

The Influence of Controllable Lifestyle and Sex on the Specialty Choices of Graduating U.S. Medical Students, 1996–2003

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Abstract

Purpose

To determine whether the preferences of female medical students are sufficient to explain the recent trend of U.S. medical students choosing specialties with controllable lifestyles.

Method

Specialty choice for graduating U.S. medical students by sex was determined from the responses to the Association of American Medical Colleges' 1996–2003 Medical School Graduation Questionnaires. Using earlier research, specialties were classified as having an uncontrollable or controllable lifestyle.

Log-linear models were constructed to assess the strength of association among trends in specialty choice, controllable lifestyle, and sex.

Results

The percentage of women choosing specialties with controllable lifestyles increased from 18% in 1996 to 36% in 2003. For men, the percentage grew from 28% to 45%. The change in preference for controllable lifestyle specialties accounted for a large proportion of the variability in specialty choices for both women and men from 1996–2003 (χ^2 for changes common to

women and men = 920, 1 df, $p < .0001$). The difference between women and men in the trend toward controllable lifestyle specialties was small relative to the common changes (χ^2 for differences = 12, 1 df, $p = .0005$).

Conclusion

Controllable lifestyle was strongly associated with the recent trends in specialty choice for both women and men and could not be explained solely by the specialty preferences of women.

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Research has shown that the recent specialty choices of graduating U.S. medical students are strongly associated with a specialty's lifestyle.¹ Specifically, after controlling for income, work hours, and duration of graduate medical education, "controllable lifestyle," characterized by the physician's control of time spent on professional responsibilities,^{2–5} accounted for 55% of the variability in specialty preference from 1996 to 2002.¹ The factors underlying this strong association have yet to be determined.

Some authors have speculated that the growing number of women in medical school is driving the demand for specialties with a controllable lifestyle.^{1,6,7} Over the same time period in which the specialty preferences of U.S. medical students changed, the number of women graduating from medical school increased. From 1996 to 2002, the percentage of U.S. medical school graduates who were women increased from 41% to 44%, and from 1983 to 2003, the percentage increased from 27% to approximately 45%.⁸

Investigators have cited lifestyle considerations as an explanation for specialty choice among women, especially for the relatively small number of women choosing the surgical fields.^{9,10} In addition, lack of "workplace control" and long work hours have been associated with increased "burn out" among female physicians.¹¹ On the other hand, women account for nearly three-quarters of the residents in obstetrics and gynecology,¹² a field with an uncontrollable lifestyle.³

In this study, we sought to determine to what extent sex contributes to the increase in choice of controllable lifestyle specialties.

Method

Specialties for evaluation

We examined only specialties to which graduating U.S. medical students could apply. Based on data available from the 2000–2002 edition of *Physician Socioeconomic Statistics* published by the American Medical Association (AMA),¹³ we identified the following 16 specialties for study: anesthesiology, dermatology, emergency medicine, family practice, internal medicine, neurology, obstetrics and gynecology, ophthalmology, orthopedic surgery, otolaryngology, pathology, pediatrics, psychiatry, radiology (diagnostic), surgery (general), and urology.

Specialty choices of graduating U.S. medical students

We determined the specialty choices of graduating female and male medical students using responses to the Association of American Medical Colleges' 1996–2003 Medical School Graduation Questionnaires (GQs). (We obtained unpublished data from R. Sabharwal, graduation questionnaire project director, April 2004.) The Graduation Questionnaire is administered annually to graduating U.S. medical students. In 2003, nearly 14,000

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students completed the GQ, a response rate of approximately 90%.¹⁴ In 1996, the response rate was 83% and over 12,000 students completed the GQ.

Specialty-related characteristics

Table 1 summarizes the lifestyle, income, work hours, and years of graduate medical education required for each of the selected specialties. Based on the work of Schwartz and colleagues,³ we classified the 16 specialties as having either a controllable or uncontrollable lifestyle. Orthopedic surgery and urology were considered surgical subspecialties and thus were classified as having uncontrollable lifestyles.¹

We determined the average income for each selected specialty by averaging the mean net income after expenses, but before taxes, from 1993 to 1998 as reported in the AMA's *Physician Socioeconomic Statistics, 2000–2002* edition.¹³ We used a mean value because we found no statistically significant evidence for changes over these years in the relative rankings of incomes across specialties. The work hours per week for

each of the selected specialties reflected the average number of hours in professional activities per week for 1998 and 1999.^{13,15} Finally, the minimum number of years of graduate medical education required for each of the selected specialties was determined from the AMA's *Graduate Medical Education Directory*.¹⁶

To control for the influence of the trend away from primary care specialties,¹⁷ we conducted a separate analysis by eliminating family practice, internal medicine, obstetrics and gynecology, and pediatrics from the data.

Statistical analysis

A table of the numbers of graduating medical students who chose each of the 16 specialties within each sex for each of the years 1996–2003 formed the basis for the analysis. Our main focus was on the trends over years. The major portion of the variability in the cell percentages of this three dimensional table (specialty, time, and sex) was potentially explainable by a steady increase over time in preferences for specialties with

controllable lifestyles. We used standard chi-square tests to determine the importance of two-way interactions (sex-by-specialty, specialty-by-time, and sex-by-time). The sex-by-specialty interactions are sensitive to differences between sexes in their specialty preferences. Specialty-by-time interactions are sensitive to a time trend in specialty preferences. Sex-by-time is sensitive to a difference in the proportions of female students over time.

We used log-linear models to determine how much of the variability in preferences over the years could be explained by the following four specialty characteristics: controllable lifestyle, income, work hours, and years of graduate medical education required. We focused in particular on the degree to which the trend toward controllable lifestyle was mainly due to preferences of women. In our log-linear model this analysis was represented by an interaction effect of sex, controllable lifestyle, and time. We used deviances from a saturated model (a three-dimensional model of specialty, time, and sex) to determine the

Table 1
Characteristics of the Selected Specialties Used in a Study on the Influence of Lifestyle on the Specialty Choices of Graduating U.S. Medical Students, 1996–2003

Specialty	Lifestyle*	Average income (in US \$1,000s) [†]	Average work hours per week	Years of GME required [‡]
Anesthesiology	Controllable	225	61.0	4
Dermatology	Controllable	221	45.5	4
Emergency medicine	Controllable	183	46.0	3
Family practice	Uncontrollable	132	52.5	3
Internal medicine	Uncontrollable	158	57.0	3
Neurology	Controllable	172	55.5	4
Obstetrics and gynecology	Uncontrollable	224	61.0	4
Ophthalmology	Controllable	225	47.0	4
Orthopedic surgery	Uncontrollable	323	58.0	5
Otolaryngology	Controllable	242	53.5	5
Pathology	Controllable	202	45.5	4
Pediatrics	Uncontrollable	138	54.0	3
Psychiatry	Controllable	134	48.0	4
Radiology (diagnostic)	Controllable	263	58.0	5
Surgery (general)	Uncontrollable	238	60.0	5
Urology	Uncontrollable	245	60.5	5
Average for the above specialties	Not applicable	208	53.9	4

* A controllable or uncontrollable lifestyle is defined by the physician's control of time spent on professional responsibilities. Definitions are based on Schwartz RW, Haley JV, Williams C, et al. The controllable lifestyle factor and students' attitudes about specialty selection. *Acad Med.* 1990;65:207–10.

† Data on income and work hours per week are from Wassenaar J, Thran S (eds). *Physician Socioeconomic Statistics, 2000–2002* edition. Chicago: American Medical Association, 2001.

‡ Data on graduate medical education from *Graduate Medical Education Directory: 2004–2005*. Chicago: American Medical Association, 2004.

explanatory power of sex and choice of controllable lifestyle specialties.¹⁸ For clarity, we dichotomized the income variable into higher or lower-than-average income.

We conducted a sensitivity analysis by eliminating the four primary care specialties (family practice, internal medicine, obstetrics and gynecology, and pediatrics) from the data. This analysis tested whether the effect of controllable lifestyle persisted apart from a trend away from primary care specialties. We performed analyses using the SAS Proc GENMOD statistical software program (SAS Institute Inc., Cary, North Carolina).

Results

As Table 2 shows, the specialty choices of both women and men changed from 1996 to 2003. Table 2 also shows that the 16 selected specialties accounted for well over 90% of assigned specialty choices for all years examined.

While the change in specialty choice was large for both sexes, the differences between the specialty preferences of women and men over the time period examined were relatively small. Most of the variability in preferences was attributable to the interaction between time and specialty choice ($\chi^2 = 3,424$, 104 df, $p < .0001$) as opposed to sex and specialty choice. In addition, the three-way interaction among sex, specialty choice, and time was significant but explained much less of the change ($\chi^2 = 202$, 104 df, $p < .0001$). In other words, differences in preferences of women and men do not explain nearly as much of the variability in time in specialty choice as do changes over time in preferences common to both sexes.

As Figure 1 shows graphically, from 1996 to 2003 both women and men increasingly chose specialties with controllable lifestyles, and men consistently chose specialties with controllable lifestyles at a higher proportion than did women. The proportion of women choosing controllable lifestyle specialties rose from 18% in 1996 to 36% in 2003. By comparison, over the same time period, the proportion of men choosing controllable lifestyle specialties rose from 28% to 45%. The differences between

women and men with respect to controllable lifestyle as an explanation for the change in preferences over time were much smaller (χ^2 for differences in changes = 12, 1 df, $p = .0005$) than were the changes common to both sexes (χ^2 for common changes = 920, 1 df, $p < .0001$).

The log-linear model demonstrated that controllable lifestyle alone explained 58% of the changes in specialty choice from 1996 to 2003 for women and 42% of the change for men. After controlling for income, work hours, and years of residency, controllable lifestyle explained 41% of the changes in specialty choice for women and 45% for men.

Income explained part of the changes in specialty choice for women and men but to a smaller extent than did controllable lifestyle. By itself, income explained 22% of the changes in specialty choice for women and 21% of the changes for men. After controlling for controllable lifestyle, work hours, and years of residency, income explained 1% of the changes in specialty choice for women and 4% of the changes for men.

When the four primary care specialties were eliminated from the data, controllable lifestyle remained a significant explanatory variable for the changes in specialty choice. After controlling for income, controllable lifestyle explained 33% of the changes in preference among the remaining specialties for men and women combined. This result is in comparison to the 41% and 45% values reported above for all 16 specialties (including primary care).

Discussion

By all measures examined, controllable lifestyle is an increasingly important factor in the specialty choices of both women and men. The similarities in specialty choice trends between women and men were striking, and the results of the statistical analyses demonstrate that the differences between the specialty choices of women and men were very small relative to their similarities. Thus, the specialty preferences of female medical students alone were insufficient to explain the broader trend toward controllable lifestyle specialties, and alternative explanations must be sought.

One possible explanation of this finding is that the reward structure in medicine has changed. A model of physician satisfaction holds that a physician's happiness (or utility, in economic terms) is a function of income, practice autonomy, and leisure.¹⁹ The recent growth of managed care has retarded the growth of physicians' income¹⁹ and decreased physicians' perceptions of professional autonomy.^{19,20} After decades of significant growth in physicians' income,²¹ physicians' real income (adjusted for inflation) from 1990 to 2000 grew by only 2%.²² With constraints on income and physicians' autonomy, future physicians may be looking to lifestyle to maximize their professional satisfaction.

While changes in the medical profession may be an important factor in the trend toward specialties with controllable lifestyles, broader societal factors may have more influence. The last half century has seen a "massive movement" of women into the paid labor force²³ that may be affecting the labor preferences of not only women but also men.

The large movement of women into the paid labor force has dramatically changed households and the family structure.²³ A growing body of social science research suggests that one element of that change is the role of fathers.^{23,24} While the involvement of fathers in childrearing and housework remains limited relative to the involvement of mothers, it has increased in recent years²³ as fathers are increasingly expected to be more involved in child-rearing.²⁴

Another result of the higher participation of women in the paid labor force is an increase in time spent at work for married couples. In 1970, the average number of hours worked per week by nonfarm married couples was 52.5 hours. By 2000, the average soared 20% to 63.1 hour.²⁵ The effect of more time spent at work is less time available for leisure or avocational pursuits, including parenting.

As a consequence of these changes in the labor force, achieving a "balanced" lifestyle between work and leisure is increasingly in demand among women and men. A survey of college students found that "achieving a balanced lifestyle (and) having a rewarding life outside of work"^{26, p.6} was a top career goal, and a study found individuals aged 26–40 years

Table 2

Number (%) of Selected Specialty Choices of Graduating U.S. Medical Students, by Sex, from Responses to the Medical School Graduation Questionnaire, 1996–2003

Specialty	1996			1997			1998			1999		
	Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total
Anesthesiology	44 (0.9)	103 (1.5)	147 (1.2)	56 (1.0)	165 (2.2)	221 (1.7)	89 (1.6)	263 (3.6)	352 (2.7)	105 (2.3)	283 (4.5)	388 (3.6)
Dermatology	120 (2.4)	81 (1.2)	201 (1.7)	128 (2.3)	103 (1.4)	231 (1.8)	164 (3.0)	141 (1.9)	305 (2.4)	149 (3.2)	96 (1.5)	245 (2.3)
Emergency medicine	250 (5.0)	644 (9.5)	894 (7.6)	214 (3.8)	633 (8.4)	847 (6.4)	208 (3.8)	614 (8.3)	822 (6.4)	227 (4.9)	538 (8.6)	765 (7.0)
Family practice	1,055 (21.1)	1,098 (16.1)	2,153 (18.2)	1,101 (19.5)	1,290 (17.1)	2,391 (18.2)	979 (17.8)	1,153 (15.6)	2,132 (16.5)	772 (16.6)	753 (12.1)	1,525 (14.0)
Internal medicine	1,093 (21.9)	1,613 (23.7)	2,706 (22.9)	1,297 (23.0)	1,826 (24.2)	3,123 (23.7)	1,245 (22.7)	1,821 (24.6)	3,066 (23.8)	950 (20.4)	1,447 (23.3)	2,397 (22.0)
Neurology	57 (1.1)	85 (1.2)	142 (1.2)	69 (1.2)	126 (1.7)	195 (1.5)	69 (1.3)	119 (1.6)	188 (1.5)	64 (1.4)	117 (1.9)	181 (1.7)
Obstetrics–gynecology	655 (13.1)	331 (4.9)	986 (8.4)	770 (13.7)	345 (4.6)	1,115 (8.5)	687 (12.5)	276 (3.7)	963 (7.5)	598 (12.9)	208 (3.3)	806 (7.4)
Ophthalmology	86 (1.7)	206 (3.0)	292 (2.5)	92 (1.6)	219 (2.9)	311 (2.4)	92 (1.7)	223 (3.0)	315 (2.4)	117 (2.5)	195 (3.1)	312 (2.9)
Orthopedic surgery	44 (0.9)	489 (7.2)	533 (4.5)	57 (1.0)	502 (6.7)	559 (4.2)	51 (0.9)	559 (7.6)	610 (4.7)	60 (1.3)	481 (7.7)	541 (5.0)
Otolaryngology	35 (0.7)	188 (2.8)	223 (1.9)	46 (0.8)	172 (2.3)	218 (1.7)	41 (0.7)	171 (2.3)	212 (1.6)	40 (0.9)	173 (2.8)	213 (2.0)
Pathology*	—	—	—	57 (1.0)	104 (1.4)	161 (1.2)	64 (1.2)	78 (1.1)	142 (1.1)	61 (1.3)	83 (1.3)	144 (1.3)
Pediatrics	986 (19.7)	533 (7.8)	1,519 (12.9)	1,115 (19.8)	589 (7.8)	1,704 (12.9)	1,206 (22.0)	626 (8.5)	1,832 (14.2)	942 (20.3)	493 (7.9)	1,435 (13.2)
Psychiatry	202 (4.0)	221 (3.2)	423 (3.6)	248 (4.4)	249 (3.3)	497 (3.8)	229 (4.2)	212 (2.9)	441 (3.4)	204 (4.4)	206 (3.3)	410 (3.8)
Radiology												
(diagnostic)	112 (2.2)	343 (5.0)	455 (3.9)	107 (1.9)	348 (4.6)	455 (3.5)	128 (2.3)	433 (5.9)	561 (4.4)	143 (3.1)	472 (7.6)	615 (5.7)
Surgery (general)	234 (4.7)	714 (10.5)	948 (8.0)	257 (4.6)	686 (9.1)	943 (7.2)	215 (3.9)	538 (7.3)	753 (5.8)	193 (4.2)	493 (7.9)	686 (6.3)
Urology	27 (0.5)	156 (2.3)	183 (1.6)	22 (0.4)	177 (2.3)	199 (1.5)	26 (0.5)	163 (2.2)	189 (1.5)	25 (0.5)	184 (3.0)	209 (1.9)
Total for selected specialties	5,000	6,805	11,805	5,636	7,534	13,170	5,493	7,390	12,883	4,650	6,222	10,872
Total for all assigned specialties	5,103	7,128	12,231	5,739	7,820	13,559	5,600	7,723	13,323	4,830	6,642	11,472
% of assigned in selected specialties	98.0	95.5	96.5	98.2	96.3	97.1	98.1	95.7	96.7	96.3	93.7	94.8

* Data for pathology for 1996 were not available.

wanted more time to devote to life outside of work.²⁷ A study published in 2002 found that 74% of men would rather have had a “daddy-track” job than a “fast-track” job.²⁴ The desire for a balanced lifestyle is widespread in business,²⁸ engineering,²⁹ and the military.³⁰ This same desire for a balanced or controllable lifestyle on the part of women and men may explain in part the trend toward controllable lifestyle specialties among female and male medical students.

Our results also demonstrate that while the proportion of women and men choosing specialties with controllable lifestyles grew steadily from 1996 to 2003, women chose specialties with uncontrollable lifestyles in greater proportion than did men. Certain specialties with uncontrollable lifestyles attracted women in large proportions. For example, in 2003, 70% of graduating medical students who chose pediatrics were women, as were 80% who chose obstetrics and gynecology. The factors that make pediatrics and obstetrics–gynecology more attractive to women despite their perceived uncontrollable lifestyles are uncertain and likely extend well beyond lifestyle considerations. Researchers have

suggested that women have not entered other uncontrollable lifestyle specialties, such as the surgical specialties, in part due to the lack of available role models¹⁰ and perceptions of male bias.³¹

The overall trend toward lifestyle considerations in medicine is likely to evolve in the future. The broader forces working in medicine and society may also influence later decisions, such as which fellowships are selected, whether academics and research are pursued, and how physicians structure their practices. Additional research will be needed to evaluate these issues to help develop educational and workforce policies that address the lifestyle needs of physicians.

Our study had limitations. Chiefly, we dichotomously assigned selected specialties to controllable or uncontrollable lifestyles, which at its roots is subjective.^{1,3,32} The classification is an oversimplification as lifestyle among and within the specialties is highly variable (e.g., an orthopedist specializing in shoulder surgery may have a more controllable lifestyle than an anesthesiologist covering a critical care service) and does not necessarily reflect recent changes to the structure of practice that influence lifestyle (e.g., the growth of

group practices and the emergence of hospitalists). Moreover, medical students’ choices are based on their perceptions of specialties and not necessarily reality. Despite these and other limitations, research does support the differentiation of specialties based on lifestyle. Schwartz and colleagues³ have shown that students choosing a specialty with a controllable lifestyle placed more emphasis on perceived lifestyle factors, such as number of work hours, perceived number of call nights, and adequate time for pursuit of avocational activities, than those who did not choose a specialty with a controllable lifestyle.

Although the classification of specialties (orthopedics is surgical and therefore uncontrollable) has a subjective component, multiple studies have validated the lifestyle designation used by Schwartz and colleagues.³ For example, recent research has noted that an medical students’ increased emphasis on lifestyle factors has led to declining interest in the surgical fields.^{5,33} In addition, a study of students’ career choices at the University of Florida found that the percentage of graduating students entering a surgical residency was declining and concluded that “lifestyle issues are increasingly important in student career decisions.”^{33,p.53} The

Table 2
(Continued)

2000			2001			2002			2003		
Women	Men	Total	Women	Men	Total	Women	Men	Total	Women	Men	Total
156 (3.0)	365 (5.3)	521 (4.3)	177 (3.5)	522 (7.7)	699 (5.9)	249 (4.8)	632 (9.5)	881 (7.5)	269 (5.4)	559 (9.2)	828 (7.5)
178 (3.4)	129 (1.9)	307 (2.5)	194 (3.8)	117 (1.7)	311 (2.6)	211 (4.1)	105 (1.6)	316 (2.7)	204 (4.1)	113 (1.9)	317 (2.9)
261 (5.0)	644 (9.3)	905 (7.5)	284 (5.6)	679 (10.1)	963 (8.1)	332 (6.4)	692 (10.4)	1,024 (8.7)	333 (6.7)	546 (9.0)	879 (8.0)
798 (15.2)	803 (11.6)	1,601 (13.2)	644 (12.6)	595 (8.8)	1,239 (10.4)	619 (12.0)	533 (8.0)	1,152 (9.8)	521 (10.5)	400 (6.6)	921 (8.4)
1,021 (19.5)	1,493 (21.6)	2,514 (20.7)	929 (18.2)	1,394 (20.7)	2,323 (19.6)	929 (18.0)	1,331 (20.0)	2,260 (19.1)	862 (17.4)	1,213 (20.0)	2,075 (18.8)
111 (2.1)	158 (2.3)	269 (2.2)	95 (1.9)	136 (2.0)	231 (1.9)	116 (2.3)	178 (2.7)	294 (2.5)	138 (2.8)	145 (2.4)	283 (2.6)
655 (12.5)	166 (2.4)	821 (6.8)	634 (12.4)	176 (2.6)	810 (6.8)	664 (12.9)	168 (2.5)	832 (7.0)	548 (11.0)	141 (2.3)	689 (6.2)
128 (2.4)	260 (3.8)	388 (3.2)	135 (2.6)	241 (3.6)	376 (3.2)	133 (2.6)	263 (4.0)	396 (3.4)	126 (2.5)	221 (3.6)	347 (3.1)
60 (1.1)	520 (7.5)	580 (4.8)	75 (1.5)	535 (7.9)	610 (5.1)	67 (1.3)	543 (8.2)	610 (5.2)	68 (1.4)	515 (8.5)	583 (5.3)
46 (0.9)	197 (2.9)	243 (2.0)	52 (1.0)	178 (2.6)	230 (1.9)	65 (1.3)	163 (2.5)	228 (1.9)	60 (1.2)	162 (2.7)	222 (2.0)
60 (1.1)	78 (1.1)	138 (1.1)	91 (1.8)	99 (1.5)	190 (1.6)	97 (1.9)	94 (1.4)	191 (1.6)	138 (2.8)	126 (2.1)	264 (2.4)
1,001 (19.1)	512 (7.4)	1,513 (12.5)	975 (19.1)	496 (7.3)	1,471 (12.4)	887 (17.2)	405 (6.1)	1,292 (10.9)	837 (16.9)	361 (6.0)	1,198 (10.9)
252 (4.8)	234 (3.4)	486 (4.0)	293 (5.7)	253 (3.7)	546 (4.6)	304 (5.9)	274 (4.1)	578 (4.9)	306 (6.2)	221 (3.6)	527 (4.8)
234 (4.5)	599 (8.7)	833 (6.9)	263 (5.1)	643 (9.5)	906 (7.6)	212 (4.1)	624 (9.4)	836 (7.1)	228 (4.6)	627 (10.3)	855 (7.8)
250 (4.8)	571 (8.3)	821 (6.8)	229 (4.5)	507 (7.5)	736 (6.2)	221 (4.3)	483 (7.3)	704 (6.0)	272 (5.5)	550 (9.1)	822 (7.5)
31 (0.6)	176 (2.5)	207 (1.7)	40 (0.8)	179 (2.7)	219 (1.8)	46 (0.9)	162 (2.4)	208 (1.8)	55 (1.1)	164 (2.7)	219 (2.0)
5,242	6,905	12,147	5,110	6,750	11,860	5,152	6,650	11,802	4,965	6,064	11,029
5,420	7,359	12,779	5,343	7,270	12,613	5,423	7,172	12,595	5,221	6,563	11,784
96.7	93.8	95.1	95.6	92.8	94.0	95.0	92.7	93.7	95.1	92.4	93.6

Liaison Committee of Obstetrics and Gynecology, in response to the decreasing number of U.S. applicants, found that medical students were looking for “areas of medicine that provided a better lifestyle following graduation.”^{34,p.490} Lifestyle considerations have become so central to specialty choice that U.S. medical students have nicknamed “lifestyle” specialties the “E-ROAD,” an acronym for emergency medicine, radiology, ophthalmology, anesthesiology, and dermatology.^{34,35}

Another study limitation was our reliance on GQ data to determine the specialty choices of women and men. While recent

response rates have been high, the response rates in earlier years were lower. These data are thus subject to response bias and additionally may not reflect the actual specialty choices of medical students in all cases. Moreover, the data reflect the likely final choice of graduating medical students and not necessarily their first preference of specialty.

Notwithstanding these limitations, in our study we found that the recent trend toward specialties with controllable lifestyles cannot be explained by the unique preferences of women. Rather,

both women and men from 1996 to 2003 increasingly chose specialties with controllable lifestyles, and the differences between their trends were very small. Changing dynamics in medicine and the increased participation of women in the paid labor force may be driving the trend toward controllable lifestyle specialties. Further research is required to investigate these relationships and their potentially broad implications for the future of medicine.

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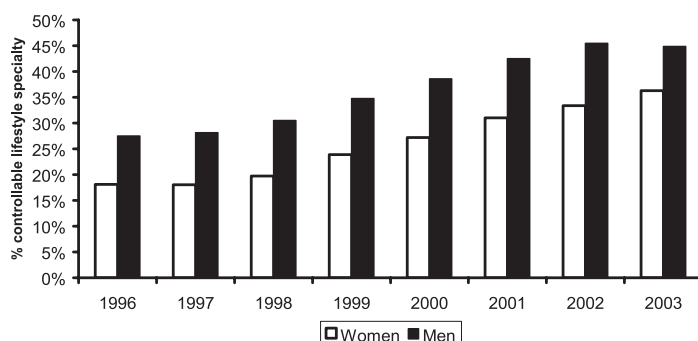


Figure 1 Percentage of graduating U.S. medical students who chose specialties with controllable lifestyles, by sex, from responses given to the Association of American Medical Colleges’ 1996–2003 Medical School Graduation Questionnaires. A controllable or uncontrollable lifestyle is defined by the physician’s control of time spent on professional responsibilities.

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