UNIVERSITY OF IOWA EMPLOYEE WELL-BEING SURVEY:

Time 2 (September 2020) Report

Overview

In this follow up to our Time 1 survey conducted in May-June 2020, we again asked University employees to complete a survey about their working environment and well-being (Time 2; August-September 2020).

The difference between reported pre-COVID well-being and current well-being at Time 1 was almost half a point (on a 5-point scale). At Time 2, that difference between pre-COVID well-being and Time 2 well-being expanded to .61 points, suggesting that overall well-being decreased over time. Although this difference may seem small, it demonstrates the large effect on well-being over time (Cohen's D score of .82).

In the following sections, we describe the methods used to collect and analyze the data, present the distribution and representativeness of our sample, describe our results by demographic group, point to potential opportunities for improvement, and outline the next steps for research and practice. In this report we summarize findings from Time 2 as well as changes over time.

Methods

We conducted a web-based survey of University of Iowa employees (faculty, staff, and postdocs). At Time 2, 24,889 employees were invited to complete the second survey. A single reminder email was sent out two weeks later. Data collection was closed on September 17, 2020.

The survey followed the same procedure as the Time 1 survey (May-June) and repeated the same questions. There were 222 items (compared to 195-items at Time 1), as we included additional questions addressing the availability of alternative work arrangements (such as flexible working schedules and remote work options), questions on childcare and homeschooling responsibilities, and questions assessing the impact of the August 10th derecho.

In both surveys we asked participants to rate their own well-being prior to the pandemic and at the time of the survey. For participants that completed both Time 1 and Time 2 surveys, the retrospective pre-COVID rating was identical at both time points, suggesting that participants were accurately recalling their pre-COVID well-being.

Statistical Analyses

Differences for demographic variables with two levels (e.g., children at home/no children) were calculated using t-tests, while variables with more than two levels (e.g.,

work unit, age brackets) were calculated with a one-way ANOVA. Significantly different means are underlined and bolded in the tables below.

To examine the degree to which potential predictors affected wellness outcomes between demographic groups, we used a stepwise regression algorithm that included or excluded specific variables based on its statistically significant relationship with each outcome.

Sample

Our final sample consisted of 4,661 participants (19% response rate: 130 individuals did not complete the well-being outcomes; 727 duplicate responses were omitted). Of these, 2,071 individuals had completed the Time 1 survey and 2,590 were new participants who did not complete the first survey.

Participants were equally drawn from various job types, schools, and age groups. Fifty percent of participants were Professional and Scientific Staff (P&S) and 35% of participants indicated they worked onsite in a clinical capacity. The only variables with a single majority group were race/ethnicity (88% White, 3.5% Asian, 1.4% Black, .2% American Indian, .00% Pacific Islander, 1.2% Other, 1.8% two or more races, and 3.7% no response) and sex (73% female, 24% male, .4% Intersex, 2.5% no response). Due to the low number of participants who indicated sex as other than male or female, we only examined sex differences between males and females.

Well-being Related Outcomes by Work Type, Sex, and Race/Ethnicity

At Time 2 onsite clinical workers were significantly worse off than their non-clinical and remote counterparts across many well-being outcomes. Onsite workers in general reported significantly lower ratings of professional fulfillment than remote workers. Onsite clinical workers reported worse emotional states (depression, anxiety, and stress) and greater emotional exhaustion compared to onsite non-clinical workers and remote workers. Although reporting better emotional states and less emotional exhaustion than onsite clinical workers, the non-clinical onsite workers had worse scores than remote workers. This same pattern was seen with overall well-being: onsite clinical workers reported lower well-being than onsite non-clinical workers, who reported lower well-being than remote workers. Below we include these results in table form, replicating the findings from our Time 1 analyses.

Table 1. Mean values of overall well-being and professional fulfillment across work groups. Higher scores equal better well-being and professional fulfillment.

	Overall Well-Being (Range: 1-5)	Professional fulfillment (Range: 1-5)
Onsite clinical	2.24	3.13
Onsite non-clinical	**2.36**	3.15
Remote	**2.54**	**3.27**

Table 2. Mean values of emotional exhaustion and emotional states (depression, anxiety, stress) across work groups. Higher scores equal worse emotional exhaustion and emotional states.

	Emotional Exhaustion (Range: 1-5)	Emotional States (depression/anxiety/stress) (Range: 1-4)
Onsite clinical	2.73	1.53
Onsite non-clinical	**2.48**	**1.51**
Remote	**2.36**	**1.44**

Males and Females

Our Time 2 results for males and female participants were the same as with Time 1. Females reported significantly worse emotional states (depression, anxiety, and stress) than males and significantly higher emotional exhaustion, but there were no differences between males and females in overall well-being or professional fulfillment scores.

Table 3. Mean values of overall well-being and professional fulfillment for male and female participants. Higher scores equal better wellness and professional fulfillment.

	Overall Well-Being (Range: 1-5)	Professional fulfillment (Range: 1-5)
Males	2.37	3.18
Females	2.37	3.18

Table 4. Mean values of emotional exhaustion and emotional states (depression, anxiety, stress) for male and female participants. Higher scores equal worse emotional exhaustion and emotional states.

	Emotional Exhaustion (Range: 1-5)	Emotional States (depression/anxiety/stress) (Range: 1-4)
Males	2.47	1.47
Females	**2.58**	**1.50**

Race/Ethnicity

At Time 2, the only differences by race/ethnicity were for reported emotional exhaustion. Asian employees were less emotionally exhausted than White employees and multiracial employees. Overall, there were few significant differences among racial and ethnic groups at the university on well-being outcomes. our Time 2 survey, we asked employees whether they had access to alternative work arrangements, including flexible start and stop times, custom scheduling, remote work options, or flexible locations for work. Due to the nature of the work, it is not surprising that only 2-6% of onsite clinical workers at UIHC consistently had these options available to them. However, 39% of clinical workers had at least some flexible time arrangements available (compared to 51% of nonclinical onsite workers and 72% of mostly remote workers). A smaller proportion had flexible work locations available (13-16%). Importantly, when clinical workers had flexible start and stop times available to them, they perceived their supervisors to engage in more family supportive supervisor behaviors. This flexibility was also associated with decreased feelings of emotional exhaustion.

Other demographic analyses: age and caregiving

Similar to Time 1, we found that at Time 2 well-being outcomes among participants under 40 were the worst of all age groups. Participants over 40 reported higher well-being, more professional fulfillment, and lower emotional exhaustion and lower levels of negative emotional states (depression, anxiety, and stress) than those under 40.

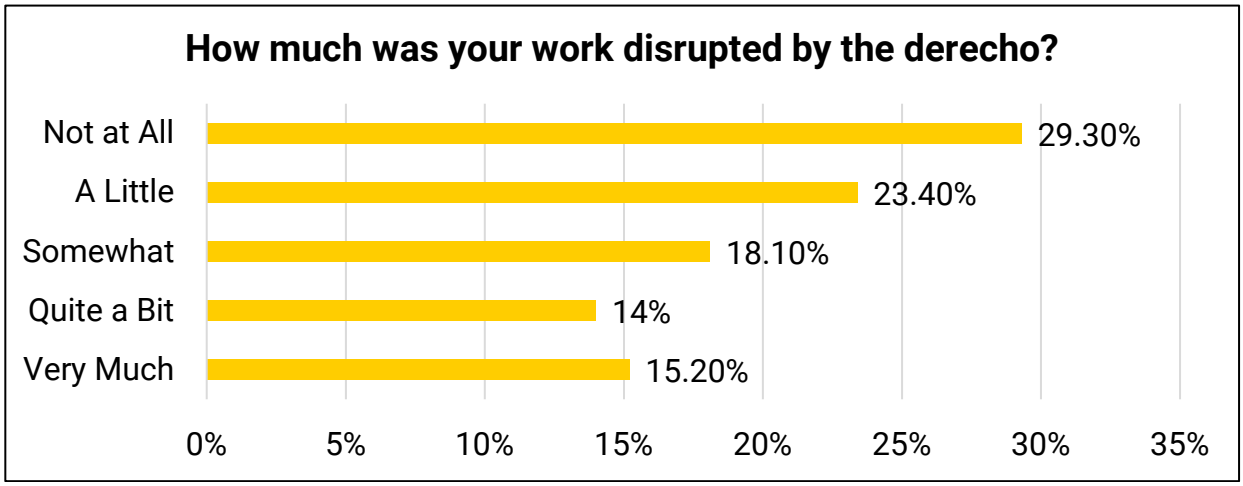
Participants with any children at home reported higher emotional exhaustion and worse emotional states (depression, anxiety, and stress) at this time period compared to those without children at home. At Time 1, only participants with school-age children or younger reported worse well-being outcomes than those without children (i.e., having older children at home was not related to worse well-being).

Because the Time 2 survey was conducted at the beginning of the school year, we asked about the role parents play in homeschooling their children. We found that

employees who were not responsible for overseeing homeschooling reported significantly higher well-being (2.38 vs. 2.25), and significantly less emotional exhaustion (2.54 vs. 2.73). Additionally, employees with responsibility for the care of their elderly parents reported significantly more emotional exhaustion than those not caring for elderly family members (2.64 vs. 2.53).

Derecho Impact

On August 10th Iowa was hit by a strong windstorm known as a derecho. We asked participants the degree to which their work was disrupted by the derecho. The majority of participants reported that their work was impacted by the storm. While 71% were disrupted for less than 3 days, 20% reported that their work was disrupted for 4-7 days, and 9% for more than a week. The disruption due to the derecho was significantly related to well-being outcomes.



Overall Impacts on Well-being

As with Time 1, we used stepwise regression to examine the degree to which certain variables contributed to participants' overall well-being. We examined the potential effects of:

- Diet and exercise regimens
- Work-family conflict
- Fear of COVID infection
- Workload changes
- Financial stress and job security
- Care for elderly parents

Overall, we found that the strongest predictors of well-being were increased workload and conflict from work interfering with family. These effects were similar for predicting emotional states (depression, anxiety, and stress), but the effects were less strong. The strongest contributor to professional fulfillment and overall well-being was conflict from work interfering with family. Additionally, emotional exhaustion was also strongly

associated with poorer diet and less exercise.

Among onsite clinical workers, replicating our Time 1 results, conflict from work interfering with family was the largest contributor to lower overall well-being, greater emotional exhaustion, and less professional fulfillment. Fear of infection was also a major contributor to greater emotional exhaustion. However, at Time 2 we found that the influence of the conflict from work interfering with family on emotional exhaustion was twice as great as the fear of infection. Workload increases also contributed to greater emotional exhaustion.

For remote workers, workload and conflict from work interfering with family contributed to worse overall well-being. Less exercise and a poorer diet were associated with greater emotional exhaustion and overall well-being for remote workers.

Finally, workers under 40 reported worse well-being than other age groups which is similar to Time 1. However, these age differences were less stark at Time 2 compared to Time 1. Conflict from work interfering with family was most strongly associated with greater emotional exhaustion among workers under 40, but increased workload was also critical. We also found that poor diet also contributed to more emotional exhaustion among these younger participants. This may also be a result of increased stress.

Changes over Time

If we compare our results from Time 2 to Time 1, we see a concerning trend. Well-being decreased across all job types. A similar pattern showed that clinical workers remain the most negatively affected group, with remote workers fairing significantly better than their onsite counterparts. However, participant's emotional states (depression, anxiety, and stress) remained constant from Time 1 to Time 2. Although all outcomes were worse at Time 2, we see a greater effect on emotional exhaustion, which has Cohen's D scores > .2 which indicates a small but meaningful change.

Table 5. Changes in professional fulfillment and overall well-being from Time 1 to Time 2. Higher scores equal better wellness and professional fulfillment.

	Time 1	Time 2
Professional fulfillment *My work is satisfying to me.*	3.29	3.17
Overall well-being *To what extent have COVID-19-related work/life changes impacted your overall well-being?*	2.54	2.40

Table 6. Changes in emotional states (depression, anxiety, stress) and emotional exhaustion from Time 1 to Time 2. Higher scores equal worse emotional exhaustion and emotional states.

	Time 1	Time 2
Emotional states (depression, anxiety, stress) *I felt I was close to panic; I felt I had nothing to look forward to.*	1.49	1.54
Emotional exhaustion *Emotionally exhausted at work*	2.35	**2.54**

Overall, 2,047 individuals completed both Time 1 and Time 2 surveys. We found significant within person changes in well-being in all four outcomes. This mirrors our overall findings but demonstrates that our effects are not just a result of different participants, but are actually suggestive of worsening employee well-being over time.

When comparing age groups, at Time 1, we found that across nearly every indicator of health and wellness, the youngest age group reported significantly worse well-being-related scores than the oldest survey participants, and all groups reported worse outcomes at Time 2 than at Time 1.

Practical Implications

Our survey results indicate that all university employees are struggling in the face of the current pandemic. As expected, onsite clinical workers are carrying a significantly heavier load than others. Results also suggest that supervisors engaging in behaviors that support family and work can help workers manage burnout and improve well-being (Remote Supervision Report). As the pandemic wanes, employers and supervisors may have more flexibility in providing alternative work arrangements, which may help mitigate work related impacts on well-being.

Survey results indicated a continued negative impact of the COVID pandemic on University of Iowa employee well-being. Certain demographic groups appear to be at higher risk: younger employees, parents of young children, and onsite clinical workers. Efforts should target the unique needs of these groups. A short report is available that focuses on the results from the University of Iowa Health Care (UIHC) clinical workers.

Previous reports describe findings from the Time 1 Survey (Full Report) and Remote Supervision Report. In addition, recorded webinars addressing the management of remote workers and other resources are available (https://hwc.public-health.uiowa.edu/ui-employee-well-being-survey/).

You can find additional resources are available from the Healthier Workforce Center of the Midwest: www.HealthierWorkforceCenter.org