To: Institutions using the HEDS COVID-19 Institutional Response Faculty and Staff Surveys
From: Charlie Blaich and Kathy Wise
RE: Comparison of how faculty and staff have experienced their institutions' responses to COVID-19
Date: September 14, 2020

In late July, we issued a report summarizing how 6,000 staff from 29 colleges and universities experienced their institutions' responses to COVID-19.[1] In this memo, we compare staff responses to the responses of faculty who participated in the HEDS COVID-19 Institutional Response Faculty Survey. Four thousand faculty from 28 colleges and universities participated in the faculty survey. In this report, we will compare quantitative responses from staff and faculty in four areas:

1. Worries and stress
2. Feeling pushed and experiencing a lack of control
3. Communication and support
4. Factors that mitigate stress and worry

As always, we looked for the impact of gender and ethnicity in our analyses and have noted their impact when it was significant. Unfortunately, a sizeable proportion of faculty who took the survey did not respond to our question asking them to identify their gender. As a result, we didn't have enough responses from faculty who identified as non-binary to include that gender identity in our analysis.

## Worries and stress

We asked both faculty and staff, given the changes caused by the spread of COVID-19, how often they worried about 11 different areas of their lives. Overall, more than half of the faculty reported worrying often or very often about 5 of the 11 areas. Compared to staff, a higher proportion of faculty worried often or very often about 9 of the 11 different areas we asked about on the survey (see Figure 1 below).
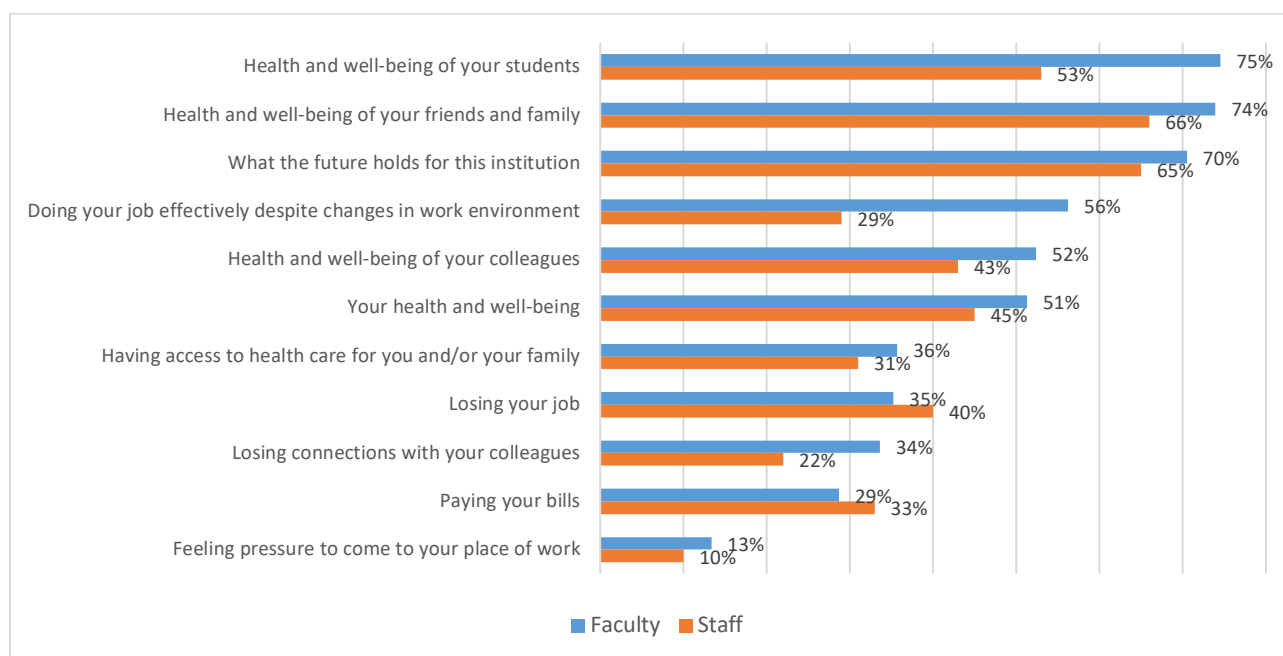


*Figure 1: Percent of faculty and staff who worry often/very often*

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[1] See https://www.hedsconsortium.org/wp-content/uploads/2020.07.24-COVID-19-Staff-Memo.pdf

Specifically:

- Although a majority of both faculty and staff worried about the health and well-being of students, the health and well-being of friends and family, and what the future holds for their institution, a larger proportion of faculty worried about these three areas.
- The difference between faculty and staff was largest when it came to worrying about doing their job effectively despite changes in their work environment. Over half the faculty said they worried often or very often about this, while just under a third of the staff did.
- Faculty also worried more often than staff about the health and well-being of colleagues, their health and well-being, having access to health care, losing connections with colleagues, and feeling pressure to come back to work, although some of these differences were small.
- The only areas in which staff reported worrying more often than faculty were about losing their jobs and paying their bills, and these differences were small.

We also asked both faculty and staff, "Overall, how much stress are you feeling about the potential consequences of the spread of COVID-19?" Once again, faculty reported higher levels of stress than staff, with a lower proportion of faculty reporting little or no stress and a higher proportion of faculty reporting a great deal of stress (see Figure 2 below).
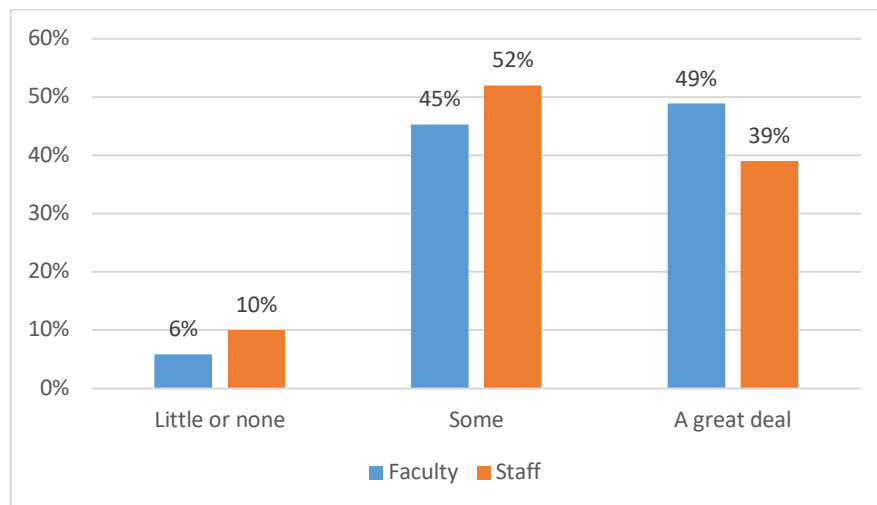


Figure 2: Overall, how much stress are you feeling about the potential consequences of the spread of COVID-19?

For both staff and faculty, women reported higher levels of stress and worries than men. However, while staff of color reported higher levels of worries and stress than white staff, faculty of color did not report significantly higher levels of stress and worries than white faculty.

## Feeling pushed and experiencing a lack of control

For both the staff and faculty surveys, we adapted questions from two parts of a psychological questionnaire that was designed to measure stress.[2] One part was designed to assess an individual's sense of control over their work and the other was developed to evaluate the extent to which an individual felt that their work was pushing them in a negative way.

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[2] Lehman, K. A., Burns, M. N., Gagen, E. C, & Mohr, D. C. (2012). Development of the Brief Inventory of Perceived Stress, *Journal of Clinical Psychology, 68*, 631–644.

The three questions that were aimed at assessing the extent to which faculty and staff felt a sense of control over their work were as follows:

*Since your institution started responding to COVID-19, how often have you:*
   a. *Felt difficulties were piling up so high that you could not overcome them?*
   b. *Felt that you were on top of things?*
   c. *Had too many worries?*

While a significant proportion of staff reported that they had too many worries or didn't feel like they were on top of things, faculty reports were substantially higher (see Figure 3 below). Overall, there was about a 15% gap between faculty and staff responses on these three questions. Faculty were more likely to feel that difficulties were piling up and to say that they had too many worries. Faculty were also less likely to feel like they were on top of things.
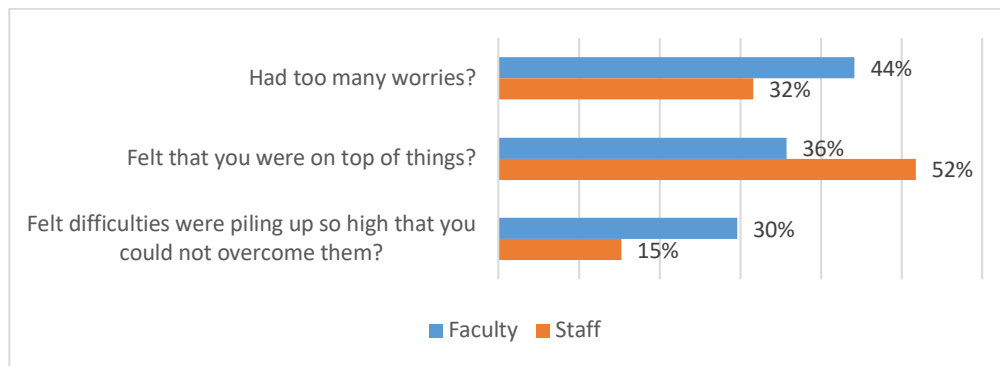


*Figure 3: Percent of faculty/staff reporting often or very often*

We saw the same pattern on the questions about how pushed staff and faculty were feeling. The three questions that assessed the extent to which staff and faculty felt pushed by work were:

*Since your institution started responding to COVID-19, how often have you:*
   a. *Had too many things to do?*
   b. *Felt you were in a hurry?*
   c. *Felt under pressure from deadlines?*

However, as you can see in Figure 4 below, the gap between faculty and staff was even larger for these experiences.
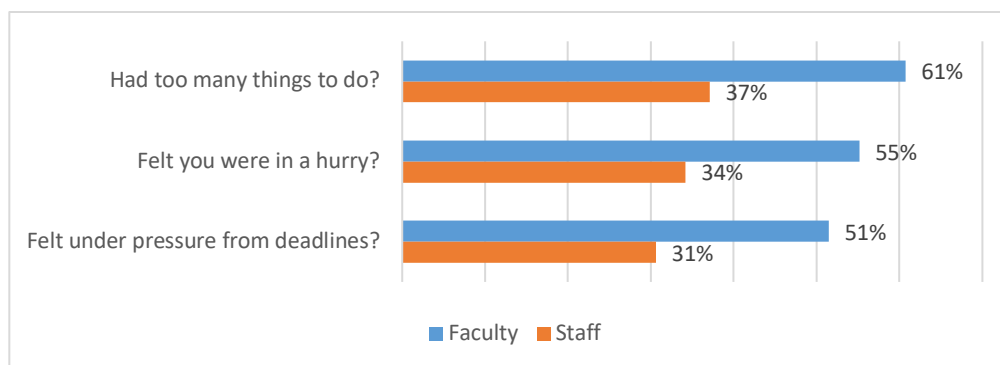


*Figure 4: Percent of faculty/staff reporting often or very often*

Since the pandemic hit, staff and faculty across the country have experienced a great deal of job-related stress and worry. It's been a rocky six months for our institutions. But as difficult as it has been for staff, the stress produced by converting multiple courses to a new, and often alien, format in a matter of days has been profound. And that stress didn't end with the spring semester. This summer, faculty across the country have been struggling to prepare for an uncertain fall, with the pandemic seeming to recede but then suddenly rebound with renewed ferocity. Every time an institution changes its direction in response to the pandemic, faculty must revise their courses to accommodate those changes. The pandemic is unrelenting.

## Communication and support

Both faculty and staff gave high marks to the timeliness, clarity, and content of the information that they received from their institutions about responses to COVID-19. The only difference was that faculty were a little less satisfied with the information that they received from their institutions about the impact of COVID-19 on their employment and their institution's viability (see Figure 5 below).



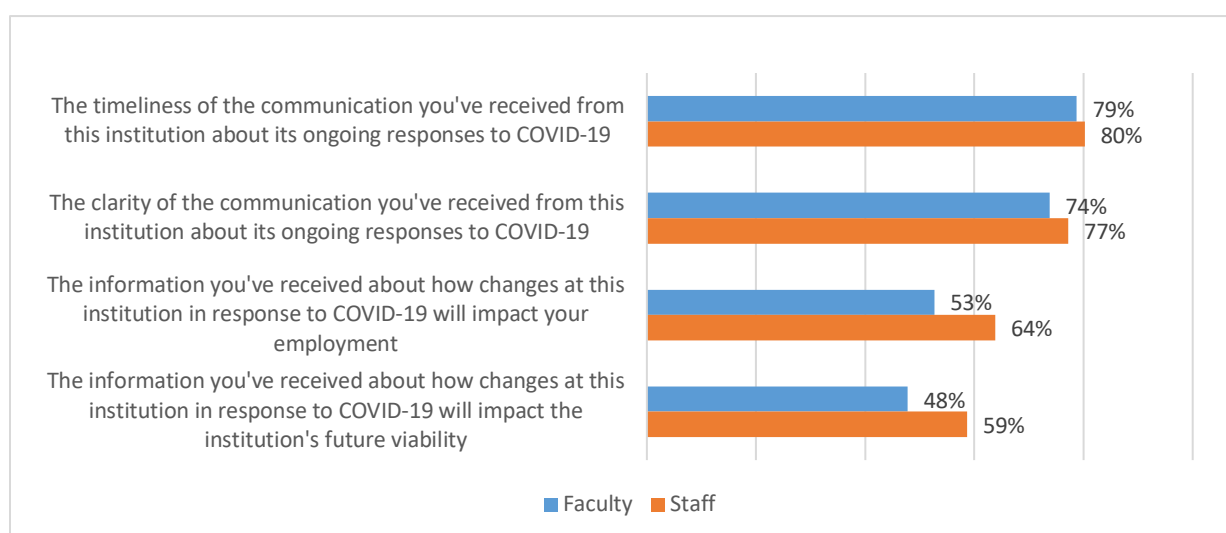*Figure 5: Percent of faculty/staff reporting generally satisfied or very satisfied*

Likewise, both staff and faculty were satisfied with the support they were getting from senior leadership at their institutions, but the level of faculty satisfaction was a little lower than that of staff (see Figure 6 below).
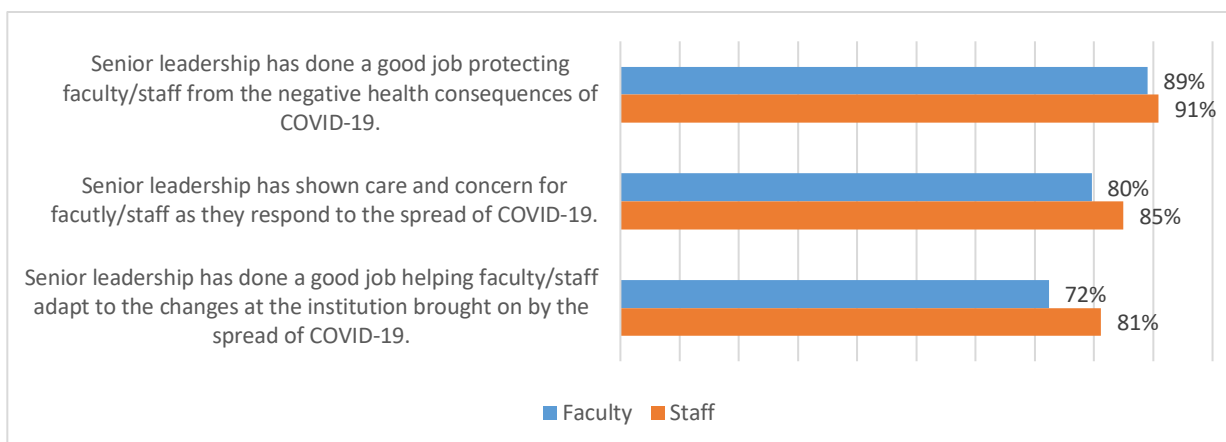


*Figure 6: Percent of faculty/staff reporting generally satisfied or very satisfied*

### What mitigates stress and worry?

In our report on how staff were experiencing their institutions' responses to COVID-19, we said that the following factors played the biggest role in the extent to which staff experienced worry and stress:

1. The extent to which staff feel like they are on top of and can manage their work. The more staff feel that things are "piling up so high that they cannot overcome them" or that they are not "on top of things," the more they experience stress and worry.
2. The quality of the communication staff receive from their institution about its response to COVID-19. The more satisfied they are with institutional communication, the less they worry and the less stress they experience.
3. The level and quality of support staff get from their supervisors and senior leaders at the institution. The better the support, the less staff worry.

Two of the three factors that played a role in the level of stress and worry that staff experienced also had an impact on the level of stress and worry that faculty experienced:

1. The more that faculty feel they are on top of and can manage their work, the less stress and worry they experience. Like staff, when faculty feel that things are "piling up so high that they cannot overcome them" or that they are not "on top of things," they experience more stress and worry.
2. The more satisfied that faculty are with institutional communication, the less they worry and the less likely they are to experience stress.

Based on our review of the open-ended comments that faculty provided on the survey, the qualities of institutional communication that faculty valued were the same as the qualities that staff valued: compassionate, transparent, and honest communication. This includes an appreciation for leaders who are willing to talk about difficult truths. As one faculty member said, "I appreciated hearing hard truths about the university's financial situation in a faculty meeting a month or two ago. More truth, please. We can handle it."

But we also found important differences in how faculty experienced their institution's transition to COVID-19. First, we found that the level of "push" that faculty experienced—having too many things to do, feeling in a rush, and feeling pressure from deadlines—added to their worries. While many staff reported feeling pushed, this experience did not add to their worries above and beyond the three factors that we cited above. Our sense is that the demands faculty faced from overhauling their courses in a matter of days, teaching these revised courses in an alien format, and providing support for students, many of whom were struggling to adapt to COVID-19-imposed changes, created a form of "push" that was different from what most staff experienced.

Another important difference between faculty and staff was that the level of support that faculty reported getting from senior leaders *was not* related to their level of stress and worry. It's not that faculty were unaware of the efforts of their senior leaders. Indeed, faculty commented positively on the support they experienced from these leaders, and their comments were similar to those made by staff. The difference, however, was that the faculty's rating of the support they received from senior leaders, positive or negative, was unrelated to the level of stress and worry they reported.

We asked staff not only about support from senior leadership, but also about the support they received from their supervisors. And, as we reported, this support turned out to be important. Unfortunately, we did not think to ask this same question of faculty. We eliminated this question because we thought that many faculty might not see themselves as having a supervisor. However, we should have included a question on the faculty survey about support from department chairs or other colleagues at their institutions.

Fortunately, in their responses to the open-ended question, "What have you appreciated most about your institution's response to COVID-19?," faculty identified a number of important sources of support, outside of senior leadership, that helped them adapt to the changes brought on by COVID-19. Below, we review sources of support that emerged from the thousands of comments that faculty made about beneficial forms of support.

## Support from department chairs

Many faculty noted the importance of having a supportive department chair. They described supportive chairs as caring, present, and responsive. Many of these chairs also found ways to continue meetings, check-ins, and other ways of bringing faculty together even though everyone was working remotely. The following statements are examples of positive comments that faculty made about their department chairs:

- "I have appreciated my chair's support and clear caring about her faculty."
- "Our department chair has been exceptionally supportive, extremely communicative and always available to us."
- "My chair has been fantastic and supportive."
- "My Chair's efforts to communicate and maintain connection."
- "Communication by email and inclusion in the conversation by Dept. Chairs."
- "I feel my department chair has been incredibly supportive and responsive to questions and concerns."
- "The department chair was always responding to my questions and concerns very quickly."
- "The support of my department and of the college of liberal arts in general has been a tremendous help. We've had weekly departmental meetings. My chair has told us to text him at any time. It's been very calming in that respect."
- "I have also had consistently thoughtful support from my department chair, who has been extremely communicative and has encouraged all of us in our department to voice our concerns and suggestions."
- "Attentiveness and professional responsiveness of my department chair. She communicates and encourages everyone's input. She has taken on a lot of extra work in order to keep the rest of us focused only on the work that matters most."

## Support from faculty colleagues

Many faculty also noted how much they valued supportive colleagues. In describing such colleagues, faculty talked about their kindness and the help they provided for solving problems and working through challenges. More than that, our sense in reading their comments is that faculty benefited from having colleagues who were "in it with them," dealing with the same struggles, and working toward the same goals. Here are some comments that faculty made about supportive colleagues:

- "…when I tried to come up with what I appreciated, I kept thinking of ways that my colleagues have showed up for me and the ways they are responding quickly to adjust and to support students."
- "I really appreciate how our colleagues are sharing experiences and supporting each other through Zoom calls."
- "I would have to say that the spirited effort of my department to collaborate on learning technologies and support students has been most important…"
- "My immediate colleagues in the department have been invaluable in supporting me personally, helping me learn the tech I needed to use, listening to my concerns and keeping me informed. Their help has been much more useful to me directly than leadership higher up."
- "The kindness of my colleagues. I do not have relationships with many individuals on campus; however, the people I do know have been kind."
- "I appreciate the help I've gotten from my colleagues on how to use different online teaching tools, how to redesign classes, and just checking in with each other to support each other."

- "I have felt like my department has done a good job of coming together and sharing resources and support."

*Support from Centers for Teaching and Learning, Information Technology, instructional design and educational technology experts*

As the connection between technology, pedagogy, course design, and course delivery has grown in the last decade, so has the overlap in the faculty development work of information technology (IT) departments, centers for teaching and learning (CTLs), and other support departments. As institutions closed their campuses and faculty began rapidly transforming their face-to-face courses to remote courses, their colleagues in IT, CTLs, and other departments stepped up to support them. Below, we highlight just a few of the many positive comments that faculty made about the support they received from their colleagues in these departments.[3]

- "I appreciate the amazing support provided by the CTL and the atmosphere of encouragement and non-judgement the CTL exemplifies as it helped the faculty to transition into remote work."
- "I have appreciated the director of the CTL's tireless programming and constant presence on Zoom calls. She was one of the first people I met at my institution, and her early comments to me about classroom equity assured me that I was in a place where I could grow as an educator. Her actions, and support, during this process have been a particular comfort and guide for me."
- "I'd single out our colleagues at the CTL for special praise here. They've offered faculty suggestions and support that we can engage on our own time and at our own pace—and have all done so amid adapting their own teaching online quickly and under challenging circumstances. All around, my institution is lucky to have such wonderful people leading us through this crisis."
- "CTL. CTL. CTL. They have been absolutely amazing in the response to supporting faculty…I cannot overstate how amazing they have been this semester. I have no idea how they are doing this work with such a small team. They need to be doubled or tripled in size as a department moving forward if we are going to keep up with online instruction needs."
- "The communications and offerings coming from the CTL. He was really on top of things! Numerous and various Zoom meetings were provided to help faculty get up to speed on distance/on-line learning. He also reminded us frequently of what was happening. He truly went above and beyond!!"
- "I also appreciate that our CTL put together IMMEDIATLY workshops to train faculty in the use of Collaborate Ultra. That was a new program for me, so I used my Spring break to re-write syllabi, attend workshops, familiarize myself with Collaborate Ultra and getting ready to continue instruction and advising after the break."
- "The amazing work of colleagues in Education Technology; the conversations sponsored by the CTL and, more generally, the wisdom of faculty colleagues in rethinking course design and pedagogy."
- "Instructional Design and IT! Yay! They worked tirelessly to provide assistance with various items for Canvas and Zoom. They responded quickly to questions via email, even on the weekends. I imagine their workload was enormous… Thank you, thank you and thank you!"
- "I think IT and the CTL did a heroic job of pulling together a lot of materials to help us move our courses online. I appreciated the discussions that made it clear to me that I had to rethink my courses. I appreciated the lessons on various technologies, even though I could not absorb so much of it at the time."
- "Technical support from IT. It's been so personal *and* effective despite that fact that I'm sure they were under immense pressure to get the systems working for all of us."
- "The IT department has been incredible, forward-thinking, and proactive in generating resources faculty want and need."

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[3] To preserve the anonymity of individuals and institutions, we've replaced actual department/center names with generic names like "CTL," "IT," or "Instructional Design" in the quotes.

- "I am grateful for how committed our IT staff is to helping us solve problems. And how our IT department is constantly providing information about making things work"
- "IT!! These people are amazing. So patient, responsive and helpful. Truly, they are the reason we have been able to hold everything together this semester. THANK YOU to them."
- "I think IT needs the gold medal here – they were so helpful and responsive."
- "The IT department has been amazing. They are available, knowledgeable and patient. They always found the answers to my questions if they didn't know them. They were polite even when I asked the same questions over and over (which were probably the same questions as others were asking). They were so helpful and amazing and solved problems quickly!!"
- "The support of all the staff, but especially the IT department, has been fantastic and I'm very thankful for that. :)"
- "I have the utmost respect for our Education Technology and IT groups. They have greatly aided me in transitioning my course online. Specifically, [name removed] has personally Zoomed into my Canvas site with me at least twice this quarter to troubleshoot some of my issues and also her feedback has been immensely helpful in continuing to thoughtfully modify my instructional design as we transition to remote learning. The faculty in-service led by [name removed] was amazing and I felt well equipped to start the journey of transitioning online."
- "Our Educational Technologist has worked tirelessly and with good humor to support us in this transition. His service is greatly appreciated."
- "[Educational technologist's name removed] has been extraordinary. He is always wonderful to work with, and his extra support and leadership during the transition to virtual instruction has been so helpful."

The expertise that these professionals brought to their work with faculty was critical. But, as the previous comments show, the compassion, patience, and tireless energy that they brought to their collaboration with faculty was just as important. The best teachers combine expertise with care and commitment for learners. And this care and commitment were especially important given the demanding circumstances their faculty were facing.

*Support from other people in the campus community*

Finally, a significant number of faculty were grateful for work other people and groups were doing to support their campuses during the crisis. In addition to expressing their gratitude, the tone of these comments included the spirit of "we're in this together." We note this spirit because it can counter the sense of isolation brought on by our months-long shift to remote work.

- "I know that Student Life, Career Center, & many others have worked incredibly hard to connect with students and reduce the impact of the transition as much as possible – I don't think it's possible for them to get recognized enough for their efforts!"
- "The custodial/maintenance staff and campus safety officers! Outstanding professionals who risk the health of themselves and family to keep things as safe as possible. They deserve hazard pay."
- "I have appreciated my building custodian's seriousness about his job and the diligence with which he kept the building clean. He was creative in finding ways for us to tell him we had been in our offices so he could reclean the space."
- "I would like to give a special shout-out to all those in the Library, the Center for Academic Success, Res Life, Religious and Spiritual Life, the art gallery, IT, custodial services, administration, and all other building staff. All of my interactions and my students' interactions with the folks in these various positions have been incredibly warm, kind, and helpful."
- "The support from so many corners of the institution, e.g. from my department, IT, college leadership, HR, my students supporting me and each other, Enrollment and Athletics and faculty working to recruit

the next class, Dining services and facilities and Campus and Public Safety coming to campus – everyone coming together to help each other, students, and the institution."

**Conclusion**

We've worked on both sides of the street, as staff and as faculty. Workwise, there are challenges and advantages to each kind of position. But it is difficult to overestimate the stress, anxiety, and labor that faculty experienced this spring as they completely rebuilt and implemented their courses in a new format within days or, if they were "lucky," within a week.

We've talked about the value of effective communication in our previous reports on data from the Staff and Student COVID-19 Institutional Response Surveys. It's probably no surprise that effective communication is also essential for faculty. During a crisis, regardless of whether we're students, staff, or faculty, we all benefit from compassionate and honest communication from our leaders and our colleagues. Good communication helps to mitigate our worries and concerns.

In this report, we've also highlighted the value of support from colleagues, both within and outside of our departments, in helping us deal with the challenges brought to our work by the pandemic. The themes we saw in the comments from faculty were similar to those we've seen in comments from students and staff. We all benefit when the people around us, be they custodial staff or CTL directors, are kind, patient, caring, and supportive.

There'll be no respite for the faculty, staff, and administrators who've worked so hard to keep their institutions, and their students, going. As we write this in early September, institutions are implementing their best strategies to bring students back to campus amid a global pandemic. Unfortunately, the pandemic is no friend to planning, no matter how careful. The uncertainty, and the shifting work brought about by our institutions' changing fortunes, will only add to the stress that all of us—faculty, staff, and students—are facing. Regardless of the testing strategies, campus plans, pedagogies, technologies, and everything else that we're bringing to bear to weather this pandemic, the thousands of faculty, staff, and students who've taken the time to respond to our surveys have taught us that our most powerful tools for withstanding this crisis are kindness, honesty, compassion, and being there for one another.

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HEDS Consortium – www.hedsconsortium.org

## Appendix

### Analysis of the quantitative data

Below we've included information on how we scored and analyzed the faculty data for this memo. As always, we are happy to send you SPSS syntax for our scales or for instances in which we reverse-coded the data. We've posted a copy of the faculty survey on our website at the following address:

https://www.hedsconsortium.org/wp-content/uploads/HEDS_COVID-19_Institutional_Response_Faculty_Survey_2020-04-07.pdf

You can find information about how we scored and analyzed data from the staff survey in the appendix of our July 24th memo located at: https://www.hedsconsortium.org/wp-content/uploads/2020.07.24-COVID-19-Staff-Memo.pdf

### Worries Scale (Overall Cronbach's alpha = 0.84)

We measured this construct using the following 11 items from Question 5 on the survey:
- *Question*: Given the changes caused by the spread of COVID-19, how often do you worry about the following?
  - Doing your job effectively despite the changes in your work environment
  - Feeling pressure to come to your place of work
  - Losing connections with your colleagues at [Institution Name]
  - The health and well-being of your colleagues
  - The health and well-being of your students
  - The health and well-being of your friends and family
  - Your health and well-being
  - What the future holds for [Institution Name]
  - Having access to health care for you and/or your family
  - Paying your bills
  - Losing your job
- *Response options for these questions*: Never; Almost never; Sometimes; Often; Very often
- *Scoring for each response option:* Never = 1; Almost never = 2; Sometimes = 3; Often = 4; Very often = 5

### Faculty Stress Question

We used Question 7 to measure faculty members' overall level of stress:
- *Question*: Overall, how much stress are you feeling about the potential consequences of the spread of COVID-19?
  - Little or none
  - Some
  - A great deal
- *Scoring for each response option*: Little or none = 1; Some = 2; A great deal = 3

### Pushed Scale (Overall Cronbach's alpha = 0.93)

We measured this construct using the first three items on Question 6 on the survey:
- *Question*: Since [Institution Name] started responding to COVID-19, how often have you:
  - Had too many things to do?

- o Felt you were in a hurry?
- o Felt under pressure from deadlines?
- *Response options for these questions*: Never; Almost never; Sometimes; Often; Very often
- *Scoring for each response option:* Never = 1; Almost never = 2; Sometimes = 3; Often = 4; Very often = 5

## Lack of Control Scale (Overall Cronbach's alpha = 0.78)

We measured this construct using the last three items on Question 6 on the survey:
- *Question*: Since [Institution Name] started responding to COVID-19, how often have you:
  - o Felt difficulties were piling up so high that you could not overcome them?
  - o Felt that you were on top of things? (reverse-scored)
  - o Had too many worries?
- *Response options for these questions*: Never; Almost never; Sometimes; Often; Very often
- *Scoring for each response option for the first and third items:* Never = 1; Almost never = 2; Sometimes = 3; Often = 4; Very often = 5
- *Scoring for each response option for the second item:* Never = 5; Almost never = 4; Sometimes = 3; Often = 2; Very often = 1

The Pushed and Lack of Control scales are sub-scales from the Brief Inventory of Perceived Stress (BIPS) Scale. For more information, see: Lehman, K. A., Burns, M. N., Gagen, E. C., & Mohr, D. C. (2012). Development of the Brief Inventory of Perceived Stress. *Journal of Clinical Psychology, 68*(6), 631-644.

## Senior Leadership Support Scale (Overall Cronbach's alpha = 0.90)

We measured this construct using the four items in Question 1 on the survey:
- *Question*: Please indicate your level of agreement with each of the following statements about senior leadership at [Institution Name].
  - o Overall, senior leadership at [Institution Name] has done a good job protecting faculty from the negative health consequences of COVID-19.
  - o Overall, senior leadership at [Institution Name] has done a good job helping faculty adapt to the changes at the institution brought on by the spread of COVID-19.
  - o Overall, senior leadership at [Institution Name] has helped faculty understand the priorities and direction in their work given changes at the institution brought on by the spread of COVID-19.
  - o Overall, senior leadership at [Institution Name] has shown care and concern for faculty as they respond to the spread of COVID-19.
- *Response options for these questions*: Strongly agree; Agree; Neither agree nor disagree; Disagree; Strongly disagree
- *Scoring for each response option:* Strongly agree = 5; Agree = 4; Neither agree nor disagree = 3; Disagree = 2; Strongly disagree = 1

## Communication Scale (Overall Cronbach's alpha = 0.89)

We measured this construct using the following four items in Question 4 on the survey:
- *Question*: Please indicate your level of satisfaction with [Institution Name] about the following:
  - o The timeliness of the communication you've received from [Institution Name] about its ongoing responses to COVID-19
  - o The clarity of the communication you've received from [Institution Name] about its ongoing responses to COVID-19

- o The information you've received about how changes at [Institution Name] in response to COVID-19 will impact your employment
- o The information you've received about how changes at [Institution Name] in response to COVID-19 will impact the institution's future viability
- *Response options for these questions*: Very satisfied; Generally satisfied; Neither satisfied nor dissatisfied; Generally dissatisfied; Very dissatisfied
- *Scoring for each response option:* Very satisfied = 5; Generally satisfied = 4; Neither satisfied nor dissatisfied = 3; Generally dissatisfied = 2; Very dissatisfied = 1

### Gender
We used the following question to determine faculty members' gender identity:
- *Question:* What is your gender?
- *Response options:*
  - o Man
  - o Woman
  - o Non-binary, please specify: _____

### Race/ethnicity
Using multiple questions from the survey, we derived the following racial/ethnic identities:
- American Indian/Alaska Native
- Asian
- African American/Black
- Native Hawaiian/Pacific Islander
- White
- Hispanic/Latino/a
- Two or more races
- Unknown

*Variables that influence faculty members' scores on the Worries Scale controlling for academic rank, gender, and race/ethnicity*

### ▼ Response Worries Scale

#### ▼ Effect Summary

| Source | LogWorth | | PValue |
|---|---|---|---|
| Lack of Control Scale | 31.779 | � | 0.00000 |
| Communication Scale | 11.674 | | 0.00000 |
| Push Scale | 7.551 | | 0.00000 |
| Race/Ethnicity Faculty of Color-White | 1.866 | | 0.01360 |
| Academic rank | 0.749 | | 0.17842 |
| Gender | 0.142 | | 0.72168 |
| Senior Leadership Scale | 0.025 | | 0.94301 |

Remove  Add  Edit  ☐ FDR

#### ▼ Lack Of Fit

| Source | DF | Sum of Squares | Mean Square | F Ratio |
|---|---|---|---|---|
| Lack Of Fit | 2608 | 112701.05 | 43.2136 | 1.0691 |
| Pure Error | 155 | 6264.98 | 40.4192 | **Prob > F** |
| Total Error | 2763 | 118966.04 | | 0.2976 |
| | | | | **Max RSq** |
| | | | | 0.9604 |

#### ▼ Summary of Fit

| | |
|---|---|
| RSquare | 0.248876 |
| RSquare Adj | 0.246158 |
| Root Mean Square Error | 6.561771 |
| Mean of Response | 36.57462 |
| Observations (or Sum Wgts) | 2774 |

#### ▼ Analysis of Variance

| Source | DF | Sum of Squares | Mean Square | F Ratio |
|---|---|---|---|---|
| Model | 10 | 39418.02 | 3941.80 | 91.5488 |
| Error | 2763 | 118966.04 | 43.06 | **Prob > F** |
| C. Total | 2773 | 158384.05 | | <.0001* |

#### ▼ Parameter Estimates

| Term | Estimate | Std Error | t Ratio | Prob>|t| | Std Beta |
|---|---|---|---|---|---|
| Lack of Control Scale | 0.8060403 | 0.067026 | 12.03 | <.0001* | 0.294221 |
| Push Scale | 0.3303405 | 0.05932 | 5.57 | <.0001* | 0.133354 |
| Race/Ethnicity Faculty of Color-White[Faculty of Color] | 0.4531537 | 0.183518 | 2.47 | 0.0136* | 0.041011 |
| Academic rank[Lecturer] | 0.3099168 | 0.450125 | 0.69 | 0.4912 | 0.019637 |
| Academic rank[Assistant Professor] | 0.2057294 | 0.256988 | 0.80 | 0.4235 | 0.017647 |
| Gender[Man] | 0.0460893 | 0.129374 | 0.36 | 0.7217 | 0.006077 |
| Intercept | 32.605123 | 0.949916 | 34.32 | <.0001* | 0 |
| Senior Leadership Scale | -0.004505 | 0.063009 | -0.07 | 0.9430 | -0.00201 |
| Academic rank[Professor] | -0.338387 | 0.239176 | -1.41 | 0.1572 | -0.0307 |
| Academic rank[Associate Professor] | -0.448065 | 0.249122 | -1.80 | 0.0722 | -0.03955 |
| Communication Scale | -0.341074 | 0.048319 | -7.06 | <.0001* | -0.20075 |

#### ▼ Effect Tests

| Source | Nparm | DF | Sum of Squares | F Ratio | Prob > F |
|---|---|---|---|---|---|
| Lack of Control Scale | 1 | 1 | 6226.8134 | 144.6185 | <.0001* |
| Push Scale | 1 | 1 | 1335.2434 | 31.0112 | <.0001* |
| Gender | 1 | 1 | 5.4645 | 0.1269 | 0.7217 |
| Academic rank | 4 | 4 | 271.0957 | 1.5741 | 0.1784 |
| Race/Ethnicity Faculty of Color-White | 1 | 1 | 262.5277 | 6.0972 | 0.0136* |
| Communication Scale | 1 | 1 | 2145.3341 | 49.8256 | <.0001* |
| Senior Leadership Scale | 1 | 1 | 0.2201 | 0.0051 | 0.9430 |

#### ▶ Effect Details

*Variables that influence faculty members' responses to the question about overall stress, controlling for academic rank, gender, and race/ethnicity*

**Response Overall, how much stress are you feeling about the potential consequences of the spread of COVID-19?**

**Effect Summary**

| Source | LogWorth | | PValue |
|---|---|---|---|
| Worries Scale | 103.446 | | 0.00000 |
| Lack of Control Scale | 19.274 | | 0.00000 |
| Gender | 4.002 | | 0.00010 |
| Academic rank | 1.521 | | 0.03010 |
| Senior Leadership Scale | 1.164 | | 0.06859 |
| Communication Scale | 1.019 | | 0.09578 |
| Push Scale | 0.389 | | 0.40840 |
| Race/Ethnicity Faculty of Color-White | 0.022 | | 0.94963 |

Remove  Add  Edit   ☐ FDR

**Lack Of Fit**

| Source | DF | Sum of Squares | Mean Square | F Ratio |
|---|---|---|---|---|
| Lack Of Fit | 2754 | 672.22205 | 0.244089 | 0.7323 |
| Pure Error | 8 | 2.66667 | 0.333333 | **Prob > F** |
| Total Error | 2762 | 674.88871 | | 0.7935 |
| | | | | **Max RSq** |
| | | | | 0.9973 |

**Summary of Fit**

| | |
|---|---|
| RSquare | 0.326127 |
| RSquare Adj | 0.323443 |
| Root Mean Square Error | 0.494316 |
| Mean of Response | 2.410959 |
| Observations (or Sum Wgts) | 2774 |

**Analysis of Variance**

| Source | DF | Sum of Squares | Mean Square | F Ratio |
|---|---|---|---|---|
| Model | 11 | 326.6181 | 29.6926 | 121.5176 |
| Error | 2762 | 674.8887 | 0.2443 | **Prob > F** |
| C. Total | 2773 | 1001.5068 | | <.0001* |

**Parameter Estimates**

| Term | Estimate | Std Error | t Ratio | Prob>|t| | Std Beta |
|---|---|---|---|---|---|
| Worries Scale | 0.0324347 | 0.001433 | 22.63 | <.0001* | 0.407886 |
| Lack of Control Scale | 0.0477984 | 0.00518 | 9.23 | <.0001* | 0.219411 |
| Academic rank[Professor] | 0.0515047 | 0.018024 | 2.86 | 0.0043* | 0.058757 |
| Senior Leadership Scale | 0.0086476 | 0.004747 | 1.82 | 0.0686 | 0.048563 |
| Academic rank[Associate Professor] | 0.0248723 | 0.018778 | 1.32 | 0.1854 | 0.027607 |
| Push Scale | 0.0037156 | 0.004494 | 0.83 | 0.4084 | 0.018863 |
| Intercept | 0.7079138 | 0.085465 | 8.28 | <.0001* | 0 |
| Race/Ethnicity Faculty of Color-White[Faculty of Color] | -0.000874 | 0.01384 | -0.06 | 0.9496 | -0.001 |
| Academic rank[Assistant Professor] | -0.019459 | 0.019362 | -1.01 | 0.3150 | -0.02099 |
| Academic rank[Lecturer] | -0.045207 | 0.033912 | -1.33 | 0.1826 | -0.03602 |
| Communication Scale | -0.00612 | 0.003673 | -1.67 | 0.0958 | -0.0453 |
| Gender[Man] | -0.037983 | 0.009746 | -3.90 | <.0001* | -0.06298 |

**Effect Tests**

| Source | Nparm | DF | Sum of Squares | F Ratio | Prob > F |
|---|---|---|---|---|---|
| Lack of Control Scale | 1 | 1 | 20.80761 | 85.1557 | <.0001* |
| Push Scale | 1 | 1 | 0.16705 | 0.6837 | 0.4084 |
| Worries Scale | 1 | 1 | 125.15372 | 512.1949 | <.0001* |
| Gender | 1 | 1 | 3.71117 | 15.1881 | <.0001* |
| Academic rank | 4 | 4 | 2.61954 | 2.6801 | 0.0301* |
| Race/Ethnicity Faculty of Color-White | 1 | 1 | 0.00098 | 0.0040 | 0.9496 |
| Communication Scale | 1 | 1 | 0.67838 | 2.7763 | 0.0958 |
| Senior Leadership Scale | 1 | 1 | 0.81100 | 3.3190 | 0.0686 |