boer, 2021). However, not all types of institutions have been characterized as organized anarchies reigned by the garbage can model—depending on size and culture, some institutions are less loosely coupled, or even tightly coupled bureaucracies (Birnbaum, 1988; Spillane et al., 2011). In fact, widespread transformations of educational systems have been conceptualized as a movement from "loose" to “tight” coupling (Meyer, 2002), especially given the rise of managerialism in higher education (Hökkä & Vähäsantanen, 2014; Maassen & Stensaker, 2019). Either way, loose or tight, universities can face a global calamity of the magnitude of the pandemic of Covid-19 where crisis signals are overlooked, problems are exacerbated, and preventative measures are neglected to the extent that a "wicked mess" ensues (Mitroff, 2020).

Amidst advice on campus teamwork, communications, and psychological aid in the times of crises (Zdziarski et al., 2020), empirical research on crises management at universities remains scant. The organizational dilemmas are overlooked and the problems of agency are not always clear in universities governed by disparate perspectives on coupling of missions and responsibilities. We have undertaken a study to explore organizational variances in the context of seven universities on the global periphery, which enables us to cover a more diverse spectrum of agential insights, and thus develop a more inclusive concept of campus crisis management globally. Insofar as building capacities for crisis management is concerned, global institutional resilience and responsiveness can only be as strong as its weakest links.

2 | THE PANDEMIC OF COVID-19 AND HIGHER EDUCATION

COVID-19 has had a major impact on academic institutions. Universities lacked knowledge on handling the treacherous global pandemic and took cautious steps to implement partial or full (and intermittent) closures and openings. In the tightly regulated policy environments, academic executives made quick decisions on lockdowns, e-learning, space regulations, and sanitation procedures. The lockdowns impeded students’ study progress. Graduation ceremonies were cancelled or delayed. International students became stranded. The processes of teaching and examination became more complicated, as online testing was neither fully trusted, nor always efficiently managed. Workloads increased with ceaseless online activity (Bergan et al., 2021; de Boer, 2021; Perrotta, 2021).

Faculty members experienced various cognitive, emotional, and organizational strains. Female academics with children suffered a heavier burden of duties, merging household, family, online schooling and virtual office responsibilities. Entrusted with “caring responsibilities”, line managers, with the profit-oriented philosophy, appeared to have limited credibility needed to create a caring institution and compassionate relations with vulnerable members of the university community in the midst of the COVID-19 crisis. At universities that lost revenue from tuition fees (especially from international students), the threat of layoffs and unpaid leave raised concerns about organizational survival (Bergan et al., 2021; Nash & Churchill, 2020; Ross, 2020). Meanwhile, neoliberal governments...
stood by the principle of devolving responsibility to universities for their financial health (de Boer, 2021; Nash & Churchill, 2020).

Crisis management at universities often implied either rearranging spaces for face-to-face “campus experience” in spite of the growing vulnerability of their staff or enhancing digitalisation and remote work at the risk of imperilling the bureaucracies’ office-holding powers (Nash & Churchill, 2020). Whereas shifting online might have been relatively easy in well-resourced environments (Jung et al., 2021), the developing world had challenges in enabling equal access for disadvantaged regions and students (Tamrat, 2021).

The institutional responses progressed from immediate reactions to emergency management, to planning a “new normal” (Agasisti & Soncin, 2021). At the early stages of the pandemic, managers had to deal with emotive pressures (Chanmugam, 2021). Academic leaders were expected to at least provide words of encouragement, if not clear instructions to their staff and assistants on reoriented schedules, support mechanisms, monitoring and evaluation of work processes and outcomes (ibid.). Weeks and months later, the demand for clear and well-structured policies grew. Anxiety among managers mounted, as academic leaders in many departments felt that their programmes should be running successfully and they were personally responsible for the organizational performance (Chanmugam, 2021). Some reasoned that transparency and strategic planning were essential for managing facilities under strain (Shamsir et al., 2021). In many cases, the concerns intensified because of the manager’s delayed responses. As ambiguity was growing, research was lacking, and prognostic analysis was rudimentary, the conundrums continued with no hopes for easy resolution. In cases where the pandemic was unfolding amid other crises (e.g., economic, social, natural disasters) (e.g., Jung et al., 2021), making sense of competing responsibilities was getting harder.

3 | CONCEPTUAL FRAMEWORK

Mitroff (2020) remarked that COVID-19 was the worst wicked mess that he ever observed—a time when disparate forces interacted in “strange and unpredictable ways”. Placing his arguments in the context of academic organizations, we would argue that COVID-related crisis management is a messier concept within complex institutions. In loosely coupled organizations such as large public universities (Weick, 1976), questions about the roles and responsibilities of institutional bodies, academic communities, and individuals, cannot but aggravate the problemata of crisis management. The issue of agency—split between institutional agency and human agency (Marginson & Rhoades, 2002)—emerges as central when the crisis is detected, but prevention and control are likely to be unallocated or disorganized. Birnbaum (1988) discusses how on a small private campus, a tightly coupled system with a strong homogenous culture, collegiality is the main form of governance whereas on a loosely coupled larger public campus, politics is the mechanisms by which decisions are made. In crisis, we would argue politics get enhanced by the wickedness of problems and inabilities to make clearer analysis and decisions. It is possible that some institutions resort to tighter coupling, and a more centralized decision-making.

Mitroff (2005) identified six phases in the process of crisis management: first signals; preparation of a systematic plan to address the crisis; damage containment; recovery; learning through critical reflection on the crisis experience; and redesign of practices and realignment of behaviours based on the crisis experience. His reference to the wickedness of COVID-19 (Mitroff, 2020) urged us to examine how actors tame the problems that are rapidly aggravated by a constellation of socio-political factors, contributed by disparate stakeholders, and accelerate to become wicked problems that are never solved. Wicked problems as they evolve, are known to become better or worse (Kreuter et al., 2004; Rittel & Webber, 1973). In contrast, tame problems are clearly defined, solved by experts based on technical data and criteria, finite, solvable, and free of subjective interpretations on the part of stakeholders (Batie, 2008; Blackman et al., 2006). It is important to note that Kreuter et al. (2004) conceptualized wicked and tame problems at the opposite ends of a continuum, where hybrids or semi-wicked/semi-tame problems emerge.
In this study, we examine how academic agency emerges in the context of the wicked problem and how loosely and tightly coupled systems of university governance contribute to wickedness. This agency can be located at various points in relations and responses across disparate epistemic fields and organizational cultures that become conspicuous because of the urgency of the agendas (Jones & Oleksiyenko, 2011). In the context of crisis management where it is difficult to identify how tame or wicked is the problem, the agency itself can be difficult to identify, as organizational units handle a gamut of institutional legacies and resource deficiencies that are impossible to overcome amid the growing competition of top leaders (Sá & Oleksiyenko, 2011). Powerful players in the roles of presidents, members of their executive teams, deans, academic department heads and various research centre managers can each have a different interpretation of what they are supposed to contribute to comprehensive crisis management in their domains of knowledge and responsibility, especially during wicked problems. The levels of co-dependency between institutional agency, defined by the willingness and ability of units and positions to act promptly and responsibly, and human agency, shaped by the determination and ability of individual scholars, teachers, and students to abide by the rules and regulations is complicated in the context of a wicked problem.

Examining these co-dependencies, we are trying to understand how the problem wickedness and organizational “coupling” contribute to the agency complexity in managing crisis inside and outside universities (Rowan, 2002; Spillane et al., 2011). Weick (1976) used the term loose coupling to describe organizational bonds that emerged from moderate, indirect, or occasional cause-effect interactions among institutional components. In the loosely coupled organizations, members and units interact but are not likely to interfere significantly with each other. Change in loosely coupled organizations resembles dealing with a wicked problem, very much buffered by individual agency or the agency of a relatively small group of people (Meyer & Rowan, 2006). As loosely coupled systems appear to struggle with wicked problems, we may observe inclinations to move from "loose" to "tight" coupling (Meyer, 2002; Sahlin, 2012), as was earlier reported by Maassen and Stensaker (2019). While hierarchical governance and centralization reinstate their significance in solving the wicked problems, questions intensify about the agency of organizational coupling.

4 | METHODS

This study was guided by traditions of qualitative research methods, yet with focus on how globalization affects our ability to see and differentiate institutional and individual responses in the seemingly converging and coherent environments of international education (please see Vulliamy, 2004). In this paper, we used a cross-institutional analysis of campus crisis management during the global COVID-19 crisis characterized as a wicked problem. We used convenient sampling through our networks in the Global South and selected institutions with various degrees of coupling. As shown in Table 1, the institutions in this study include three public universities, one public university with a hybrid public-private governance, and three private universities. Following Birnbaum’s classification of types of higher education institutions (1987), due to their size, we assumed that the public institutions in this sample (University of Dhaka (DU) in Bangladesh; Makerere University (MU) in Uganda, Royal University of Phnom Penh (RUPP) in Cambodia) are loosely coupled institutions. That did not imply that they were democratic in their governance or leadership. The Nazarbayev University (NU) is a hybrid public-private “boutique” university, established by the former president of Kazakhstan, and enjoying privileges of autonomy for research and teaching (seemingly a loosely coupled organization), and hierarchical administration (seemingly a tightly coupled organization). The sampled private universities were assumed to be tightly coupled organizations: i.e., AURO University-India is the smallest of all private universities; UNIMINUTO in Colombia (fourth by size in the whole sample); and Ukrainian Catholic University (UCU). Tight coupling in the latter two was also due to their catholic shared values and mission, given the traditional hierarchies in Catholicism.
| Sample Type         | University                                      | # Students | Participants                                                                 |
|---------------------|--------------------------------------------------|------------|------------------------------------------------------------------------------|
| Loosely Coupled     | University of Dhaka (DU), Bangladesh             | 38,172     | Director Institute of Education and Research                                 |
|                     |                                                   |            | Director Institute of Information Technology                                  |
|                     |                                                   |            | Chairman Persian Literature                                                  |
|                     |                                                   |            | Chairman Sociology                                                            |
|                     | Makerere University (MU), Uganda                 | 35,000     | Dean School of Distance and Lifelong Learning                                |
|                     |                                                   |            | Deputy Academic Registrar Academic Registrar's Department                    |
|                     |                                                   |            | Dean School of Gender and Women Studies                                      |
|                     |                                                   |            | Principal College of Business and Management Sciences                        |
|                     |                                                   |            | Ag. Deputy Vice Chancellor (Finance & Administration) Academic Registrar's Office |
|                     | Royal University of Phnom Pehn (RUPP), Cambodia  | 26,676     | Dept Head Social Sciences                                                     |
|                     |                                                   |            | Coordinator Social Sciences                                                  |
|                     |                                                   |            | Dean Social Sciences                                                          |
|                     |                                                   |            | Dept Head Social Sciences                                                     |
|                     |                                                   |            | Dean Education                                                               |
|                     |                                                   |            | Dept Head Sciences                                                            |

(Continues)
| Tighter Coupled Autonomous & Private | Nazarbayev University (NU), Kazakhstan | 6629 | Chair | Sciences and Engineering |
| AURO University, India | 1352 | Dean Academics | School of Business |
| Vice Dean | Social Sciences |
| Vice Dean | Social Sciences |
| Program Director | Sciences and Engineering |
| Vice Dean | Social Sciences |
| Chair | Sciences and Engineering |
| Tightly Coupled Private Catholic | Ukrainian Catholic University (UCU), Ukraine | 2160 | Vice rector | Social sciences |
| UNIMINUTO, Colombia | 14,671 | Vice rector | Business |
| Chancellor | Applied Sciences |
| Vice Dean | Health Sciences |
| Vice rector | Philosophy and Theology |
| Program coordinator | Applied Sciences |
| Vice-Chancellor For Academic and Student Affairs | Main Campus |
| Director of Internationalization | |
| Director of Marketing and Communications | |
| System Level Vice-Chancellor of Integrated Services | System-Level |
Our research was guided by the following questions: How did organizational coupling determine the ability of selected universities to tame the COVID-19 problem when it began to acquire a wicked character? Who took responsibility for managing the crisis and taming the problems?

We investigated these questions through semi-structured interviews with university administrators in charge of teaching, research, and services who were involved in crisis management between February/March–October 2020, the most critical period of the pandemic accelerating the complexity of problem-solving. Seven participants in our study were females, and twenty-nine males. We did not observe any major gender-related differences in their responses. Fourteen participants were implementing their duties at a senior level (e.g., Dean and above), and twenty-two at middle level (e.g., Chair, Institute Director etc.). Table 1 provides a list of participants, whose profiles are coded by gender, position, university type, and country. Given the intensity of challenges faced during this period, we allowed for flexibility in interviewing modes including email, phone call, videoconference or through self-directed surveys. The interviews ranged from 30 to 60 minutes, and included the following five questions: (1) What was the major challenge that you had to deal with in your leadership role during the pandemic? (2) What was the most disturbing dilemma that you had to resolve in the process of crisis management on your campus? (3) Did your university cope well with problems and communicate efficiently with the professoriate and students during the COVID-19 crisis? (4) What did you wish your university could do more, or better, in the process of crisis management? (5) Who should be taking more responsibility for crisis management—(vice)presidents/rectors, deans, chairs, or individual faculty members and students? The interviews were recorded, transcribed, and translated into English when necessary. We also solicited policy-related documents from the interviewees and collected posts from institutional websites and social media that provided evidence of how universities were managing the COVID-19 crisis.

We, the co-authors, are from one of the countries represented in this study, and so, each of us collected and transcribed interview data from a selected university in our respective country. Each of us kept our own notes, as well as exchanged insights within the research team by way of emails, as well as a Zoom session where everyone shared their first impressions and sought and made clarifications. Next, the two lead authors took the cumulative data from all universities and conducted several rounds of coding. During the last coding step, our goal was to determine how the changes in problem wickedness influenced the changes in organizational coupling. We have also focused only on three stages of Mitroff’s (2005) crisis management (first signals, preparation, and damaged containment) given that other stages were still in progress and early to investigate. In the course of considering the priorities, roles, tensions, and responsibilities of institutional agency and human agency in each university, we reflected on the developments as insiders (virtual visitors, managers, or lecturers at the selected universities). Our findings emerged through triangulation of analysis of documents, the interviews data, and our personal observations. While we engaged some quotes from the interviews in our findings report, we used the institutional documents only for verification and triangulation purposes. In order to protect the privacy of our participants who are few and in executive positions, we decided to identify only their universities when presenting quotes.

5 | FINDINGS

At the onset of the pandemic, university managers saw a clear need to contain the spread of the virus with extreme measures if necessary. Our sampled universities show that disparate actors found it challenging to assess the need and quality of responses across organizational units. The tight coupling was helpful—however, only in cases where resources were sufficient to solve the problem. Some universities did better than others in managing agential responsibilities amidst fluctuation of the problem's wickedness.
5.1 | First signals

During the first weeks following the declaration of Covid-19 as a pandemic, most university administrators decided to close their campuses given the growing global concern about the severity of virus:

UCU: Uncertainty was a challenge, because for the first time we had such a major crisis. We did not know, nobody knows how to deal with a pandemic.

MU: When we heard about the pandemic, we did not know what it is and its impact, we only heard that in Europe and America many people were dying, and this caused fear.

At the University of Dhaka, a loosely coupled public institution, the uncertainty caused a prolonged suspension and inability to pivot online:

DU: We did not do anything in the first few months … That means from March 2020 to September 2020 we could not take care of our academic activities …

Leaders at RUPP, another loosely coupled public institution, devolved responsibility to individual departments to take the best course of action regarding instruction:

RUPP: For the first three months, the department needed to take actions by itself for teaching online, including what kind of free of charge technology to use and how to use technology. Thus, online teaching was very much dependent on each department. Some departments did not carry out online teaching temporarily. That was partly because it was thought that the school closure was temporary.

Ultimately, this decentralization meant an overall lack of guidance from the top administration combined with the absence of basic infrastructure and resources to function online:

RUPP: There was not much information passed down to the department level. Some work got stuck due to the abrupt closure. There should have been instructions or information on how to cope with it …. We felt very frustrated. For example, we don’t know when the new semester will begin or end … Students couldn’t come to school to pay the school fee or pay via banking systems …

The disparate agencies of stakeholders within RUPP are obvious. Every unit, every faculty member was left to decide what to do based on their capabilities in very challenging circumstances:

RUPP: It was a mess for the department … We had to compromise. We wanted everyone to follow this way as a system by using MS Teams, but we couldn’t. Lecturers still use different technological tools. Internet connection is another issue. … Working from home is very difficult because we don’t have a good environment … Some were willing to learn by themselves through the instructions or guidelines compiled by the department … However, most of our lecturers are part-timers, so they were not fully committed …

The concern for students' wellbeing and learning was obvious across all institutions. However, the frustration of not being able to teach them properly was particularly acute in the public institutions:
MU: Many students had to go for industrial training and during the crisis they couldn't be permitted in organisations, yet it was a requirement for their progress, and therefore, there was an urgent need to support them.

RUPP: Teaching online is very new, and students do not seem active. Everyone is silent. This is very frustrating ...

In spite of plenty of challenges, the tighter coupled private universities appeared to tame the wicked problem quicker because of clear, prompt, and unequivocal directives from university administrators. They organized a constant flow of communication keeping campus community up to date and on the same page:

AURO: The campus was quickly vacated, and steps were taken to send off students to their homes immediately. A meeting was called by the Vice Chancellor for all Heads of Schools during which clear instruction was given to make sure there is no disruption in classes. Shift to online mode of teaching was categorically instructed with immediate effect.

UCU: For the first few months we had daily meetings ... just talking and sharing our knowledge on what's going on. ... Microsoft teams [was] our main communication tool [to] establish everything, send the information, establish groups, establish courses ...

Besides, private catholic institutions leveraged previous institutional investments in the process:

UCU: At the beginning of the quarantine, the university community already had a sufficient level of training, as the UCU Center for Educational and Innovative Technologies has been implementing blended learning tools since 2012. In addition, at the beginning of the quarantine CeNIT conducted a series of trainings and webinars, during which teachers were able to acquire additional skills needed for distance learning. The Center's specialists were also constantly in touch with teachers to solve current technical problems.

UNIMINUTO: I personally believe that the pandemic allowed us to prove the strengths that we had as an institution ... which allowed us to very quickly address the pandemic and be able to serve both employees and our students. ...

The top administration at UNIMINUTO set up a crisis management committee and hired the services of a well-known multinational firm to help them design a risk-based response plan and so, tame the wicked problem.

UNIMINUTO: We met daily and began to generate a model of care based on risks ... From small academic risks, from risks with allies, from taking care of ... the physical spaces ... from psychosocial care ... and we generated strategic indicators to mitigate the risk ...

In sum, our evidence suggests that private and tighter coupled institutions were able to tame the wicked problem quickly pivoting online. At the onset of the pandemic, their top leadership made clear and swift determination and investments, which alleviated the uncertainty and diminished the diffusion of agencies. Their public counterparts were slower or completely paralysed, with individual colleges and faculties left alone to their own judgement and availability of resources, thus deepening the wicked mess.
5.2 | Preventive measures

Gradually, it became clear that there were no quick fixes to the challenges generated by the pandemic. Facing the wicked problem, managers at all universities had to decide whether to sustain online instruction for the closed campuses or to bring students back while containing the spread of the virus on open campuses. Public universities hesitated given the lack of resources, stiff bureaucracy, and governmental steering:

DU: Everything was not in our hands; higher authority was uncertain about what was next ... we did not have strict direction from the higher authority.

MU: For Makerere's Registrar, crisis bolstered the truism that implementing top-down policies at a public university is a challenge even during crisis.

The best that the top administrators could do was to devolve responsibilities for the aforementioned choices to frontline units:

RUPP: During the closure, [the ministry] advised universities not to be strict with staff, so staff could work from home. So, we didn’t strictly monitor them ... At the faculty level, we managed only admin staff working with students, so as long as their work didn’t get stuck, we didn’t strictly monitor them. They could either work from home or in the office.

MU: We didn’t have anything in our hands, and we didn’t want to close the campus for a long period. That’s why we allowed the departments and lecturers to use whatever means they had.

Senior administrators at RUPP acted more like a fire brigade responding only to departmental alarms:

RUPP: When the department faces a problem, and other departments also face it, then the university starts to work on it. For example, when the departments started voicing the problem of payment, then the university began to give some instructions to solve it. There was no master plan. The university has always waited for the department to voice their issues collectively to take actions.

In the decentralized public institutions, some departments were in a better position than others to organize their resources and answer disparate student expectations:

DU: You know there are 82 departments ... the training needs varied because some of them already knew the teaching-learning and some of them might not know about online teaching activities. And, that is, you will see authority took decisions, but implementation of this decision varied from department to department.

RUPP: We faced many challenges with communication with students. We posted our admin staff’s phone number in front of the office for students ... because they didn’t use email, so students could send texts. We helped support students. For example, we helped with the process of requesting a transcript for them. When it was ready, we helped give it to them at the university gate.

At Nazarbayev University, the agency was incapacitated by different expectations and misguided communication of senior and middle administrators handling different areas of research, teaching or service:
NU: I think the difficulty of the upper administration [is] ... the lack of interaction ... with faculty and students on a regular ordinary basis ... very easy to lose orientation, lose sense of what they need, what would be helpful. ... Several times, the President ... sent messages ... not completely sort of sensitive to where faculty and students were ... It wouldn’t be helpful if some of that messaging had been coordinated with schools.

The diffused agency was explained by lacking resources, technology and training to adequately transition to online instruction:

NU: The University was poorly equipped, had no investment plan, and faculty were expected to cope with inadequate infrastructure. Rather than it being the best of both worlds (on-line and off-line teaching) it was the worst—students in class could not interact with on-line students who, in turn, often could not hear in-class discussions. One Faculty member used the analogy of 'being sent to do battle as a soldier without the right equipment'.

Some NU administrators remarked that they offered emotive support to lecturers when the frustration was increasing on campus and the university was not able to ensure the immediate solution on the virus containment:

NU: Faculty knows that I was there to support them ... they always contact me and I would do whatever I could to help them, ... letting them know that I was there to support them because these are very, very challenging unusual times and it is more important that the students and faculty knew that they were supported.

In the absence of a strong institutional agency, the NU's students were critical in taming the wicked problem brought by the pandemic:

NU: Students ... were very, very helpful ... I wished to have a nice case study of that, the students voices were very, very helpful. ... Also, their voices were mobilized, there was a big survey in fall 2020 from ... about students' adaptation to the online learning ...

Meanwhile, the management of the wicked problem at private universities relied on a more consistent executive teamwork, given that tight coupling of responsibilities and services had been practised in the past. Both UCU and UNIMINUTO argued that there was a stronger sense of unity in the private institutions where individual and institutional agencies were in sync:

UCU: I felt very much as you know, we felt very much as a team in these difficult times. Of course, when we had to communicate and to do some difficult decisions ... we really had to do it as a team ... There is a limited number of people to whom vice-rectors can communicate and, of course a lot of information goes through deans. So if dean ... is distorting some information or giving his or her version of the communication, you know it doesn’t help the management at all. The communication is really horizontal and that means also the responsibility is ... There is a lot of responsibility on each faculty member. We deliver that responsibility to the professor for his course, for communication with students. Because of that, it was much easier for us to cope with this pandemic—because people were ready to take this responsibility, and I think that that really helped us.

UNIMINUTO: It is very difficult in crisis like this ... that the responsibility falls on the shoulders of a person like me. I believe that ... everyone has a responsibility. The chancellor must guarantee
some things, the vice-chancellor must guarantee others. Of course, greater responsibility. But the support staff must also guarantee other aspects. It is a shared responsibility.

A UNINMINUTO senior administrator also underlined the importance of a shared vision rooted in Christian values of pastoral care, service, and solidarity, allowing for an integrated agency and a sense of pride for the accomplishments:

UNIMINUTO: We kept the services and we looked for quick and prompt support. And I think that's commendable, not many institutions did it.

5.3 | Damage containment

During this phase, university leaders had to reckon with the consequences and effects of a prolonged online teaching and even service delivery as the wickedness of the problem became obvious. The management of the wicked problem implied a long-term investment in off-campus work and strained faculty, students, and staff. The uncertainty increased while stakeholder views further diffused, offering neither clear solutions, nor greater resources. Again, the private universities were able to implement a better host of measures to adapt to the new reality than their public counterparts. Tighter coupling allowed the former to serve the community inside and outside campuses, and leverage new opportunities for resource development during the crisis.

5.3.1 | Struggling with online delivery

Dealing with the reality of having almost all instruction online meant a significant challenge for all institutions in terms of infrastructure, training and agential capacities:

RUPP: Some old-aged lecturers couldn't teach because of technological competence ... Some lecturers didn't have a laptop, so they had to buy laptops and had Wi-Fi at home.

UNIMINUTO: I came across students who did not have a home computer, who did not have an iPhone or a smartphone to be able to take classes, because it is the home phone. Or they had a smartphone, but they didn't have money for ... data, because they didn't have internet ... or they lived together in physical spaces where four people lived in one room.

MU: ... the challenge of attracting all students to embrace and register on the learning management system. Many couldn't afford the necessary gadgets.

DU: There was a dilemma whether students' problems should be solved first or teachers' problems. Because both groups needed [IT] training and ... devices. Between these two groups, I emphasized solving the teachers' problems first because when teachers increased the capacity, they would help students to solve their problems. ... I needed to increase the confidence of the teachers about the online teaching and exam because many senior teachers were reluctant to begin online classes and exams.

While the University of Dhaka could provide a temporary solution on campus, their ability to decide on a long-term commitment was hampered by governmental control:
OLEKSIYENKO et al.

DU: When corona was relatively controlled last year, we wanted to start exams for the first semester. The university agreed to conduct the exams physically, but suddenly everything became shut down again ... Our students wanted to sit for an exam, so they came here, but higher authority directed us to stop all academic activities. Higher authority was directed by the government rules ...

Meanwhile, the private universities in charge of a smaller and more coherent faculty and student bodies were more capable to use a centralized institutional command to tame the wicked problem. The following quotation from UCU indicates how decision-makers urged students to work on campus if they were unable to secure proper connectivity at home:

UCU: Not all the students have good computers, not everyone has good access to Internet not everyone has access to a quiet room when he or she can study or read the lecture and trying to be not engaged ... with your dog, with your cat, to his grandmother or grandfather ... small children. We said "Okay, we can't manage that. So it is your responsibility to come and have good connection. If you are not sure about your home ... simply come to campus so that you can study."

Likewise, UNIMINUTO and AURO began to provide institutional resources for teachers and students who found it difficult to organize online teaching and learning at home in times when the COVID-19 did not subside:

UNIMINUTO: What we did was to lend equipment that we had at the university. And it was an extremely quick program that we developed in almost a week. Professors who did not have their equipment—you see a loan of equipment from the university to their homes; the same for students. But we also resorted to donations of equipment, donations of phones.

AURO: Library staff [were] instructed to ensure a seamless supply of e-books/articles to students and faculty members ... Online reading materials, video links were shared with students periodically through emails and WhatsApp groups. Simultaneously, the online learning platform ... was used very rigorously for sharing learning materials with students ... Lots of webinars were done and students were asked to facilitate such events to make them active and keep them engaged with learning ... A two-day online workshop was held for both faculty and students separately to introduce them to this new pattern of examinations and make them aware of the processes and steps for uploading and downloading the papers.

At the same time, frustration over devolved responsibilities in the times of wicked problem was louder in the loosely coupled public institutions. At RUPP, which some regard as a university with bureaucratic culture, faculty members were frustrated “because suddenly they were forced to be on their own instead of following instructions they have had to follow for so long”. A manager at RUPP communicated his complaint by exclaiming:

RUPP: Can the university send one email to all students like what happens in a university abroad? ...

The university needs to fasten the process of online payment because it's important for the university financial management because the university depends mostly on tuition fees.

Unsure how they could sustain teaching at their own expense, RUPP's lecturers often sought to abandon rather than continue their teaching:

RUPP: There were students who asked for suspension sometime after the closure because they said they couldn't study online, and they would continue when the campus was reopened. They assumed
it might have taken one semester. The same for lecturers. Some lecturers at the [Department] told the management that they would also suspend their teaching if the next semester was also online. They even said that they didn't know how to teach online because it was difficult … This abrupt switch to online learning has shown to us that we only managed to offer them access for the time being, but the quality is still questionable.

5.3.2 | Caring for internal and external communities

One of the biggest concerns faced by our interviewees was the deteriorating financial circumstances of students and their households. Public universities were slow in orchestrating institutional assistance, and individual faculty and departments had to take over fundraising initiatives as exemplified by the University of Dhaka:

DU: The university took initiative about financial assistance for the students, but you know, executing central decisions takes a long time. So, if you [were to] wait for financial support from the higher authority for the students it could not be possible to start the class on time. So, what we did was, our faculties generated funds on their own and our department also provided small support to the students so that they can attend the class.

In contrast, at UNIMINUTO, the top administration quickly institutionalized financial assistance to students by cutting tuition, negotiating contracts with providers (including internet providers), and calling upon the solidarity of companies and citizens at large:

UNIMINUTO: Donations were abundant, including cash and groceries for students and families in critical situations: How did we do it?—Invoking the solidarity of our suppliers, of the large chain grocery stores.

The top leadership at this institution worked tirelessly to maintain the contracts of all employees, including janitors who were temporarily relocated to other sectors in the city thanks to negotiated agreements with places that needed to stay open like hospitals.

However, even private universities encountered some wicked problems that they were unable to tame with ease. The following quotes illustrate some difficult dilemmas faced by administrators in dealing with international students at a time when many local citizens were rightly fearful for their own lives and hospitals were swamped with COVID-19 patients:

UNIMINUTO: … such a great responsibility if one of them had gotten sick … I said to JC: "... and if a student gets sick, who is going to take them to the hospital? Me? Who will be watching the student in the hospital? You or me?"

UNIMINUTO: It was another trauma that you can't even imagine ... because repatriation flights ... had a cost.... It was not so easy to bring them. It was not when you wanted, but when you could, because they could even have money to be able to get the humanitarian flight and the embassy or the airline tells you, "Sorry, you can't go". So, we [were] ... pressuring the Foreign Ministry, pressuring the embassies ... And the student did not have money for a humanitarian flight. So UNIMINUTO, through an internationalization fund ... sent to some money ... We held weekly ... meetings with the students, giving them two types of support: academic and psychological. ... In fact, we invited parents to some meetings ... that helped a lot, a lot, a lot so that our students kept calm.
AURO: International students couldn't travel due to travel ban and hence special stay arrangement with uninterrupted food supply and daily essentials was ensured for them. Food and other essentials were served at their room on a daily basis.

As time passed, all universities worked on their communication strategies launching specialized websites to keep the community informed about the pandemic, preventive protocols, and institutional logistics. Some also provided uplifting messages. The private universities went a step further and developed new wellness and support initiatives for their online communities. UNIMINUTO's online initiative called "The U Takes Care of Me" consolidated all online information including governmental directives, virtual academic advising, tutoring, and registration, financial aid advice, and wellness programs (freely available counsellors and physicians, spiritual support, fitness classes, and art and cultural performances and activities). The wellness services were extended to families of students, faculty, and staff. UCU's priests and clergymen counselled students throughout the working week, helping to resolve their difficulties emerging during quarantine. The UCU's Faculty of Health Sciences also organized psychological counselling services online, and the Faculty's Physiotherapy and Occupational Therapy Department launched a programme to encourage physical activity and community building. The third private university, AURO, likewise launched a series of online wellness initiatives including free yoga sessions, and an arts exhibition highlighting the Indian life under the pandemic, which helped keeping students engaged academically and socially. The Schools of Business and Liberal Arts took advantage of the Government of India's initiative called Bharat Padhe Online (India Studies Online) to provide a rare opportunity for students to interact with leading thinkers, activists, writers, and entrepreneurs from different corners of the world.

Some universities were also asked to organize outreach to the external communities. A leader of online teaching in Colombia, UNIMINUTO was invited by the Ministry of Education to mentor three other institutions in the country that did not have the technological infrastructure and expertise to deliver online instruction. The University of Nazarbayev also provided technical expertise to the government:

NU: NU's Institute of Smart Systems and Artificial Intelligence (ISSAI) has developed a stochastic epidemic simulator that uses real data, ranging from population density to health care capacity for each region of the Republic of Kazakhstan to predict the dynamics of the spread of COVID-19 in the country.

However, given that the NU was more loosely coupled for academic work it also witnessed the rise of grassroots initiatives. Its faculty members, and administrative staff launched "NU COVID-19 Solidarity Initiative" in order "to express solidarity with the people of Kazakhstan... raising their own funds to support the frontline healthcare workers and their families."

NU: Graduates of NU, in cooperation with practicing doctors, Ph.D. students... and international universities... have launched a... channel... informing medical workers that treat the patients with COVID-19 about current scientific publications, new data, scientific articles, and reviews.

6 | DISCUSSION AND CONCLUDING REMARKS

Crisis management is a complex phenomenon shaped by disparate agencies of higher education. While both public and private universities were expected to undertake immediate measures on curbing the COVID-19 crisis, their approaches to management differed in grasping and resolving the problems. Managing the crisis rooted in and unpredictable and erratic virus necessitated an efficient balancing of responsibilities between lecturers and administrators, students and greater communities, inside and outside campuses. Loosely
coupled, the public universities faced more challenges in developing this balance entangled in governmental regulations and resource deficiencies. University of Dhaka’s faculty members were particularly frustrated, notwithstanding that the government’s rigid approach provided better results in controlling infection and death incidence rates in the long run, compared to other countries. Private universities (AURO, UNIMINUTO, and UCU) felt compelled during the crisis to institute rigid structural controls, which superseded the controls used by the government. These universities were smaller and with access to better overall resources, which greatly facilitated their ability to adapt to new ways of delivering services as well as stay committed to taming the problem which became more wicked. Their determination stemmed from an acute awareness of the high level of accountability to privately paying students or religious communities, who expected that the universities would protect their interests.

While distinctions of institutional and human agencies were obvious in some situations (e.g., institutional decisions on lockdowns vs. faculty fund-raising campaigns), the agency of crisis management was often an amalgam of the two. Notably, in many institutions, greater agency was allowed in teaching and service matters, where university administrators allowed greater flexibility for faculty members to quickly modify their teaching approach. Meanwhile, universities were less flexible in policy-making related to health and safety. At times, the structure/agency relations were the matter of individual perceptions and interpretations. Policy statements provided some basis for a structural solidification, while emotive expressions of university administrators either in media or in interviews were often difficult to attribute to specific agential roots. Situational and relational variances were quite significant in these expressions across different organizational contexts. Academics who lived on campuses in the conditions of excessive regulations thought that institutional structures were too dominant, and faculties had little agency. Those who lived off campus and were not subject to campus health and safety regulations thought that they had lots of agency and that this agency was intentionally allowed by the institution.

Large public universities such as University of Dhaka or Makerere and small private ones such as UCU, UNIMINUTO or AURO obviously had different dynamics in shaping institutional agency and correlating it with human agency (see Table 2). The pastoral behaviours of the mission-centred universities in Ukraine and Colombia were equipping them with opportunities for tight-coupling, and thus developing more coherent solutions and communication strategies. The shaping of institutional agency however also depended on the nature of universities. The research-focused Nazarbayev University was more concerned about the futures of research and collaborations, especially with decline of international travels. Research units expected more freedom and NU granted it to individual faculty members. Meanwhile, in the areas of facility management, procurement, and health and safety, which were more interconnected to the local bureaucratic structures, a more centralized, managerial and less consultative approach to decision making evolved under emergency conditions. Moreover, differences transpired in epistemic fields. Specialists in health and communal work had more legitimacy and power in promoting the

**TABLE 2** Agency manifestations in taming the wicked COVID-19 problem

| Agency       | Extent | Public loosely coupled | Full autonomy tighter coupling | Private Catholic tight coupling |
|--------------|--------|-----------------------|--------------------------------|--------------------------------|
|              |        | Bangladesh | Cambodia | Uganda | Kazakhstan | India | Colombia | Ukraine |
| Institutional| Strong | X                     | X               | X      | X            | X     | X         |         |
|              | Medium | X                     | X               |        |              |       |           |         |
|              | Weak   | X                     |                 | X      |              |       |           |         |
| Human        | Strong | X                     |                 | X      |              |       |           |         |
|              | Medium | X                     |                 | X      | X            |       |           |         |
|              | Weak   | X                     |                 |        |              |       |           |         |
virus-related research and communal engagements, including support to local hospitals and government bodies in charge of crisis management. Academic outreach underpinned by legitimate expertise was viewed as more valuable by internal and external stakeholders.

Issues of access and equity, or timely responsiveness to vulnerable members of the academic community, often galvanized campus-wide anxiety, especially in the absence of clear messages from the central authorities, as in the case of RUPP. However, in the private universities, senior administrators felt full responsibility for students and even faculty and staff and took leadership in providing the best possible direction in advance of institutional intervention.

Despite differences in their organizational statuses and cultures, public and private universities in low-to-middle income countries appear to have gone through crisis management phases as outlined by Mitroff (2005). Having deciphered the first signals, universities were quick enough in undertaking preventative measures and developing damage containment strategies, while having a better grasp on challenges encountered. Yet, the problem wickedness prevented them from reaching the stage of recovery—this may be taking a longer and more winding road, as new variants of the coronavirus emerge, some members of society resist vaccination, and resources continue to be unevenly distributed across countries and continents. In the midst of these challenges, universities and societies are most likely to achieve more if they learn from each other how to manage the crisis.

AUTHOR CONTRIBUTIONS
Anatoly Oleksiyenko: Conceptualization; Writing - original draft; Investigation; Methodology; Validation; Writing - review & editing; Supervision; Project administration; Formal analysis; Data curation; Resources.
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CONFLICT OF INTEREST
The authors have no conflict of interest to declare.

DATA AVAILABILITY STATEMENT
Research data are not shared.

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REFERENCES
Agasisti, T., & Soncin, M. (2021). Higher education in troubled times: On the impact of Covid-19 in Italy. Studies in Higher Education, 46(1), 86–95.
Batie, S. S. (2008). Fellows address: Wicked problems and applied economics. American Journal of Agricultural Economics, 90(5), 1176–1191.
Bergan, S., Gallaher, T., Harkavy, I., Munck, R., & van’t Land, H. (Eds.). (2021). *Higher Education’s Response to the COVID-19 Pandemic: Building a sustainable democratic future*. Council of Europe.

Birnbaum, R. (1988). *How colleges work: The cybernetics of academic organization and leadership*. Jossey-Bass.

Blackman, T., Greene, A., Hunter, D. J., McKee, L., Elliott, E., Harrington, B., Marks, L., & Williams, G. (2006). Performance assessment and wicked problems: The case of health inequalities. *Public Policy and Administration*, 21(2), 66–80.

Blakeley, K. (2007). *Leadership blind spots and what to do about them*. John Wiley & Sons.

Chanmugam, A. (2021). The menu of bad options: Academic leadership during the early pandemic. *Qualitative Social Work*, 20(1–2), 645–651.

de Boer, H. (2021). COVID-19 in Dutch higher education. *Studies in Higher Education*, 46(1), 96–106.

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

Hökkä, P., & Vähäsanantane, K. (2014). Agency-centred coupling—A better way to manage an educational organization? *International Journal of Leadership in Education: Theory and Practice*, 17(2), 131–153.

Jones, G. A., & Oleksiyenko, A. (2011). The internationalization of Canadian university research: A global higher education matrix analysis of multi-level governance. *Higher Education*, 61(1), 41–57.

Jung, J., Horta, H., & Postiglione, G. (2021). Living in uncertainty: The COVID-19 pandemic and higher education in Hong Kong. *Studies in Higher Education*, 46(1), 107–120.

Kreuter, M. W., De Rosa, C., Howze, E. H., & Baldwin, G. T. (2004). Understanding wicked problems: A key to advancing environmental health promotion. *Health Education & Behavior*, 31(4), 441–454.

Maassen, P., & Stensaker, B. (2019). From organised anarchy to de-coupled bureaucracy: The transformation of university organisation. *Higher Education Quarterly*, 73(4), 456–468.

Marginson, S., & Rhoades, G. (2002). Beyond national states, markets, and systems of higher education: A glonal agency heuristic. *Higher Education*, 43(3), 281–309.

Meyer, H.-D. (2002). From "loose coupling” to “tight management”? Making sense of the changing landscape in management and organization theory. *Journal of Educational Administration*, 40(6), 515–520.

Meyer, H.-D., & Rowan, B. (2006). Institutional analysis and the study of education. In H.-D. Meyer & B. Rowan (Eds.), *The new institutionalism in education* (pp. 1–13). State University of New York Press.

Mitroff, I. (2020). Corona virus: A prime example of a wicked mess. *Technological Forecasting and Social Change*, 157, 120072.

Mitroff, I. I. (2005). *Why some companies emerge stronger and better from a crisis*. AMACOM.

Nash, M., & Churchill, B. (2020). Caring during COVID-19: A gendered analysis of Australian university responses to managing remote working and caring responsibilities. *Gender, Work and Organization*, 27, 833–846.

Perrotta, D. (2021). Universities and Covid-19 in Argentina: From community engagement to regulation. *Studies in Higher Education*, 46(1), 30–43. https://doi.org/10.1080/03075079.2020.1859679

Rittel, H. J., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4, 155–169.

Ross, J. (2020). Economic ramifications of the COVID-19 pandemic for higher education: A circuit breaker in Australian universities’ business model? *Higher Education Research & Development*, 39(7), 1351–1356. https://doi.org/10.1080/07294360.2020.1825350

Rowan, B. (2002). Rationality and reality in organizational management. Using the coupling metaphor to understand educational (and other) organizations—A concluding comment. *Journal of Educational Administration*, 40(6), 604–611.

Sá, C. M., & Oleksiyenko, A. (2011). Between the local and the global: Organized research units and international collaborations in the health sciences. *Higher Education*, 62(3), 367–382.

Sahlin, K. (2012). The interplay of organizing models in higher education. What room is there for collegiality in universities characterized by bounded autonomy? In B. Stensaker, J. Välimaa, & C. Sarrico (Eds.), *Managing reforms in universities: The dynamics of culture, identity and organizational change* (pp. 189–222). Routledge.

Shamsir, M. S., Krauss, S. E., Ismail, I. A., Jalilb, H. A., Johar, M. A., & Rahman, I. A. (2021). Development of a Haddon matrix framework for higher education pandemic preparedness: Scoping review and experiences of Malaysian universities during the COVID-19 pandemic. *Higher Education Policy*, 35, 439–478. https://doi.org/10.1057/s41307-020-00221-x

Spillane, J. P., Parise, L. M., & Sherer, J. Z. (2011), Organizational routines as coupling mechanisms: Policy, school administration, and the technical core. *American Educational Research Journal*, 48(3), 586–619.

Tamrat, W. (2021). Enduring the impacts of COVID-19: Experiences of the private higher education sector in Ethiopia. *Studies in Higher Education*, 46(1), 59–74.

Vuillamy, G. (2004). The impact of globalisation on qualitative research in comparative and international education. *Compare: A Journal of Comparative and International Education*, 34(3), 261–284.
Weick, K. E. (1976). Educational organizations as loosely coupled systems. *Administrative Science Quarterly*, 21(1), 1–19.

Zdziarski, E. L., Rollo, J. M., & Dunkel, N. W. (2020). *Campus crisis management: A practitioner's guide*. Routledge.

**How to cite this article:** Oleksiyenko, A., Mendoza, P., Riaño, F. E. C., Dwivedi, O. P., Kabir, A. H., Kuzhabekova, A., Charles, M., Ros, V., & Shchepetylnykova, I. (2022). Global crisis management and higher education: Agency and coupling in the context of wicked COVID-19 problems. *Higher Education Quarterly*, 00, 1–19. [https://doi.org/10.1111/hequ.12406](https://doi.org/10.1111/hequ.12406)