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Post-Pandemic Faculty Motivation: Causes for Burnout Offset by Motivation or Hygiene Factors

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Introduction

The COVID-19 pandemic had many devastating effects worldwide including in the United States. The pandemic impacted physical health, safety, and the economy but as a result, many suffered from mental health issues stemming from depression and stress. Faculty in higher education, like many others serving our communities, were not shielded from the effects of COVID-19. They were required to adapt and continue serving students. Traditional in-person classes moved to an online platform overnight, placing an additional workload on faculty acclimating to new methodologies and technology associated with online delivery. Many colleges and universities were also faced with financial concerns, a consequence of diminished enrollment, having to reduce overall budgets impacting the availability of resources. Now that the immediate danger has subsided, colleges, universities, and their faculty members are left with the residual effects of the pandemic and are seeking to understand the new norm and better ways to serve faculty, staff, and students moving forward.

Purpose

The purpose of this study was to understand the motivational factors important to engineering and technology faculty in an urban campus setting and to assess, given the current post-pandemic conditions, whether those motivational factors are in place. The study was approached from an insider, scholar-practitioner standpoint with the hope that the results of this survey would be used to inform campus administrators in real-time and positively impact working conditions. The approach loosely aligns with an action research paradigm [1], but it is recognized that this project currently does not represent a fully developed action research project. Thus, the study is descriptive and exploratory in nature. It is also important to note that this study is cross-sectional and does not include pre-pandemic data. Thus, it is impossible to empirically determine a causal relationship between pandemic related issues and the data we obtained. A survey was developed asking participants to rank a list of motivators in order of their perceived importance as well as provide input on the degree to which those motivating factors were being met by the institution.

The initial data-gathering process did not specifically align with a particular motivational theory. However, it was determined that Herzberg's two-factor theory of motivation utilized as a post-hoc examination of the data would prove fruitful. While this introduces potential issues of validity and research fidelity, this research project is exploratory and the conclusions may be more helpful from a practitioner, rather than theoretical, standpoint.

Literature Review

COVID-19 continues to have a significant impact on faculty members in higher education. A 2020 study [2] surveyed 1,122 faculty members and found that faculty experienced increased workloads, lowered morale, and were provided with no semblance of work-life balance. The same report revealed that the pandemic not only caused faculty to experience increased stress and fatigue but also feelings of grief and anger. Another study [3] identified financial difficulties

and work-life balance as stressors leading to anxiety and depression. Many faculty also felt increased responsibilities related to student well-being. Identified as emotional labor, faculty obligations included increased emotional support for students which varied greatly depending on faculty gender and race [4]. During the height of COVID-19, physical safety was a paramount concern. Amid conflicting messages from local government, the Centers for Disease Control (CDC), and the World Health Organization (WHO) [5], there was uncertainty about how it was spread and how it was treated. COVID-19 required that faculty do more to create safe and physically healthy learning environments. This was achieved in part by moving in-person classes online and providing personal protective equipment (PPE).

In addition to pandemic related upheaval, civil unrest in the summer of 2020 brought societal tensions to the fore, and amplified faculty's need to create psychological safety in the classroom. Faculty were now tasked with creating safe spaces for students to discuss difficult differences and the impact of social unrest [6]. The *ASEE COVID-19 & Engineering Education: An Interim Report on the Community Response to The Pandemic and Racial Justice* [7] highlighted how the May 25, 2020, murder of George Floyd ignited a second national crisis. This trauma created a major disruption in the lives of all faculty as they needed to be more cognizant of the needs of their students, colleagues, and staff and heightened the need to provide psychological safety for students. Images of George Floyd's last minutes of life were hard to avoid [8], resulting in students, staff, and faculty of color experiencing repeated trauma. Moreover, there were gender-based differences in the impact of COVID-19. Pre-existing, pervasive barriers (i.e., institutional, systemic, and psychological) were further exacerbated by familial barriers for female STEM faculty seeking tenure during COVID-19 [9]. Velez-Cruz and Holstun [10] examined the impact of COVID-19 pandemic on faculty success, emotional, and physical well-being and found that the stress associated with providing psychologically safe learning environments for traumatized students can lead to secondary trauma in faculty. However, faculty who engage in self-care activities are more likely to experience lower levels of secondary traumatic stress [10].

Increased demands placed on faculty further exacerbated by the pandemic, led researchers to examine the impact these stressors have had on educators' levels of job satisfaction and burnout [11], [12]. The identification of burnout as an occupational risk for educators [13] is not a new discovery, however. Recognizing the negative impact exhaustion, cynicism, and inefficacy could have on teachers as well as their students, Maslach and Leiter [14],[15] have researched it extensively for more than 20 years. Unlike college professors who are motivated and energized by students [16], Maslach and Leiter [15] described individuals suffering from exhaustion as being characterized as depleted, fatigued, and lacking energy. Not surprisingly, studies have reported negative correlations between emotional exhaustion and job satisfaction [11], [17], [18].

While the impact that burnout and low levels of job satisfaction have on faculty includes a variety of subpar performance outcomes that also negatively impact students, recent research by Gallup has emphasized negative health implications. Gallup polls indicated that employees who experience burnout are 63% more likely to take a sick day [19]. In contrast, Gallup concluded that "a good job, with engaging work, is the very foundation of a thriving life" [19]. At a time when 78% of the world's working population reported that they are not currently engaged and

not satisfied with their work, Harter and Collins [20] were determined to identify what was necessary for individuals to experience well-being. They found, in this order, that the elements of career, social, financial, physical, and community well-being were what contributed to feelings of thriving. Interestingly, it was the combined effect of these components that made the biggest difference. For instance, while financial reasons could be a reason to change jobs, other factors played a role as well. For those whose social well-being needs were being met, they were found to require more than a 20% increase to leave their present job. Race-based civil unrest that occurred during the pandemic would likely have an added negative impact on feelings of community well-being for minoritized faculty.

The importance of social well-being as a motivator for educators remaining in the classroom was further emphasized by Marston's [16] finding regarding the value of relationships between faculty colleagues in elementary, high school, and college teaching. While Marston [16] noted that all teachers found significant levels of satisfaction from working with their students, college professors commented on how they were energized by their interactions and engagement with students and found it intrinsically rewarding. Similarly, though there were differences in the level of job satisfaction reported, both male and female math teachers reported greater job satisfaction when higher levels of cooperation among colleagues was present than those teachers who experienced lower cooperation among their colleagues [21]. Though job satisfaction has been studied extensively and is an important contributor to one's work attitude and behavior [22], Chen et al. [11] recognized the complexity in addressing burnout and determined that job satisfaction should not be explored without also exploring faculty's professional identity and psychological motivations.

Individual motivation is a topic of perennial interest for scholars and practitioners in many fields of study. Educators are interested in improving students' motivation to learn, for example, and leaders are interested in improving employees' motivation to perform. One of the best supported theories of motivation, self-determination theory [23], suggests that there are two sources of motivational drive: extrinsic and intrinsic. Extrinsic motivation refers to factors outside of the individual's psyche that give rise to an external reward. In the workplace context, examples of extrinsic motivators might include salary and job benefits, good working conditions, and fair employment policies. These generally give rise to performance by providing rewards that are outside of the individual; that is, the reward has an external locus of control. On the other hand, intrinsic motivation arises from internally driven factors like joy obtained from doing the work, a sense of purpose, and a desire to learn and advance in one's career.

The two-factor theory of motivation [24] helps explain extrinsic and intrinsic motivation in the workplace context. According to this framework, extrinsic motivators are called *hygiene factors* and are the components of one's job that keep someone from being dissatisfied. However, they do not necessarily compel someone to be satisfied or motivated to perform at high levels. Intrinsic factors, or *motivating factors*, create satisfaction with one's work and can be a strong force for positive work attitudes and contentment with one's job [25]. In other words, hygiene factors prevent dissatisfaction with work, but do not create satisfaction. Motivating factors create job satisfaction, but their absence does not create dissatisfaction [26]. This theory of workplace

motivation has strong empirical and theoretical support for explaining workers' motivation in a variety of contexts [27].

Methodology

The survey used in this research was designed to identify factors that motivate faculty in their jobs and to assess the perception of the current conditions within an urban university. The survey was developed and delivered using Qualtrics (https://www.qualtrics.com) targeting faculty members from the schools of science and engineering & technology within the university. The survey consisted of 51 questions comprised of five demographic questions, 44 organization achievement questions, one importance ranking question, and one open-ended response question. The organizational achievement questions utilized a 4-point Likert scale (strongly agree, agree, disagree, and strongly disagree). A 4-point scale was selected to remove the neutral dumping ground and require faculty to select a side. Survey questions were initially developed without considering Herzberg's two-factor theory and designed around typical faculty workload expectations, available resources, support, and rewards. The institutional review board (IRB) approved the study prior to solicitation. Participants were sent the link to the survey via existing school email listservs on September 19, 2022, with a closeout date of September 30, 2022. The email informed faculty members of the survey subject matter, the format, the approximate time to complete the survey, and provided an anonymous link employing Qualtrics. The survey was sent to 300 faculty members from the two schools within the university (179 in Science and 121in Engineering and Technology). Twenty-two faculty from Science and 41 faculty from Engineering and Technology completed the survey. The data were analyzed using IBM SPSS Statistics (Version 28) predictive analysis software.

Participants

Of the 63 respondents, 63.5% identified as male and 36.5% as female. Over two-thirds of the respondents (68.3%) were faculty members who had taught at the university for more than 10 years. Table 1 provides the respondent's rank, broken out by school and combined total while Table 2 provides therespondent's number of years as full-time faculty.

Table 1. Rank by School and Combined.

Rank	Engineering & Technology	Science	Combined Total
Lecturer	11 (26.8%)	4 (18.2%)	15 (23.8%)
Senior Lecturer	5 (12.2%)	1 (4.5%)	6 (9.5%)
Teaching Professor	1 (2.4%)	3 (13.6%)	4 (6.3%)
Associate Clinical Professor	2 (4.9%)	-	2 (3.2%)
Tenure Track/Non-Tenured	3 (7.3%)	-	3 (4.8%)
Associate Tenured Professor	10 (24.4%)	5 (22.7%)	15 (23.8%)
Full Tenured Professor	9 (22.0%)	7 (31.8%)	16 (25.4%)
Total	41	22	63

Table 2. Years as Fulltime Faculty by School.

Years as full-time Faculty	Engineering & Technology	Science	Combined Total
1 to 3	2 (4.9%)	1 (4.5%)	3 (4.8%)
3 to 5	6 (14.6%)	3 (13.6%)	9 (14.3%)
5 to 10	6 (14.6%)	2 (9.1%)	8 (12.7%)
More than 10	27 (65.9%)	16 (72.7%)	43 (68.3%)
Total	41	22	63

Faculty were also asked the average number of courses they taught per semester. One course, two courses, and four courses each had at least 20% of the respondents selecting them. Table 3 provides a complete breakdown of responses.

Table 3. Semester Teaching Load by School and Combined.

Teaching Load	Engineering & Technology	Science	Combined Total
1 course per semester	8 (19.5%)	6 (27.3%)	14 (22.2%)
2 courses per semester	11 (26.8%)	8 (36.4%)	19 (30.2%)
3 courses per semester	6 (14.6%)	3 (13.6%)	9 (14.3%)
4 courses per semester	10 (24.4%)	3 (13.6%)	13 (20.6%)
More than 4 courses per semester	6 (14.6%)	2 (9.1%)	8 (12.7%)
Total	41	22	63

Results

Faculty were asked to rank 14 factors that impacted their work. Pay and meaningful work were the top two ranked factors. Forty-one percent ranked meaningful work as the most important factor, while 61% ranked it in their top three, and 19% ranked it in their bottom three. Twenty-nine percent ranked pay as their top choice, while 54% ranked it in their top three and 3.2% ranked it in their bottom three. Table 4 shows the mean ranked score of the factors by school and combined. Because of the differences in distribution, pay was the highest mean ranked factor and available resources was the lowest ranked factor.

Table 4. Mean Factor Ranking Results by School and Combined

	Eng & Tech (n = 41)		Science (n = 22)		Combined Schools	
	Mean	Rank	Mean	Rank	Mean	Rank
Pay	5.15	2	3.59	1	4.60	1
Meaningful Work	4.93	1	5.27	2	5.05	2
Job Security	6.32	4	5.91	4	6.17	3
Work-life Balance	5.61	3	7.55	6	6.29	4

Fringe Benefit	6.78	6	5.41	3	6.30	5
Continuous Development	6.51	5	8.27	9	7.13	6
Sense of Belonging/Teamwork	7.39	7	7.45	5	7.41	7
Work Environment	7.73	8	8.73	11	8.08	8
Fairness/Equity	7.83	9	8.59	10	8.10	9
Promotion	8.71	10	7.86	7	8.41	10
Recognition	9.68	13	8.05	8	9.11	11
Included in Decision Making	9.22	12	9.00	12	9.14	12
Administrative Support	9.10	11	9.91	14	9.38	13
Available Resources	10.05	14	9.41	13	9.83	14

In the tables below we highlight Likert-scale survey questions where at least 80% of the respondents agreed to some level (strongly agree or agree) for the combined group. While we have grouped them under the ranked categories, we recognize that some questions might fit into more than one group.

Pay

Pay was mean ranked as the most important factor. Tables 5 and 6 present the two questions focused on pay with only Table 6 meeting the 80% threshold of disagreement.

Table 5. I am paid a fair amount for the work that I do.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	0 (0%)	1 (4.5%)	1 (1.6%)
Agree	20 (48.8%)	5 (22.7%)	25 (39.7%)
Disagree	11 (26.8%)	7 (31.8%)	18 (28.6%)
Strongly Disagree	10 (24.4%)	9 (40.9%)	19 (30.2%)
Total	41	22	63

Table 6. My pay increases have kept pace with the market.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	-	-	-
Agree	6 (15.0%)	2 (9.1%)	8 (12.9%)
Disagree	11 (27.5%)	3 (13.6%)	14 (22.6%)
Strongly Disagree	23 (56.1%)	17 (77.3%)	40 (64.5%)
Total	40	22	62

Meaningful Work

Meaningful work was mean ranked as the second most important factor. Tables 7-10 present the questions meeting the 80% threshold of agreement.

Table 7. I feel that I am positively influencing others through my work.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	17 (41.5%)	12 (54.5%)	29 (46.0%)
Agree	19 (46.3%)	10 (45.5%)	29 (46.0%)
Disagree	5 (12.2%)	-	5 (8.0%)
Strongly Disagree	-	-	-
Total	41	22	63

Table 8. I feel a sense of pride in doing my job.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	20 (48.8%)	15 (68.2%)	35 (55.5%)
Agree	19 (46.3%)	7 (31.8%)	26 (41.3%)
Disagree	2 (4.9%)	-	2 (3.2%)
Strongly Disagree	-	-	-
Total	41	22	63

Table 9. I find meaning in my job.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	22 (53.7%)	12 (54.5%)	34 (54.0%)
Agree	18 (43.9%)	10 (45.5%)	28 (44.4%)
Disagree	1 (2.4%)	-	1 (1.6%)
Strongly Disagree	-	-	-
Total	41	22	63

Table 10. I continue to enjoy teaching and I am glad that I chose it as a career path.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	19 (46.3%)	12 (54.5%)	31 (49.2%)
Agree	18 (43.9%)	9 (40.9%)	27 (42.9%)
Disagree	4 (9.8%)	1 (4.5%)	5 (7.9%)
Strongly Disagree	-	-	-
Total	41	22	63

Job Security

Job security was mean ranked as the third most important factor. Table 11 presents the only question meeting the 80% agreement level.

Table 11. My workplace promotes job security.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	10 (25.0%)	5 (22.7%)	15 (24.2%)
Agree	20 (50.0%)	15 (68.2%)	35 (56.5%)
Disagree	8 (20.0%)	2 (9.1%)	10 (16.1%)
Strongly Disagree	2 (5.0%)	-	2 (3.2%)

Total	40	22	62

Work-Life Balance

Work-Life Balance was mean ranked as the fourth most important factor. Tables 12-14 present the questions meeting the 80% threshold of agreement.

Table 12. I have achieved many worthwhile personal and professional goals through my job.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	16 (39.0%)	4 (18.2%)	20 (31.7%)
Agree	22 (53.7%)	17 (77.3%)	39 (61.9%)
Disagree	3 (7.3%)	1 (4.5%)	4 (6.3%)
Strongly Disagree	-	-	-
Total	41	22	63

Table 13. I am physically exhausted by my work.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	24 (58.5%)	16 (72.7%)	40 (63.5%)
Agree	15 (36.6%)	5 (22.7%)	20 (31.7%)
Disagree	-	-	-
Strongly Disagree	2 (4.9%)	1 (4.5%)	3 (4.8%)
Total	41	22	63

Table 14. I am emotionally exhausted from my work.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	23 (56.1%)	16 (72.7%)	39 (61.9%)
Agree	17 (41.5%)	5 (22.7%)	22 (34.9%)
Disagree	-	-	-
Strongly Disagree	1 (2.4%)	1 (4.5%)	2 (3.2%)
Total	41	22	63

Fringe Benefits

Fringe benefits was mean ranked as the fifth most important factor. Table 15 presents the only question asked about fringe benefits. It also met the 80% threshold of agreement.

Table 15. The benefit package is equal to or better than other organizations.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	7 (17.1%)	2 (9.1%)	9 (14.3%)
Agree	28 (68.3%)	16 (72.7%)	44 (69.8%)
Disagree	5 (12.2%)	1 (4.5%)	6 (9.5%)

Strongly Disagree	1 (2.4%)	3 (13.6%)	4 (6.3%)
Total	41	22	63

Continuous Development

No questions related to continuous development met the 80% threshold of agreement.

Sense of Belonging/Teamwork

Sense of belonging/Teamwork was mean ranked as the seventh most important factor. Tables 7-10 present the questions meeting the 80% threshold of agreement.

Table 16. I feel like I work in isolation.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	21 (51.2%)	13 (59.1%)	34 (54.0%)
Agree	13 (31.7%)	5 (22.7%)	18 (28.6%)
Disagree	-	-	-
Strongly Disagree	7 (17.1%)	4 (18.2%)	11 (17.5%)
Total	41	22	63

Work Environment

Work Environment was mean ranked as the eighth most important factor. Tables 17-19 present the questions meeting the 80% threshold of agreement.

Table 17. There is a surplus of obstacles that make my job responsibilities more difficult.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	20 (48.8%)	13 (59.1%)	33 (52.4%)
Agree	20 (48.8%)	8 (36.4%)	28 (44.4%)
Disagree	-	-	-
Strongly Disagree	1 (2.4%)	1 (4.5%)	2 (3.2%)
Total	41	22	63

Table 18. My workload has increased due to the increased diversity of student needs.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	23 (56.1%)	13 (59.1%)	36 (57.1%)
Agree	18 (43.9%)	9 (40.9%)	27 (42.9%)

Disagree	-	-	-
Strongly Disagree	-	-	-
Total	41	22	63

Table 19. My work environment adds to my personal and professional success.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	15 (36.6%)	3 (13.6%)	18 (28.6%)
Agree	18 (43.9%)	15 (68.2%)	33 (52.4%)
Disagree	6 (14.6%)	4 (18.2%)	10 (15.9%)
Strongly Disagree	1 (2.4%)	-	1 (1.6%)
Total	41	22	63

Fairness/Equity

Fairness/equity was mean ranked as the ninth most important factor. Tables 20 and 21 present the questions meeting the 80% threshold of agreement.

Table 20. My workload has increased due to others not doing their jobs.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	23 (56.1%)	16 (76.2%)	39 (62.9%)
Agree	15 (36.6%)	4 (19.0%)	19 (30.6%)
Disagree	-	-	-
Strongly Disagree	3 (7.3%)	1 (4.8%)	4 (6.5%)
Total	41	21	62

Table 21. My workload has increased due to a reduced workforce.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	21 (51.2%)	13 (59.1%)	34 (54.0%)
Agree	17 (41.5%)	9 (40.9%)	26 (41.2%)
Disagree	-	-	-
Strongly Disagree	3 (7.3%)	-	3 (4.8%)
Total	41	22	63

Promotion

No questions related to continuous development met the 80% threshold of agreement.

Recognition
Recognition was mean ranked as the 11th most important factor. Table 22 presents the question meeting the 80% threshold of agreement.

Table 22. My efforts in the classroom are recognized and appreciated by my students.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	13 (31.7%)	7 (31.8%)	20 (31.8%)
Agree	23 (56.1%)	15 (68.2%)	38 (60.3%)
Disagree	5 (12.2%)	-	5 (7.9%)
Strongly Disagree	-	-	-
Total	41	22	63

Included in Decision Making
No questions related to being included in decision making met the 80% threshold of agreement.

Administrative Support
Administrative support was mean ranked as the 13th most important factor. Table 23 presents the question meeting the 80% threshold of agreement.

Table 23. I receive adequate positive feedback from my direct supervisor.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	17 (41.5%)	8 (36.4%)	25 (39.7%)
Agree	17 (41.5%)	9 (40.9%)	26 (41.3%)
Disagree	6 (14.6%)	4 (18.2%)	10 (15.9%)
Strongly Disagree	1 (2.4%)	1 (4.5%)	2 (3.2%)
Total	41	22	63

Available Resources
Available resources were mean ranked as the 14th (least) most important factor. Table 24 and 25 present the questions meeting the 80% threshold of agreement.

Table 24. I am provided an adequate physical learning environment to meet the needs of my students.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	10 (24.4%)	5 (22.7%)	15 (24.2%)
Agree	25 (61.0%)	16 (72.7%)	41 (66.1%)
Disagree	5 (12.2%)	1 (4.5%)	6 (9.7%)
Strongly Disagree	-	-	-
Total	40	22	62

Table 25. Budget cuts have negatively impacted my motivation.

Level of Agreement	Engineering & Technology	Science	Combined Total
Strongly Agree	22 (55.0%)	15 (71.4%)	37 (60.7%)
Agree	16 (40.0%)	6 (28.6%)	22 (36.1%)
Disagree	-	-	-
Strongly Disagree	2 (5.0%)	-	2 (3.3%)
Total	40	21	61

Herzberg's Two-Factor Model

Because this survey was not specifically designed for Herzberg's model [24], [25], it was decided that grouping questions in the two primary areas of the model (i.e., hygiene factors and motivating factors) made more sense than trying to divide the questions between the 11 subconstructs in the model. This was because several questions fit into multiple subconstructs, thus making an analysis in that regard less useful. To determine if a question would be categorized as a motivational factor or a hygiene factor, the authors individually placed them into one of the two categories. Less than five questions had a conflict where one author put it in a category different than the others. In this case, the item was placed with the majority. Final coding put 16 questions in Motivation and 28 questions in Hygiene. All negatively phrased questions were reversed scored. Cronbach's Alpha was run for each construct and was found to be acceptable at .902 and .913, respectively. The survey questions assigned to Herzberg's Two-Factor Motivation Theory can be seen in appendix A of this report.

A mean score for both Motivation (2.8869, SD = .47244) and Hygiene (2.5977, SD = .44076) was calculated. A paired sample *t* test was conducted comparing mean motivation and hygiene scores with simple bootstrapping. Motivation was found to have a statistically higher mean score $t(56) = 9.28$ with a large effect size (Cohen's $d = 1.23$).

Discussion

The results of the study revealed that, of the 14 factors presented in the survey, pay, meaningful work, and job security ranked highest in level of importance for responding faculty. Even though faculty ranked pay as the most important factor, 58.8% of the respondents felt that they were not being paid a fair wage while 89.1% responded that the university had not kept pace with the market in terms of salary increases. Fortunately, the vast majority of faculty felt that their work is meaningful. Overall, greater than 90% of the faculty surveyed reported finding meaning in their jobs, taking pride in their work, having a positive influence on others through their work, and that they continue to enjoy being a teacher. Ranked as the third highest priority, approximately 80% of all faculty felt the university provides job security. Based on faculty responses, the university has been effective at providing job security and meaningful work but underperforms in its ability to satisfy faculty salary expectations.

Our results also present faculty as being both physically and emotionally tired. Regardless of the high levels of personal and professional achievements experienced by faculty, 95.2% report that

they are physically tired, while 96.8% also claim to be emotionally exhausted. Though the dimension of emotional exhaustion is only one aspect of burnout, it has been found to be negatively related to professional identity and job satisfaction [11, 18]. High levels of emotional and physical exhaustion have been identified in many helping professions, such as teaching, because of the additional emotional labor performed by these individuals [28]. Just like in our survey, employees in these fields (e.g., nursing, psychology, social work, and teaching) often do very meaningful work but suffer from high levels of burnout. This phenomenon was exacerbated by the COVID-19 pandemic [29]. Thus, our results are not surprising given the various stressors faculty face. Anecdotally, we believe the pandemic had an impact, however, we recognize that our study cannot demonstrate a causal linkage between the pandemic and faculty's reported motivation and satisfaction. We believe that institutional leaders must attend to these issues because they are so widespread and pervasive. This recommendation which considers the wellbeing of the whole person and recognizes the extra demands placed on faculty by the uncertainties associated with the pandemic were supported by Erickson's [30] emphasis for leaders to facilitate employees' ability to establish work-life balance. Though the faculty in this study did not rank it in the top three, work-life balance fell just below at number four and was viewed as an important concern.

Examining the results of our survey using Herzberg's model revealed that, in general, faculty are more highly satisfied with motivational factors as compared to hygiene factors. To reiterate, hygiene factors must be in place to prevent dissatisfaction with a job, but their presence does not cause one to have job satisfaction. On the other hand, the absence of motivational factors does not necessarily cause job dissatisfaction, but their presence does cause job satisfaction. Our survey indicated that faculty are very motivated by Herzberg's motivational factors (e.g., meaningful work) which are powerful motivators despite other issues not being in place, such as pay. Leaders must be very cautious here; faculty may be intrinsically motivated, but the lack of hygiene factors quickly leads to job dissatisfaction [31]. Coupled with our findings regarding work-life balance, burnout may be very likely for many [32].

Conclusion

The original intent of this study was to recognize the impact the COVID-19 pandemic had on faculty members in higher education and whether sufficient factors are in place to provide support and motivation to prevent faculty burnout. While our study cannot show a causal relationship between the pandemic and the outcomes we found, we believe such results still provide insights into the current struggles faced by faculty. The vaccines developed and administered reduced the health scare and opened the country back up to some sense of normalcy, but there are still many ongoing underlying symptoms as a result of the pandemic that need to be considered and addressed to ensure faculty well-being. Race-based civil unrest during the pandemic negatively impacted feelings of community well-being for minoritized faculty, and stress associated with providing psychologically safe learning environments for traumatized students can lead to secondary trauma in faculty. There is an intrinsic nature to teaching, a desire to serve and support students often at the expense of personal welfare much like that of a caregiver. The hope is that the results of this study would encourage action by universities and colleges to look closely at faculty motivational factors, but even more so at the hygiene factors

that may have a greater physical and emotional impact when absent. This study has inspired future examination of the topic designed with Herzberg's two-factor theory of motivation at the forefront with the investigation tool specifically aligned to Herzberg's [24] motivational and hygiene factors. Additionally, future investigation should include increased stratification of demographics, including gender and race, to help identify the impacts that factors have on varying groups.

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Appendix A

Survey Questions Assigned to Herzberg's 2 Factor Motivation Theory	
Hygiene	Motivation
• The overall level of campus support positively impacts my motivation as a faculty member. • The overall level of school support positively impacts my motivation as a faculty member. • The overall level of departmental support positively impacts my motivation as a faculty member. • Work-related decisions are fair and equitable. • I am provided with an adequate physical learning environment to meet the needs of my students. • I receive adequate positive feedback from my direct supervisor. • There are adequate merit-based rewards for faculty. • There is enough time in the day to complete my required tasks. • I am emotionally exhausted from my work. • My workload has increased due to the increased diversity of student needs. • My work environment adds to my personal and professional success. • I am paid a fair amount for the work that I do. • The benefit package is equal to or better than other organizations. (Fringe Benefits) • The same rules apply to everyone. • I am physically exhausted by my work. • There are a surplus of obstacles that make my job responsibilities more difficult. • My work environment promotes a positive attitude. • My workload has increased due to a reduced workforce. • I am afforded the same resources as my colleagues. • I feel alienated at work. • There is ample opportunity for me to collaborate and work with others. • My pay increases have kept pace with the market. • Budget cuts have negatively impacted my motivation. • My workload has increased due to others not doing their jobs. • I feel rewarded by the pay increases that I have received. • I feel like I am part of a team. • My workplace promotes job security. • I feel like I work in isolation.	• I am provided adequate resources for personal career development and continued education. • Promotion requirements fairly recognize the work that I am required to fulfill as part of my job responsibilities. • I am provided clear guidelines and direction to achieve promotion. • I receive adequate recognition from the school for my contributions. • My efforts in the classroom are recognized and appreciated by my students. • My combined workload is recognized and taken into consideration by administration. • Promotion opportunities are fair and equitable. • I feel a sense of pride in doing my job. • I feel that I am positively influencing others through my work. • There is ample mentoring available for faculty throughout the stages of their careers. • Based on expected workloads including administrative and advising responsibilities there is enough time to engage and participate in activities that support promotion. • I am included in decisions that impact my job. • I have achieved many worthwhile personal and professional goals through my job. • I feel like my status gives me a sense of belonging and a voice. • I find meaning in my job. • I continue to enjoy teaching and I am glad that I chose it as a career path.