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Disparities in Burnout and Satisfaction With Work-Life Integration in U.S. Physicians By Gender and Practice Setting

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Ethical approval: The Mayo Clinic and Stanford University institutional review boards approved this study on September 27, 2017.

Data: No external data outside of the American Medical Association Physician Masterfile were used for this study.

Abstract

Purpose

To explore the interaction between practice setting (academic practice [AP], private practice [PP]) and gender in relation to physician burnout and satisfaction with work-life integration (WLI).

Method

In 2017, the authors administered a cross-sectional survey of U.S. physicians and characterized rates of burnout and satisfaction with WLI using previously validated and/or standardized tools. They conducted multivariable logistic regression to determine the interaction between the included variables.

Results

Of the 3,603 participants in the final analysis, female physicians reported a higher prevalence of burnout than male physicians in both AP (50.7% vs 38.2%, P < .0001) and PP (48.1% vs 40.7%, P = .001). However, the multivariable analysis found no statistically significant gender-based differences in burnout (odds ratio [OR] 0.94, 95% confidence interval [CI] 0.76 - 1.17, P = .60). Women and men in AP were less likely to report burnout than men in PP (OR 0.70, 95% CI 0.52 - 0.94, P = .01 and OR 0.69, 95% CI 0.53 - 0.90, P < .01, respectively); women in PP did not report different burnout rates from men in PP (OR 0.89, 95% CI 0.68 - 1.16, P = .38). Women in both AP and PP were less likely to be satisfied with WLI than men in PP (OR 0.62, 95% CI 0.47 - 0.83, P < .01 and OR 0.75, 95% CI 0.58 - 0.97, P = .03, respectively); men in AP did not report different satisfaction with WLI than men in PP (OR 1.05, 95% CI 0.82 - 1.33, P = .71).

Conclusions

Gender differences in rates of burnout are related to practice setting and other differences in physicians' personal and professional lives. These results highlight the complex relationships among gender, practice setting, and other personal and professional factors in their influence on burnout and satisfaction with WLI.



Symptoms of burnout and dissatisfaction with work-life integration (WLI) are major threats to physicians and the health care system. Burnout is characterized by emotional exhaustion, depersonalization, and disengagement from work.² Almost 50% of physicians in the United States report at least one symptom of burnout, and physicians are at a higher risk for experiencing the symptoms of burnout relative to workers in other fields.³ In addition to the negative consequences for physicians and their families, burnout has an effect on patient care; physician burnout is associated with patient safety incidents and reduced patient satisfaction.⁴⁻⁶ Findings from previous studies suggest there are gender disparities in rates of physician burnout, with female physicians at a higher risk of burnout across many specialties.^{3,7} A variety of professional and personal factors may contribute to gender differences in rates of burnout. For example, female physicians are less likely to report satisfaction with autonomy in practice and control over day-to-day aspects of practice (such as patient volume and scheduling) compared to their male colleagues.^{3,8,9} In addition to differences in rates of burnout, prior studies have reported gender-based disparities in WLI, finding that female physicians spend more time on domestic activities, are more likely to experience work-home conflicts, and are more likely to endorse the importance of balancing work and non-work activities compared to their male colleagues.9-11

Little is known, however, about how the experiences of male and female physicians vary by practice setting. Previous research suggests burnout is more common among physicians in private practice (PP) than academic practice (AP) but that career satisfaction is higher among those in PP.^{3,12} In this study, we explored the interaction between gender and practice setting in association with rates of burnout and satisfaction with WLI.

Method

As reported in a previous study,³ we surveyed a national sample of U.S. physicians across all specialties in 2017 using the American Medical Association (AMA) Physician Masterfile, which represents a nearly complete record of all physicians in the United States independent of AMA membership. The Mayo Clinic and Stanford University institutional review boards approved this study.

Participants

We used Qualtrics (Provo, Utah) to send canvassing emails stating the purpose of the study along with an invitation to participate and a link to the survey to 83,291 physicians in October 2017 and followed up with 4 reminder requests over the subsequent 6 weeks. A total of 27,071 physicians opened at least one email. After invitations to complete the electronic survey were sent out, a random sample of 5,000 physicians who did not respond to the invitation were mailed a paper version in December 2017. The 30,456 physicians who opened at least one invitation email and/or received a paper version of the survey were considered to have received an invitation to participate; 269 of the paper surveys were returned as undeliverable. Participation was voluntary and results were collected anonymously.

Study measures

Participants provided information regarding their demographic and professional characteristics as well as burnout symptoms and satisfaction with WLI.³

Burnout. Burnout was measured using the validated 22-item Maslach Burnout Inventory (MBI) questionnaire.¹³ Consistent with convention, ¹⁴⁻¹⁶ we considered physicians with a high score on the depersonalization and/or emotional exhaustion subscale of the MBI as having at least one manifestation of professional burnout.¹³

Satisfaction with WLI. We used the phrase "My work schedule leaves me enough time for my personal/family life." to assess satisfaction with WLI. Participants' answers to this question were evaluated on a 5-point scale with response options of strongly agree, agree, neither agree nor disagree, disagree, and strongly disagree; individuals who chose strongly agree or agree were considered to be satisfied with WLI.²

Statistical analysis

We used descriptive summary statistics to characterize physician demographics. Associations between variables were evaluated using the Kruskal-Wallis test (continuous variables) or the chisquared test (categorical variables), as appropriate. We used multivariable logistic regression and included the following variables in all models: age, relationship status, number of children, hours worked per week, and specialty. Gender and practice setting were analyzed together using interaction terms in the full multivariable models. We present the results for each of the 4 gender/practice setting categories, with interaction test outcomes reflected in the overall *P* values. Contrast terms were applied to model each main effect within these interactions, and we report the main effect results separately from the tables to maintain clarity in our presentation of the results of the full multivariable models. The multivariable analysis for burnout included satisfaction with WLI, and the multivariable analysis for satisfaction with WLI included burnout. All tests were 2-sided with Type I error rates of 0.05. All analyses were done using SAS version 9 (SAS Institute, Inc., Cary, North Carolina).

Results

Response rate and participant demographics

Of the 30,456 physicians who were invited to participate, 5,445 (17.9%) completed the survey. Of these, 3,868 respondents were in AP or PP; of those in AP or PP, 254 did not have a gender variable recorded and 11 selected "other" rather than male or female, leaving a total of 3,603 participants included in the final analysis (66.2% of all respondents). A follow-up survey of nonrespondents suggested that participants were representative of the overall sample.³ We grouped participants into 4 categories by sex and practice setting (AP vs PP); demographics data by category are presented in Table 1. Of the 3,603 participants, 1,592 (44.2%) were men in PP, 730 (20.3%) were men in AP, 717 (19.9%) were women in PP, and 564 (15.7%) were women in AP. A significantly greater percentage of female physicians were in AP compared to their male colleagues (44.0% [564/1,281] vs 31.4% [730/2,322], P < .0001). The median age for participants in the 4 categories varied significantly (P < .001), with a younger median age for women in AP and PP (44 and 50 years, respectively) vs men in AP and PP (53 and 57 years, respectively). Relationship status also varied statistically significantly amongst participants, with women more likely to be single. Fewer female than male physicians had children in both AP (69.9% [390/558] vs 83.1% [602/724]) and PP (75.7% [539/712] vs 90.2% [1,429/1,584]). There were additional statistically significant differences between the 4 categories with respect to specialty, median hours worked per week, and number of nights on call per week.

Burnout

Burnout results by gender and practice setting are presented in Table 2. Overall, 49.3% (629/1,277) of female physicians and 39.9% (916/2,293) of male physicians reported burnout (P < .0001); 43.7% (562/1,286) of physicians in AP and 43.0% (983/2,284) of physicians in PP reported burnout (P = .70). Among physicians in PP, women were more likely than men to have high emotional exhaustion (43.9% [311/709] vs 34.2% [536/1,566], P < .0001) and overall burnout (48.1% [343/713] vs 40.7% [640/1,571], P = .0010). Among physicians in AP, women again were more likely than men to have high emotional exhaustion (48.6% [272/560] vs 32.6% [235/721], P < .0001) and overall burnout (50.7% [286/564] vs 38.2% [276/722], P < .0001). Comparing burnout in female physicians in AP vs PP, overall burnout rates were similar (50.7% [286/564] in AP and 48.1% [343/713] in PP, P = .36). For male physicians in AP vs PP, overall burnout rates were also similar (38.2% [276/722] vs. 40.7% [640/1,571], P = .25). However, in the multivariable analysis of burnout presented in Table 3, we found no statistically significant gender-based differences in burnout when gender was considered as a main effect (odds ratio [OR] 0.94, 95% confidence interval [CI] 0.76 - 1.17, P = .60). We did find practicebased differences in burnout when practice setting was analyzed as a main effect (AP vs PP, OR 0.74, 95% CI 0.59 - 0.91, P = .005). Across the 4 gender and practice setting combinations, women and men in AP were similarly less likely to report burnout than men in PP (OR 0.70, 95% CI 0.52 - 0.94, P = .01 and OR 0.69, 95% CI 0.53 - 0.90, P < .01, respectively), while women in PP were not more likely to report burnout than men in PP (OR 0.89, 95% CI 0.68 -1.16, P = .38).

Satisfaction with WLI

Participants' responses to the WLI question by gender and practice setting are presented in Table 2. Female physicians were less likely to be satisfied with WLI than male physicians (36.3% [461/1,269] vs 44.9% [1,037/2,309], P < .0001). Physicians in AP were less likely to be satisfied with WLI than physicians in PP (35.4% [453/1,281] vs 45.5% [1,045/2,297], P < .0001). For women in AP, 30.4% (169/556) reported satisfaction with WLI, as did 41.0% (292/713) of women in PP, 39.2% (284/725) of men in AP, and 47.5% (753/1,584) of men in PP (P < .0001). The results of our multivariable analysis of satisfaction with WLI are presented in Table 4. Women were less likely to be satisfied with WLI when gender was considered as a main effect (OR 0.67, 95% CI 0.54 - 0.82, P < .01). We found no practice setting-based differences in satisfaction with WLI (AP vs PP, OR 0.93, 95% CI 0.76 - 1.15, P = .51). Across the 4 gender and practice setting combinations, women in both AP and PP were less likely to be satisfied with WLI than men in PP (OR 0.62, 95% CI 0.47 - 0.83, P < .01 and OR 0.75, 95% CI 0.58 - 0.97, P = .03 respectively), while men in AP were not less likely to be satisfied with WLI than men in PP (OR 1.05, 95% CI 0.82 - 1.33, P = .71).

Discussion

In the multivariable analyses reported here using data from a large national survey, we found no statistically significant gender-based differences in burnout, while both men and women in AP were less likely to have burnout symptoms than their colleagues in PP. In addition, women in both AP and PP were less satisfied with WLI than their male colleagues in either setting, while practice setting-based differences in satisfaction with WLI were less evident. As these results differ from the unadjusted prevalence data from our national survey (for which women had higher burnout rates, for example), they highlight the complex relationships among gender,

practice setting, and other personal and professional factors with respect to their influence on rates of physician burnout and satisfaction with WLI.

Existing literature regarding burnout as a function of practice setting is relatively sparse and generally limited either to medical trainees or to specialists in a specific area of practice. In one study of practicing oncologists, those in PP had higher median emotional exhaustion and depersonalization scores than those in AP, but there were no differences in overall burnout rates based on practice setting. 17 In a study of surgeons practicing in a variety of surgical subspecialties, the PP setting was independently associated with burnout compared to the AP setting in a multivariable analysis (OR 1.17, P = .02). Other studies have not specifically stratified results by practice setting when assessing prevalence of physician burnout. Although prior studies have reported gender disparities in physician burnout and wellness, ^{3,8,9} many of these studies have subsequently performed analyses controlling for gender while focusing on other major findings. ^{2,3} To our knowledge, ours is the first study specifically exploring the interaction between gender-based disparities in the AP and PP settings and the first to find that gender differences in burnout appear to be in large part a function of practice setting and other differences in physicians' personal and professional lives rather than based on gender alone.

The attenuation of the unadjusted gender-based differences in burnout rates in the multivariable analyses including practice setting as an interaction effect may be partially due to a greater proportion of female physicians in younger age groups and certain specialties (e.g., family medicine, obstetrics and gynecology) and with them reporting less satisfaction with WLI, each of which is associated with higher burnout rates. Additional differences between groups, such as median hours worked per week and relationship status (women in both AP and PP were more

likely to be single than men in AP and PP), may also influence the complex associations between gender and burnout/satisfaction with WLI. These factors, along with closer examination of relevant differences across practice settings that may influence burnout and satisfaction with WLI, merit further study to better understand the mechanisms by which they contribute to these outcomes, particularly in the study of gender and physician burnout.¹⁹ While many excellent organizational strategies to reduce rates of burnout and promote wellbeing in physicians have been suggested, 20-24 these do not distinguish the potentially different needs of physicians in AP and PP. Our results suggest that developing strategies specific to different practice settings may be necessary to address rates of burnout, supplementing previous recommendations to align solutions with different career stages and specialties. 17,20 In contrast with burnout, gender remained consistently associated with lower satisfaction with WLI after multivariable analysis and the inclusion of practice setting as an interaction effect. Previously, women reported that they felt being a physician was more challenging for them than it was for men because of their greater family responsibilities, potential disparity in earnings (even with equal qualifications), and the perception of "having to work harder." Female physicians in other studies have similarly expressed career dissatisfaction associated with

difficulties with integrating work and personal responsibilities.²⁶ A recent study reported that female physicians were significantly more likely to report working part-time than male physicians, and the differences were even greater between female and male physicians with children.²⁷ In that study, women were more likely than men to mention family as a factor influencing their work status.

There are widespread variations in childbearing and family leave policies for academic faculty at top medical schools in the United States, and many facilities do not have policies that provide salary support for the minimum 12-week leave period endorsed by the American Academy of Pediatrics. ^{28,29} Additionally, compared to male physicians, female physicians spend significantly larger amounts of time per day on household activities and child care; are more likely to reduce work hours and otherwise alter practice plans; and are more likely to choose a specialty based on the anticipated effects on family considerations, putting women in both AP and PP at risk for dissatisfaction with WLI. ³⁰⁻³⁴ The major theme that emerged from these and other studies was the challenge of balancing career with personal and family responsibilities, which seems to weigh more heavily on women than men regardless of practice setting.

Regarding gender-based disparities in satisfaction with WLI, reports of interventions specifically designed to improve WLI amongst female physicians have been rare. One study found that female physicians with children may benefit from protected time to attend structured peer support groups addressing common challenges faced by physician mothers.³⁵ At Stanford, a "time-banking" system open to all physicians allows participants to accumulate credits from participating in activities that support their team or institution to "buy back" work or home support services when needed. Participants in this program reported an increased perception of a culture of flexibility and wellness and were also awarded more research funding compared to nonparticipants.³⁶ Such interventions are relatively simple, yet they can have a profound influence on WLI for physicians of both genders. Leaders should seek to implement similar programs and develop other innovative programs that improve workplace support and WLI amongst female physicians. Some examples of innovations include developing flexible scheduling, family, caregiving, and medical leave policies that provide both time and financial

support for such needs and developing innovative/nontraditional promotion and advancement criteria. 37,38

There are several limitations to this study. The overall participation rate was 17.9% and, of all participants, 73.6% worked in an academic or private practice setting and provided data on gender. Although the observed response rate aligns with participation rates in other physician burnout studies, ^{39,40} it is low. This may limit generalizability and increase the risk of nonresponse bias. As previously described, ³ we employed a double survey approach using incentives to compare participants to nonrespondents. ⁴¹ These results demonstrated no statistically significant differences with respect to age, years in practice, rate of burnout, or satisfaction with WLI, providing some degree of reassurance that the participants were reasonably representative of U.S. physicians as a whole and that the magnitude of nonresponse bias was less likely to substantially impact the main study findings. However, corroboration of these results in additional samples is needed. Additionally, given the cross-sectional design of this study, we were unable to determine cause-effect relationships among the included variables.

Conclusions

The differences in rates of physician burnout and satisfaction with WLI across gender and practice setting (AP vs PP) observed in this study appeared to be due to complex relationships among gender, practice setting, and other personal and professional variables. The results of this study suggest that strategies to reduce physician burnout and improve satisfaction with WLI across genders and practice settings may be most effective if they are developed and implemented with specific attention to the underlying personal and professional determinants contributing to these outcomes.

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Table 1 Characteristics of Respondents to a 2017 Survey of U.S. Physicians Regarding Burnout and Satisfaction with Work-Life Integration, By Gender and Practice Setting

AP, no. (% PP, no. (% AP, no. (% no. (% of Characteristic of 564) of 717) of 730) 1,592) P value Age	ue
	ue
Age	
Median (IQR) 44 (37-54) 50 (41-57) 53 (41-62) 57 (47-65) < .000	01
< 35	01
35-44 210 (37.6) 199 (28.0) 186 (25.9) 278 (17.7)	
45-54 146 (26.1) 218 (30.7) 148 (20.6) 331 (21.1)	
55-64 103 (18.4) 193 (27.2) 203 (28.3) 506 (32.2)	
≥ 65 24 (4.3) 53 (7.5) 136 (19.0) 412 (26.2)	
Missing 5 7 13 20	
Relationship status < .000	01
Single 95 (17.1) 123 (17.3) 63 (8.7) 125 (7.9)	
Married 423 (76.4) 530 (74.5) 636 (87.6) 1,388 (87.9)	
Partnered 29 (5.2) 41 (5.8) 22 (3.0) 53 (3.4)	
Widowed 7 (1.3) 17 (2.4) 5 (0.7) 13 (0.8)	
Missing 10 6 4 13	
Hours worked per	
week	
Median (IQR) 55 (45-60) 45 (36-60) 60 (50-65) 50 (40-60) < .000	
< 40	01
40-49 88 (15.7) 189 (26.6) 90 (12.5) 307 (19.5)	
50-59 164 (29.2) 144 (20.3) 189 (26.3) 414 (26.3)	
60-69 138 (24.6) 106 (14.9) 217 (30.1) 355 (22.6)	
70-79 50 (8.9) 40 (5.6) 90 (12.5) 123 (7.8)	
≥ 80 49 (8.7) 40 (5.6) 79 (11.0) 114 (7.2)	
Missing 3 7 10 18	
Specialty < .000	01
Anesthesiology 31 (5.5) 42 (5.9) 36 (4.9) 93 (5.9)	
Dermatology 13 (2.3) 46 (6.4) 10 (1.4) 42 (2.7)	
Emergency 27 (4.8) 15 (2.1) 56 (7.7) 67 (4.3)	
medicine	
Family medicine 26 (4.6) 68 (9.5) 20 (2.7) 127 (8.1)	
Internal medicine - 45 (8.0) 51 (7.1) 51 (7.0) 112 (7.1)	
general	
Internal medicine - 77 (13.7) 52 (7.3) 105 (14.4) 217 (13.8)	
subspecialty	
Neurology 27 (4.8) 18 (2.5) 39 (5.4) 62 (3.9)	
Neurosurgery 3 (0.5) 6 (0.8) 11 (1.5) 27 (1.7)	
Obstetrics and 23 (4.1) 57 (8.0) 16 (2.2) 29 (1.8)	
gynecology	

Otolaryngology	3 (0.5)	4 (0.6)	9 (1.2)	15 (1.0)	
Ophthalmology	11 (2.0)	21 (2.9)	10 (1.4)	78 (5.0)	
Orthopedics	12 (2.1)	11 (1.5)	33 (4.5)	143 (9.1)	
Other	8 (1.4)	12 (1.7)	7 (1.0)	27 (1.7)	
Pathology	37 (6.6)	16 (2.2)	27 (3.7)	22 (1.4)	
Pediatrics - general	30 (5.3)	98 (13.7)	11 (1.5)	58 (3.7)	
Pediatrics -	75 (13.4)	18 (2.5)	69 (9.5)	17 (1.1)	
subspecialty					
Physical medicine and rehabilitation	8 (1.4)	20 (2.8)	17 (2.3)	36 (2.3)	
Preventive/	2 (0.4)	3 (0.4)	1 (0.1)	4 (0.3)	
occupational/					
environmental					
Psychiatry	31 (5.5)	69 (9.7)	38 (5.2)	100 (6.3)	
Radiation oncology	2 (0.4)	7 (1.0)	3 (0.4)	17 (1.1)	
Radiology	13 (2.3)	27 (3.8)	38 (5.2)	84 (5.3)	
Surgery - general	7 (1.2)	17 (2.4)	19 (2.6)	58 (3.7)	
Surgery -	47 (8.4)	37 (5.2)	94 (12.9)	128 (8.1)	
subspecialty					
Urology	3 (0.5)	0 (0.0)	8 (1.1)	12 (0.8)	
Missing	3	2	2	17	
No. nights on call per					< .0001
week					
Median (IQR)	1 (0-2)	1 (0-3)	1 (0-2)	1 (0-4)	
Have children					< .0001
Yes	390 (69.9)	539 (75.7)	602 (83.1)	1,429 (90.2)	
No	168 (30.1)	173 (24.3)	122 (16.9)	155 (9.8)	
Missing	6	5	6	8	
Age of youngest child					< .0001
< 5	136 (35.1)	105 (19.6)	123 (20.6)	169 (11.8)	
5-12	98 (25.3)	129 (24.0)	117 (19.6)	250 (17.5)	
13-18	51 (13.1)	106 (19.7)	84 (14.1)	238 (16.7)	
19-22	23 (5.9)	71 (13.2)	61 (10.2)	141 (9.9)	
≥ 23	80 (20.6)	126 (23.5)	212 (35.5)	629 (44.1)	
Missing	176	180	133	165	
	DD .	· TOD	•		

Abbreviations: AP, academic practice; PP, private practice; IQR, interquartile range.

Table 2 Symptoms of Burnout and Satisfaction With Work-Life Integration (WLI) Experienced by Respondents to a 2017 Survey of U.S. Physicians, By Gender and Practice Setting

	<i>_</i>				
Symptom of	Women in	Women in	Men in AP,	Men in PP,	
burnout/satisfaction with	AP, no. (%	PP, no. (%	no. (% of	no. (% of	Univariate
WLI	of 564)	of 717)	730)	1,592)	P value
Emotional exhaustion					
(EE)					
Median (IQR)	26 (16-36)	24 (16-35)	20 (11-31)	20 (11-32)	< .0001
High score	272 (48.6)	311 (43.9)	235 (32.6)	536 (34.2)	< .0001
Missing	4	8	9	26	
Depersonalization (DP)					
Median (IQR)	5 (2-10)	5 (2-10)	4 (1-10)	5 (2-10)	.21
High score	148 (26.3)	195 (27.4)	184 (25.6)	433 (27.6)	.76
Missing	1	5	11	22	
Overall burnout					
High EE and/or high DP	286 (50.7)	343 (48.1)	276 (38.2)	640 (40.7)	< .0001
Missing	0	4	8	21	
Work schedule leaves					_
enough time for personal					
life					
Strongly agree	32 (5.8)	87 (12.2)	53 (7.3)	234 (14.8)	
Agree	137 (24.6)	205 (28.8)	231 (31.9)	519 (32.8)	
Neutral	95 (17.1)	101 (14.2)	139 (19.2)	264 (16.7)	< 0.0001
Disagree	186 (33.5)	199 (27.9)	199 (27.4)	373 (23.5)	
Strongly disagree	106 (19.1)	121 (17.0)	103 (14.2)	194 (12.2)	
Missing	8	4	5	8	
Satisfied with WLI	169 (30.4)	292 (41.0)	284 (39.2)	753 (47.5)	< .0001
	DD	TOD '		·	

Abbreviations: AP, academic practice; PP, private practice; IQR, interquartile range.

 $Table\ 3$ Results of a Multivariable Analysis of Respondents Who Reported Symptoms of Burnout on a 2017 Survey of U.S. Physicians

	Dl	Physicians			
	Physicians with burnout,	without burnout,		P	Overall
Dependent variable	no. (%)	no. (%)	OR (95% CI)	value	P value
Age (mean [SD])	50.0 (10.81)	53.9 (12.52)	0.98 (0.96,		.001
			$(0.99)^{a}$		
Gender/Practice					.02
Men, PP	581 (40.2)	865 (59.8)	Ref.		
Women, AP	273 (50.9)	263 (49.1)	0.70 (0.52, 0.94)	.02	
Women, PP	327 (47.9)	356 (52.1)	0.89 (0.68, 1.16)	.38	
Men, AP	260 (38.5)	416 (61.5)	0.69 (0.53, 0.90)	.007	
Relationship status				7	.80
Single	200 (52.1)	184 (47.9)	Ref.		
Married	1,158 (41.7)	1,622 (58.3)	1.15 (0.84, 1.58)	.40	•
Partnered	70 (50.4)	69 (49.6)	1.21 (0.71, 2.07)	.48	
Widowed	13 (34.2)	25 (65.8)	1.32 (0.54, 3.27)	.54	•••••
Parental status			(, , , , , , , , , , , , , , , , , , ,		.06
No children	321 (55.0)	263 (45.0)	Ref.		
Youngest age < 5	230 (44.7)	284 (55.3)	0.56 (0.40, 0.80)	.001	
Youngest age 5-12	269 (47.8)	294 (52.2)	0.72 (0.52, 1.01)	.054	
Youngest age 13-18	199 (44.5)	248 (55.5)	0.86 (0.59, 1.24)	.42	•
Youngest age 19-22	111 (39.9)	167 (60.1)	0.84 (0.55, 1.28)	.42	
Youngest age > 22	311 (32.6)	644 (67.4)	0.84 (0.56, 1.24)	.38	•••••
Hours worked per week	55.6 (15.80)	50.0 (16.46)	1.00 (0.99,		.90
(mean [SD])			$1.01)^{b}$		
Specialty					.007
Internal medicine - general	115 (48.1)	124 (51.9)	Ref.		
Anesthesiology	72 (38.9)	113 (61.1)	0.84 (0.49, 1.41)	.50	
Dermatology	46 (42.2)	63 (57.8)	1.81 (0.97, 3.38)	.06	•
Emergency medicine	80 (53.0)	71 (47.0)	1.18 (0.69, 2.02)	.55	
Family medicine	106 (45.9)	125 (54.1)	1.05 (0.65, 1.70)	.83	•••••
Internal medicine - subspecialty	193 (46.5)	222 (53.5)	1.07 (0.70, 1.62)	.76	
Neurology	67 (50.0)	67 (50.0)	2.06 (1.17, 3.63)	.01	
Neurosurgery	16 (37.2)	27 (62.8)	0.46 (0.18, 1.22)	.12	•••••
Obstetrics and gynecology	60 (49.6)	61 (50.4)	1.25 (0.71, 2.23)	.44	•••••
Otolaryngology	16 (55.2)	13 (44.8)	2.13 (0.82, 5.52)	.12	

Ophthalmology	43 (38.4)	69 (61.6)	1.55 (0.84, 2.88)	.16	
Orthopedics	73 (38.6)	116 (61.4)	0.90 (0.54, 1.51)	.69	
Other	24 (49.0)	25 (51.0)	1.26 (0.51, 3.12)	.62	
Pathology	34 (35.4)	62 (64.6)	0.80 (0.42, 1.51)	.49	
Pediatrics - general	68 (37.4)	114 (62.6)	0.95 (0.56, 1.61)	.85	
Pediatrics - subspecialty	58 (33.9)	113 (66.1)	0.59 (0.34, 1.00)	.05	
Physical medicine and rehabilitation	37 (52.1)	34 (47.9)	1.05 (0.52, 2.13)	.90	
Preventive/occupational/ environmental	5 (50.0)	5 (50.0)	1.01 (0.15, 6.70)	.99	
Psychiatry	72 (32.4)	150 (67.6)	1.10 (0.66, 1.83)	.73	
Radiation oncology	15 (53.6)	13 (46.4)	2.45 (0.87, 6.91)	.09	
Radiology	68 (45.3)	82 (54.7)	1.13 (0.65, 1.98)	.66	
Surgery - general	48 (48.5)	51 (51.5)	0.93 (0.50, 1.73)	.81	
Surgery - subspecialty	114 (40.3)	169 (59.7)	0.65 (0.41, 1.03)	.07	
Urology	11 (50.0)	11 (50.0)	1.95 (0.62, 6.12)	.25	
Satisfied with WLI					< .0001
Neutral/disagree	1,110 (57.4)	825 (42.6)	Ref.		
Agree	331 (23.5)	1,075 (76.5)	0.55 (0.44, 0.68)	.0001	

Abbreviations: OR, odds ratio; CI, confidence interval; SD, standard deviation; PP, private practice; AP, academic practice; WLI, work-life integration.

^aOdds ratio for each additional year of age.

^bOdds ratio for each additional hour worked per week.

Table 4
Results of a Multivariable Analysis of Respondents' Satisfaction With Work-Life Integration (WLI) From a 2017 Survey of U.S. Physicians

	Physicians satisfied with WLI,	Physicians neutral/ dissatisfied with WLI,			Overall
Dependent variable	no. (%)	no. (%)	OR (95% CI)	P value	P value
Age (mean [SD])	53.6 (12.86)	51.2 (11.15)	0.99 (0.97, 1.00) ^a		.04
Gender/Practice					.002
Men, PP	693 (47.9)	753 (52.1)	Ref.		
Women, AP	161 (30.0)	375 (70.0)	0.62 (0.47, 0.83)	.001	
Women, PP	281 (41.1)	402 (58.9)	0.75 (0.58, 0.97)	.03	
Men, AP	271 (40.1)	405 (59.9)	1.05 (0.82, 1.33)	.71	
Relationship status					.67
Single	141 (36.7)	243 (63.3)	Ref.		
Married	1,182 (42.5)	1,598 (57.5)	0.86 (0.63, 1.18)	.35	
Partnered	63 (45.3)	76 (54.7)	1.08 (0.65, 1.77)	.77	
Widowed	20 (52.6)	18 (47.4)	1.00 (0.42, 2.41)	.99	
Parental status		~			.09
No children	227 (38.9)	357 (61.1)	Ref.		
Youngest age < 5	188 (36.6)	326 (63.4)	0.63 (0.45, 0.89)	.009	
Youngest age 5-12	222 (39.4)	341 (60.6)	0.80 (0.58, 1.10)	.17	
Youngest age 13-18	180 (40.3)	267 (59.7)	0.83 (0.59, 1.19)	.32	
Youngest age 19-22	109 (39.2)	169 (60.8)	0.83 (0.55, 1.25)	.37	
Youngest age > 22	480 (50.3)	475 (49.7)	1.07 (0.74, 1.56)	.72	

Hours worked per week (mean [SD])	45.2 (14.98)	57.7 (15.37)	0.95 (0.94, 0.96) ^b		<.0001
Specialty			,		.01
Internal medicine - general	83 (34.7)	156 (65.3)	Ref.		
Anesthesiology	81 (43.8)	104 (56.2)	1.31 (0.80, 2.16)	.28	
Dermatology	67 (61.5)	42 (38.5)	1.84 (1.02, 3.31)	.04	
Emergency medicine	84 (55.6)	67 (44.4)	2.41 (1.43, 4.08)	.001	
Family medicine	104 (45.0)	127 (55.0)	1.47 (0.93, 2.34)	.10	
Internal medicine - subspecialty	140 (33.7)	275 (66.3)	1.05 (0.69, 1.60)	.81	
Neurology	53 (39.6)	81 (60.4)	1.04 (0.60, 1.82)	.88	
Neurosurgery	14 (32.6)	29 (67.4)	1.48 (0.60, 3.68)	.39	
Obstetrics and gynecology	34 (28.1)	87 (71.9)	0.91 (0.51, 1.63)	.75	
Otolaryngology	12 (41.4)	17 (58.6)	1.84 (0.73, 4.67)	.20	
Ophthalmology	53 (47.3)	59 (52.7)	0.89 (0.50, 1.59)	.70	
Orthopedics	82 (43.4)	107 (56.6)	1.52 (0.92, 2.49)	.10	
Other	17 (34.7)	32 (65.3)	1.06 (0.45, 2.51)	.89	
Pathology	42 (43.8)	54 (56.3)	1.17 (0.64, 2.12)	.61	
Pediatrics - general	84 (46.2)	98 (53.8)	0.87 (0.53, 1.42)	.57	
Pediatrics - subspecialty	66 (38.6)	105 (61.4)	1.30 (0.78, 2.16)	.32	
Physical medicine and rehabilitation	27 (38.0)	44 (62.0)	1.25 (0.62, 2.49)	.53	
Preventive/occupational/ environmental	5 (50.0)	5 (50.0)	1.52 (0.31, 7.44)	.61	
Psychiatry	120 (54.1)	102 (45.9)	1.27 (0.79, 2.05)	.33	
Radiation oncology	13 (46.4)	15 (53.6)	1.58 (0.56, 4.46)	.390	
Radiology	72 (48.0)	78 (52.0)	1.96 (1.15, 3.34)	.01	

Surgery - general	37 (37.4)	62 (62.6)	2.10 (1.14, 3.88)	.02
Surgery - subspecialty	109 (38.5)	174 (61.5)	1.87 (1.19, 2.95)	.007
Urology	7 (31.8)	15 (68.2)	1.01 (0.29, 3.49)	.98
urnout				< .0001
Yes	331 (23.0)	1,110 (77.0)	0.57 (0.46, 0.71)	<.0001
No	1,075 (56.6)	825 (43.4)	Ref.	

Abbreviations: OR, odds ratio; CI, confidence interval; SD, standard deviation; PP, private practice; AP, academic practice.



^aOdds ratio for each additional year of age.

^bOdds ratio for each additional hour worked per week.