Resilience in Higher Education in Times of Crisis

S.M. Kowler Hemdat Academic College

> O. Rubin Haifa University

S. Shpergel Talpiot College

Resilience refers to the capacity to bounce back and reorganize during times of exposure to crisis. We explored how higher-education institutions might enhance their employees' capacity to confront hardships, through a Mixed-Methods qualitative-quantitative study design, that examined the experiences of faculty-members during the first wave of the COVID-19 pandemic. The findings revealed vulnerabilities, challenges and opportunities. Four themes emerged: basic needs, trust and confidence, community atmosphere and respect and appreciation. The colleges' support was based on trial and error and responsible leadership was perceived as missing. However, the community offered a sense of strength and a cornerstone of resilience.

Keywords: crisis, faculty, higher-education, leadership, resilience

INTRODUCTION

This study was conducted following the first wave of the COVID-19 pandemic. COVID-19 is probably the greatest global challenge in recent times, involving deep shifts in many areas of our lives (Zheng et al., 2021).

A pandemic is considered a pervasive, unavoidable and invisible danger (Pappas et al., 2009), which disrupts the social and family conduct that help protect people in times of crisis. According to UNESCO (2020), COVID-19 has been the greatest disruption in the education system in generations. In light of rising concerns about the spread of COVID-19, educational institutions across the globe shut down in person instruction, and moved towards online learning. In Higher education (HE), faculty members started to teach in front of a computer screen, and their students took the courses through the internet (Ali, 2020).

The transition to online teaching was followed by a sense of a decrease in the quality of teaching and increasing levels of stress, confusion and burnout among HE faculty (Ashencaen Crabtree et al., 2020; Schmidt-Crawford et al., 2021; Winfield & Paris, 2021). HE lecturers have collectively experienced significant adversity and trauma arising from the COVID-19 pandemic. Recent studies point to some of the triggers experienced by lecturers, namely social lockdown involving working from home; using unfamiliar technology systems; rapid and unexpected changes, not knowing what the demands of the following week

or month might be and what the future may hold; distressed and anxious students; not having regular interactions within the college community; high workload demands - teaching programs online, developing alternative assessment methods, striving to maintain research activities; moving from ways of working with full confidence to new ways of teaching outside of their comfort zones; grief over things that had been changed or curtailed; and fear for the health and well-being of family, friends, and loved ones (Bartusevičienė et al., 2021; Bento et al., 2021; Fox & Walter, 2022; Meishar-Tal & Levenberg, 2021).

We found it important to investigate HE responses when facing this adversity, using the theoretical framework of resilience. Empirical and conceptual work on resilience in adults, and teachers in particular, is still in its infancy (Gu, 2018). At the same time, studies about HE during COVID-19 point to the need for flexible and resilient systems as we face unpredictable futures and call to investigate the needed resources of the faculty, for they play an important function in the emerging vulnerable systems as COVID-19 revealed (Ali, 2020).

What Is Resilience?

Resilience narrates a positive adaptation in the face of adversity, trauma, tragedy, threats or significant sources of stress (American Psychological Association, APA). Resilience theory originally developed from the literature on psychopathology relating to coping with stress, and focused on personality variables such as hardiness that may make one resilient. Our study relates to the "third wave" of resilience theory (Mlinac & Schwabenbauer, 2018), adding the importance of exploring the attributes of context, in which resilience is likely to occur.

The present study adopts the logical relation of system capacities contributing to overall system resilience (Yarveisy, Gao, & Khan, 2020): Instead of measuring resilience as an isolated system characteristic, resilience can be achieved and measured through the sum of unique system capacities contributing to the overall system resilience. Therefore, in the present study we investigated measures of performance of HE institutions when they faced the outbreak of the pandemic. The overall goal of this study was to contribute to the knowledge of HE system attributes that might be vital in evaluating resilience under the circumstances of a sudden adversity.

Hartmann et al. (2020) undertook a comprehensive review on resilience in organizational contexts. They found the majority of research on resilience in the workplace had focused on these factors: (1) personality traits (such as openness to experience), (2) personal resources (such as having expertise related to the job), (3) personal attitudes (such as a sense of purpose), (4) personal emotions, and (5) work demands and resources (including social support at work, performance feedback from supervisors, leadership styles). They noted an additional recent trend, that elaborates on resilience as a collective phenomenon, highlighting team resilience as an outcome of contextual factors and interactions.

As higher education teachers face the demand to transform from traditional individualistic working culture, to new collaborative practices, they need to learn new ways of sustaining their motivation and resilience (Kunnari, 2018). Motivation is related to resilience, for it takes motivation to be resilient and recover from hard events (Resnick, 2018). Similar factors are associated with both resilience and motivation such as self-efficacy, openness to experience new things, a sense of meaningfulness, previous experiences with hardship and social support (Resnick, 2018). Nevertheless, motivation is different from resilience and is based on an inner urge rather than stimulated in response to adversity or challenge.

Taylor and Seager (2021) proposed a revised and enhanced version to Maslow's hierarchy of needs, and demonstrated from the current COVID-19 pandemic, that well-being depends equally on biological, psychological, and social factors and that these interact dynamically. A recent article (Accenture, 2020) highlights what employees need nowadays in order to develop resilience, based on a survey of 15,665 employees from 10 countries, in collaboration with the 2020 World Economic Forum. The authors mentioned conditions of physical needs, mental needs, relationship needs and responsible leadership. People in leadership roles are responsible for creating a workplace climate that fosters resilience. During a crisis, management should focus on providing information and promote a sense of safety, self and community efficacy, connectedness to others and hope (Dückers et al., 2017).

This study investigated resilience as reflecting interactions between individuals and their environments (Ungar, 2012), and in particular the behaviors, interactions, needs, barriers and opportunities, that occurred in the context of colleges, as perceived by the faculty members. The study focused on what the college faculty needed in response to the pandemic, and at what level their institutions provided them with these attributes.

THE PRESENT STUDY

The Context of the Study

In face of the COVID-19 crisis, in March 2020, all HE institutions in Israel shut down and were instructed to start teaching online, while schools did the same in full or in part. This situation posed multiple difficulties for many of the faculty members (Donitsa-Schmidt & Ramot, 2020). ICT units in the institutions offered a plethora of remote training in online teaching tools, in addition to quickly purchased licenses for digital tools.

The capacity to absorb shocks and to bounce back into functioning shape, or at the least, to prevent system collapse, has to be measured in a given period of time after the crisis occurred. Resilience refers to the system's ability to reorganize itself during times of exposure to hazards, including the preservation of its essential basic structures, functions and core purpose, and to adopt in these measures in a timely and efficient manner. Therefore, we found it important to study the very initial reactions to the crisis within the HE institutions, during the phase of the shock- the first wave of the COVID-19 pandemic. As a result, the data collection period was brief and occurred during very challenging times as people coped with sudden trauma.

Methodology

In order to answer, what the college faculty needed in response to the pandemic, and at what level their institutions provided them with these attributes, the present exploratory research utilized a fully mixed qualitative-quantitative sequential equal-status design, attributing equal value to both methods (Leech & Onwuegbuzie, 2009). The findings of the first qualitative phase guided the development of items and scales for the quantitative survey instrument and provided an independent source of information. The qualitative findings provided insights into the experiences of the faculty members, while the quantitative findings were used to investigate the prevalence of these experiences and to examine whether there were statistical differences between the faculty members.

PHASE 1

Methodology

Semi-structured interviews were conducted with faculty members by telephone, during the first wave of the COVID-19 pandemic. The participants were a respondent-driven convenience sample of 18 faculty members, aged 42–60 years, who teach in various departments (humanities, education, science and mathematics) in 10 different colleges. The interviewees were asked about resources, behaviors, barriers, and opportunities in the college in which they taught in that period; what they needed in order to cope effectively with the crisis; what they felt that their institutions did well and where they failed.

Findings

The interviews were encoded using the categorical content analysis method (Lieblich et al., 1998). We identified four main themes:

Basic needs. Participants indicated the burden they felt, having to teach and deal with technical
and technological issues, mostly without the necessary skills or assistance, while their work
became intertwined with their home environment:

The college did not help at all. I had to buy a camera and speakers. I also bought a larger screen. Because my computer isn't just a home computer anymore, it became very important.

We found a high recurrence in the statements of the interviewees, of comparing their institution with others:

I know that in [a name of a different college] they upgraded the faculty's equipment, and also provided a teaching-assistant who dealt with all the Zoom issues.

The statements that were included in the basic needs theme included physical, technical and pedagogical needs of the faculty members in the wake of the COVID-19 crisis.

 Trust and confidence. This theme referred to the sense of confidence, and addressed clarity, strong leadership, stability, and transparency, as reflected in ongoing collaborative decisionmaking and information sharing:

They did not update us on the decisions and I felt that I had been left completely alone. I don't know how it could have been done differently, but it is typical, no sense of trust. Not only that things were being dictated from above, I've felt that they might give completely different instructions the next day.

The fear of being an uninformed outsider, as expressed in the phrases "they" versus "I", seems to have intensified a sense of isolation and heightened confusion.

Community atmosphere. Interviewees shared a need for a support within the community of the college faculty. The participants' experiences were accompanied by a strong sense that it was the institution's responsibility to help them cope with the sudden crisis, by encouraging them to work together to develop solutions. This was involving constant comparisons between colleges, and what they believed some faculty members had received and others had not.

In [a name of a different college] they maintained a supportive community. For example, people who know about computers, or who had a good idea, helped out everyone else. Here though, there was no interaction, and it left me feeling very lonely. I was looking for help, from one webinar to another, in all different sites. I didn't feel like I belonged.

One participant that had the support of her community, perceived these opportunities for support as a matter of being lucky:

I was lucky. Unless our faculty members were willing to share information, I would have to look for opportunities elsewhere, to look for help outside.

The interviewees expressed the significant need for the support of the faculty community during the crisis, and the fear of having to seek help as an outsider.

Respect and appreciation. This theme included viewing the faculty members as human beings, ensuring their wellbeing, and expressing trust and appreciation:

Since there was no presence on campus, we were required to fill out reports after every lesson. It was very insulting. In [a name of a different college], the lecturers were given complete freedom and they didn't have to report all the time. I felt that the college didn't trust me.

I didn't get any positive reinforcements, not even a single encouraging word. There wasn't anyone who appreciated the special work I was doing. This is something I heard about from other faculty members as well.

All interviewees shared the strong desire to be valued and appreciated, and expressed the importance of seeing the employee as a human being.

PHASE 2

The findings from the first phase of the study were used to develop a questionnaire, that referred to the prevalence of each of the four themes, in the participants' colleges, during the period of the first wave of the pandemic.

Methodology

On the basis of the theoretical background and the content analysis of the interviews in the qualitative phase, a total of 31 items for the questionnaire were formulated. These items were subjected to the review of three experts, and 26 items for which there was 100% consensus were included in the final version of the questionnaire. The participants were asked to rank to what degree they felt each item has been addressed by their college during the COVID-19 pandemic, on a 5-point Likert-type scale, and to add a verbal explanation for their response to each statement. The Cronbach's alpha for the questionnaire was .97. Reliability coefficients and items for each scale are listed in Table 1.

The questionnaire was designed using the Google Form, and was distributed by email and by the instant message WhatsApp application to a respondent-driven convenience sample. A convenience sample of selected faculty members completed the questionnaire and were asked to invite colleagues to complete the same questionnaire as well. A decision was made to stop distributing the questionnaires when the first lockdown ended, to allow us to obtain information about the initial reactions of the colleges to the crisis.

70 questionnaires of faculty members from 15 colleges in Israel met eligibility criteria (consented and provided sufficient data to be deemed valid) and were included in the analysis. 27% of the participants were members of the college administration and 22% of the participants were pedagogical instructors, in addition to being lecturers. 36% of them had a seniority of over 15 years as college faculty members.

Findings

In order to calculate the prevalence of each of the themes as perceived by the participants, at first, responses were divided into Low (if ranked 1–2 on the Likert-type items), Medium (3), and High (4–5). The results (shown in Table 1) indicate as follows.

- Basic needs. As perceived by the participants, colleges had provided technological support (63.3%); appointed employees to contact when the faculty members encountered problems (60%); and provided some pedagogical consultancy (46.7%). Yet, 56.7% of the respondents reported that there was only minimal emotional support during the pandemic, and 63.8% had not received any financial assistance for purchasing the equipment they needed to work from home.
- Trust and confidence. The participants indicated that they had confidence in the leaders in their colleges, and generally felt that they could trust people from their college (60%), and particularly from their departments (76.7%). The two items that were ranked the lowest were: transparency, which was reported as low by 48.3% of the respondents; and 38.3% reported that instructions during the period of the pandemic were being "dictated from above".
- Community atmosphere. 50% of the participants reported that the administration encouraged faculty members to assist one another when coping with COVID-19 pandemic, and 71.1% of the participants reported beneficial interactions between faculty members.

- Respect and appreciation. Among the participants, 56.7% did not feel that the college saw them as more than just lecturers and looked out for their emotional wellbeing during the pandemic. The responses to the statement "During the pandemic, the college administration valued and expressed appreciation for my performance" were divided into two extremes. This item was ranked low by 40% of the participants, and very high by 43.3%.

TABLE 1 SCALES RELIABILITIES, ITEMS, AND PERCENTAGES OF RANKS (LOW, MEDIUM, HIGH)

Scale	High(%)	Medium(%)	Low(%)	
Basic needs (α=0.93)	8 \ /			
During the pandemic, I felt that the college provided the	28.3	23.3		
conditions I needed to continue the routine of teaching.				
The college appointed people who would be available to the	60.0	20.0	20.0	
faculty members and help them solve problems that arose during				
the pandemic.				
The college offered lecturers the opportunity to receive	25.0	18.3	56.7	
emotional support during the pandemic.				
The college adequately addressed the needs of the lecturers	38.3	20.0	41.7	
during the pandemic.				
During the pandemic, each lecturer was entitled to equal and fair	60.0	26.7	13.3	
assistance from the college.				
During the pandemic, the lecturers received financial assistance	15.0	16.7	68.3	
from the college (e.g. to buy the equipment they needed to teach				
from home).				
The instructions given by the college during the pandemic were	46.6	16.7	36.7	
considerate of the fact that I had to work from home (meaning				
while my children were at home, with unstable internet				
connections, etc.).				
The college provided the resources I needed to teach during the	35.0	21.7	43.3	
pandemic.				
The college provided pedagogical assistance during the	46.7	21.7	31.6	
pandemic.				
The college provided technological support during the	63.3	25.0	11.7	
pandemic.				
Trust and confidence (α=0.90)				
I knew which of the college employees I could contact during	66.7	15.0	18.3	
the pandemic when I needed help.				
During the pandemic I had a great deal of confidence in the	56.6	21.7	21.7	
decision makers at my college.				
I can trust the people at my college to help me in case of a future	60.0	20.	20.0	
crisis like the pandemic.				
I believe that the college management will have the ability to	48.4	30.0	21.6	
solve problems during a similar crisis.				
The faculty members at the college were very much involved in	35.0	26.7	38.3	
what was happening during the pandemic, and instructions were				
not "dictated" from above.				
During the pandemic, there was transparency and consideration	35.0	16.7	48.3	
of the faculty members' opinions when making decisions.				

I could depend on my colleagues in my department during the	76.6	11.7	11.7
pandemic.			
The college made sure to share clear information with the	53.4	23.3	23.3
faculty members about what was being done at the college			
during the pandemic.			
The college administration demonstrated leadership during the	48.3	26.7	25.0
pandemic.			
The head of my department demonstrated leadership skills	63.3	21.7	15.0
during the pandemic.			
Community atmosphere (α =0.85)			
During the pandemic, the college administration encouraged the	50.0	23.3	26.7
faculty members to support one another.			
The faculty members at my college were a supportive	66.6	20.0	13.4
community during the pandemic.			
The faculty members interacted and cooperated during the	71.7	13.3	15.0
pandemic.	51.6		
The college administration encouraged the faculty members to	20.0	28.4	
cooperate and work together to develop solutions for issues that			
arose during the pandemic.			
Respect and appreciation (α=0.66)			
During the pandemic, the college management valued and	43.3	16.7	40.0
expressed appreciation for my performance.			
I felt that the college saw me as a person and not just as a	23.3	20.0	56.7
lecturer, and considered my emotional wellbeing in different			
ways during the pandemic.			

In order to examine whether there were differences between participants as related to their position at the college and to their seniority, we performed one-way ANOVA tests. The sample size was not large and for this reason we were reluctant to set statistical powerful conclusions, however we found several interesting preliminary differences that we believe are worth noting for future research.

Differences Based on Seniority

We performed one-way ANOVA to analyze the differences between groups of participants based on their seniority (1-5 years, 6-10 years, 11-15 years, 16 years or more) for each of the four scales.

Significant differences were found for the basic needs (F(66,3)=3.84, P<0.05), so that faculty members with 6–10 years of experience were the most satisfied with this category (M=3.72, SD=0.74). Similar findings emerged for trust and confidence (F(66,3)=2.88, P<0.05), which was scored highest by participants with 6–10 years of experience (M=4.03, SD=0.60). A significant difference was also found for community atmosphere between seniority groups (F(66,3)=2.46, P<0.05), so that faculty members with the least experience (1-5 years) reported feeling less of a sense of community than the other groups (M=2.98, SD=1.51). No significant differences were found between seniority groups for respect and appreciation.

Differences Based on Participants' Positions at the College

We performed one-way ANOVA to analyze the differences between participants with different functions at their colleges for each of the four scales. While members of the college administration ranked the colleges' contribution to each scale as higher than all the other groups (see table 2), the differences were not found to be significant.

The participants' explanations for how they ranked each item were then analyzed. The comments about how well the colleges had provided basic needs raised an issue that we referred to as "subject to the good intentions", namely support attempts which in most cases were chaotic and inadequate to the needs of the

faculty members. The college appointed employees who were responsible for helping the other faculty members. However, the assistance was based mostly on good will, the desire to volunteer, and the lecturers' general knowledge.

TABLE 2
DIFFERENCES BASED ON PARTICIPANTS' POSITIONS: MEAN AND SD

Scales	Lecturer and Lecturer and		Lecturer			
	administration member		pedagogical instructor			
	(n=18)		(n=14)		(n=38)	
Basic needs	3.38	0.90	3.00	0.95	3.05	1.01
Trust and confidence	3.86	0.82	3.25	0.98	3.37	1.11
Community atmosphere	4.01	0.76	3.41	1.06	3.41	1.14
Respect and	3.08	1.11	2.53	1.23	2.55	1.34
appreciation						

They really tried, but the people appointed by the college weren't really helpful. On the contrary, there was a sense of confusion. We helped each other out as a team, but it didn't really come from the administration. All the college cared about was student dropout rates. Are you kidding?! Everything I needed in order to teach from home I bought myself, out of my own pocket. The college didn't address the difficulties at all, and there was no consideration for challenges such as having our children at home and problematic internet connections. Not at all; and there was no support when things became difficult and when I asked for help.

Our analysis of comments regarding the college's ability to create a climate of trust and confidence in the face of the adversity, revealed a sense of instability and use of trial and error, which was perceived as unfocused and indicative of the college's helplessness in coping with the situation:

It was very difficult to work because of the unknown situation and also because the administration was acting based on trial and error. I didn't feel the presence of a director.

They never asked for our opinion. We received the instructions and had to follow them. The college's weaknesses were fully exposed. Most of the attention was on the students, to make sure things ran smoothly. There definitely wasn't trust. They just disappeared and dictated instructions with no explanations. I couldn't count on the college, only on myself. I hope that the college will do better solving problems in the future. I didn't feel they were capable during this crisis.

Participants used terms of being "silenced", "exposed", and "ignored".

The analysis of the comments regarding the community atmosphere yielded a further perspective, namely not only the small group of administers can contribute to creating a sense of community, but also additional functionaries:

I found support in active WhatsApp groups. As head of a department, I tried to encourage the lecturers to cooperate with one another and share the teaching methods they were using successfully.

The college did not encourage cooperation and sharing. They seemed to be happy about us being dispersed and not working together, as a group. The head of the department was not

involved. Unfortunately, even we didn't do anything as the committee representing the faculty.

The community seems to offer a sense of strength, while its absence left the individual and the group disconnected and disassociated.

The comments on respect and appreciation have demonstrated that during times of crisis, there are many opportunities and challenges, which can provide fertile ground for empowering employees, by giving them plenty of space to grow and be appreciated for the efforts they make.

It was an opportunity for me to prove myself. I received a personal thank-you letter, after I volunteered to provide support and assistance.

No one ever expressed any appreciation, even though there were members of the administration who knew about the challenges I was experiencing during the pandemic.

DISCUSSION

Another crisis like the outbreak of COVID-19 could happen again, and the HE institutions must be prepared to contend with it (Nandy et al., 2021). This study examined how the institutions coped with the crisis, as perceived by faculty members from various colleges. This exploratory Mixed-Method study facilitated a three-stage analysis. The interviews presented a range of factors related to the needs in colleges during times of facing the crisis, the close-ended questions in the questionnaires quantified the prevalence of those factors in 15 different colleges at the initial stage of the pandemic, and the open-ended responses provided interpretations of the findings collected from the 70 questionnaires included in this study.

It was important to study the institutions' very initial reactions to the crisis, and explore their capability of reorganizing during the first period of time of exposing to the hazard, when they are expected to absorb shocks and to *bounce back*, or at the least to prevent system collapse. As a result, the data collection period was limited in time and occurred during an intense and challenging period of adversity and lockdowns. Under these circumstances, the scope of the sample was limited. Future comparative studies may analyze the changes that occur during the pandemic, and enable to statistically address the issue that was raised by participants during the qualitative part of this study, namely their feeling that the various colleges were handling the crisis differently (see also: Kovacs et al., 2021).

Studies so far have explored the resiliency of school teachers, in general and particularly during the pandemic (Baguri et al, 2022; Fox & Walter, 2022; Ramakrishna & Singh, 2022). When the COVID-19 crisis began and colleges were committed to continue teaching, they experienced many challenges, some resembling and others differing from those experienced by school teachers. Faculty members in HE institutions collectively experienced a forced transition to off-campus teaching overnight, in relative isolation and during lockdowns, without prior preparation (Carrillo & Flores, 2020; Guangul et al., 2020; Mishra et al., 2020; Parham & Rauf, 2020; Rapanta et al., 2020). The current study has raised questions about what has been done and what has not been done in colleges to meet the needs of faculty, as the crisis began. The findings may be vital to the policymakers and to the organizational leadership, who can contribute significantly to the individual and the collective resilience.

Four themes emerged from the interviews and highlighted the specific conditions that lecturers needed during the first period of the outbreak of the crisis: basic needs (such as technical and pedagogical support), trust and confidence, community atmosphere, and respect and appreciation. In general, the findings indicated that the colleges offered solutions and provided technological support, however these were based on trial and error, and even described as a matter of 'being lucky'. Similarly, Duchek (2019), questioned whether resilience is the result of designed processes or perhaps the outcome of improvisation and luck.

Despite the lack of consistent, stable support, the participants noted a clear sense of community, especially within their departments, built not only by the administration but by various functionaries at the college, particularly heads of departments. The findings reinforce the literature regarding the role of the

head of the department in leading joint projects, encouraging connections, and creating hope among staff members (Baporikar, 2015; Dückers et al., 2017; Islam, Karmaker, & Paul, 2019; Knight & Trowler, 2000).

It would be interesting to explore HE institutions in other countries, addressing the question of whether the findings of tendency to protect the community atmosphere that has been found in this study can be attributed to the collective culture of Israeli society, a typical reaction to the pandemic in collectivist societies (Maaravi et al., 2021). Nandy et al. (2021) found that faculty members struggled with sharing their difficulties with their peers and asking for assistance during COVID-19 pandemic. Academic culture in general encourages autonomy and academic freedom, which can easily be translated into social isolation (Baporikar, 2015). In the face of the pandemic and the lockdowns, when working from home instead of on campus, this isolation could undermine resilience, while working with colleagues as a community can become a cornerstone of resilience (see: Sharma, 2020, who suggested the development of online peer communities).

When examining differences between participants, we found that for all the categories, the members of the administration viewed the items that were assessed in a more positive light than the other participants, though the differences were not significant. The members of the administration may be more involved in the decision-making processes, and therefore perceived the college's performance as more positive. It is interesting to note that the pedagogical instructors did not differ in this respect from the disciplinary lecturers. We would have expected the pedagogical instructors, who coped with challenges related to the practical aspects of teaching in schools, to report more and possibly different challenges in the qualitative and quantitative stages of this study. One possible explanation for this result may be that the study was presented in the context of the conditions provided by the colleges, thus the participants focused on this aspect.

Significant differences were found for the seniority variable. The group with the most seniority gave the lowest scores for the basic needs, which may reflect the technological changes that are considered in general more challenging for the more senior faculty members. We also found that lecturers with the least experience (1-5 years) ranked the community atmosphere lower than the other groups. These findings indicate the need to facilitate their sense of belonging to the college, especially in times of crisis.

The qualitative and quantitative findings indicate that directives were commonly dictated from above. Communication that builds trust not only helps to produce collective understanding and commitment (Lucero et al, 2009); Giving employees the opportunity to express their opinions and understand the logic behind decisions made by their managers is critical in emergency situations (Kim, 2018). Responsible leadership has also been found important for effective teaching (Rapanta et al., 2020). The findings show that this aspect of leadership is perceived as missing in the context of the colleges during the COVID-19 crisis. Future studies could investigate the perceptions of the directors of the HE institutions and explore how they perceive their responsibility and obligation to provide these conditions.

A crisis presents opportunities and challenges. The participants described providing support and assistance on a volunteer basis, while overcoming personal and professional challenges that people were contending with at the time. Some were acclaimed for their efforts, and others were disturbed by the lack of appreciation. The literature shows that the pandemic has enhanced the need for self-recognition in HE institutions (Nandy et al., 2021). Furthermore, a director has the ability to create an atmosphere that markets employees' accomplishments. The head of a department can inspire faculty members to be respectful of one another, and to express mutual appreciation of colleagues who share their knowledge and experience with others (Baporikar, 2015; Black, 2015). It seems that institutional resilience can be developed by encouraging to express appreciation and respect, by the managers, but also by colleagues. This means recruiting the positive trait of the community identified in this study, to strengthen this challenging attribute of resiliency in HE institutions, of evident appreciation in times of crisis.

Note that the largest discrepancies in the responses were found for the category of respect and appreciation. The ratings given for the items that related to being valued and appreciated, were divided into two extremes – those who expressed a low level of agreement vs. those who expressed a high level of agreement. This disparity may indicate that the pandemic presented an opportunity for the development of some of the important attributes that construct resiliency. The mentioned discrepancy was not based on

seniority or position in the college, according to our findings. It would be interesting to pursue these findings and identify the variables that contribute to this distinction.

The COVID-19 pandemic revealed emerging vulnerabilities in education systems around the world (Bozkurt, 2022). An explicit expression of this is a participant's statement, that the pandemic fully exposed the college's greatest weaknesses. It is now clear that society needs flexible and resilient education systems as we face unpredictable futures (Ali, 2020). To confront hardships, HE institutions need to apply a resilience model that will enhance their employees' capacity to adapt to adversity. Such an approach will allow them not only to continue successfully with their main activities (Ayebi-Arthur, 2017), but hopefully also to thrive (Breen, 2019), modeling their coping experience to their students, colleagues and other stakeholders.

For the HE institutions, the COVID-19 period may become an opportunity to re-examine its culture in regard to resilience in the face of futures crises. Breen (2019) argues that as educators and higher education leaders, our collective work inherently concerns student learning, research and service to the broader society; Yet alongside caring for their students' grades and preventing students from dropping out in the face of extreme challenges, the leadership's attention should be turned also towards the faculty members, modeling a positive orientation, marking accomplishments, supporting self-care initiatives, and creating a structure that nurtures resilience.

REFERENCES

- Accenture. (2020). *Human Resilience: What your people need now*. Retrieved from https://accntu.re/3A3m8Cp
- Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Higher Education Studies*, 10(3), 16–25.
- American Psychiatric Association (APA). *The road to resilience*. Retrieved from http://www.apa.org.ezproxy.haifa.ac.il/helpcenter/road-resilience.aspx
- Ashencaen Crabtree, S., Esteves, L., & Hemingway, A. (2021). A 'new (ab) normal'?: Scrutinising the work-life balance of academics under lockdown. *Journal of Further and Higher Education*, 45(9), 1177–1191.
- Ayebi-Arthur, K. (2017). E-learning, resilience and change in higher education: Helping a university cope after a natural disaster. *E-learning and Digital Media*, 14(5), 259–274.
- Baguri, E.M., Roslan, S., Hassan, S.A., Krauss, S.E., & Zaremohzzabieh, Z. (2022). How do self-esteem, dispositional hope, crisis self-efficacy, mattering, and gender differences affect teacher resilience during COVID-19 school closures? *International Journal of Environmental Research and Public Health*, 19(7), 4150.
- Baporikar, N. (2015). Understanding professional development for educators. *International Journal of Sustainable Economies Management*, 4(4), 18–30.
- Bartusevičienė, I., Pazaver, A., & Kitada, M. (2021). Building a resilient university: ensuring academic continuity—transition from face-to-face to online in the COVID-19 pandemic. *WMU Journal of Maritime Affairs*, 20(2), 151–172.
- Bento, F., Giglio Bottino, A., Cerchiareto Pereira, F., Forastieri de Almeida, J., & Gomes Rodrigues, F. (2021). Resilience in higher education: a complex perspective to lecturers' adaptive processes in response to the COVID-19 pandemic. *Education Sciences*, 11(9), 492.
- Black, S.A. (2015). Qualities of effective leadership in higher education. *Open Journal of Leadership*, 4(2), 54–66.
- Bozkurt, A. (2022). Resilience, adaptability, and sustainability of higher education: A systematic mapping study on the impact of the Coronavirus (Covid-19) pandemic and the transition to the new normal. *Journal of Learning for Development*, *9*(1), 1–16.
- Breen, J.M. (2019). Thriving in higher education: Creating the new normal through resilience. In *Management and Administration of Higher Education Institutions at Times of Change*. Emerald Publishing Limited.

- Carrillo, C., & Flores, M.A. (2020). COVID-19 and teacher education: A literature review of online teaching and learning practices. *European Journal of Teacher Education*, 43(4), 466–487.
- Donitsa-Schmidt, S., & Ramot, R. (2020). Opportunities and challenges: Teacher education in Israel in the Covid-19 pandemic. *Journal of Education for Teaching*, 46(4), 586–595.
- Dückers, M.L., Yzermans, C.J., Jong, W., & Boin, A. (2017). Psychosocial crisis management: The unexplored intersection of crisis leadership and psychosocial support. *Risk, Hazards & Crisis in Public Policy*, 8(2), 94–112.
- Fox, H.B., & Walter, H.L. (2022). More than strength from within: Cultivating teacher resilience during COVID-19. *Current Issues in Education*, 23(1),1–22.
- Gu, Q. (2018). (Re) Conceptualising teacher resilience: A social-ecological approach to understanding teachers' professional worlds. In M. Wosnitza, F. Peixoto, S. Beltman, & C.F. Mansfield (Eds.), *Resilience in education. Concepts, contexts and connections* (pp. 13–33). Springer, Cham.
- Guangul, F.M., Suhail, A.H., Khalit, M.I., & Khidhir, B.A. (2020). Challenges of remote assessment in higher education in the context of COVID-19: A case study of Middle East College. *Educational Assessment, Evaluation and Accountability*, 32(4), 519–535.
- Hartmann, S., Weiss, M., Newman, A., & Hoegl, M. (2020). Resilience in the workplace: A multilevel review and synthesis. *Applied Psychology*, 69(3), 913–959.
- Islam, M.R., Karmaker, P.R., & Paul, A.K. (2019). Instructional leadership as head of the department at tertiary colleges in Bangladesh: Challenges and solutions. *Journal of Humanities and Social Science*, 24(2), 1–8.
- Kim, Y. (2018). Enhancing employee communication behaviors for sensemaking and sense giving in crisis situations: Strategic management approach for effective internal crisis communication. *Journal of Communication Management*, 22(4), 451–475. https://doi.org/10.1108/JCOM-03-2018-0025
- Knight, P.T., & Trowler, P.R. (2000). Department-level cultures and the improvement of learning and teaching. *Studies in Higher Education*, 25(1), 69–83.
- Kovács Cerović, T., Mićić, K., & Vračar, S. (2021). A leap to the digital era—what are lower and upper secondary school students' experiences of distance education during the COVID-19 pandemic in Serbia? *European Journal of Psychology of Education*, pp. 1–20.
- Kunnari, I. (2018). Teachers changing higher education: From coping with change to embracing change. *Helsinki Studies in Education*, 34.
- Leech, N.L., & Onwuegbuzie, A.J. (2009). A typology of mixed methods research designs. *Quality & Quantity: International Journal of Methodology*, 43(2), 265–275.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative Research: Reading, Analysis and Interpretation*. Sage.
- Lucero, M., Tan, A.T.K., & Pang, A. (2009). Crisis leadership: When should the CEO step up? *Corporate Communications: An International Journal*, *14*, 234–248.
- Maaravi, Y., Levy, A., Gur, T., Confino, D., & Segal, S. (2021) "The Tragedy of the Commons": How Individualism and Collectivism Affected the Spread of the COVID-19 Pandemic. *Front. Public Health*, *9*, 627559.
- Meishar-Tal, H., & Levenberg, A. (2021). In times of trouble: Higher education lecturers' emotional reaction to online instruction during COVID-19 outbreak. *Education and Information Technologies*, 26(6), 7145–7161.
- Mishra, L., Gupta, T., & Shree, A. (2020). Online teaching-learning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*, 1, 100012.
- Mlinac, M.E., & Schwabenbauer, A. (2018). Psychological resilience. In B. Resnick (Ed.), *Resilience in Aging* (pp. 81–104). Springer, Cham.
- Nandy, M., Lodh, S., & Tang, A. (2021). Lessons from Covid-19 and a resilience model for higher education. *Industry and Higher Education*, 35(1), 3–9.
- Pappas, G., Kiriaze, I.J., Giannakis, P., & Falagas, M.E. (2009). Psychosocial consequences of infectious diseases. *Clinical Microbiology and Infection*, 15, 743–747.

- Parham, S., & Rauf, M.A. (2020). COVID-19 and obligatory remote working in HEIs: An exploratory study of faculties' work-life balance, well-being and productivity during the pandemic. *International Journal of Economics, Commerce and Management*, 8(12), 384–400.
- Ramakrishna, M., & Singh, P. (2022). The Way We Teach Now: Exploring Resilience and Teacher Identity in School Teachers During COVID-19. *Front. Educ.*, 7, 882983.
- Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the Covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, 2(3), 923–945.
- Resnick, B. (2018). The relationship between resilience and motivation. *Resilience in Aging*, pp. 221–244. Schmidt-Crawford, D.A., Thompson, A.D., & Lindstrom, D.L. (2021). Condolences and congratulations: COVID-19 pressures on higher education faculty. *Journal of Digital Learning in Teacher Education*, 37(2), 84–85.
- Sharma, A. (2020). Finding community during a pandemic. Science, 368(6487), 206–206.
- Taylor, L., & Seager, M. (2021). Maslow revised: How COVID-19 highlights a circle of needs, not a hierarchy. *Psycherg Journal of Psychology*, *5*(1), 116–127.
- UNESCO. (2020). Covid-19 Impact on Education Data. COVID-19 Education Disruption and Response. The United Nations Educational, Scientific and Cultural Organization, UNESCO. Paris, France.
- Ungar, M. (2012). Social ecologies and their contribution to resilience. In M. Ungar (Ed.), *The Social Ecology of Resilience: A Handbook of Theory and Practice* (pp. 13–31).
- Winfield, J.D., & Paris, J.H. (2021). A Mixed Method analysis of burnout and turnover intentions among higher education professionals during COVID-19. *Journal of Education Human Resources*, e20210048.
- Yarveisy, R., Gao, C., & Khan, F. (2020). A simple yet robust resilience assessment metrics. *Reliability Engineering & System Safety*, 197, 106810.
- Zheng, J., Morstead, T., Sin, N., Klaiber, P., Umberson, D., Kamble, S., & DeLongis, A. (2021). Psychological distress in North America during COVID-19: The role of pandemic-related stressors. *Social Science & Medicine*, 270(c), 113687.