

# Gender differences in the vocational satisfaction of physician assistants

Dawn M. LaBarbera, PA-C, PhD

The AAPA estimates that 88,771 people are currently eligible to practice as physician assistants (PAs) and that as of May 2010, 74,469 people were practicing clinically as PAs.<sup>1</sup> In 2008, women represented 72.7% of PA matriculants.<sup>2</sup> The United States Bureau of Labor Statistics projects that PA jobs will grow by 39% between 2008 and 2018, which is much faster than average growth.<sup>3</sup> With the increasing popularity of the PA profession, wise career and job choices should be made to achieve vocational satisfaction. Theories on job satisfaction, career choice, and career development are vast and varied. A synthesis of examples was previously published in *JAAPA*.<sup>4</sup> In addition to contributing to life satisfaction, vocational satisfaction is particularly important in the medical profession, as inferred from the work of Mathieu and Zajac.<sup>5</sup> The quality of patient care may be compromised if job satisfaction is not achieved.

Several studies have been published showing high levels of PA professional satisfaction with work environment, clinical practice, and job factors.<sup>4,6-9</sup> In a survey of physicians, PAs, and nurse practitioners (NPs) functioning as primary care providers in a large group-model HMO, all reported that professional autonomy was not a problem and that they were satisfied with most aspects of their practice. Sources of dissatisfaction included patient load and amount of time spent with patients. PAs and NPs were more likely to indicate daily stress than physicians were. With respect to income and fringe benefits, PAs and NPs were significantly less satisfied than the physicians.<sup>10</sup> In a mixed methodology (quantitative and qualitative) survey study of PAs across the United States, LaBarbera identified 21 variables for the high degree of PA career satisfaction and 29 variables for dissatisfaction.<sup>4</sup> The top three ranked satisfiers were *helping others*, *patient interaction*, and *intellectual challenge*. The top three dissatisfiers were lack of *respect*, lack of *compensation*, and *other*. *Autonomy* was the fourth-ranked career satisfier, and lack of *autonomy* was ranked 17th for career dissatisfaction. Satisfaction was not analyzed by gender, however.

Continued on page 34

Dawn LaBarbera is a faculty member in the Department of Physician Assistant Studies, University of Saint Francis, Fort Wayne, Indiana. She has indicated no relationships to disclose relating to the content of this article.

## ABSTRACT

**Objective:** The purpose of this study is to analyze vocational satisfaction differences by gender as a follow-up of data gathered from a mailed survey study on American physician assistant vocational satisfaction.

**Methods:** This is an analysis of a database from an original piloted, validated survey with a response rate of 50% from 2,323 labels from the 2003 AAPA's mailing list (n = 1,137). The survey measured vocational satisfaction in terms of career, job, and specialty choice on a forced-choice 6-point Likert-type scale. A qualitative analysis of answers to open-ended questions addressing career satisfiers and dissatisfiers was also conducted.

**Results:** PAs were shown to be highly satisfied with their careers, specialty choices, and jobs. Trends for male PAs showed that they were more satisfied with their careers, specialty choices, and jobs (6-point Likert scale) but female PAs were more likely to refer others into the PA profession than their male counterparts (4-point Likert scale). Statistically significant differences via 2-tailed Mann-Whitney *U* tests were shown for job satisfaction ( $P = .02$ , male Likert mean 3.92 vs. female 3.78) and the likelihood to refer others into the profession ( $P = .04$ , female Likert mean 3.43 vs. male 3.33). Twenty-one factors for vocational satisfaction and 29 for dissatisfaction were qualitatively analyzed by gender. The top three satisfiers of *helping others*, *patient interaction*, and *intellectual challenge* were the same by rank regardless of gender. Similarly, the top three dissatisfiers were the same but in reverse order for female and male PAs: (lack of) *respect*, *compensation*, and *other*, for females; and *other*, *compensation*, and *respect*, for males.

**Conclusions:** This study demonstrated very similar vocational satisfaction measures for female PAs and male PAs via quantitative and qualitative methods with the noteworthy exception that male PAs were statistically more satisfied with their jobs while female PAs were statistically more likely to refer others into the career. These differences, while statistically significant, may be of no practical significance and need to be further studied.

An understanding of vocational satisfaction among PAs is important to maintain the professional practice characteristics that contribute to a high level of satisfaction.<sup>8</sup> Administrators may be able to control some variables to improve their employees' satisfaction, thereby improving recruitment and retention. Furthermore, knowledge of these variables is important to job applicants and to those exploring careers because some of the variables may be amenable to personal control. To explore PA vocational satisfaction by gender, the results of a mailed written survey were analyzed.

## METHODS

Further analysis of the LaBarbera<sup>4</sup> written mailed survey database was conducted to provide a blend of quantitative and qualitative methodologies to study PA vocational satisfaction by gender. This prior study included compliance with the conditions of use of the AAPA mailing list and local Institutional Review Boards.

**Original survey** An original survey was piloted and validity tested. The survey captured demographics and measured vocational satisfaction in terms of career satisfaction, job satisfaction, and satisfaction with specialty choice on a 6-point, forced-choice (to avoid neutral responses) Likert scale. The survey also inquired, on a 4-point Likert scale, into the likelihood of respondent PAs to refer bright young prospects into the PA profession. Finally, the survey used open-ended questions to elicit vocational satisfiers and dissatisfiers.

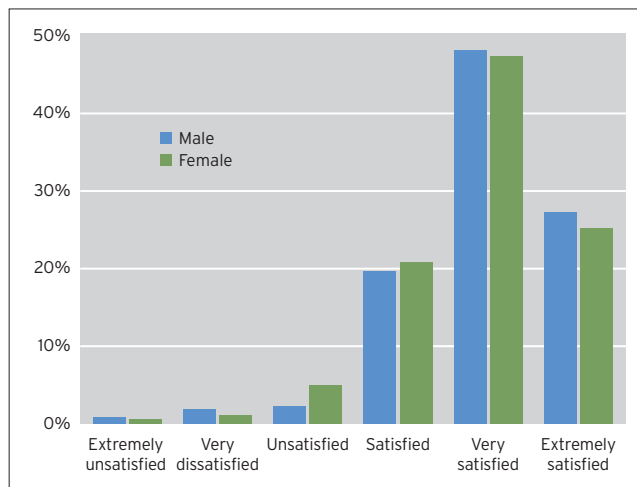
**Sampling methodology** A random sample of 1,137 PAs (response rate, 50.55%) was obtained from clinically practicing PAs across the United States. Female respondents represented 57.3% of the sample (n = 651) and males represented 42.3% (n = 481). The mean age of all respondents was 41.5 years (standard deviation [SD] + 10.3), with a range spanning 61 years (23-84 years) (n = 1,131). The mean of the total years in PA practice of those noting a full-time or part-time clinical practice status was 9.74 (SD + 8.45) (n = 981), with a minimum of less than 1 year to a maximum of 35 years. The mean total length of PA practice in the preferred specialty (item 8, n = 1,007) was 7.72 years (SD + 6.95) with a minimum of less than 1 year to a maximum of 33 years. This sample was shown to be statistically representative of AAPA's published demographics from the prior year's census survey by employment status, gender, age, years in PA practice, work setting, and specialty.

## RESULTS

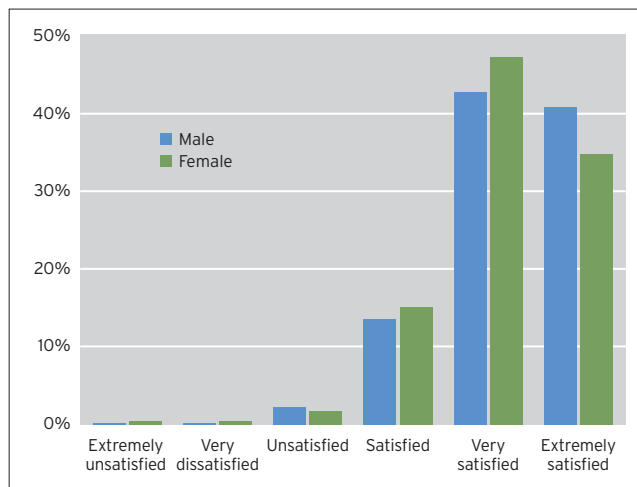
Data were evaluated with SPSS 15.0 for Windows and Excel. Descriptive statistics were used for aspects of demographic information. Frequencies of coded responses were calculated.

**Survey items by gender** Satisfaction with the PA profession as a career choice (on a 6-point Likert scale) was reported by 1,117 respondents as follows: extremely unsatisfied, 0.7% (n = 8); very dissatisfied, 1.4% (n = 16); unsatisfied, 3.8% (n = 43); satisfied, 20.2% (n = 226); very satisfied, 47.6% (n = 532); and extremely satisfied, 26.1% (n = 292). The mean satisfaction level was 3.91. **Figure 1** displays satisfaction with the

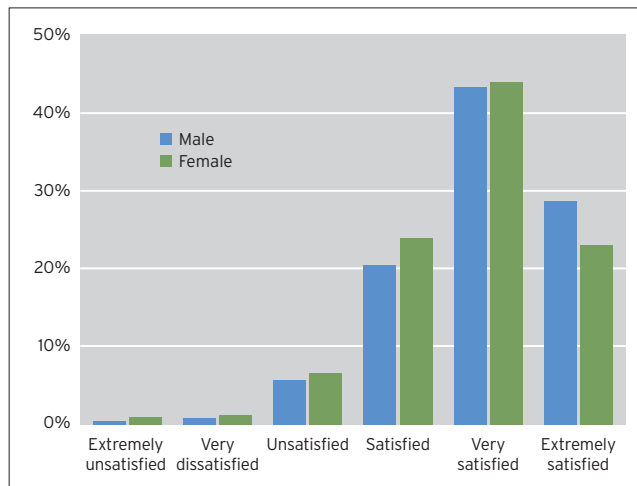
**FIGURE 1. PA career choice satisfaction by gender**



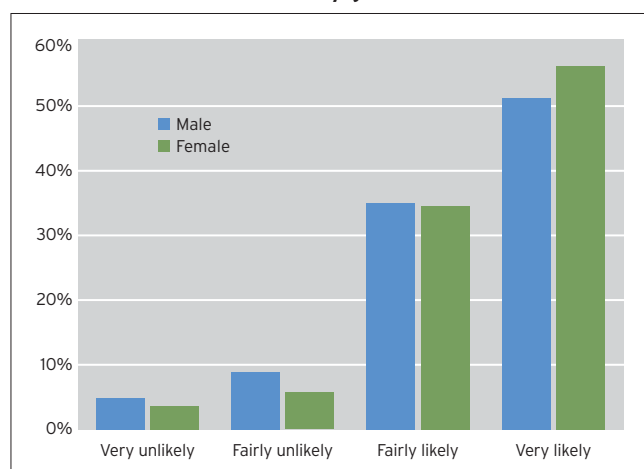
**FIGURE 2. Specialty choice satisfaction by gender**



**FIGURE 3. Job satisfaction by gender**



**FIGURE 4. Likelihood to refer by gender**



PA profession by gender. The mean career satisfaction of 640 female PAs was 3.89 (SD = 0.92); of 474 male PAs, 3.94 (SD = 0.93). The median and mode were 4 each for the whole sample and for each of the female and male PA groupings.

Satisfaction levels for the preferred PA specialty (6-point Likert scale) were reported by 1,061 respondents as follows: extremely unsatisfied, 0.4% (n = 4); mostly dissatisfied, 0.4% (n = 4); unsatisfied, 1.9% (n = 20); satisfied, 14.4% (n = 153); mostly satisfied, 45.4% (n = 482); and extremely satisfied, 35.0% (n = 398). The mean satisfaction level was 4.17. **Figure 2** displays the results for specialty satisfaction by gender. The mean specialty satisfaction of 601 female PAs was 4.13 (SD = 0.82); of 457 male PAs, 4.21 (SD = 0.80). The median and mode were 4 each for the combined and for each of the female and male PA groupings.

Satisfaction with current PA job (6-point Likert scale) was reported by 1,012 respondents as follows: extremely unsatisfied, 0.8% (n = 9); mostly dissatisfied, 1.1% (n = 11); unsatisfied, 6.2% (n = 63); satisfied, 22.5% (n = 228); mostly satisfied, 43.7% (n = 442); and extremely satisfied, 25.6% (n = 259). The mean satisfaction level was 3.84. **Figure 3** displays the results of job satisfaction by gender. The mean

job satisfaction of 572 female PAs was 3.78 (SD = 0.98); of 437 male PAs, 3.92 (SD = 0.94). The median and mode were 4 each for the combined and female and male PA groupings.

When PAs were asked how likely they were to “suggest to a bright young person searching careers to become a PA” (on a 4-point Likert scale), 4.1% (n = 46) of 1,112 respondents reported very unlikely; 7.0% (n = 78) reported fairly unlikely; 34.8% (n = 387), fairly likely; and 54.0% (n = 601), very likely. The mean likelihood to refer was 3.39. **Figure 4** displays the results of likelihood to refer by gender. The mean likelihood to refer of 637 female PAs was 3.43 (SD = 0.76); of 472 male PAs, 3.33 (SD = 0.83). The median and mode were 4 each for the combined and female and male PA groupings.

A series of 2-tailed Mann-Whitney *U* tests were conducted to evaluate whether there were statistically significant differences in the Likert scale satisfaction item responses of male and female PAs. The Mann-Whitney *U* test was used because of the ordinal data type and the positively skewed distribution of the results. **Table 1** displays these results. There were no statistical differences between men and women in terms of career and specialty satisfaction. Men, however, were significantly more satisfied with their jobs. On the other hand, women were statistically more likely than men to refer others into the PA profession.

**Open-ended survey items** The participation rates for the open-ended survey items regarding factors for PA career satisfaction and dissatisfaction were 93.0% overall (n = 1,049): 93.7% for men (n = 449) and 92.45% for women (n = 600). The open-ended item on satisfaction had an overall 90.43% participation rate (n = 1,083): 90.61% for men (n = 434); 90.29% for women (n = 649). The open-ended item on dissatisfaction had an overall 89.98% participation rate: 90.61% for men (n = 434); 89.52% for women (n = 581).

The qualitative data had been coded in the previous study<sup>4</sup> into categories with accuracy of data entry checked and intercoder reliability of more than 99% between the author and two other reviewers. There were 21 different themes for career satisfaction (**Table 2**) and 29 for career dissatisfaction (**Table 3**) from almost 5,000 coded items. These themes are now broken down by gender.

**TABLE 1. Results of 2-tailed Mann-Whitney *U* tests**

Variable tested	Gender	Number	Likert mean	Mann-Whitney <i>U</i>	Sig. (2-tailed) <i>P</i> level
PA career satisfaction (6-point scale)	Men	474	3.94	145958.5	0.25
	Women	640	3.89		
Specialty choice satisfaction (6-point scale)	Men	457	4.21	128980.5	0.07
	Women	601	4.13		
Job satisfaction (6-point scale)	Men	437	3.92	114949.0	0.02*
	Women	572	3.78		
Likelihood to refer (4-point scale)	Men	472	3.33	140707.5	0.04*
	Women	637	3.43		

\*Statistically significant.

**TABLE 2. Qualitative career satisfaction variables by gender**

Satisfaction variable	Total			Men			Women		
	Rank order	n	Percent	Rank order	n	Percent	Rank order	n	Percent
Helping others	1	552	48.8	1	249	52.0	1	301	46.4
Patient interaction	2	302	26.6	2	113	23.6	2	188	29.0
Intellectual challenge	3	222	19.5	3	82	17.1	3	140	21.6
Autonomy	4	120	10.6	10	43	9.0	4	77	11.9
Teaching	5	117	10.3	5	27	5.6	5	90	13.9
Flexibility	6	106	9.3	8	29	6.1	5	77	11.9
Teamwork	7	91	8.0	6	38	7.9	7	53	8.2
Other	8	84	7.3	7	38	7.9	8	45	6.9
Compensation	8	83	7.3	10	52	10.9	9	31	4.8
Variety	10	70	6.2	13	27	5.6	10	43	6.6
Appreciation	11	62	5.5	9	24	5.0	11	38	5.9
Procedures	11	62	5.5	14	28	5.9	12	34	5.2
Respect	13	59	5.2	16	27	5.6	12	32	4.9
Specialty change	14	52	4.6	12	19	4.0	14	33	5.1
Problem solving	15	51	4.5	4	18	3.8	15	33	5.1
Responsibility	16	45	4.0	14	19	4.0	16	26	4.0
Physician backup	17	26	2.3	20	5	1.0	17	21	3.2
Professional	18	21	1.8	18	12	2.5	18	9	1.4
Job availability	19	18	1.6	17	8	1.7	19	10	1.5
Global satisfaction	20	9	0.8	19	6	1.3	20	3	0.5
Limited liability	21	4	0.4	10	1	0.2	20	3	0.5

The top three career satisfaction themes were identical for male and female PAs: 1. *helping others*; 2. *patient interaction*; and 3. *intellectual challenge*. A large discrepancy in the rank orders between the genders was seen in the theme of *autonomy* (rank order 4 for female PAs and 10 for male PAs). *Problem solving* was rank ordered 4 by male PAs and 15 by female PAs, resulting in the largest discrepancy of all the satisfaction themes by 11 rank order points. *Teaching* was rank ordered 5 by both genders. *Flexibility* was also important to both genders but at a slightly different order: female PAs ranked it 5, and males ranked it 8. The second largest discrepancy of the satisfaction themes was the 10-point rank order spread of *limited liability*, which male PAs rank ordered at 10 and females at 20. Female PAs were more satisfied than male PAs in 12 of the 21 satisfaction variables.

The top three career dissatisfaction themes were the same for male and female PAs but in reverse order: *respect* (1 for females, 3 for males), *compensation* (rank order 2 for males and females), and *other* (3 for females, 1 for males). The *other* category encompassed varied miscellaneous themes not captured with a great enough frequency or a clear enough concept to be identified as one of the 28 distinct

themes. The top 10 overall categories encompassed the top 9 themes for male PAs and top 10 for female PAs. The largest discrepancy seen was *job availability* (tied for rank order 10 overall). Male PAs scored it at 17 and female PAs at 9. Female PAs were more disgruntled than male PAs in only 11 of the 29 dissatisfaction variables.

## DISCUSSION

Career choice, preferred PA specialty, and PA job satisfaction levels are similar among male and female PAs, with the same medians and modes; however, means are higher for male PAs. Mann-Whitney *U* testing revealed a statistically significant difference in PA job satisfaction, with male PAs more satisfied than female PAs. Although male PAs appear to be more satisfied with their career choices, specialty choices, and jobs, female PAs were statistically more likely to refer others into the profession. These differences were statistically significant but small, and it remains to be seen if the statistical significances between genders are of any practical significance.

The lack of noteworthy gender differences within the PA profession as a whole is potentially important as the profession becomes female dominated. Male and female PAs will

**TABLE 3. Qualitative career dissatisfaction variables by gender**

Dissatisfaction variable	Total			Men			Women		
	Rank order	n	Percent	Rank order	n	Percent	Rank order	n	Percent
Respect	1	147	12.9	3	50	10.4	1	147	15.0
Compensation	2	139	12.2	2	51	10.7	2	139	13.6
Other	3	121	10.6	1	52	10.9	3	120	10.5
Misunderstood PA role	4	111	9.8	8	37	7.7	4	111	11.4
Hours	5	110	9.7	5	45	9.4	5	110	10.0
Insurance	5	110	9.7	4	47	9.8	6	109	9.6
Paperwork/ administrative	7	89	7.8	7	40	8.4	7	89	7.6
Bureaucracy	8	81	7.1	6	44	9.2	8	80	5.6
Regulatory issues	9	77	6.8	10	32	6.7	10	45	6.9
No dissatisfaction	10	62	5.5	9	34	7.1	12	28	4.3
Job availability	10	62	5.5	17	16	3.3	9	46	7.1
Productivity	12	60	5.3	16	18	3.8	11	42	6.5
Patient care disrupted	13	50	4.4	11	29	6.1	16	21	3.2
Malpractice issues	13	50	4.4	13	21	4.4	12	28	4.3
Supervising physician	15	47	4.1	15	19	4.0	12	28	4.3
Patient demands	16	46	4.0	12	24	5.0	15	22	3.4
Autonomy	17	37	3.3	13	21	4.4	18	16	2.5
PA role	18	34	3.0	17	16	3.3	17	18	2.8
Nurse practitioner	19	29	2.6	19	14	2.9	19	15	2.3
Reimbursement	20	25	2.2	20	11	2.3	20	14	2.2
Team issues	21	19	1.7	21	9	1.9	21	9	1.4
No advancement	22	17	1.5	21	9	1.9	23	8	1.2
Work/life balance	22	17	1.5	24	8	1.7	21	9	1.4
NCCPA	24	16	1.4	24	8	1.7	23	8	1.2
No input	25	14	1.2	26	7	1.5	26	7	1.1
Name	26	13	1.1	21	9	1.9	28	4	0.6
Stress	26	12	1.1	27	4	0.8	23	8	1.2
CME	28	8	0.7	28	1	0.2	26	7	1.1
Lack of residency program	29	3	0.3	28	1	0.2	29	2	0.3

provide better patient care and make better employees if they find appropriate job matches for their interests and needs. The disparity seen between the genders in terms of job satisfaction may be a result, in part, of female PAs not being able to find jobs that afford the flexibility they need to be both PAs and mothers. This lack of flexibility could contribute to the slightly lower female PA career satisfaction score as well.

**Open-ended survey items** Approximately 90% of the participants responded to each of the open-ended questions on career satisfaction and dissatisfaction. Participation rates

were similar between male and female PAs. The 21 main categories for PA career satisfaction and 29 for sources of dissatisfaction were analyzed by gender. The top three themes for satisfaction and dissatisfaction were similar by gender.

Of the 21 variables qualitatively categorized for PA vocational satisfaction (Table 2), the upper six are discussed in this section. The top three for both genders (*helping others*, *patient interaction*, and *intellectual challenge*) deal with the practice of medicine. A more distant fourth overall was *autonomy* (4 for female PAs, 10 for male PAs). Autonomy is likely not as important to PAs because, by definition, they are dependent



providers. The fifth satisfaction category for both genders, *teaching*, closely followed *autonomy* overall. This enjoyment of teaching is no surprise. *Flexibility* was the overall sixth most common variable cited for satisfaction, ranked at 5 for female and 8 for male PAs. Marvelle and Kreditor hypothesized that the professional flexibility offered to PAs by their profession may be one of the factors that lead to high levels of satisfaction.<sup>8</sup> These study findings support their notion from the perspective of both male and female PAs. Flexibility could be what attracts women into the profession as they rate this higher than men do as a career satisfier.

Of the 29 categories qualitatively identified for PA career dissatisfaction (Table 3), the factors for dissatisfaction varied greatly without one overwhelming outlier. When analyzed by gender, the rankings were quite similar. *Respect* was the most frequently cited overall cause for dissatisfaction (rank order 1 for female and rank order 3 for male PAs), followed closely by *compensation* (tied at rank order 2 for female and male PAs), and *other* (1 for male and 3 for female PAs). Like physicians,<sup>11</sup> female and male PAs express dissatisfaction with the number and types of *hours* worked, ranking hours number 5 for dissatisfaction for both female and male PAs.

#### LIMITATIONS

As this study was survey based, it is limited by assumptions of survey research, such as that the respondents understood the survey and answered truthfully. The most relevant limitation of this analysis is that the data are a few years old, so the results represent vocational satisfaction at the time of the survey collection and potentially may not accurately reflect the responses of PAs today.

#### CONCLUSIONS

The PA profession is growing rapidly and becoming female dominated, but it affords great vocational satisfaction regardless of the PA's gender. In this study, vocational satisfaction was measured for career, specialty, and job satisfaction on 6-point forced-choice Likert scales. A 4-point forced-choice item measured the likelihood to refer others into the profession. The only significant gender differences were that male PAs were more satisfied than female PAs with their jobs and female PAs were more likely to refer others into the PA profession; no significant differences were shown with career or specialty satisfaction.

Likewise, the top variables for career satisfaction and dissatisfaction were similar by gender in responses to the survey's open-ended questions. The top three satisfiers for both genders were 1) *helping others*, 2) *patient interaction*, and 3) *intellectual challenge*. The top three dissatisfiers for females were the lack of 1) *respect*, 2) *compensation*, and 3) *other*. The same three dissatisfiers were seen for males but in reverse order.

The gender differences in PA vocational satisfaction found may not be of practical significance; or female PAs may not be as satisfied in their jobs as compared to male PAs, possibly attributable to a mismatch between their needs and the workplace. Regardless of gender, persons interested in the

PA profession should be aware of dissatisfaction variables and balance those with satisfaction variables congruent with the thoughts of Dawis and Lofquist.<sup>12</sup> Many of the factors reported for PA dissatisfaction, whether as a whole or categorized by sex, appear to be issues that are either avoidable or resolvable by changing jobs. In conclusion, gender satisfaction needs to be further studied and understood, as a satisfied PA is more committed to an employer and, as a result, provides benefits to a practice including decreased turnover and, most significantly, improved patient care. **JAAPA**

#### REFERENCES

1. American Academy of Physician Assistants. FAQ: what is the number of PAs? <http://www.aapa.org/about-pas/faq-about-pas>. Accessed September 3, 2010.
2. Twenty-fifth annual report on physician assistant educational programs in the United States, 2006-2007. M. Link. Alexandria, VA: Physician Assistant Education Association; 2008.
3. Bureau of Labor Statistics, US Department of Labor. Occupational Outlook Handbook, 2010-11 edition. Physician assistants. <http://www.bls.gov/oco/ocos081.htm>. Accessed September 3, 2010.
4. LaBarbera D. Physician assistant vocational satisfaction. *JAAPA*. 2004;17(10):34-40, 51.
5. Mathieu JE, Zajac DM. A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychol Bull*. 1990;108(2):171-194.
6. Doshier C. Nine out of 10 PAs would choose same career path. *AAPA News*. 2002;23(14):1, 12.
7. Lane S. Twenty-five years later, most PAs would do it again. *AAPA News*. 2002;23(5):1, 6.
8. Marvelle K, Kreditor K. Do PAs in clinical practice find their work satisfying? *JAAPA*. 1999;12(11):43-50.
9. Muus KJ. Measurement and prediction issues regarding job satisfaction among rural physician assistants. *Dissertation Abstracts International*. 1996;58(01):141A. (UMI No. 9721215)
10. Freeborn DK, Hooker RS, Pope CR. Satisfaction and well-being of primary care providers in managed care. *Eval Health Prof*. 2002;25(2):239-254.
11. Edwards N, Kornacki MJ, Silversin J. Unhappy doctors: what are the causes and what can be done? *BMJ*. 2002;324:835-838.
12. Dawis RV, Lofquist LH. *A psychological theory of work adjustment*. Minneapolis, Minnesota: University of Minnesota Press; 1984.