Job Satisfaction and Retention Among High School Teachers in the United States

Evidence from the 2023-24 School Year

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Executive Summary

Utilizing survey responses from 17,000 high school teachers in the United States, this study explores the degree to which high school teachers are satisfied with their job and likely to stay in the profession as well as factors that may drive up or detract from their engagement in teaching. We find only 39% of high school teachers report being "very satisfied" with their job and 20% of teachers report being "fairly likely" or "very likely" to leave the profession within two years. More than half of teachers cite low student motivation (69%) and low public respect for the profession (59%) as detractors from their job satisfaction. Less commonly cited detractors, like lack of administrative support (35%) and lack of autonomy over what is taught (19%), also work against teachers' job satisfaction and remain statistically significant predictors of satisfaction in regression analyses that control for teacher and high school factors. We find that many teachers rate the mental health of fellow teachers in the school building as "poor" or "fair" (65%) and regression analyses suggest that improving mental health perceptions is strongly associated with increased job satisfaction for high school teachers overall, for firstyear high school teachers, and for Advanced Placement (AP) teachers. Implications of our findings and areas for additional research for improving teacher satisfaction and retaining high school teachers across U.S. schools are discussed.

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Teaching in the United States

Teaching is a lot of work and, while many find teaching to be extremely rewarding, it can also be overwhelming and result in burnout that causes teachers to leave the profession altogether. Research shows that teacher dissatisfaction and turnover have consequences for student outcomes (Banerjee et al., 2017). Ronfeldt et al. (2013) find that students who experience higher teacher turnover score lower on both English language arts and math assessments and that the negative effects are particularly strong in schools with more low-performing and traditionally underserved students. Consequences of teacher turnover on student learning are likely further magnified right now given substantial and persistent learning loss due to the pandemic (Fahle et al., 2023).

The degree to which teachers are satisfied with their job, a leading indicator of the intent to stay in the profession (Madigan & Kim, 2021), varies over time, but the pandemic was especially hard on teachers and teacher satisfaction hit an all-time low during the pandemic. The Merrimack College Teacher Survey conducted in January 2022 finds that just 12% of the roughly 1,200 K-12 teachers polled were very satisfied with their job, a drop of 27 percentage points in satisfaction from 10 years earlier when 39% of K-12 teachers reported being very satisfied with their job (Will, 2023).¹ In 2023, when the Merrimack survey was conducted for a second time, results indicate levels of teacher satisfaction rebounded somewhat but were still low by historical standards. There is evidence that the percentage of teachers leaving the profession spiked during the pandemic and is not back to normal in many places (Barnum, 2024).

The pandemic created new challenges for teachers, many that professionals in other occupations simply did not have to contend with, and concern for the wellbeing and mental health of teachers was brought to the forefront. Kush et al. (2022) compare the mental health outcomes during the pandemic between PreK-12 teachers and professionals in other occupations to find that teachers reported greater mental health concerns than those in other professions. Qualitative evidence from 24 teachers by Kim et al. (2022) finds that teachers' mental health and well-being declined throughout the pandemic and that various job demands contributed to the declines (i.e., uncertainty, workload, negative perceptions of the profession, concern for others' wellbeing, health struggles, and multiple roles). Encouragingly, the research also finds that the presence of social support, work autonomy, and coping strategies positively impact teacher wellbeing. Likewise, a survey of approximately 830 teachers finds that teacher mental health is positively related to administrative support and job satisfaction (Pressley et al., 2023).

The purpose of this study is to more deeply understand current levels of high school teacher job satisfaction, the drivers and detractors of job satisfaction, and the likelihood of high school teachers leaving the profession post-pandemic. Our analyses focus on a large

¹ The Merrimack survey was designed to replace the MetLife Survey of the American Teacher, which was administered for over 25 years and ended in 2012 (Will, 2023).



sample of high school teachers, noting that prior research often combines data across elementary and secondary levels despite research suggesting important differences across grade levels (Lin et al., 2024). We find only 39% of high school teachers report being "very satisfied" with their job and 20% of teachers report being "fairly likely" or "very likely" to leave the profession within two years. More than half of high school teachers cite low student motivation (69%) and low public respect for the profession (59%) as detractors from job satisfaction; however, even less commonly cited detractors like lack of administrative support (35%) and lack of autonomy over what is taught (19%) detract from satisfaction and remain statistically significant predictors in regression models that control for teacher and high school factors. Notably, many teachers rate the mental health of fellow teachers in the school building as "poor" or "fair" (65%) and regression analyses indicate that improving mental health perceptions is strongly associated with increased job satisfaction for all teachers overall, for first-year teachers, and for AP teachers. After describing our dataset and methodology, we report the results of the high school teacher survey followed by regression results that explore the effect of various teacher- and school-level variables on teachers' job satisfaction controlling for all factors simultaneously. We end with a discussion of the implications of our findings for retaining high school teachers across U.S. schools.

Data and Methodology

At the start of the 2023-2024 school year, we sent survey invitations to 300,000 high school teachers, a group consisting of all the AP teachers listed in our College Board database as well as U.S. high school teachers from Math, ELA, and Science disciplines sourced from a list provided by an external vendor. Our response rate was 6%, with a total of 17,126 teachers responding to the survey. Participants were asked to respond to questions covering a variety of topics including their satisfaction with the teaching profession, factors that may detract from their satisfaction with teaching, types of classes they teach, prior education and teaching experience, and their perceptions of the mental health of the teachers in their school.² The median time spent on the survey was 25 minutes. No incentives were offered for completion of the survey.

In addition to reporting the descriptive survey results, we also use multilevel modeling to predict the effect of various teacher- and school-level variables on teachers' job satisfaction controlling for all factors simultaneously. The survey question, "All in all, how satisfied are you with your job?" serves as our outcome variable, an ordinal variable on a 4-level scale with "very satisfied," "somewhat satisfied," "somewhat dissatisfied," and "very dissatisfied" as the responses. Our predictors include teacher-level variables from the survey and school-level variables representing where respondents teach obtained from the National Center for Education Statistics (NCES). Responses that could not be matched to an NCES ID based on school name and state are removed from the regression sample resulting in a final sample size of 16,940 teachers in a multilevel structure with teachers nested within schools.

² Survey questions and response frequencies are available in Appendix A.

There are 8,402 schools in our regression sample with the number of survey respondents ranging from one to 22 per school and an average of about two respondents per school.

Table 1 describes the characteristics of the teachers included in the final regression sample and the characteristics of the schools where they teach. Our sample is 66.1% female with an average of 18.6 years of teaching experience. The race/ethnicity of the sample is primarily White (84.4%). The high schools where our sample teachers are employed have an average enrollment of 40.4% underrepresented minority (URM) students and are primarily public schools (88.9%). Appendix B contains the full list of predictors and their proportions or averages within the sample.

	Mean	SD
Years of Teaching Experience	18.6	8.0
% Underrepresented Students at School	40.4	27.5
School Student-to-Teacher Ratio	16.6	6.0
Teacher Race/Ethnicity	Ν	Percentage
American Indian/Native Hawaiian	36	0.3%
Asian	349	3.3%
Black	226	2.2%
Hispanic	853	8.2%
Two or More Races	162	1.5%
White	8828	84.4%
Teacher Gender		
Female	7369	66.1%
Male	3787	33.9%
Level of Classes Taught		
AP or Other Advanced	16241	95.9%
Non-Advanced	699	4.1%
High School Control		
Public	13531	88.9%
Private	1687	11.1%

Table 1: Characteristics of Teachers and their High Schools

Note: Sample characteristics reflect final regression sample. N = 16,940. Missingness varies across the data (see Appendix B) so counts listed may not add up to 16,940.

Variables in our data range from less than 1% to 34% missing data (see Appendix B) and we address missingness with multiple imputation (MI).³ Among the various methods of handling missing data (e.g., maximum likelihood estimation or listwise deletion), survey item non-response is best handled with multiple imputation, due to its flexibility when filling in data (Enders, 2010) as well as the improved power and accuracy of subsequent analyses (Schafer & Graham, 2002). When a MI is properly done, the distribution of data on the new complete data sets will match the distribution of the original data set with missing information. Based on data in Appendix B, we conclude there is a reasonable match between the distribution of our raw and MI values. After creating the complete data sets with no missing data, we estimate a multilevel ordinal logistic regression model on each complete data set and aggregate the parameter estimates and standard errors into a single set of results.⁴

Descriptive Survey Results

An overwhelming majority of teachers (86%) with 25 or more years of experience say that the teaching profession is "very" or "somewhat" different now compared to when they started, and 57% of teachers who started pre-pandemic (6-10 years of experience) also agree. When we ask teachers how satisfied they are with their job, only 39% report they are "very satisfied." Furthermore, when we ask teachers how likely they are to leave the teaching profession within the next two years, 20% report being "very likely" or "fairly likely" to leave. Figure 1 shows that teachers who report being likely to leave the profession are more likely to report being dissatisfied with the profession (16%) than teachers not likely to leave the profession, nearly one-third report being very or somewhat dissatisfied—another substantial fraction of teachers at real risk of attrition. Importantly, attrition from teaching could become a difficult problem to address given recent data on the pipeline into the profession. Growth in the number of bachelor's degree recipients in education has been declining or stagnant despite continued growth in bachelor's degree recipients more broadly (U.S. Department of Education, NCES, 2022).

⁴ Estimating models using multiply imputed data requires specialized algorithms. For this study, Stata's *meologit* and *mi estimate* commands were used to estimate the regression model. The Stata module, *mimrgns*, was used to calculate predicted probabilities (Klein, 2014).



³ We used the *mice* R package (v.3.16.0; van Buuren & Groothuis-Oudshoorn, 2011) to generate 35 imputed data sets saved after every 20 iterations. Graham, Olchowski, and Gilreath (2007) suggest a minimum of 20 imputations as sufficient, if the fraction of missing information is less than 50%. School-level variables were grand mean centered for each imputation using the *dplyr* (v1.1.0; Wickham et al., 2023) and *misty* (v.0.5.3; Yanagida, 2023) R packages.

Figure 1: Percentage of Teachers Reporting Likelihood of Leaving Teaching, by Job Satisfaction



Note: Survey question asks, "How likely is it that you will leave the teaching profession to go into a different occupation?"

Figure 2 shows the percentage of teachers indicating whether a particular job-related factor detracts from their engagement in teaching. The most cited detractors are lack of student motivation (69%), low levels of public respect for the teaching position (59%), and low salary (44%). Teachers indicate that not being fully trained in the subject they teach is the least likely to detract from job satisfaction (4%), which may result from our sample of teachers having many years of experience, on average.





Note: Survey question asks, "Thinking about last school year (2022-2023), what job-related factors detract from your engagement in teaching?"

When we examine the relationship between these detractors and degree of satisfaction with the profession in Figure 3, an interesting pattern emerges. Although many high school teachers cite lack of student motivation and low levels of public respect for the profession as

sources of disengagement, when we look at their reported job satisfaction, only 16% and 18% of the teachers, respectively, who cited these detractors also report being somewhat or very dissatisfied with their jobs. By contrast, among the relatively smaller percentage of teachers who cite lack of support from administrators (35%) and lack of autonomy over what they can teach (19%) as sources of dissatisfaction, 24% and 26%, respectively, report being somewhat or very dissatisfied with their jobs.

Figure 3: Degree of Satisfaction Among Teachers who Indicate Each Job-Related Factor Detracts from their Satisfaction with Teaching



Note: Survey question asks, "What job-related factors detract from your engagement in teaching?"

As Figure 2 illustrates, roughly two-thirds of high school teachers cite student motivation as a factor that detracts from their job satisfaction. More motivated students are likely to sort themselves into more advanced high school courses, so Figure 4 shows reported job satisfaction among different types of teachers: those who only teach AP courses, those who teach a mix of courses (advanced and non-advanced), and those who do not teach any AP courses.⁵ Looking at those who report being very satisfied, those who only teach AP courses who teach a mix of courses (40% very satisfaction (43% very satisfied), followed by those who teach a mix of courses (40% very satisfied), and those who do not teach any AP courses (30% very satisfied). We also find reports of being somewhat or very dissatisfied to be a bit higher descriptively among teachers who do not teach advanced courses like AP.

⁵ Advanced courses include Advanced Placement, International Baccalaureate, Dual Enrollment, Cambridge AICE, and honors courses. In our sample, the vast majority of respondents teach at least some advanced courses as shown in Appendix A.







Note: Survey question asks, "All in all, how satisfied are you with your job?"

Prior surveys that examine teacher satisfaction (e.g., Merrimack, 2023) probe teachers about their mental health, and whether there were policies at the school to address it. Our current survey seeks to understand respondents' perception of the mental health of teachers at their school, and its impact on satisfaction. Figure 5 shows that nearly two-thirds of respondents rate the overall mental health of teachers at their school as poor or fair.





Note: Survey question asks, "Thinking about last school year (2022-2023), how would you rate the overall mental health of the teachers in your school?

When segmenting perceptions of mental health by job satisfaction, Figure 6 shows that respondents who report the overall mental health of teachers in their school as good or excellent descriptively have higher levels of job satisfaction.





Note: Survey question asks, "Thinking about last school year (2022-2023), how would you rate the overall mental health of the teachers in your school?

When we examine satisfaction by years of teaching experience, we find that teachers with more years of experience tend to report higher levels of job satisfaction (and similar levels of job dissatisfaction) than teachers with less experience. Figure 7 shows that teachers with 30 or more years of experience have the highest levels of job satisfaction. One-quarter of our participants have 26 years or more of teaching experience, and 18% have between one and ten years of experience. Appendix A provides the full distribution of experience of teachers in our sample.





Note: Survey question asks, "All in all, how satisfied are you with your job?"

Exploring Survey Results in a Regression Framework

The survey results reveal many differences in response frequencies for variables that we believe could be related to teacher job satisfaction. For example, out of the survey respondents with at least 30 years of teaching experience, 54% reported feeling very satisfied with their job, while 38% of respondents with 20 years of experience reported feeling very satisfied (see Figure 7). Are these differences indicative of a relationship between length of time spent teaching and job satisfaction? Or, are the differences in responses due to differences in survey sample characteristics (e.g., length of time teaching) instead a product of differences in teachers' highest education level or type of teaching certificate? Including a range of control variables in our model that we hypothesize may be relevant to high school teacher job satisfaction, allows us to control for those variables when interpreting the model results. For example, with the regression model, we can evaluate the relationship between length of time teaching and job satisfaction, after holding all other variables—including teacher education and type of teaching certificate—constant. The regression results allow us to interpret relationships as due solely to the variable we are examining and not the other variables in the model.⁶ To explore the differences in teachers' job satisfaction, we examine all potential predictors in a multilevel ordinal logistic regression model that isolates the relative impact of a single predictor while holding the others constant.

Table 2 shows the results of the multilevel regression model of various factors on teacher job satisfaction. The significant predictors (p < .05) in the model are:

- teaching AP or other advanced level classes
- perceiving fellow teachers' mental health as fair, good, or excellent (compared to poor)
- teaching Social Science
- feeling their satisfaction with teaching is negatively impacted by:
 - o lack of student motivation
 - o low salary
 - o lack of administration support
 - o parent complaints
 - o lack of autonomy
 - o low public respect

In addition, the following predictors are considered marginally significant (p < .10):

- length of time teaching
- teaching English
- teaching an "other" subject
- teaching in a rural community (compared to a city)

⁶ Variables that are not included in the model may still affect the relationships in question. We include all variables available to us that we hypothesize to have a relationship with teacher job satisfaction and acknowledge that unobservables may still influence our results.



Because the outcome variable, teacher job satisfaction, is a four-level ordinal variable, odds ratio parameter estimates, as shown in Table 1, are calculated as the probability that a certain job satisfaction rating will be selected by the teacher, divided by the probability that the next lowest satisfaction rating is selected by the teacher. Odds ratios are one way to interpret the size of the effect that one variable has on teacher satisfaction controlling for all other variables in the model. Odds ratios > 1.00 indicate that the probability of selecting the higher satisfaction rating was the larger of the two (i.e., the numerator was larger than the denominator). Odds ratios < 1.00 indicate that the probability of selecting the lower satisfaction rating was the larger of the two (i.e., the denominator was larger than the numerator). When the odds ratio = 1.00, there is no difference in the probability of a satisfaction rating being selected instead of the next lowest satisfaction rating (i.e., the numerator and denominator are the same number).

As an example of interpretation of the Odds Ratios in Table 2, consider teacher perception of their fellow teachers' mental health, which was the predictor with the biggest impact in the model. Holding all other variables constant, a teacher who perceives their fellow teachers have good mental health (instead of poor mental health) has 7.5 times the odds of selecting the higher job satisfaction rating instead of the lower satisfaction rating. When it comes to negative predictors, the factors detracting from a teacher's satisfaction were all associated with selecting lower satisfaction ratings. For example, holding all other variables constant, a teacher who feels that a lack of support from their administration detracted from their satisfaction rating instead of the lower satisfaction rating instead of selecting the higher satisfaction rating. In other words, they are less likely to select the higher satisfaction rating. Similarly, a teacher who feels that a lack of support with teaching has 0.558 times the odds of selecting the higher satisfaction rating. Similarly, a teacher who feels that a lack of support with teaching has 0.558 times the odds of selecting the higher satisfaction rating instead of the lower rating, holding all other variables constant.

We felt it was important to leave non-significant predictors in the model as covariates in order to control for them. Additionally, some of these non-significant predictors reveal positive information regarding teacher job satisfaction, further affirming their inclusion in the model. For example, a teacher's race/ethnicity is not a significant predictor of job satisfaction. In addition, the percentage of underrepresented minority students enrolled at a school is also not a significant predictor of job satisfaction. As a society, we would not want teachers of one racial/ethnic group to be more likely to be satisfied with their job than teachers of other racial/ethnic groups. We also would not want the racial/ethnic composition of the student body to affect how teachers feel about their job.

Level-1 (Teacher Level)	Odds Ratio	SEOR	Logit	SE _{Logit}	<i>p-</i> value
Teaches Advanced: Yes	1.477	0.206	0.390	0.140	.005
Tenure (5-year increments)	1.034	0.018	0.034	0.017	.053
Highest Education (compared	d to Bachelors)				
Masters	0.933	0.070	-0.070	0.075	.357
Specialist	0.971	0.205	-0.029	0.211	.890
Doctorate	1.111	0.143	0.105	0.129	.415
Type of Teaching Certificate	(compared to no c	ertificate)			
Regular/Standard	0.851	0.106	-0.162	0.125	.196
Advanced Professional	1.027	0.159	0.026	0.155	.865
Other	0.909	0.166	-0.096	0.182	.600
Teacher Race/Ethnicity (com	pared to White)				
American Ind./Native Haw.	1.274	0.635	0.242	0.498	.628
Asian	1.094	0.180	0.089	0.165	.587
Black	0.820	0.189	-0.199	0.231	.391
Hispanic	1.039	0.141	0.038	0.136	.778
Two or More Races	1.108	0.272	0.103	0.246	.676
Gender: Male	1.104	0.072	0.099	0.065	.127
Subject Taught					
Art/Music	0.822	0.109	-0.196	0.133	.140
Capstone	0.917	0.129	-0.087	0.141	.536
English	0.845	0.073	-0.169	0.087	.052
Math	0.881	0.078	-0.127	0.089	.154
Science	0.949	0.070	-0.052	0.074	.480
Social Science	0.851	0.062	-0.162	0.072	.025
World Language	1.016	0.132	0.016	0.130	.903
Other	0.771	0.105	-0.260	0.136	.057

Note: N = 16,940. Logit = B; Odds Ratio = exp(B). Job satisfaction was on a 4-point scale where 0 = very dissatisfied, 1 = somewhat dissatisfied, 2 = somewhat satisfied, and 3 = very satisfied. Advanced classes include AP, IB, Cambridge, Dual Enrollment, and Honors level classes. URM = underrepresented minority; calculated as the sum of all American Indian, Black, Latino, and Hawaiian/Pacific Islander students.

Level-1 (Teacher Level)	Odds Ratio	SEOR	Logit	SE _{Logit}	<i>p-</i> value			
Factors that Detract from Satisfaction with Teaching								
Lack of student motivation	0.609	0.039	-0.496	0.063	<.001			
Low salary	0.583	0.036	-0.539	0.062	<.001			
Lack of admin support	0.552	0.035	-0.593	0.063	<.001			
Parent complaints	0.767	0.049	-0.265	0.064	<.001			
Lack of autonomy	0.560	0.043	-0.580	0.077	<.001			
Low public respect	0.725	0.046	-0.322	0.063	<.001			
Subjective Mental Health of F	ellow teachers (co	mpared to "	poor")					
Fair	2.839	0.263	1.043	0.093	<.001			
Good	7.500	0.823	2.015	0.110	<.001			
Excellent	19.768	4.301	2.984	0.218	<.001			
Level-2 (School Level)								
High School Urbanicity (com	pared to city)							
Rural	1.177	0.112	0.163	0.095	.086			
Suburban	1.136	0.090	0.128	0.079	.108			
Town	1.051	0.119	0.050	0.113	.661			
High School Type: Public	0.862	0.097	-0.149	0.113	.189			
U.S. Region (compared to So	uthwest)							
Middle States	0.994	0.121	-0.006	0.122	.961			
Midwest	1.006	0.117	0.006	0.117	.962			
New England	0.886	0.118	-0.120	0.133	.366			
South	0.993	0.109	-0.007	0.109	.952			
West	1.090	0.129	0.086	0.118	.466			
School % URM Students	0.999	0.002	-0.001	0.005	.716			
Student-to-Teacher Ratio	0.995	0.005	-0.005	0.005	.365			

Table 2: Multilevel Ordinal Logistic Regression of Teacher Job Satisfaction, cont.

Note: School % URM students and student-to-teacher ratio were grand mean centered following multiple imputation of missing data. Middle States: DC, DE, MD, NJ, NY, PA; Midwest: IA, IL, IN, KS, MI, MN, MO, NE, ND, OH, SD, WI, and WV; New England: CT, MA, ME, NH, RI, and VT; South: AL, FL, GA, KY, LA, MS, NC, PR, SC, TN, and VA; Southwest: AR, NM, OK, and TX; West: AK, AZ, CA, CO, HI, ID, MT, NV, OR, UT, WA, and WY.

Results from the multilevel regression model can also be interpreted as predicted probabilities. The parameter estimates are used to establish a profile of a "baseline" teacher. This baseline can be compared to teacher profiles with different teacher and school characteristics to more clearly illustrate what factors might improve or worsen teachers' job satisfaction. Based to some extent on the average high school teacher today, our baseline teacher is a white, female with a bachelor's degree, a regular teaching certificate, and 10 years of teaching experience. In this baseline profile, she teaches non-advanced English classes. The high school for the baseline teacher is in a suburban community in the Middle States region of the U.S. and has a student body that is 40% underrepresented minority students and a 16:1 student-to-teacher ratio. The baseline teacher reports that her fellow teachers have "fair" mental health and reports that low student motivation and low public respect for the profession detract from her job satisfaction with teaching.⁷ Figure 8 shows the predicted probability of job satisfaction for a teacher with this baseline profile. This baseline teacher has a 54% likelihood of being somewhat satisfied, 33% likelihood of being very satisfied, 11% likelihood of being somewhat dissatisfied, and 2% likelihood of being very dissatisfied.



Figure 8: Predicted Probability of Job Satisfaction for Baseline Teacher Profile

To better understand the effect a single predictor has on job satisfaction, after controlling for other variables in the model, the predicted probabilities by mental health perception (Figure 9), class level (Figure 10), length of time teaching (Figure 11), and number of satisfaction detractors (Figure 12) are calculated and discussed in more detail below. Since mental health perceptions were a strong predictor of teacher job satisfaction, we additionally calculated probability of job satisfaction when mental health perceptions differ for first-year teachers (Figure 13), teachers of AP and other advanced classes (Figure 14), as well as

⁷ Specific characteristics were selected based on the most common responses from the survey and the sample's average school % URM and student-to-teacher ratio.



teachers experiencing many satisfaction detractors (Figure 15). In other words, when a teacher has many engagement detractors working against them, can a change in how they perceive their fellow teachers' mental health overcome the negative effect of the detractors?

Mental Health Perceptions. The most common response on the survey is that teachers believed their fellow teachers in the school building have "fair" mental health. Figure 9 shows that the model results indicate that improving this perception from fair to good or even excellent increases the probability that a teacher would be very satisfied with her job from 33% (fair) to 51% (good) and 69% (excellent). In addition, a teacher who views the mental health of fellow teachers to be excellent has roughly a 0% probability of feeling very dissatisfied with her job.



Figure 9: Predicted Probability of Job Satisfaction, by Mental Health Perceptions

Class Level. Figure 10 shows that both teachers of AP and other advanced classes as well as teachers of only non-advanced classes are nearly equally likely to feel somewhat satisfied with their jobs. However, teachers of AP and other advanced classes have a higher probability of feeling very satisfied (40%) compared to teachers of non-advanced classes (33%).





Length of Time Teaching. While teacher tenure is a significant predictor of job satisfaction (Odds Ratio = 1.034, p = .053), increases in teacher tenure do very little to shift job satisfaction. For example, Figure 11 shows that the probability a teacher will feel somewhat satisfied is 54% for first year teachers, 54% for teachers with 10 years of experience, 53% with 20 years of experience, and 53% for teachers with 30 or more years of experience.



Figure 11: Predicted Probability of Job Satisfaction, by Years Teaching

Satisfaction Detractors. Figure 12 shows that, as more factors detract from a teacher's job satisfaction, the likelihood of being dissatisfied increases. The two most cited factors from the survey are lack of student motivation and low public respect (our baseline teacher profile). Compared to this baseline of two detractors, and holding all other variables constant, teachers who report their job satisfaction is negatively affected by all six detractors are more likely to be very dissatisfied (11 percentage points) or somewhat dissatisfied (19 percentage points) with their job. In addition, while teachers whose satisfaction is negatively affected by two detractors have a 33% likelihood of feeling very satisfied with their job, teachers affected by all six detractors have only a 9% likelihood of feeling very satisfied.



Figure 12: Predicted Probability of Job Satisfaction when Engagement in Teaching is Negatively Affected

Mental Health Perceptions in First-Year Teachers. First-year teachers face unique challenges and may be particularly sensitive to the mental health of fellow teachers in their school. When first-year teachers perceive fellow teachers' mental health to be good instead of fair, they are 18 percentage points more likely to be very satisfied with their job (50% vs. 32% in Figure 13). In fact, first-year teachers who perceive their fellow teachers have good mental health have a 94% likelihood of feeling either somewhat or very satisfied.

Negatively Affected by All Detractors



Figure 13: Predicted Probability of Job Satisfaction for First-Year Teachers, by Mental Health Perceptions

Mental Health Perceptions for Teachers of Advanced Classes. We also examine the teachers of AP and other advanced classes alongside mental health perceptions. Those who teach AP and other advanced classes are 19 percentage points more likely to be very satisfied with their job when they perceive the mental health of their fellow teachers to be good rather than merely fair (see Figure 14).





Mental Health Perceptions when Engagement is Affected. We use the model results to estimate the probability of job satisfaction for the teachers who perhaps feel the most burdened: the teachers who reported that all the detractors were working simultaneously

against their satisfaction with teaching. Figure 15 shows that improving these overlyburdened teachers' perception of the mental health of fellow teachers from fair to good doubles their probability of feeling very satisfied from 9% to 18%. In addition, their probability of feeling very dissatisfied is more than halved, dropping from 13% to 6%. This finding illustrates the positive impact mental health perceptions can have on teachers who struggle with disengagement.





Discussion

In our efforts to understand current levels of high school teacher job satisfaction postpandemic, we find that only 39% of high school teachers report being very satisfied with their job. Results from a recent nationally representative survey from the Pew Research Center are similar. Just 36% of high school teachers report being extremely or very satisfied (Lin et al., 2024). We also find that an overwhelming majority of teachers (86%) with 25+ years of experience say that the teaching profession is "very" or "somewhat" different now compared to when they started, and 57% of teachers who started pre-pandemic (6-10 years of experience) also agree. As one teacher said:

"We are being asked to do way more than just teach. We are asked to play mental health professionals. We are being pulled in countless directions and the focus is not as much on content and curriculum as it was when I started. Students are also very different than they were ten years ago. School is less of a focus and there are more pressing issues and distractions that make being in the classroom difficult. Parents are more enabling. Absenteeism is a much bigger issue." Our findings indicate that teachers face many job-related factors that can work against their satisfaction with teaching. The most cited detractors are lack of student motivation (69%) and low levels of public respect for the teaching position (59%); however, even less commonly cited detractors like lack of administrative support and lack of autonomy over what is taught detract from satisfaction and remain statistically significant predictors in the regression model. Accounting for all variables simultaneously, teachers affected by all six detractors have only a 9% likelihood of feeling very satisfied about their job. Moving the needle on teacher job satisfaction likely requires addressing more than one job-related factor.

The strongest predictor of teacher satisfaction is the perceived mental health of fellow teachers in the building. Most teachers rate the mental health of fellow teachers in the school building as "poor" or "fair" (65%). Comments from teachers illuminate the issues:

"The demands and stress have gotten so great ever since the pandemic that it's become unsustainable. My health both physical and mental have suffered and I don't know how much longer I'll be able to do this job. I love my students and the work is fulfilling, but I feel like it's slowly killing me."

"I'm currently experiencing extreme burnout resulting from the pandemic, increased expectations of teachers, lack of respect for the profession, and increased behavioral and attendance issues among students."

"Please share it with my school. They just keep talking about our student's mental health and never consider that all of the teachers are falling apart."

Other recent research from the School Pulse Panel study administered by NCES also indicates mental health issues among teachers and colleagues remains a concern (U.S. Department of Education, Institute of Education Sciences, 2024). Findings from March 2024 indicate that 43% of public schools report that their staff express concerns about the mental health of themselves or their colleagues has increased since the last school year. Our regression results indicate that improving mental health perceptions is strongly associated with increased job satisfaction for all teachers overall, for first-year teachers, and for AP teachers. While this finding isn't necessarily surprising, it does raise important questions about the availability of resources to support teachers, in addition to students, as they deal with the continued effects of the pandemic.

Our findings indicate that roughly 75% of teachers entered the profession to have an impact on students' lives and to share a love of their subject. Efforts to improve teacher satisfaction and reduce the likelihood of teacher turnover will not only improve the lives of teachers but also benefit the students they serve. Areas for future research include identifying the practices and initiatives schools and districts are implementing to support teacher mental health, whether and how those efforts relate to teacher satisfaction and retention, and best practices for widespread implementation across U.S. high schools.



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Appendix A: Survey Questions

Table A1: Summary	Statistics of	Survey Res	ponses, Weig	hted by Gender
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Ask All	What best describes the type of classes you teacl	h? (please select a	all that apply)
	Variables	Counts	Percent
-	Honors classes	4,536	27%
	CTE (Career and Technical Education) classes	479	3%
	Standard / general level classes	6,660	40%
	IB (International Baccalaureate) classes	475	3%
	Cambridge AICE	123	1%
	AP (Advanced Placement) classes	15,669	92%
	Dual Enrollment classes	1,624	10%
	Other	675	4%
		Total: 17,126	
Ask			
All	How long have you been teaching?		
-	Variables	Counts	Percent
-	2023-24 will be my first year teaching	100	0%
	1-5 years	938	5%
	6-10 years	2,279	13%
	11-15 years	2,729	16%
	16-20 years	3,583	21%
	21-25 years	3,332	20%
	26-30+ years	4,074	25%
		Total: 17,035	
	How long have you been teaching AP?		
Ask AP	Variables	Counts	Percent
teachers	2023-24 will be my first year teaching	1,221	7%
	1-5 years	4,311	26%
	6-10 years	4,251	27%
	11-15 years	2,581	17%
	16-20 years	1,783	12%
	21-25 years	918	7%
	26-30+ years	476	4%
		Total: 15,541	

	All in all, how satisfied are you with your job?					
	Replicated from Merrimack 2022, 2023					
Ask	Variables	Counts	Percent			
All	Very satisfied	6,036	39%			
	Somewhat satisfied	7,321	47%			
	Somewhat dissatisfied	1,615	11%			
	Very dissatisfied	475	3%			
		Total: 15,44	7			
Ask	Thinking about last school year (2022-2023), how would you rate the overall mental					
All	health of the teachers in your school?					
	Adapted from Merrimack 2023					
	Variables	Counts	Percent			
	Excellent	447	2%			
	Good	4,565	30%			
	Fair	6,989	45%			
	Poor	2,999	20%			
	Prefer not to respond	381	2%			
		Total: 15,38	1			
Ask	Thinking about last school year (2022-2023), w	hat job-related fac	ctors detract from			
All	your engagement in teaching? (please select all that apply)					
	Variables	Counts	Percent			
	Lack of student motivation	10,019	69%			
	Low levels of public respect for the teaching					
	position	8,605	59%			
	Low salary	6,375	44%			
	Lack of support from administrators	5,199	35%			
	Parent complaints	4,510	31%			
	Lack of autonomy over what I can teach	2,803	19%			
	Not being fully trained in the subject(s) I'm	571	4%			
	teaching					
	Other	2,618	18%			
		Total: 14,62	6			
	Within the next two years, how likely is it that	t you will leave the	teaching			
	profession to go into a different occupation?					
	Replicated from Merrimack 2023					
	Variables	Counts	Percent			
	Very likely	1,063	8%			
Ask	Fairly likely	1,506	12%			
All	Not too likely	5,025	42%			
	Not at all likely	4,404	38%			
		Total: 11,99	8			

Appendix B: Regression Variables

Table B1: Summary Statistics of Regression Variables Before and After Multiple Imputation (N=16,940)

			After N	lultiple
	Raw Survey Data		Imputation	
		% of Non-		
Variable	Value	Missing Data	Value	%
Teacher Satisfaction				
Very Dissatisfied	469	3.1%	521	3.1%
Somewhat Dissatisfied	1599	10.5%	1784	10.5%
Somewhat Satisfied	7242	47.4%	8019	47.3%
Very Satisfied	5965	39.1%	6616	39.1%
NA/missing	1665			
% Missingness	9.8%			
Teacher Tenure				
Mean	18.64		18.64	
SD	8.01		8.01	
Min	0		0	
Median	19		19	
Max	30		30	
NA/missing	90			
% Missingness	0.5%			
School % URM Students				
Mean	40.42		38.79	
SD	27.46		27.68	
Min	0		0	
Median	35.05		32.17	
Max	100		100	
NA/missing	4911			
% Missingness	29.0%			
School Student-Teacher Ratio				
Mean	16.58		16.61	
SD	5.97		6.18	
Min	1.14		1.14	
Median	16.23		16.26	
Max	278.67		278.67	
NA/missing	1961			
% Missingness	11.6%			

	After Multip			
Table B1, continued	Raw S	Survey Data	Imputation	
-		% of Non-		
Variable	Value	Missing Data	Value	%
Teacher's Highest Degree				
Bachelors	2375	21.0%	3578	21.1%
Masters	7969	70.3%	11923	70.4%
Specialist	291	2.6%	418	2.5%
Doctorate	698	6.2%	1021	6.0%
NA/missing	5607			
% Missingness	33.1%			
Teacher Race/Ethnicity				
Latino	853	8.2%	1422	8.4%
Asian	349	3.3%	561	3.3%
Black	226	2.2%	364	2.1%
White	8828	84.4%	14277	84.3%
Two or more races	162	1.5%	253	1.5%
American Indian or Native Hawaiian	36	0.3%	63	0.4%
NA/missing	6486			
% Missingness	38.3%			
Teacher Gender				
Female	7369	66.1%	11190	66.1%
Male	3787	33.9%	5750	33.9%
NA/missing	5784			
% Missingness	34.1%			
Teaching Certificate				
No teaching certificate	590	5.1%	818	4.8%
Regular/standard certificate	9268	80.7%	13718	81.0%
Advanced professional certificate	1162	10.1%	1736	10.2%
Other teacher certificate	458	4.0%	668	3.9%
NA/missing	5462			
% Missingness	32.2%			
School Urbanicity				
City	4517	29.7%	5013	29.6%
Rural	2481	16.3%	2848	16.8%
Suburban	7094	46.6%	7764	45.8%
Town	1126	7.4%	1315	7.8%
NA/missing	1722			
% Missingness	10.2%			

			After Multiple	
Table B1, continued	Raw Survey Data		Imputation	
=		% of Non-		
Variable	Value	Missing Data	Value	%
School Type				
Private	1687	11.1%	1955	11.5%
Public	13531	88.9%	14985	88.5%
NA/missing	1722			
% Missingness	10.2%			
School Region				
Middle States	2273	14.9%	2538	15.0%
Midwest	3129	20.6%	3461	20.4%
New England	1009	6.6%	1124	6.6%
South	3696	24.3%	4103	24.2%
Southwest	1947	12.8%	2185	12.9%
West	3158	20.8%	3529	20.8%
NA/missing	1728			
% Missingness	10.2%			
Teaches AP or other Advanced				
No	699	4.1%	*	
Yes	16241	95.9%	*	
Teaches Math				
No	13240	78.2%	*	78.2%
Yes	3700	21.8%	*	21.8%
Teaches Science				
No	12164	71.8%	*	71.8%
Yes	4776	28.2%	*	28.2%
Teaches English				
No	13093	77.3%	*	77.3%
Yes	3847	22.7%	*	22.7%
Teaches Social Science				
No	12769	75.4%	*	75.4%
Yes	4171	24.6%	*	24.6%
Teaches World Language				
No	15943	94.1%	*	94.1%
Yes	997	5.9%	*	5.9%
Teaches Art/Music				
No	16061	94.8%	*	94.8%
Yes	879	5.2%	*	5.2%
Teaches Other Subject				
No	16222	95.8%	*	95.8%
Yes	718	4.2%	*	4.2%

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			After M	ultiple
Table B1, continued	Raw Survey Data		Imputation	
—		% of Non-		
Variable	Value	Missing Data	Value	%
Teaches Capstone				
No	16240	95.9%	*	95.9%
Yes	700	4.1%	*	4.1%
Lack of Student Motivation				
No	4552	31.5%	5323	31.3%
Yes	9912	68.5%	11617	68.7%
NA/missing	2476			
% Missingness	14.6%			
Low Salary				
No	8165	56.5%	9558	56.5%
Yes	6299	43.5%	7382	43.5%
NA/missing	2476			
% Missingness	14.6%			
Lack of Administration Support				
No	9318	64.4%	10896	64.4%
Yes	5146	35.6%	6044	35.6%
NA/missing	2476			
% Missingness	14.6%			
Parent Complaints				
No	10013	69.2%	11796	68.9%
Yes	4451	30.8%	5144	31.1%
NA/missing	2476			
% Missingness	14.6%			
Lack of Autonomy				
No	11682	80.8%	13663	80.8%
Yes	2782	19.2%	3277	19.2%
NA/missing	2476			
% Missingness	14.6%			
Low Public Respect				
No	5944	41.1%	7013	41.2%
Yes	8520	58.9%	9927	58.8%
NA/missing	2476			
% Missingness	14.6%			
Mental Health of Fellow Teachers				
Poor	2975	20.1%	3383	20.0%
Fair	6908	46.6%	7925	46.8%
Good	4516	30.4%	5128	30.3%
Excellent	436	2.9%	504	3.0%

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NA/missing	2105
% Missingness	12.4%

*No missingness in raw data; multiple imputation was not needed.