UNIVERSITY OF IOWA EMPLOYEE WELL-BEING SURVEY:

Time 3 (December 2020-January 2021) Report

Overview

We conducted our third survey of employee well-being between December 2020 and January 2021 (Time 3). The previous 2 surveys were conducted between May-June 2020 (Time 1) and in September 2020 (Time 2).

The difference between self-reported pre-COVID well-being and well-being at Time 1 was almost half a point (on a 5-point scale). That difference increased to 0.61 points at Time 2; however, the difference decreased at Time 3 back to half a point. While it is a positive sign that well-being is better than it was in September, it is still significantly less than well-being reported pre-COVID.

In the following sections, we describe the methods used to collect and analyze the data, present the distribution and representativeness of our sample, demonstrate our results by demographic group, point to potential approaches to improve well-being, and outline the next steps for research and practice. In this report we summarize findings from Time 3 as well as changes over time.

Methods

We conducted a web-based survey of University of Iowa employees (faculty, staff, and postdocs). At Time 3, 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 January 10, 2021.

The survey followed the same procedure as prior surveys and repeated many of the same questions. There were 240 questions on the survey at Time 3. Additional questions asking about self-rated performance and productivity, and questions for supervisors on their management activities were added.

In all three surveys (Time 1, Time 2, and Time 3), we asked participants to rate their own well-being prior to the pandemic and at the time of the survey. For participants that completed multiple surveys, the retrospective pre-COVID rating was identical at Times 1 and 2, with the Time 3 retrospective rating of well-being being significantly less (but the difference was very small; Cohen's D = .06). This suggests that participants were consistently recalling their pre-COVID well-being.

Statistical Analyses

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

levels (e.g., work unit, age brackets) were calculated with a one-way ANOVA (significantly different means are bolded in the tables below).

To examine the degree to which potential predictors affected wellness outcomes between demographic groups (e.g., children at home or not, clinical or non-clinical staff, etc.), 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 for the December-January survey consisted of 4,696 participants (19% response rate). However, not everyone completed all items. One hundred and twenty-nine individuals did not complete the well-being outcomes. Below is a Table summarizing the overall number of survey participants (sample size) across time periods.

Time Period	Sample Size
Time 1 only	2,687
Time 2 only	1,733
Time 3 only	1,943
Times 1 & 2	869
Times 2 & 3	765
Times 1 & 3	693
Times 1, 2 & 3	1,424
TOTAL	10,114

This report includes only those survey participants who responded to the Time 3 survey (longitudinal effects will be summarized in a subsequent report).

Participants included various job types, schools, and age groups. Forty-seven percent (47%) of respondents were Professional and Scientific Staff (P&S) and 38% of participants indicated they worked onsite in a clinical capacity. The only variables with a single majority group were race/ethnicity (87% White, 3.7% Asian, 1.6% Black, .4% American Indian, .03% Pacific Islander, 1.6% Other, 1.8% two or more races, and 4.2% no response) and sex (71% female, 26% male, .05% Intersex, 2.8% no response). Due to the low number of respondents 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

Just as in our Time 1 and Time 2 surveys, Time 3 onsite clinical workers reported significantly worse well-being 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 and Time 2 analyses.

Table 1. Mean (average) values of wellness and health across work groups. Higher scores equal better wellness and professional fulfillment.

	Overall Well-Being (Range: 1-5)	Professional Fulfillment (Range: 1-5)
Onsite clinical	2.26	3.17
Onsite non-clinical	**2.41**	3.24
Remote	**2.62**	**3.36**

Table 2. Mean (average) values of wellness and health across work groups. Higher scores equal worse emotional exhaustion and depression/anxiety/stress.

	Emotional Exhaustion (Range: 1-5)	Emotional States (Depression/ Anxiety/Stress) (Range: 1-4)
Onsite clinical	2.59	1.57
Onsite non-clinical	**2.32**	**1.51**
Remote	**2.23**	**1.43**

Males and Females

Our Time 3 results for males and female respondents were the same as Times 1 and 2. Women reported significantly worse emotional states (depression, anxiety, and stress) than men and significantly higher emotional exhaustion, but there were no differences between men and women in overall well-being or professional fulfillment scores.

Table 3. Mean values of wellness and health for male and female participants. Higher scores equal better wellness and professional fulfillment.

	Overall Well-Being (Range: 1-5)	Professional Fulfillment (Range: 1-5)
Men	2.45	3.28
Women	2.41	3.26

Table 4. Mean values of wellness and health for male and female participants. Higher scores equal worse emotional exhaustion and depression/anxiety/stress.

	Emotional Exhaustion (Range: 1-5)	Emotional States (Depression/ Anxiety/Stress) (Range: 1-4)
Men	2.26	1.47
Women	**2.41**	**1.51**

Race/Ethnicity

At Time 3, there were no significant differences among racial and ethnic groups at the university on well-being outcomes. This is consistent with Times 1 and 2 (in which there were few differences by race or ethnicity).

Other Demographic Analyses: Age and Children in the Home

Replicating our Time 1 and Time 2 results, we found that at Time 3 well-being among participants under 40 were the worst of all age groups. Participants over 40 reported higher well-being and professional fulfillment, and lower emotional exhaustion and lower levels of negative emotional states (depression, anxiety, and stress) than those under 40. At Time 3, age was linearly related to emotional exhaustion and negative emotional states, such that as participants reported older ages, they also reported lower emotional exhaustion and lower negative emotional states.

As at Time 2, participants with any children at home reported higher emotional exhaustion, but at Time 3, we find that they also report worse well-being 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 children high school or older at home was not related to worse well-being).

The Time 3 survey was sent out before and during the winter break for schools. Following up on our Time 2 findings, we again found that parents responsible for overseeing homeschooling report lower well-being. Although we only found this for two well-being outcomes at Time 2 (well-being and emotional exhaustion), we found this across all well-being outcomes at Time 3 (worse overall well-being and professional fulfillment; higher emotional exhaustion and negative emotional states). We did not find that employees with responsibility for care of their elderly parents reported significantly worse outcomes, contrary to what we found at Time 2.

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:

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

At Time 3, we find that the strongest predictor of well-being was again conflict from work interfering with family, but increased workload was not a strong predictor (which was true at Time 2). However, poorer eating habits and less exercise were also strong contributors to worse well-being at Time 3. Increased work interfering with family conflict and increased workload both were strongly associated with higher emotional exhaustion; however, work interfering with family conflict was a consistent predictor of lower professional fulfillment and worse negative emotional states (depression, anxiety, and stress). Overall, the consistencies across time in the entire sample suggest that work interfering with family conflict is a critical factor affecting well-being outcomes.

Among onsite clinical workers, replicating our Time 1 and Time 2 results, conflict from work interfering with family was the largest contributor to overall well-being, emotional exhaustion, professional fulfillment, and negative emotional states (which is different from Time 1 and 2). Fear of infection was less of a contributing factor to emotional exhaustion than at Time 2, but workload increases contributed to lower well-being outcomes across all variables. It seems that workload has outpaced fear of infection for many clinical workers at the university. Interestingly, poorer eating habits emerged as an important contributor to poorer well-being across all outcomes for clinical workers as well.

For remote workers, conflict from work interfering with family AND conflict from family interfering with work contributed to worse well-being across all four outcomes. Previous surveys have not shown conflict from family interfering with work as a contributing factor for these workers. Less exercise and a poorer diet were also associated with worse well-being across all four outcomes for remote workers.

Finally, workers under 40 reported worse well-being than other age groups which is similar to Times 1 and 2. Conflict from work interfering with family was most strongly associated with emotional exhaustion among workers under 40, but increased workload was also critical. We also found that poor diet contributed to more emotional exhaustion among these younger participants. Interestingly, at Time 3, among these younger participants, stress about personal finances was also a contributory factor across all four well-being outcomes. Family interfering with work conflict was a contributory factor to poorer well-being for workers over 40, but not for those who were younger than 40.

Changes over Time

In our last report, we compared Time 2 outcomes to Time 1. Here we add a column for Time 3 and compare across outcomes again.

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, there is some indication of a small rebound effect at Time 3 (though all changes represent Cohen's D<0.2, suggesting small, not-meaningful change). We examined this more carefully by considering changes within person over time in the subsequent section.

Table 5. Changes over time for of wellness and health. Higher scores equal better wellness and professional fulfillment.

	Time 1	Time 2	Time 3
Professional fulfillment *My work is satisfying to me.*	3.29	3.17	3.26
Overall well-being *To what extent have COVID-19-related work/life changes impacted your overall well-being?*	3.74	3.56	3.64

Table 6. Changes over time for of wellness and health. Higher scores equal worse emotional exhaustion and depression/anxiety/stress.

	Time 1	Time 2	Time 3
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	1.50
Emotional exhaustion *Emotionally exhausted at work*	2.35	2.54	2.39

Overall, between 1667 and 2105 people completed well-being outcomes at both Times 2 and 3. We found statistically significant within person changes in well-being in all four outcomes, but in a positive direction (compared to Time 2). Within-person, the averages are not quite back up to Time 1 levels. Time 3 well-being outcomes are still significantly worse than Time 1. Importantly, although the trends are similar across outcomes over time, the differences are small.

Practical Implications

We have now collected three of four planned surveys assessing the wellness of university employees and have heard from over 10,000 unique respondents. We have found some consistent patterns between work groups across time. However, all university employees have struggles, particularly around work interfering with family conflict and heavier workloads.

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. Previous reports describe findings from the Time 1 Survey, Time 2 Survey, Remote Supervision Report, and Clinical Workers 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: https://hwc.public-health.uiowa.edu/.