

Final Report

2016 Faculty and Staff Quality of Life Survey

Written by Members of the MIT Council on Family and Work

in collaboration with the

MIT Institutional Research Office

September 20, 2019



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Select Results from the MIT 2016 Faculty and Staff Quality of Life Survey

Introduction

The [MIT Council on Family and Work](#) monitors the state of family and work life at MIT and works to ensure MIT is a place where faculty, staff, and students can have fulfilling and productive professional and personal lives. As part of its charge, the council sponsors the MIT Faculty and Staff Quality of Life Survey, which is administered to faculty, other instructional staff, researchers, postdocs, administrative staff, support staff, and service staff on MIT's main campus and at Lincoln Laboratory. The Office of the Provost and the Chair of the Faculty serve as co-sponsors of the faculty portion of the survey. The survey covers a number of topics, including satisfaction, workload, work-related stressors, departmental climate, mentoring, integration of work and personal/family life, and the tenure and promotion process.

In 2012, 59% of main campus staff and 67% of Lincoln Laboratory staff answered the survey at least partially. In 2016, the response rates were 57% and 45%, respectively (see appendix table 1 for response rates by various subgroups). Our analysis of the 2012 survey can be found [here](#). Highlights from the 2016 survey, prepared by Institutional Research, can be found [here](#). This report emphasizes the 2016 results.

We begin by describing how we structured our investigation. Then, we present our findings. Finally, we share some recommendations and next steps.

Confidentiality of Survey Results

Prior to presenting any findings, we think it is important to point out the efforts taken to maintain the confidentiality of the survey participants. Individual-level data are never explored by the council; indeed, any subgroup analyzed required at minimum five respondents. We do not present results where individual respondents can be identified.

Methodology

In 2016, the council initially considered three primary outcomes, similar to our approach in 2012: overall employee satisfaction; satisfaction of employees with their ability to “integrate the needs of [their] work with those of [their] personal/family life”; and employee intentions to leave MIT within three years. Institutional Research in the Office of the Provost first explored the relationship between these outcomes and other survey questions to look for patterns in the data. Through this descriptive analysis, we noticed that questions about respect in the workplace, control over one's job (including manager openness to flexible work arrangements), growth and learning opportunities, and adequate mentorship were correlated with the three main outcomes.

We then used regression analysis—a statistical modeling technique—to measure these correlations accounting for employee role, hours worked, age, sex, underrepresented minority (URM) status, international status, and family structure (presence of a spouse or partner, presence of one or more children under age 13, and presence of one or more children over the

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age of 13). This analysis did not change what we observed in the descriptive analysis described above.

In addition to the three primary outcomes, we explored 34 additional variables related to the work-life experience at MIT. The 34 questions were all asked on a five-point scale (very dissatisfied to very satisfied for the satisfaction items and strongly disagree to strongly agree for the agreement items). We used principal component analysis (PCA) to better understand how the 34 variables related to one another. From the PCA, we constructed eight scales, composed of between two and seven variables each. For each scale, we examined differences by various subsets of the MIT community, including location, role, gender, and URM status. More detail on the scale components are in the results section of this report. We did not replicate this analysis for 2012, as some of the survey questions used to form the scales were only available in 2016.

Quality of Life Survey Results

Overall Satisfaction

First, we looked at overall satisfaction at MIT, specifically the fraction who responded that they were somewhat or very satisfied in their role at MIT. Of the faculty, research and instructional staff, staff (administrative, support and service), Lincoln Lab researchers, and Lincoln Lab staff, 90% reported that they were satisfied. The overall employee satisfaction rate is 90.2%, which is similar to 90.9% found in 2012.

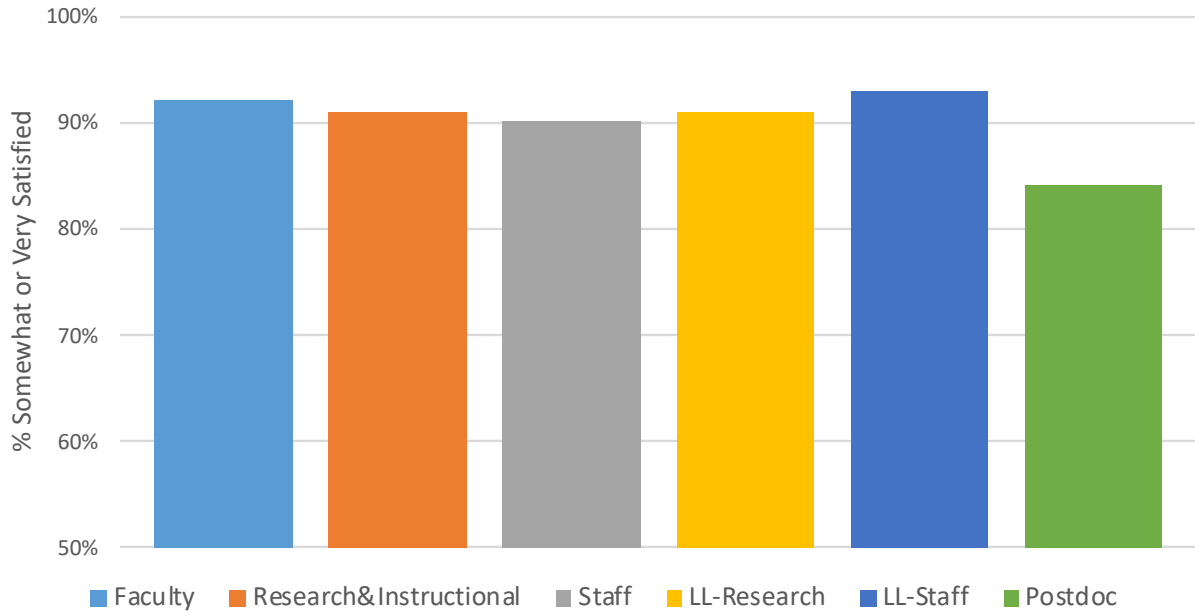
The one group who reported lower overall satisfaction are postdoctoral scholars (both postdoctoral associates and postdoctoral fellows),¹ where 84% reported being satisfied (see fig. 1).

¹ Postdocs are appointed with the title Postdoctoral Fellow or Postdoctoral Associate depending on the type and source of funding. The MIT title of Postdoctoral Associate applies to those who are paid a salary by MIT. Their salary is usually charged to a grant or contract secured by their faculty mentor.

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Figure 1: Overall, how satisfied are you being an employee at MIT? (Somewhat or Very Satisfied)

These are raw percentages (not accounting for the influence of other factors) from the MIT 2016 Quality of Life Survey.

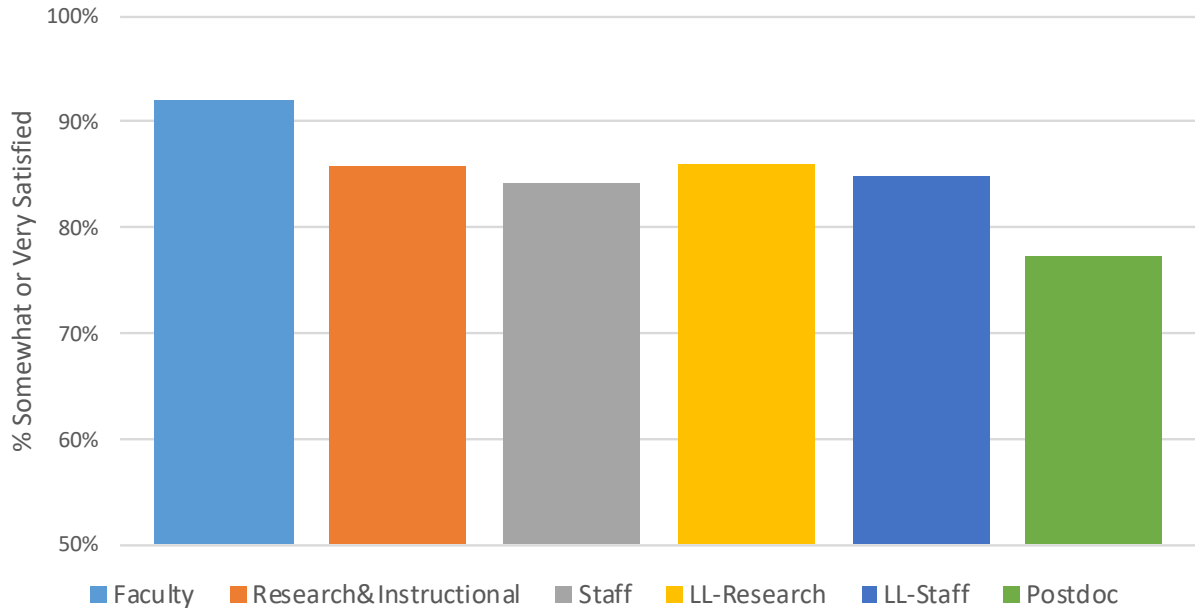


When we account for demographic characteristics and the number of hours worked (see appendix table 2), faculty stand out as having the highest reported satisfaction rates; other employees are about 5 percentage points lower, and postdocs are approximately 15 percentage points lower (see fig. 2).

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Figure 2: Overall Satisfaction with Demographic and Workload Controls

These are conditional comparisons, which means that these estimates account for the influence of age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.



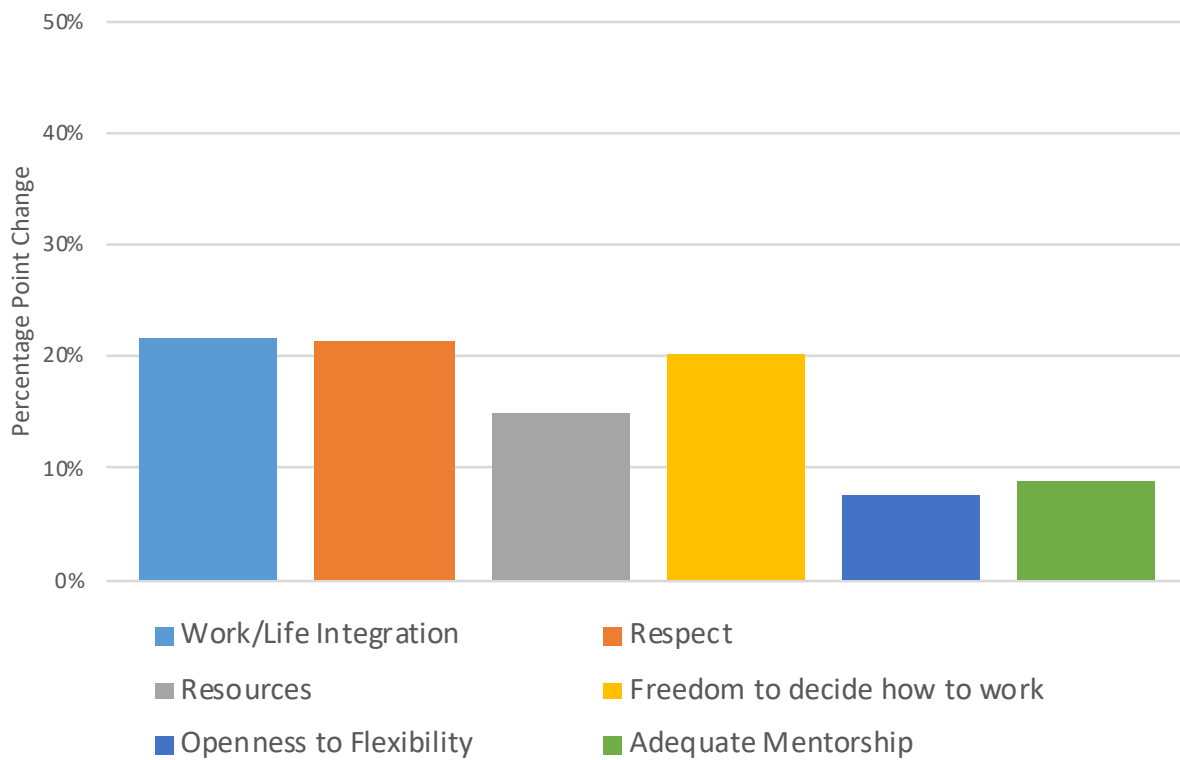
Next, we considered which variables are correlated with satisfaction. We report results with demographic and workload controls, although results are generally similar without controls.

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One of the strongest relationships with overall satisfaction is employee satisfaction with the ability to integrate work and personal/family life, indicating the ability to balance responsibilities and time in both areas. An employee who is satisfied with work-life integration is over 20 percentage points more likely to report being satisfied overall (see fig. 3). A similarly large effect is found when employees report that everyone is treated with respect in the workplace. This suggests recent efforts by the Institute Community and Equity Officer to promote respect at MIT have the potential to increase overall job satisfaction across the Institute.

Figure 3: Factors Predictive of Overall Satisfaction

Change in overall satisfaction when employees are satisfied with these variables, accounting for age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.



To place these results in context, consider the question of adequate resources to “do my job well” and “freedom to decide how to do my own work.” Both are classic questions known to be related to employee satisfaction. Satisfaction on those questions are associated with 15 to 20 percentage points higher level of overall satisfaction.

In addition, we considered two measures found to be important in the 2012 Quality of Life Survey: manager openness to flexible work arrangements and adequate mentorship. Both are predictive of an 8 to 9 percentage points higher level of overall satisfaction.

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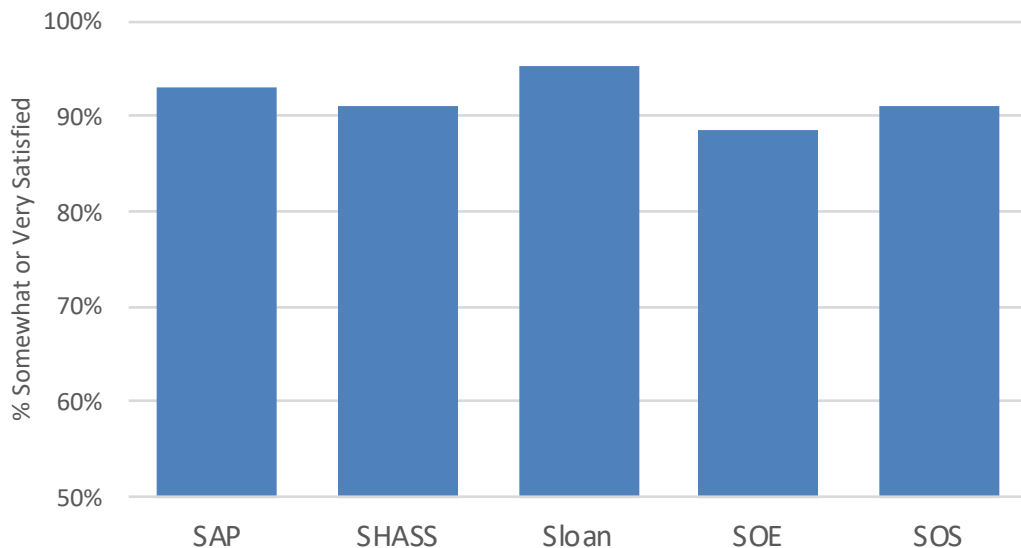
When we looked directly at differences across demographic characteristics, we did not find differences by gender or international status. We did find that overall satisfaction is 3.2 percentage points lower for underrepresented minority participants, controlling for other demographics and workload (see appendix table 2).

Overall Satisfaction and Variation Across Organizational Units

Accounting for demographics and workload, 89% or more of faculty across the five schools reported being somewhat or very satisfied being a faculty member at MIT. Sloan School of Management reported the highest level of satisfaction at 95%, although this difference is not statistically significant at conventional levels (see fig. 4).

Figure 4: Faculty Overall Satisfaction with Demographic and Workload Controls

These are comparisons accounting for age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.

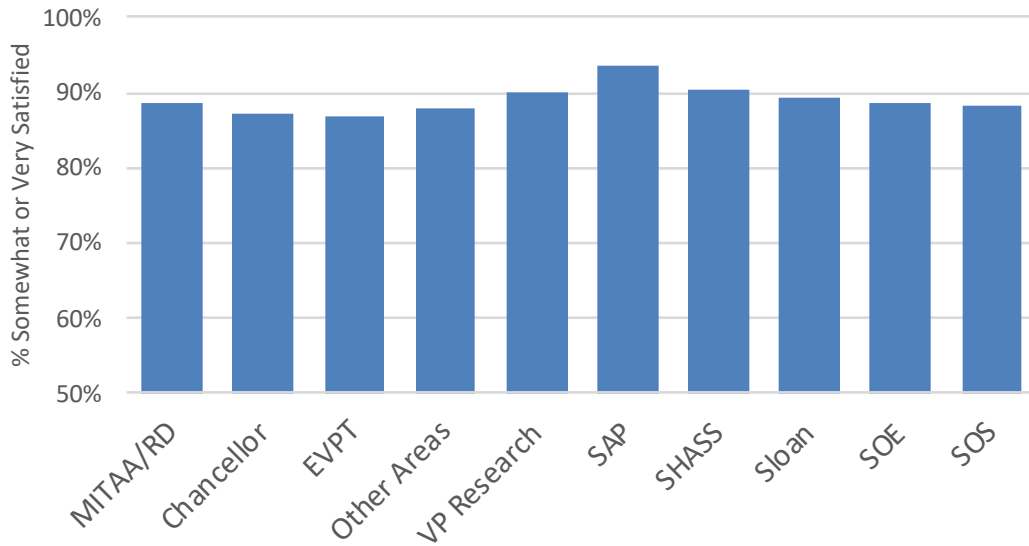


Overall satisfaction also is similar across staff areas at MIT. Figure 5 shows that while there are some differences, each area has satisfaction rates just above or just below 90%.

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Figure 5: Staff Overall Satisfaction with Demographic and Workload Controls

These are conditional comparisons controlling for age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.

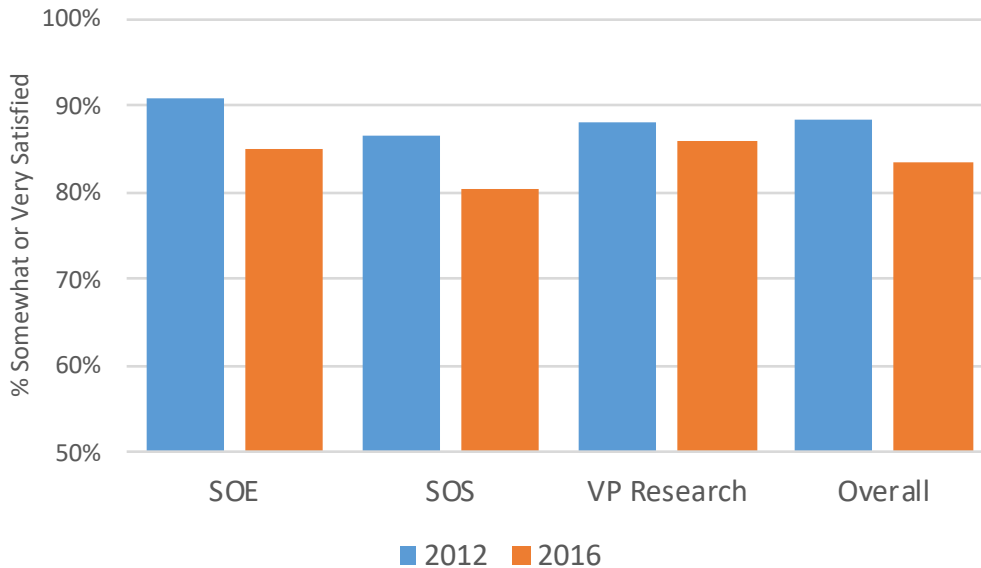


More on Postdoctoral Scholar Satisfaction

We further explored possible sources of postdoc dissatisfaction but did not find any clear answers. There were no big differences in satisfaction across the first three years of postdoc tenure. Satisfaction among international postdocs declined between 2012 and 2016 (from 88% to 84%), which was somewhat smaller compared to postdocs from the United States (a decline from 89% to 82%). We found some heterogeneity across schools and the Vice President of Research, where most postdocs are appointed (see fig. 6).

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Figure 6: Postdoctoral Scholar Overall Satisfaction by Area



All areas showed a decline from 2012 to 2016. (Note that because of the temporary nature of the postdoctoral position, with typical appointments ranging from one to three years, different cohorts would have completed each survey.) The School of Engineering and the School of Science both had a 6 percentage point reduction, although the School of Science started with a slightly lower rate of satisfaction. Those appointed through the Vice President of Research had a smaller decline, from 88% to 86%.

Similarly, we considered postdoctoral associates and postdoctoral fellows separately and found a decline for both groups, but with a lower base level of satisfaction among the fellows. In both surveys, postdoctoral fellows reported lower satisfaction than postdoctoral associates. Fellows' satisfaction rate was 78% in 2016, down from 82% in 2012, while associates' satisfaction rate was 86% in 2016, down from 91% in 2012. Even when accounting for satisfaction with salary and benefits, this gap persists. These results merit further inquiry, including looking at them in the context of the particular nature of the postdoctoral position.

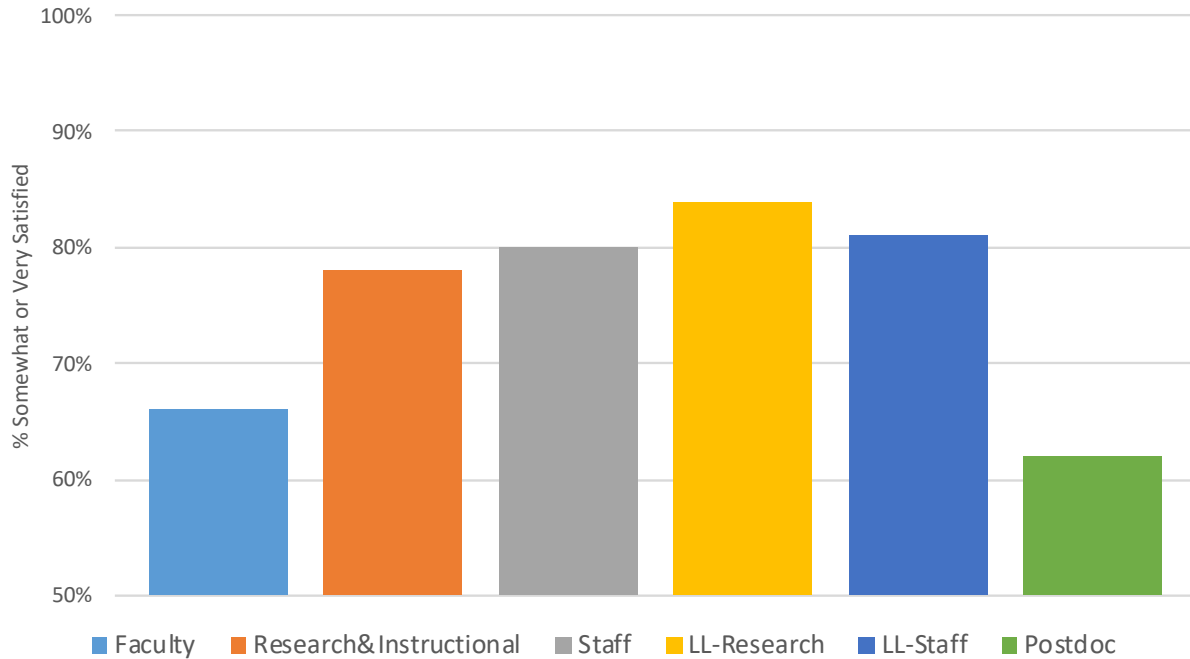
Work-Life Integration

Given our role as the Council on Family and Work, we are particularly interested in the satisfaction of employees with their work-life integration. Satisfaction in this regard is lower than overall satisfaction, suggesting that there continues to be room for improvement.

In particular, faculty report lower levels of satisfaction (66%) than other groups (78% to 84%), with the exception of postdoctoral scholars, who again have the lowest level of satisfaction at a rate of 62% (see fig. 7).

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Figure 7: Percentage of each employee type answering somewhat or very satisfied to the question, “Please indicate the degree to which you are satisfied with your ability to integrate the needs of your work with those of your personal/family life.”

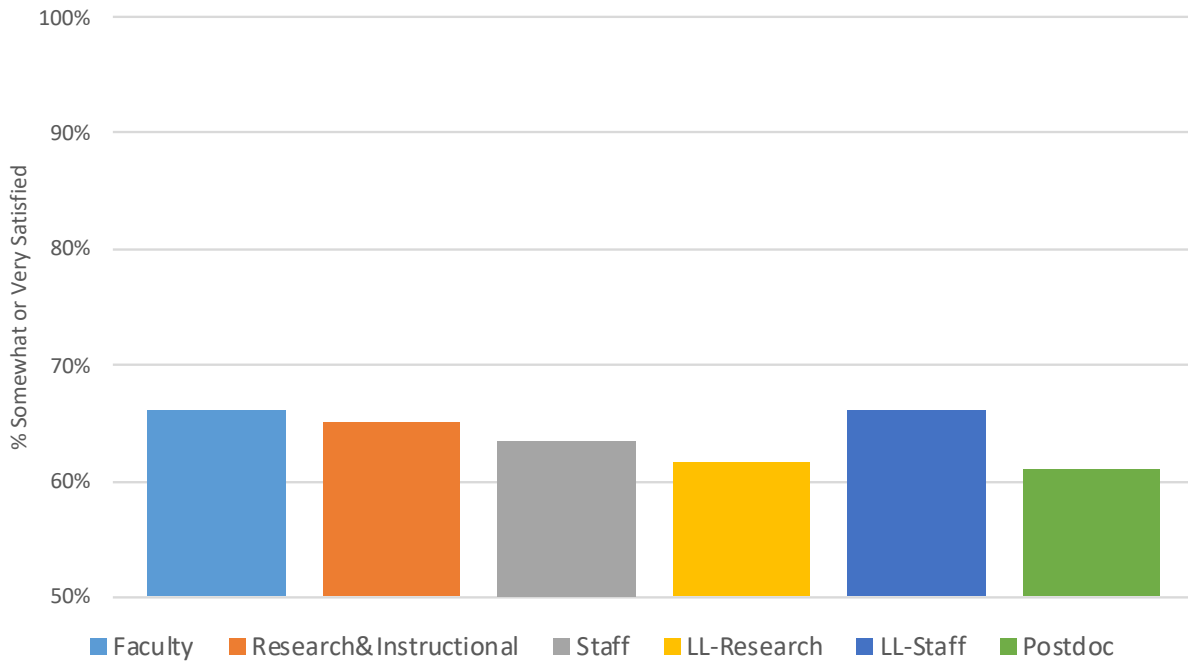


These differences are smaller, once we control for demographic and workload differences, and have a different distribution across the job categories. These changes speak to the sources of the variance in satisfaction along this dimension (see fig. 8).

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Figure 8: Work-Life Integration with Demographics and Workload Controls

These are conditional comparisons accounting for age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.

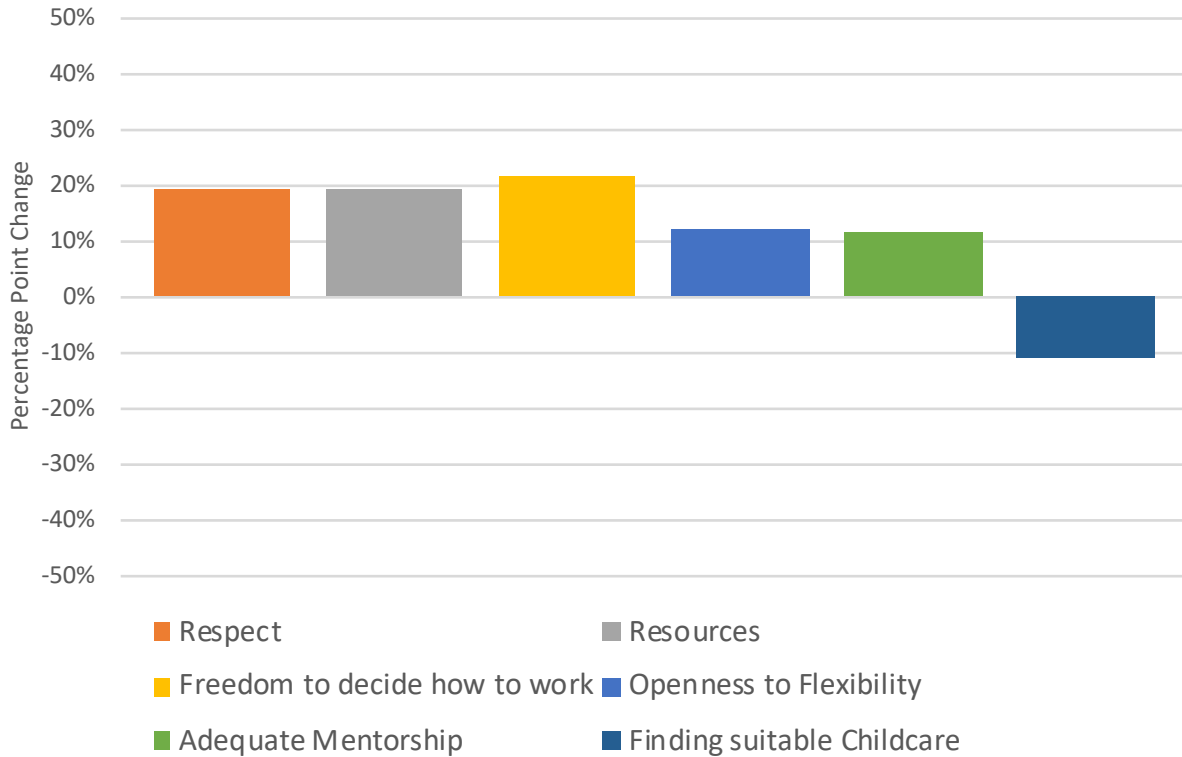


When we look at predictors of work-life balance, we again find large associations with the same characteristics that correlate with overall satisfaction, such as respect and freedom to decide how to work. In addition, those experiencing stress in finding suitable childcare are 10 percentage points less likely to say they are satisfied with work-life integration (see fig. 9).

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Figure 9: Factors Predictive of Work-Life Integration

Change in satisfaction with work-life integration when employees are satisfied with these variables, conditional on age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.



Employee Retention

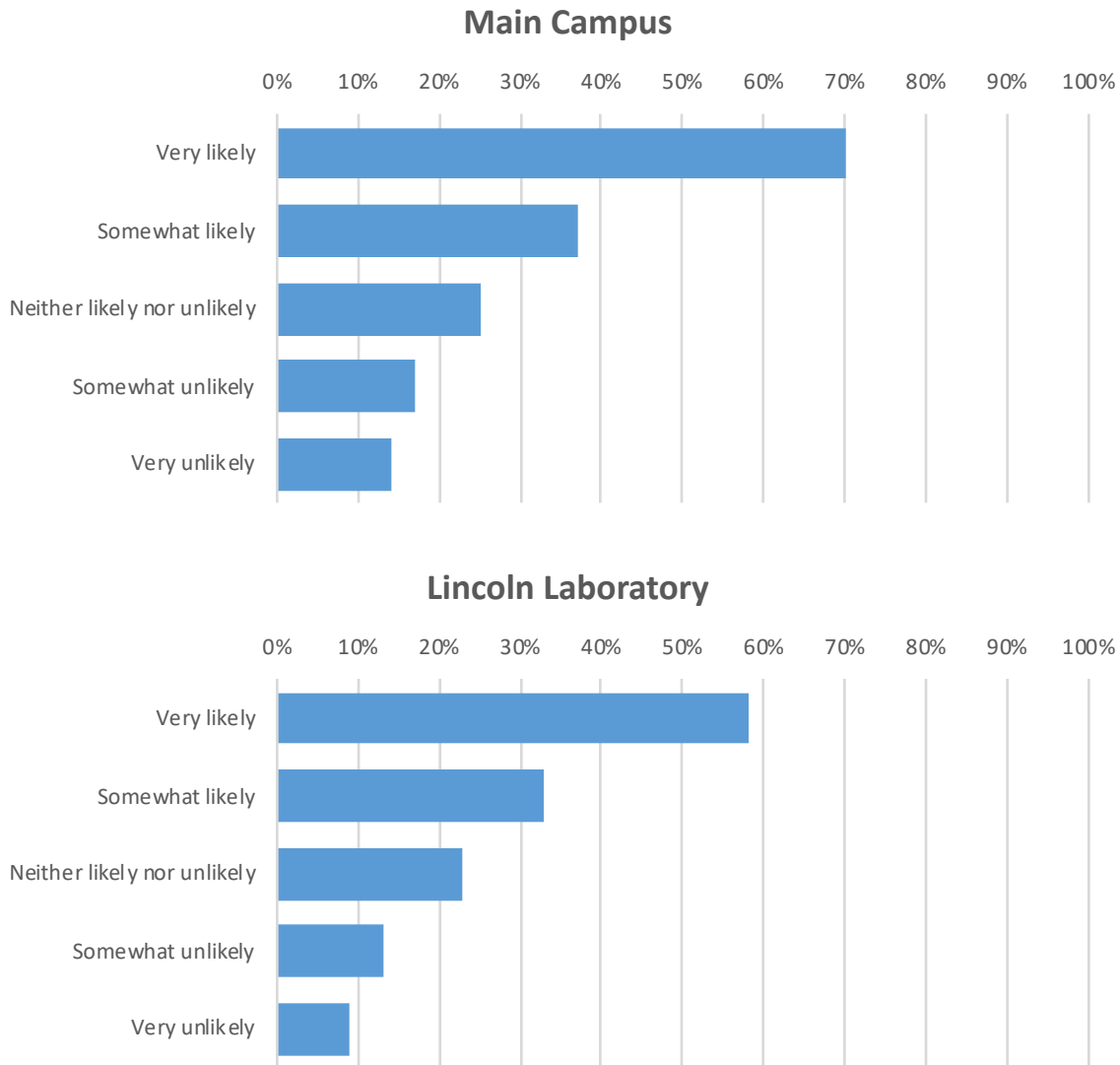
In the 2012 and 2016 surveys, respondents were asked the likelihood that they would leave the Institute in the next three years. To assess the accuracy of these predictions, we correlated the answers from the 2012 survey with administrative data on which employees were still at MIT in October 2015 (see fig. 10).

We found that employees who said that they were very likely to leave in three years were, in fact, likely to do so, and that their expectations (as expressed in the surveys) generally track what they do. Note that the neutral response (“Neither likely nor unlikely”) correlates to about a quarter of respondents actually leaving MIT three years later.

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Figure 10: Percent of Employees Who Actually Left MIT by Self-Reported Likelihood of Leaving MIT within Three Years

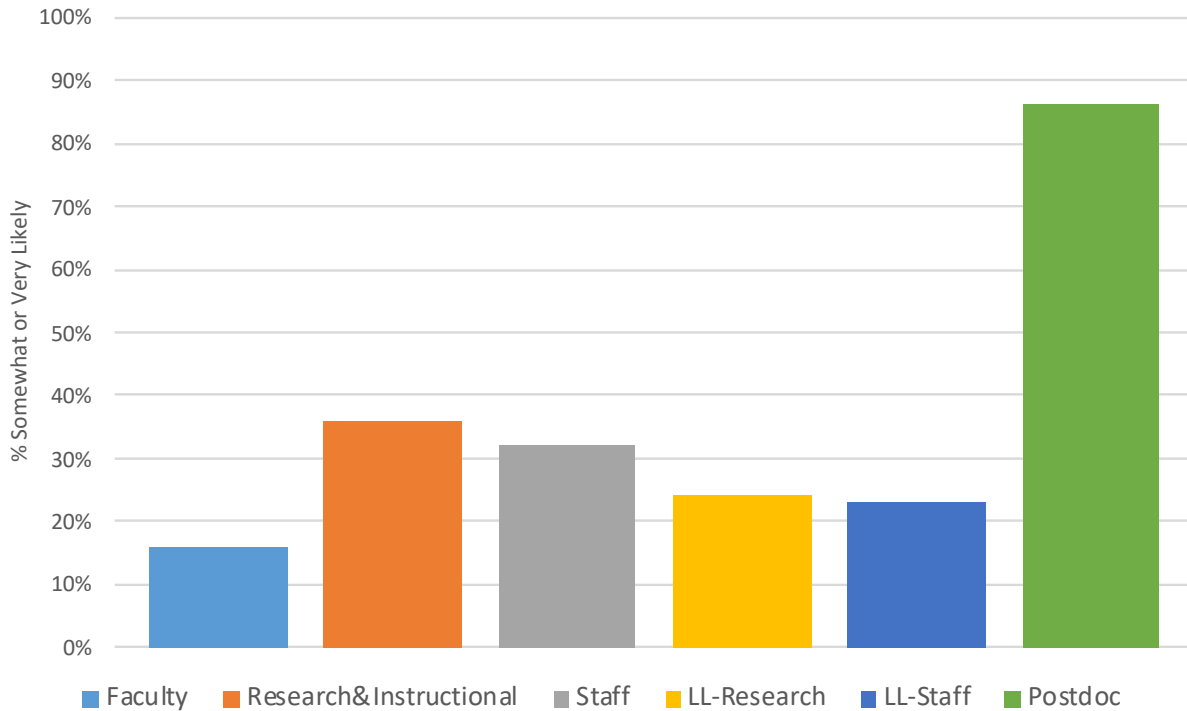
Source: October 31, 2015 administrative data and 2012 Quality of Life Survey



From the 2016 survey, over 30% of main campus staff (research/instructional and admin/support/service) reported being likely to leave MIT within three years (see fig. 11). Postdoctoral scholars are highly likely to leave, as is consistent with the temporary nature of their positions. This result highlights how postdocs may be a different type of employee with their own set of concerns.

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Figure 11: In the next three years, how likely are you to leave MIT, including retirement?
These are raw percentages from the MIT 2016 Quality of Life Survey.



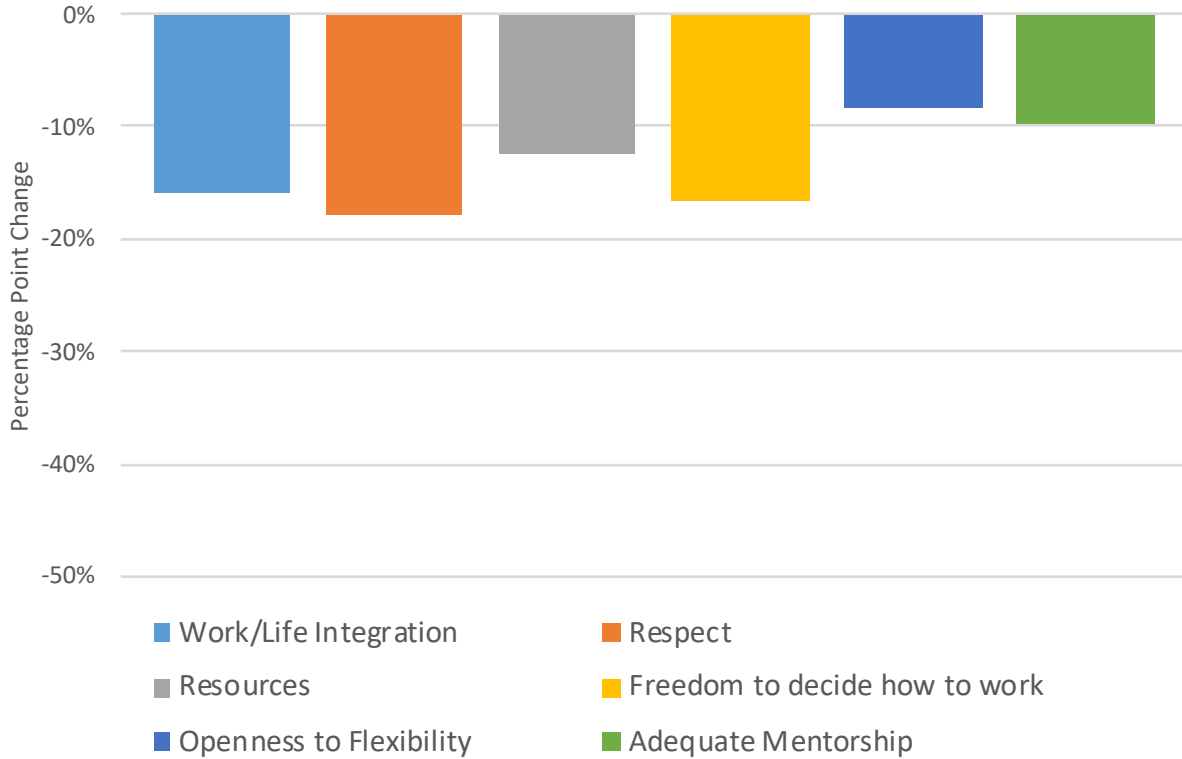
These results are quite similar after accounting for demographics and workload. For example, the overall mean for an employee being likely to leave within three years is 33%, and when we limit the sample to those under the age of 60—to reduce the influence of planned retirements—this figure is 31%. If we exclude both postdocs and those over age 60 from the sample, the rate drops to 26%.

The main predictors of overall satisfaction are also strongly associated with the intention to leave MIT (see fig. 12).

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Figure 12: Factors Predictive of Likelihood of Leaving MIT within Three Years

Change in likelihood of leaving MIT when employees are satisfied with these variables, conditional on age, gender, underrepresented minority status, international status, family structure, and number of hours worked per week from the MIT 2016 Quality of Life Survey.



In particular, those satisfied with work-life integration are 16 percentage points less apt to report that they are likely to leave MIT within three years. Respect in the workplace again is shown to be highly associated with retention, with an 18 percentage point difference. These differences are larger than satisfaction with resources “to do my job well.” Manager openness to flexibility and adequate mentorship are associated with an 8 to 10 percentage point lower intention to leave MIT.

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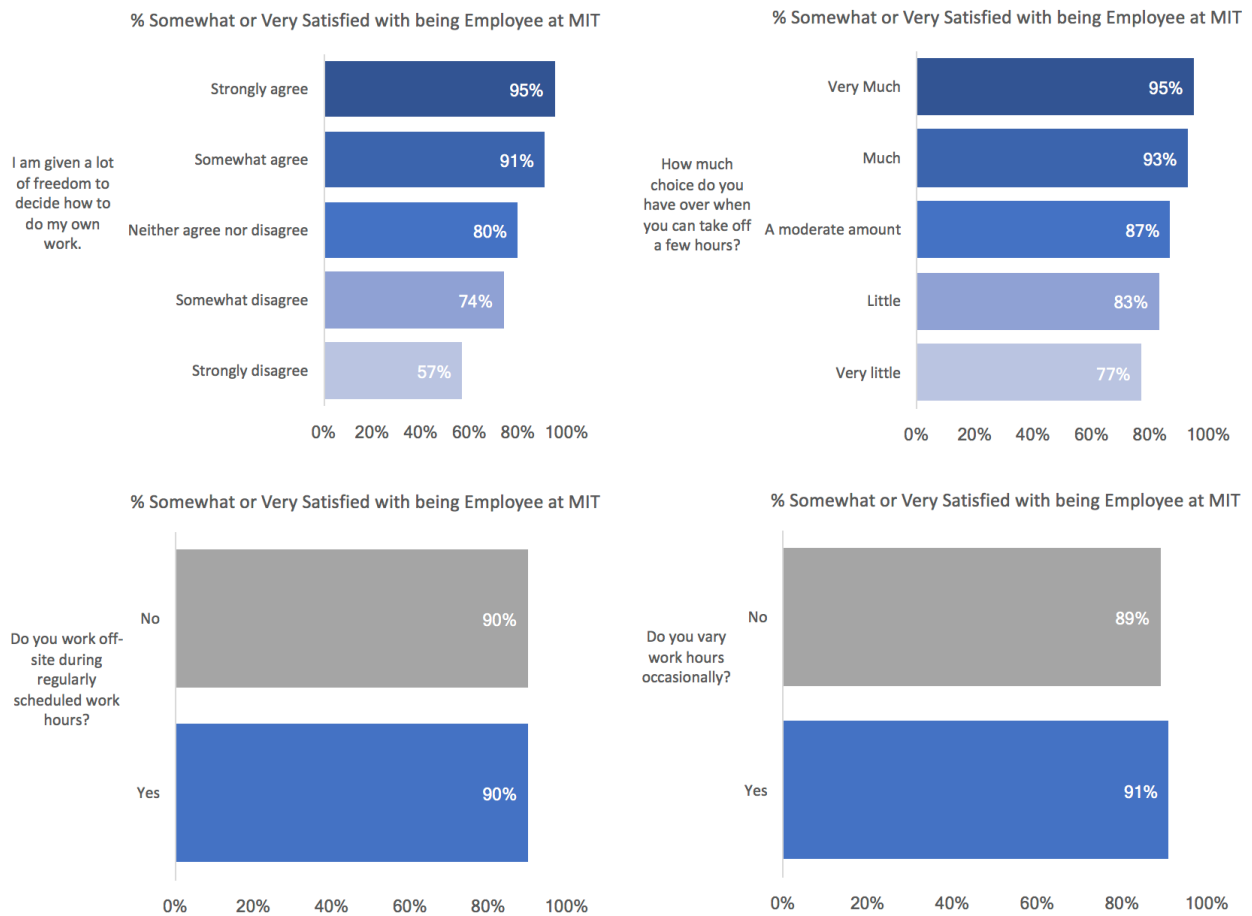
Flexible Work Arrangements: Informal Flexibility Seems to Matter Most

Following our 2012 finding that manager openness to flexibility is strongly associated with employee satisfaction, we were interested in learning more from the 2016 survey. We added additional questions to the 2016 survey to discover what types of flexibility are most valued by employees. We found that informal flexibility is quite important. For example, those who said they worked in “a place where individuals may comfortably raise personal and/or family responsibilities when scheduling DLC [departments, labs, and centers] obligations” were 14 percentage points more likely to be satisfied at MIT. This corroborates our informal discussions with employee groups that they value informal ability to manage issues, such as last-minute personal needs. We also believe this type of flexibility aligns with the respect initiatives on campus and could be a low-cost way to boost satisfaction and retention rates at MIT.

Figure 13 below supports the premise that what you do in terms of flexibility (e.g., work remotely) is less important than having the freedom to decide what you do. The top two charts show a positive relationship between overall satisfaction and having the freedom to decide how to do your own work and having a choice over when to take time off (the more freedom and choice you have, the higher your satisfaction). The bottom two charts show the relationship between overall satisfaction and actually working remotely or varying your work hours. These factors don't appear to affect overall satisfaction.

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Figure 13: Relationship between Four Flexibility Variables and Overall Satisfaction
Results for main campus administrative and support staff from the MIT 2016 Quality of Life Survey.



This is not to say that formal flexible work arrangements are not important. Our council has worked with Human Resources and the Work-Life Center to update flexible work arrangement guidelines. Indeed, a new website is in the works to provide fresh guidance on how to make such arrangements work. There have also been successful pilots in the Sloan School of Management, where entire groups are convened to discuss issues of fairness and flexibility.

Mentorship

In addition to flexible work arrangements, adequate mentorship was discovered as an important correlate with overall satisfaction in 2012. On the survey, we asked separately about having informal and formal mentors. Having one or more informal mentors was associated with higher overall satisfaction by 5 percentage points. Having one or more formal mentors was only weakly associated with higher overall satisfaction and was statistically insignificant.

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Satisfaction with Specific Aspects of MIT and Departmental Climate

The Quality of Life Survey covered much more ground than the variables discussed above. The survey included a bank of questions asking MIT employees to rate their satisfaction with specific items related to their MIT experience, such as satisfaction with meeting space, availability of nearby parking, medical services, salary, committee and administrative responsibilities, and so forth. The survey also asked respondents to agree or disagree with a diverse set of statements related to general and departmental climate issues at MIT, such as having a voice in decision making, being treated fairly, having a collegial and supportive work environment, having opportunities to collaborate inside and outside the department, having a workplace free from bias and discrimination, and so on.

Our Approach to Analyzing the Principal Component Analysis

As described in the methodology section, principal component analysis is a data reduction technique that enables researchers to group variables measuring related characteristics. Based on a PCA of 34 variables from the 2016 survey, we created eight-scale variables by taking a simple average of the variables that had similar loadings per the PCA. Each scale is on a five-point scale, with one being low satisfaction or agreement and five being high satisfaction or agreement. (See appendix table 3 for the specific variables associated with each scale.) The eight scales we developed are as follows:

- Feeling supported (seven items)
- Collaboration/Doing my best work (six items)
- No bias (three items)
- Salary/Benefits (three items)
- Resources (five items)
- Friendships (two items)
- Transparency/Fairness (six items)
- Work responsibilities (two items)

Overall Findings

The mean score for each scale ranges from 3.6 (Work responsibilities) to 4.1 (Feeling supported), so even the scale with lowest mean is above the neutral response of 3.0 (the middle of the five-point scale) (see fig. 14). A note about the work responsibilities scale: This scale is composed of two variables related to satisfaction with committee and advising/mentoring responsibilities. The N for this scale is lower than the other scales because only research staff at Lincoln Laboratory (63% of the Lincoln Laboratory sample) were asked these questions.

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Figure 14: Descriptive Statistics for Survey Scales from 2016 Quality of Life Survey

Scale Name	Mean	Minimum	Percentile 25	Median	Percentile 75	Maximum	N
Feeling supported	4.1	1.0	3.6	4.3	4.7	5.0	6,425
Collaboration/Doing my best work	4.0	1.0	3.7	4.2	4.6	5.0	6,443
No bias	4.0	1.0	3.3	4.3	5.0	5.0	5,836
Salary/Benefits	4.0	1.0	3.5	4.3	4.7	5.0	6,730
Resources	3.9	1.0	3.3	4.0	4.6	5.0	6,747
Friendships	3.8	1.0	3.0	4.0	5.0	5.0	5,708
Transparency/Fairness	3.7	1.0	3.0	3.8	4.5	5.0	5,910
Work responsibilities	3.6	1.0	3.0	4.0	4.5	5.0	5,111

Sorted in descending order by mean value

For each scale, the mean is lower than the median, consistent with the data being skewed left. There are three scales for which the 25th percentile is 3.0, meaning that 25% of respondents gave a neutral or negative response. These are transparency/fairness, friendships, and work responsibilities. For the other five scales, over 75% of respondents gave positive responses.

In short, MIT employees are, in aggregate, rather satisfied with the aspects of the quality of life at MIT assessed by these scales. One question is how uniform is that sense across the Institute? In particular, can we identify factors that correlate with lower ratings on these scales?

Findings by Role

First, we looked at how the scales compared to one another separately within each employee type. For postdoctoral scholars, salary/benefits was ranked last on the list of scales (lowest mean of the eight scales). In contrast, salary/benefits was first or second on the list for administrative staff, support staff, and faculty. For all employee types except other instructional staff, work responsibilities was at or near the bottom of the list. Transparency/fairness was last on the list for other instructional staff and research staff.

Next, we identified the scales where ratings from multiple employee types differed from one another. Our hope is that these scales indicate areas where change might enhance the quality of life across the Institute. Then, we identified employee types whose ratings are significantly lower than other types across multiple scales. Our concern is that these are employees who are being substantially underserved in one way or another, and the Institute might enhance the quality of life of those least content through focused efforts to address their concerns.

This approach is not complete. An employee type that is substantially unhappy on a single scale—on which no other type is unhappy—may be an outlier, or there may be a substantive issue to be addressed. Such instances will need to be considered on a case-by-case basis, and we will not address them in this document.

In Figure 15, we show how each employee type compares to other employee types with regard to how they rated each of the eight scales. The notations (B, E, BE, etc.) summarize statistically significant differences. The notations appear in the column of the employee type with the lower

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rating. For example, admin (A) has a significantly lower rating than faculty (B) for the transparency/fairness scale. The footnote to Figure 15 gives another example of how to interpret the table.

Figure 15: Statistically Significant Differences in Scale Ratings between Employee Types

	Admin (A)	Faculty (B)	Other Instructional (C)	Postdoc (D)	Research (E)	Service (F)	Support (G)
Transparency/Fairness (6 items)	B		B	B	B	B	BD
Feeling supported (7 items)	E			E		E	E
Collaboration/Doing my best work (6 items)				EF			E
No bias (3 items)		E	AE				E
Friendships (2 items)	BE			B		BCE	BCE
Resources (5 items)					BCG	BCG	
Salary/Benefits (3 items)				ABCEFG			
Work responsibilities (2 items)	BCDE	C		C	C	BCDE	BCDE

Example of how to interpret Column C: Other Instructional (C) ratings are significantly lower than Faculty (B) on the Transparency/Fairness Scale. Other Instructional (C) ratings are also significantly lower than Admin (A) and Research (E) on the No bias Scale.

In looking at Figure 15, some things jump out at us:

1. Postdocs report significantly lower ratings on six of the eight scales, in comparison to one or more employee types. In one case (Salary/Benefits), their ratings are significantly lower than every other employee type. This is likely reflecting the difference in benefits eligibility between postdoctoral fellows (not benefits eligible) and postdoctoral associates (benefits eligible).
2. Faculty have significantly higher ratings on transparency and fairness than all other employee types.
3. Service and support staff have several pairs in which they have significantly lower ratings than people in other roles.

We summarize Figure 15 in two different ways. First, we count the number of scales for which people in one role gave results that were significantly lower than at least one other group, where the maximum possible count is eight (the number of scales) (see the left side of fig. 16). Second, we tally the total number of pairwise comparisons for which a group was significantly lower than the partner of that pairing, where the maximum possible count is 48 (each group paired six times on each of eight scales) (see the right side of fig. 16).

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Figure 16: Summary of Findings from Figure 15

	# Scales in which this group is significantly lower than at least one other group	% of total scales		# Pairs in which this group is significantly lower	% of total pairs
Admin	4	50%	Admin	8	17%
Faculty	2	25%	Faculty	2	4%
Other Instructional	2	25%	Other Instructional	3	6%
Postdoc	6	75%	Postdoc	12	25%
Research	3	38%	Research	5	10%
Service	5	63%	Service	12	25%
Support	6	75%	Support	12	25%
	# of Scales	8		# of Pairs	48

In both cases, the three groups that stand out are postdocs, service staff, and support staff. Each had significantly lower ratings than at least one other group on more than half of the eight scales (five for service staff, six for support staff, and six for postdocs). The same three groups had significantly lower ratings on 12 of the 48 possible pairs.

A Comment on Sample Sizes

The number of survey responses varies widely by employee type. For example, fewer than 200 service staff and instructional staff answered the items in the transparency/fairness scale. In contrast, more than 1,000 research staff and more than 2,000 administrative staff answered the same items. Groups with low numbers of responses give us the lowest resolution, that is, the least ability to identify small differences from other roles as statistically significant. Hence, the 12 pairwise comparisons where responses from service staff were significantly lower than that of the paired role is of note, as the low response rate for service staff means we are seeing a result large enough to exceed the relatively low resolution of the survey. This also suggests that we may need to find more robust ways to assess the quality of life of service staff.

Findings by Gender and URM Status

Finally, we examined the scales in the context of gender and underrepresented minority status differences. In six of the eight scales, there was a statistically significant gender difference in at least one category of employee. Instructional staff are the standout. In four of the eight scales, women had a significantly lower rating than men (Transparency/Fairness, Feeling supported, Collaboration/Doing my best work, and No bias). In one scale (No bias), six of the seven employee types had a significant gender difference, where women had lower ratings than men. While the gender difference among service staff was not statistically significant, the magnitude of the difference was similar to other staff types. Among administrative staff, women had a

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significantly *higher* rating than men for friendships and salary/benefits. In both cases, the difference was just one-tenth of a point on a five-point scale.

With regards to URM employee differences, three of the eight scales (Feeling supported, No bias, and Work responsibilities) showed a significant difference among administrative staff, where URM employee ratings were lower than non-URM employee ratings. For the no bias scale, URM support staff also had lower ratings than non-URM support staff. Among research staff, URM employee ratings on the resources scale exceeded those of non-URM employees.

Recommendations and Next Steps

We present the following recommendations to the Institute based upon our findings of the Quality of Life Survey results.

1. *Repeat the staff survey every four years.* Going forward, the council will sponsor a quadrennial staff survey, which (as in 2012), will be offered concurrent with the faculty survey and with identical wording of the questions where practical.
2. *Create a standardized, short, annual engagement survey.* There is a need to conduct an annual survey to assess more immediate organizational issues and measure MIT's community pulse. Many problems confronting DLCs relate to concerns that are urgent and require a timely response (downsizing and upsizing, shifts in funding, external opportunities and threats, responses to overarching Institute-wide policies, etc.).
3. *Create a standard format for reporting survey results.* The ability to produce standardized reports will allow DLC heads to compare results for their unit over time and can provide executive-level leaders the capacity to analyze the status of their subunits. Confidentiality will require careful construction of both survey instruments and reporting procedures.
4. *Explore postdoctoral scholar results further, including the decline in satisfaction between 2012 and 2016.* The lower satisfaction rate for postdocs, compared to other employee types, requires additional exploration and attention.
5. *Further explore gender and URM employee differences.* Women indicate perceptions of bias, report lower ratings for transparency and fairness, and experience a lack of support. Of particular note are gender differences among instructional staff. Overall satisfaction ratings are lower for URM employees than non-URM employees. Among administrative staff, we find URM differences for three of the eight scales.
6. *Support the respect initiatives spearheaded by the Institute Community and Equity Officer.* One of the most striking results is that feeling that everyone in an area is treated with respect is highly correlated with job satisfaction and retention at MIT. This should bolster efforts to improve respect across different types of employees and students, including experiments across units in outreach programs.

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7. *Continue to explore ways to increase workplace flexibility across the Institute.* The Council on Family and Work collaborated with MIT Human Resources and the MIT Work-Life Center in writing the *Guide to Job Flexibility at MIT* in June 2004 and this required an update. Since our 2012 findings, we have contributed to the Human Resource efforts to update [flexibility guidelines](#). We will continue to monitor the roll out of the guidelines and ideally the homogenous implementation across similar units.
8. *Continue to explore ways to increase mentoring across the Institute.* While the correlation between formal mentoring and job satisfaction is not particularly strong, this could be in part because there is not a large effort to have formal mentorship among staff on MIT's campus (our last report detailed mentorship programs at Lincoln Laboratory). We continue to think that expansions of mentorship programs on campus should be implemented and evaluated.
9. *Work with the Employee Benefits Oversight Committee going forward.* The Employee Benefits Oversight Committee (EBOC) was formed to advise the provost and executive vice president and treasurer about employee benefits that directly affect employees' ability to balance work and family needs. We have begun (and will continue) to meet with the EBOC to coordinate our efforts, particularly in the creation of questions for the next round of Quality of Life surveys.
10. *Generate awareness of these results.* In addition to posting this report to our website, we will look for avenues to publicize the findings. We also plan to present our findings to different groups of employees to generate awareness of our findings and listen to concerns. We welcome suggestions on other topics the council might consider and appreciate the opportunity to contribute to the well-being of the MIT community.

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Appendix

Appendix Table 1: 2016 Response Rates by Location

MAIN CAMPUS		Answered survey				Respondents	Population
		No		Yes, at least partially			
		Count	Value	Count	Value		
Gender	Female	1495	34%	2877	66%	52%	45%
	Male	2659	50%	2609	50%	48%	55%
	Total	4154	43%	5486	57%	100%	100%
Race/Ethnicity	American Indian or Alaskan Native	11	27%	30	73%	1%	0%
	Asian	368	46%	431	54%	8%	8%
	Black or African American	224	46%	264	54%	5%	5%
	Hispanic/Latino	176	47%	195	53%	4%	4%
	International	710	59%	486	41%	9%	12%
	Native Hawaiian or Other Pacific Islander	4	29%	10	71%	0%	0%
	White	2661	40%	4070	60%	74%	70%
	Total	4154	43%	5486	57%	100%	100%
URM Status	URM	415	45%	499	55%	9%	10%
	Non-URM	3029	40%	4501	60%	82%	78%
	International	710	59%	486	41%	9%	12%
	Total	4154	43%	5486	57%	100%	100%
Role	Admin	938	29%	2277	71%	42%	33%
	Faculty	348	36%	611	64%	11%	10%
	Other Instructional	272	53%	246	47%	4%	5%
	Postdoc	881	60%	595	40%	11%	15%
	Research	747	56%	581	44%	11%	14%
	Service	521	71%	214	29%	4%	8%
	Support	447	32%	962	68%	18%	15%
	Total	4154	43%	5486	57%	100%	100%
Age (mean)		4154	42	5486	44	44	43
Years at MIT (mean)		4154	9	5486	10	10	10

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LINCOLN LABORATORY		Answered survey				Respondents		Population	
		No		Yes, at least partially					
		Count	Value	Count	Value				
Gender	Female	387	44%	501	56%	33%	26%		
	Male	1484	59%	1038	41%	67%	74%		
	Total	1871	55%	1539	45%	100%	100%		
Race/Ethnicity	American Indian or Alaskan Native	5	33%	10	67%	1%	0%		
	Asian	162	61%	105	39%	7%	8%		
	Black or African American	33	55%	27	45%	2%	2%		
	Hispanic/Latino	50	55%	41	45%	3%	3%		
	International	0	0%	0	0%	0%	0%		
	White	1618	54%	1355	46%	88%	87%		
	Total	1871	55%	1539	45%	100%	100%		
URM Status	URM	91	54%	79	46%	5%	5%		
	Non-URM	1780	55%	1460	45%	95%	95%		
	Total	1871	55%	1539	45%	100%	100%		
Role	Admin	286	46%	334	54%	22%	18%		
	Faculty	0	0%	0	0%	0%	0%		
	Other Instructional	0	0%	0	0%	0%	0%		
	Postdoc	0	0%	0	0%	0%	0%		
	Research	1208	56%	938	44%	61%	63%		
	Service	266	68%	127	32%	8%	12%		
	Support	111	44%	140	56%	9%	7%		
	Total	1871	55%	1539	45%	100%	100%		
Age (mean)		1871	45	1539	45	45	45		
Years at MIT (mean)		1871	8	1539	8	8	8		

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Appendix Table 2: Overall Satisfaction, Demographics, and Roles

	Coefficient	S.E.	p-value
(Constant)	1.082	0.033	0.000
Age 30–39	-0.024	0.014	0.079
Age 40–49	-0.028	0.015	0.066
Age 50–59	-0.011	0.015	0.481
Age 60+	0.009	0.017	0.568
Female	0.010	0.008	0.235
URM	-0.032	0.015	0.031
International	0.041	0.024	0.088
Spouse/Partner	0.019	0.010	0.059
Children under 13 years of age	0.010	0.010	0.350
Children 13 years of age or older	0.020	0.011	0.056
Hours in typical week	-0.003	0.000	0.000
Main Campus— Research/Other Instructional	-0.063	0.019	0.001
Main Campus— Admin/Support/Service	-0.078	0.017	0.000
LL—Research	-0.059	0.019	0.001
LL— Admin/Support/Service	-0.072	0.021	0.001
Main Campus—Postdoc	-0.147	0.026	0.000

Outcome: Overall, how satisfied are you being an employee at MIT?

Source: 2016 MIT Quality of Life Survey

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Appendix Table 3: Scales Based on 34 Questions from 2016 Quality of Life Survey

SCALE NAME	ITEM	RESPONSE CATEGORIES
Transparency/Fairness	My [organizational unit's] procedures are transparent and open for discussion.	1 = Strongly disagree; 2 = Somewhat disagree; 3 = Neither agree nor disagree; 4 = Somewhat agree; 5 = Strongly agree
	My [organizational unit] does a good job of keeping employees informed about matters affecting us.	
	My [organizational unit's] procedures are fair and equitable to all.	
	Employees in my [organizational unit] are treated fairly.	
	I have a voice in the decision making that affects the direction of my [organizational unit].	
	MIT does a good job of keeping employees informed about matters affecting us.	
Feeling supported	My [supervisor/department chair/dean] seems to care about me as a person.	1 = Strongly disagree; 2 = Somewhat disagree; 3 = Neither agree nor disagree; 4 = Somewhat agree; 5 = Strongly agree
	My [supervisor/chair/director/dean] creates a collegial and supportive environment.	
	My [supervisor/chair/director/dean] helps me obtain the resources I need.	
	My [supervisor/department chair/dean] is open to flexible work arrangements.	
	My [organizational unit] is a place where individuals may comfortably raise personal and/or family responsibilities when scheduling [organizational unit] obligations.	
	In my workplace, it is understood that an employee's personal life is as important as their job.	
	In my workplace everyone is treated with respect.	
Collaboration/Doing my best work	At work I have the opportunity to do what I do best every day.	1 = Strongly disagree; 2 = Somewhat disagree; 3 = Neither agree nor disagree; 4 = Somewhat agree; 5 = Strongly agree
	I am satisfied with opportunities to collaborate with colleagues in my [organizational unit].	
	I am confident in my ability to do my job well.	
	I have the resources (equipment, training, budget, etc.) I need to do my job well.	
	My primary [organizational unit] is a good fit for me.	
	I am satisfied with opportunities to collaborate with colleagues in other [organizational units] at MIT.	
No bias	I feel that the climate and opportunities for minority [faculty/staff] in my [organizational unit] are at least as good as those for non-minority [faculty/staff].	1 = Strongly disagree; 2 = Somewhat disagree; 3 = Neither agree nor disagree; 4 = Somewhat agree; 5 = Strongly agree
	I feel that the climate and opportunities for female [faculty/staff] in my [organizational unit] are at least as good as those for male [faculty/staff].	
	My workplace is free from bias and discrimination.	
Friendships	I have colleagues at MIT outside my [organizational unit] who are my personal friends.	1 = Strongly disagree; 2 = Somewhat disagree; 3 = Neither agree nor disagree; 4 = Somewhat agree; 5 = Strongly agree
	I have colleagues in my [organizational unit] who are my personal friends.	
Resources	Space for meetings, conferences, and other collaborative activities	1 = Very dissatisfied; 2 = Somewhat dissatisfied; 3 = Neither dissatisfied nor satisfied; 4 = Somewhat satisfied; 5 = Very satisfied
	Physical campus environment (e.g., buildings, landscape, walkways)	
	Office space	
	Availability of nearby parking	
Salary/Benefits	Resources (equipment, technology, etc.) I need to do my job well	1 = Very dissatisfied; 2 = Somewhat dissatisfied; 3 = Neither dissatisfied nor satisfied; 4 = Somewhat satisfied; 5 = Very satisfied
	Benefits package	
	Medical services for you and your family	
Work responsibilities	Salary	1 = Very dissatisfied; 2 = Somewhat dissatisfied; 3 = Neither dissatisfied nor satisfied; 4 = Somewhat satisfied; 5 = Very satisfied
	Committee [and administrative] responsibilities	
	Advising and mentoring responsibilities	