

2009 JCO Orthodontic Practice Study

Part 3 Practice Growth and Staff Data

ROBERT G. KEIM, DDS, EDD, PHD
EUGENE L. GOTTLIEB, DDS
ALLEN H. NELSON, PHD
DAVID S. VOGELS III

Part 1 of this four-part report on the 2009 JCO Orthodontic Practice Study dealt with trends in orthodontic economics and practice administration over the nearly three decades since the first biennial survey was conducted in 1981 (JCO, October 2009). The survey questionnaire and methodology were also covered in that article. Part 2 identified factors that seem to be related to practice success, as expressed by net income and numbers of case starts (JCO, November 2009).

In Part 3, we will report on practice growth over the two years since the 2007 Study. Orthodontic staffing patterns, salaries, and benefits are also presented. For the complete Practice Study tables, click on the link from this article in the Online Archive at our website, www.jco-online.com.

Practice Growth

The effects of the current recession can be seen most clearly in this section, in which far lower percentages of respondents reported growth in case starts and gross income than ever before (Table 18). In this case, they were comparing their practice data from calendar year 2008 to that of 2007.

This is the fifth consecutive Study in which the percentages of practices reporting growth in

both case starts and gross income declined from the previous report. This is the first time, however, that more orthodontists have reported decreases in case starts than have reported increases. Furthermore, growth lagged far behind the expectations reported in the 2007 Study, indicating that many practices may have been caught unprepared by the recession.

Only the newest practices showed growth in both case starts and net income between 2007 and 2009 (Table 19). The only category in which more growth in case starts was reported than two years earlier was the 6-to-10-year-old practices; in gross income, the only group with more growth was New England practices. High net income practices were the only other category with a majority reporting increased gross income. In case starts, declines over the past two years were shown by a majority of respondents in the groups that had been in practice for 11-15 or 21 or more years, sole proprietorships, low net income practices, and practices in the South Atlantic and Pacific regions.

Expectations for 2009

As in every Practice Study to date, the respondents who said their case starts or gross income increased, decreased, or stayed the same in the current survey were the most likely to expect the

Dr. Keim is Editor, Dr. Gottlieb is Senior Editor, and Mr. Vogels is Managing Editor of the *Journal of Clinical Orthodontics*, 1828 Pearl St., Boulder, CO 80302. Dr. Nelson is Director and Research Consultant, Nelson Associates, Nederland, CO.



Dr. Keim



Dr. Gottlieb



Dr. Nelson

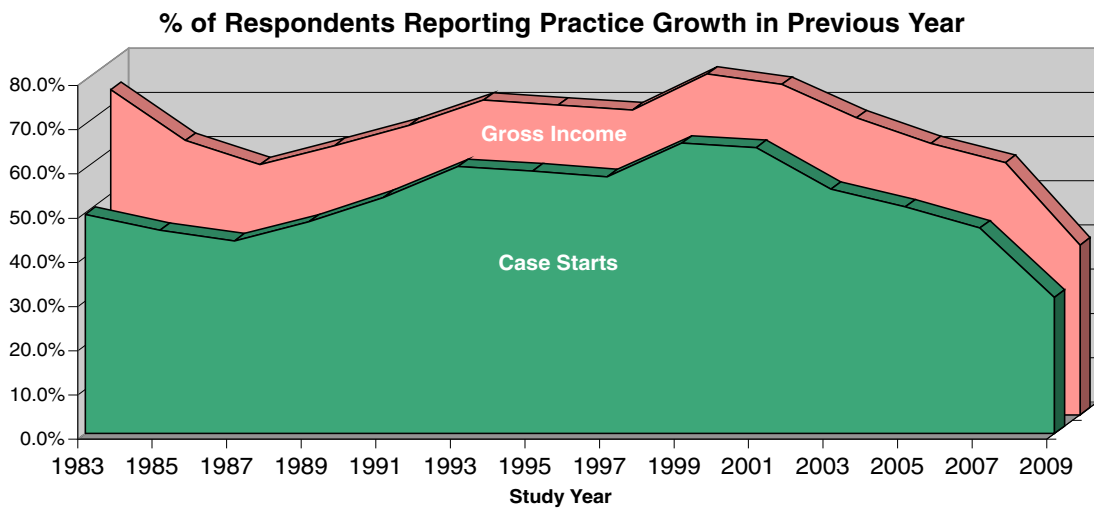


Mr. Vogels

same results in the following year (Table 20). For the first time, however, a majority of those who reported decreases expected further decreases in the subsequent year.

As an indication that the deepest point of the recession may not yet be reflected by this Practice Study, respondents were more pessimistic about the potential for future growth than ever before

(Table 21). In fact, for the only time since practice growth was first surveyed in the 1983 Study, more respondents expected decreases in case starts and gross income than expected increases. The only groups in which more predicted increases were those who had been in practice 2-10 years and those in the New England, East South Central, and West North Central regions.



**TABLE 18
PRACTICE GROWTH IN PREVIOUS YEAR**

	Case Starts		Gross Income	
	Increase	Decrease	Increase	Decrease
1983 Study	49.6%	24.6%	73.6%	11.2%
1985 Study	46.0	29.7	62.1	19.7
1987 Study	43.6	34.8	56.6	23.7
1989 Study	47.9	29.7	60.9	20.6
1991 Study	53.4	23.5	65.5	17.1
1993 Study	60.4	20.1	71.2	15.3
1995 Study	59.4	20.5	70.1	14.3
1997 Study	58.1	19.0	69.0	15.2
1999 Study	65.7	13.0	77.1	10.1
2001 Study	64.7	14.6	74.8	11.4
2003 Study	55.3	21.4	67.2	15.6
2005 Study	51.3	25.0	61.4	19.3
2007 Study	46.5	28.0	57.1	24.1
2009 Study	30.8	46.3	38.4	37.9

Percentages of respondents who "stayed the same" are not shown.

Reasons for Lack of Growth

As in previous surveys, the respondents who did not experience increases in case starts were asked to rate the influence of various external and internal factors on their lack of growth (Table 22).

Higher percentages of respondents blamed local economic conditions than ever before, while other factors, including competition from orthodontists and other dentists, declining numbers of children, and practice management, were rated as no more significant than they had been in the past.

**TABLE 19
PRACTICE GROWTH BY SELECTED VARIABLES**

	Case Starts			Gross Income		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>Years in Orthodontic Practice</i>						
2-5 years	65.1%	11.6%	23.3%	67.4%	14.0%	18.6%
6-10 years	55.8	30.2	14.0	60.5	25.6	14.0
11-15 years	32.5	57.5	10.0	32.5	47.5	20.0
16-20 years	26.1	46.4	27.5	39.1	46.4	14.5
21-25 years	17.6	58.8	23.5	29.9	38.8	31.3
26 or more years	23.1	50.9	26.0	29.3	41.9	28.7
<i>Legal Status</i>						
Sole proprietorship	23.4	50.9	25.7	30.7	40.4	28.9
Professional corporation	34.6	44.0	21.4	42.4	36.7	20.8
<i>Child Fee (permanent dentition)</i>						
Low (less than \$4,800)	37.1	43.8	19.1	41.4	36.8	21.8
High (more than \$5,500)	28.9	48.9	22.2	37.8	37.8	24.4
<i>Net Income</i>						
Low (\$25,000-250,000)	24.7	53.9	21.3	30.3	47.2	22.5
Moderate (\$325,000-525,000)	31.0	46.0	23.0	36.8	42.5	20.7
High (\$600,000 and more)	40.2	38.0	21.7	51.1	28.3	20.7
<i>Community Size</i>						
Rural (less than 20,000)	33.9	48.4	17.7	47.5	36.1	16.4
Small city (20,000-50,000)	30.4	48.8	20.8	36.0	42.4	21.6
Large city (50,000-500,000)	34.0	44.7	21.3	39.6	36.9	23.5
Metropolitan (more than 500,000)	24.2	44.4	31.3	33.7	35.7	30.6
<i>Geographic Region</i>						
New England	33.3	33.3	33.3	53.3	20.0	26.7
Middle Atlantic	33.9	44.6	21.4	42.9	35.7	21.4
South Atlantic	27.4	50.7	21.9	34.2	38.4	27.4
East South Central	47.4	36.8	15.8	44.4	38.9	16.7
East North Central	27.4	47.9	24.7	33.3	37.5	29.2
West North Central	48.1	29.6	22.2	63.0	22.2	14.8
Mountain	28.2	43.6	28.2	33.3	43.6	23.1
West South Central	36.5	36.5	26.9	45.1	25.5	29.4
Pacific	25.7	57.1	17.1	31.4	50.0	18.6
COMPOSITE	30.8	46.3	22.8	38.4	37.9	23.7

**TABLE 20
EXPECTATIONS FOR 2009 BY 2008 PRACTICE GROWTH**

	Expected Case Starts			Expected Gross Income		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>2008</i>						
Increased	47.4%	24.4%	28.1%	47.9%	24.6%	27.5%
Decreased	18.5	61.0	20.5	17.1	62.8	20.1
Stayed the Same	20.0	37.0	43.0	17.8	43.6	38.6

**TABLE 21
EXPECTATIONS FOR PRACTICE GROWTH BY SELECTED VARIABLES**

	Case Starts			Gross Income		
	Increase	Decrease	Same	Increase	Decrease	Same
<i>Years in Orthodontic Practice</i>						
2-5 years	57.8%	22.2%	20.0%	55.6%	17.8%	26.7%
6-10 years	43.2	25.0	31.8	47.7	27.3	25.0
11-15 years	35.7	42.9	21.4	35.7	47.6	16.7
16-20 years	26.4	36.1	37.5	26.4	34.7	38.9
21-25 years	20.9	56.7	22.4	19.4	55.2	25.4
26 or more years	19.4	51.2	29.4	21.8	50.6	27.6
<i>Legal Status</i>						
Sole proprietorship	21.3	49.1	29.6	23.1	47.9	29.0
Professional corporation	32.0	40.1	27.9	32.7	40.1	27.2
<i>Child Fee (permanent dentition)</i>						
Low (less than \$4,800)	25.8	48.3	25.8	30.3	46.1	23.6
High (more than \$5,500)	28.0	38.7	33.3	28.0	38.7	33.3
<i>Net Income</i>						
Low (\$25,000-250,000)	38.2	43.8	18.0	37.1	42.7	20.2
Moderate (\$325,000-525,000)	25.0	46.6	28.4	28.4	46.6	25.0
High (\$600,000 and more)	23.4	37.2	39.4	25.5	40.4	34.0
<i>Community Size</i>						
Rural (less than 20,000)	31.3	40.6	28.1	37.5	39.1	23.4
Small city (20,000-50,000)	22.8	46.5	30.7	24.4	44.9	30.7
Large city (50,000-500,000)	31.4	41.7	26.9	31.4	40.4	28.2
Metropolitan(over 500,000)	28.9	42.3	28.9	27.8	45.5	26.8
<i>Geographic Region</i>						
New England	37.5	25.0	37.5	43.8	25.0	31.3
Middle Atlantic	32.1	35.7	32.1	33.9	33.9	32.1
South Atlantic	24.4	48.6	27.0	21.6	48.6	29.7
East South Central	42.1	21.1	36.8	57.9	15.8	26.3
East North Central	30.1	47.9	21.9	28.8	47.9	23.3
West North Central	44.4	40.7	14.8	48.1	33.3	18.5
Mountain	36.6	36.6	26.8	36.6	41.5	22.0
West South Central	28.3	35.8	35.8	30.2	39.6	30.2
Pacific	12.5	55.6	31.9	15.3	51.4	33.3
COMPOSITE	28.3	43.3	28.5	29.4	42.8	27.8

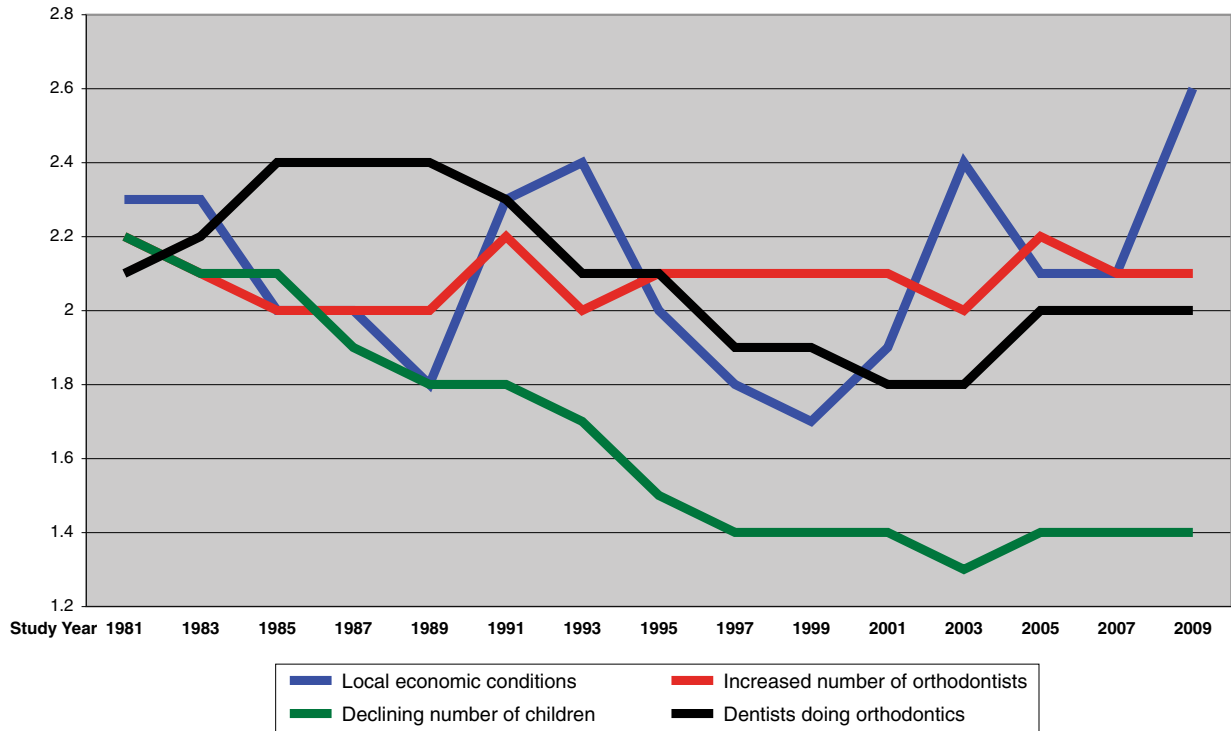


TABLE 22
DEGREE OF INFLUENCE OF FACTORS
CITED FOR LACK OF GROWTH

	None (1)	Some (2)	High (3)	Mean Rating
Local economic conditions	5.9%	25.3%	68.8%	2.6
Increased number of orthodontists in your area	23.0	44.0	33.0	2.1
Increased number of dentists doing Invisalign in your area	12.7	57.2	30.1	2.1
Increased number of dentists doing orthodontics in your area	19.4	59.2	21.4	2.0
Low-fee competition	35.0	51.1	13.9	1.8
Loss of contact with younger dentists	37.0	50.7	12.2	1.8
Advertising dentists in your area	40.5	50.6	8.9	1.7
Managed care (closed-panel) dental programs	48.7	42.8	8.5	1.6
Ineffective practice-building methods	43.4	52.1	4.5	1.6
Ineffective practice management	57.2	39.0	3.8	1.5
Declining number of children in the local population	64.0	28.5	7.5	1.4
Management service organizations	63.4	30.2	6.4	1.4
Personal decision not to increase size of practice	81.2	14.2	4.6	1.2
Quality of staff	81.6	14.6	3.7	1.2
Retail store clinics	81.3	15.7	3.0	1.2

Staff Data

Although numbers of full-time staff members rose to the highest level ever in the 2007 Study, employment dropped back closer to 2005 levels in the current survey (Table 23). These modest decreases were reflected in both front-desk and chairside positions. (Too few of the other staff positions listed on the questionnaire—including dental hygienist, new-patient coordinator, treatment coordinator, bookkeeper, business manager, and non-owner orthodontist—were employed to allow subdivision for analysis in these tables.)

Only midsize practices in terms of case starts and number of chairs and low net income prac-

tices showed increases in mean numbers of full-time staff compared to 2007. Numbers of part-time employees dipped slightly over the past two years, but generally stayed at about the same levels as they have since they were first reported in 1985. As in every Practice Study, mean numbers of full-time staff tended to increase with the size of the practice, but mean numbers of part-time staff increased only in the largest practices.

While the percentage of respondents employing at least one full-time receptionist-secretary increased slightly over the 2007 Study, the percentages employing at least one full-time chairside assistant, lab technician, or office manager dropped (Table 24). The overall percentages employing at

**TABLE 23
MEAN NUMBERS OF SELECTED AND TOTAL STAFF**

	Receptionist/ Secretary		Chairside Assistant		Lab Technician		Office Manager		TOTAL	
	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time	Full- Time	Part- Time
<i>Case Starts</i>										
Less than 150	0.8	0.3	1.4	0.7	0.1	0.1	0.1	0.0	2.8	1.3
150-200	1.1	0.2	2.4	0.7	0.3	0.1	0.1	0.0	4.6	1.3
201-250	1.2	0.4	2.9	0.8	0.3	0.1	0.3	0.0	6.0	1.6
251-350	1.4	0.3	3.5	0.9	0.3	0.1	0.3	0.0	6.8	1.8
More than 350	1.8	0.5	4.0	1.3	0.5	0.2	0.3	0.1	8.2	2.6
<i>Active Patients</i>										
Less than 300	0.8	0.2	1.1	0.7	0.0	0.1	0.0	0.1	2.4	1.2
300-425	1.0	0.3	2.2	0.9	0.2	0.1	0.1	0.0	4.2	1.7
426-550	1.4	0.3	3.0	0.6	0.4	0.1	0.3	0.0	6.1	1.2
551-750	1.3	0.4	3.3	0.7	0.3	0.1	0.2	0.0	6.4	1.7
More than 750	1.8	0.5	4.0	1.5	0.5	0.2	0.3	0.1	8.3	2.9
<i>Net Income Level</i>										
Low	1.0	0.2	1.8	0.8	0.2	0.1	0.1	0.0	3.6	1.4
Moderate	1.2	0.3	2.7	0.9	0.2	0.1	0.2	0.0	5.4	1.5
High	1.7	0.5	3.9	0.9	0.4	0.2	0.2	0.1	7.7	2.1
<i>Number of Chairs</i>										
3-5	1.0	0.3	2.0	0.8	0.2	0.1	0.1	0.0	4.0	1.4
6-10	1.4	0.4	3.4	0.9	0.3	0.1	0.3	0.0	6.7	1.8
COMPOSITE	1.2	0.4	2.7	0.8	0.3	0.1	0.2	0.0	5.5	1.6

least one part-time employee in each category remained about the same as in 2007.

For the first time since these surveys began, mean staff salaries remained virtually unchanged over the previous two years (Table 25). Monthly salaries for receptionist/secretaries increased by \$58 (2%) and for chairside assistants by only \$1 since the 2007 Study.

Differences among respondents in mean monthly salaries were statistically significant according to fees charged, as in previous surveys, but not according to net income level or geographic region. Community size appeared to make more of a difference than in past reports, with mean monthly salaries declining for receptionist/secretaries in rural areas and large cities and for chair-

side assistants in all sizes of communities except metropolitan areas. Regionally, front-office salaries declined over the past two years in the New England, East North Central, and Pacific regions; clinical salaries decreased in the Middle Atlantic, East South Central, East North Central, and Pacific regions (Table 26).

As in past studies, the percentages of respondents providing various staff benefits tended to increase with the size and age of the practice, except for the oldest practices, and with the length of employee retention (Table 27). Perhaps because of the economy, overall benefit provision dropped slightly compared to the 2007 Study in every cat-

TABLE 24
PERCENTAGES OF PRACTICES EMPLOYING SELECTED STAFF

	Receptionist/ Secretary		Chairside Assistant		Lab Technician		Office Manager	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
<i>Case Starts</i>								
Less than 150	74%	22%	75%	39%	8%	10%	6	5%
150-200	83	22	91	43	25	7	12	4
201-250	93	34	95	38	28	13	31	0
251-350	93	27	95	41	26	10	26	4
More than 350	96	36	89	49	43	16	25	7
<i>Active Patients</i>								
Less than 300	71	22	70	42	4	9	3	6
301-450	83	27	87	47	16	10	13	4
451-550	93	24	97	34	34	14	27	0
550-750	90	31	96	38	28	10	23	3
More than 750	95	37	89	51	44	17	29	10
<i>Net Income Level</i>								
Low	81	20	80	43	19	11	8	5
Moderate	88	21	90	35	23	10	17	3
High	98	38	95	44	35	14	22	4
<i>Number of Chairs</i>								
3-5	81	24	84	44	15	7	12	4
6-10	91	30	94	38	31	13	25	3
COMPOSITE	87	28	89	44	24	11	19	4

TABLE 25
MEAN MONTHLY SALARIES FOR
FULL-TIME STAFF BY SELECTED VARIABLES

	Receptionist/ Secretary	Chairside Assistant
<i>Years in Orthodontic Practice</i>		
2-5 years	\$2,552	\$2,590
6-10 years	2,445	2,560
11-15 years	2,567	2,355
16-20 years	2,548	2,395
21-25 years	2,624	2,580
26 or more years	2,796	2,774
<i>Legal Status</i>		
Sole proprietorship	2,760	2,663
Professional corporation	2,598	2,556
<i>Child Fee (permanent dentition)</i>		
Low (less than \$4,800)	2,403*	2,257*
High (more than \$5,500)	3,026	2,977
<i>Net Income</i>		
Low	2,520	2,484
Moderate	2,703	2,595
High	2,699	2,668
<i>Community Size</i>		
Rural (less than 20,000)	2,347*	2,428*
Small city (20,000-50,000)	2,713	2,534
Large city (50,000-500,000)	2,539	2,501
Metropolitan (more than 500,000)	2,877	2,925
<i>Geographic Region</i>		
New England	2,561	2,964
Middle Atlantic	2,759	2,552
South Atlantic	2,636	2,748
East South Central	2,265	2,212
East North Central	2,407	2,393
West North Central	2,649	2,713
Mountain	2,677	2,582
West South Central	2,766	2,530
Pacific	2,926	2,784
COMPOSITE	2,654	2,594

*Differences between these groups are statistically significant at or below the .01 probability level.

TABLE 26
MEAN MONTHLY SALARIES FOR
FULL-TIME STAFF BY GEOGRAPHIC REGION

	Receptionist/ Secretary	Chairside Assistant
New England		
(CT,ME,MA,NH,RI,VT)	\$2,561	\$2,964
Less than 20,000	NA	NA
20,000-50,000	NA	NA
50,000-500,000	NA	NA
More than 500,000	NA	NA
Middle Atlantic		
(NJ,NY,PA)	2,759	2,552
Less than 20,000	2,345	2,337
20,000-50,000	2,988	2,652
50,000-500,000	2,433	2,094
More than 500,000	NA	NA
South Atlantic		
(DE,DC,FL,GA,MD,NC,SC,VA,WV)	2,636	2,748
Less than 20,000	NA	NA
20,000-50,000	2,624	2,608
50,000-500,000	2,276	2,417
More than 500,000	2,755	3,015
East South Central		
(AL,KY,MS,TN)	2,265	2,212
Less than 20,000	2,094	2,147
20,000-50,000	NA	NA
50,000-500,000	NA	NA
More than 500,000	NA	NA
East North Central		
(IL,IN,MI,OH,WI)	2,407	2,393
Less than 20,000	2,189	2,554
20,000-50,000	2,493	2,300
50,000-500,000	2,439	2,428
More than 500,000	2,392	2,279
West North Central		
(IA,KS,MN,MO,NE,ND,SD)	2,649	2,713
Less than 20,000	NA	NA
20,000-50,000	2,589	3,320
50,000-500,000	2,647	2,443
More than 500,000	NA	NA
Mountain		
(AZ,CO,ID,MT,NV,NM,UT,WY)	2,677	2,582
Less than 20,000	NA	NA
20,000-50,000	2,542	2,319
50,000-500,000	2,766	2,701
More than 500,000	2,570	2,820
West South Central		
(AR,LA,OK,TX)	2,766	2,530
Less than 20,000	NA	NA
20,000-50,000	NA	NA
50,000-500,000	2,337	2,387
More than 500,000	3,258	2,862
Pacific		
(AK,CA,HI,OR,WA)	2,926	2,784
Less than 20,000	NA	NA
20,000-50,000	3,035	2,540
50,000-500,000	2,723	2,724
More than 500,000	3,465	3,546

NA = too few respondents for accurate data (less than 1% of entire sample).

egory except health insurance, orthodontic benefits, cafeteria plan, and direct reimbursement for medical expenses. Benefits offered did not appear to vary much by community size or geographic region. Maternity leave, included on the questionnaire for the first time, was most commonly offered

in the New England and West North Central regions and least commonly in the East North Central and East South Central regions. No other categorization was appreciably related to the provision of maternity leave for staff members.

(TO BE CONTINUED)

TABLE 27
BENEFITS PROVIDED FOR EMPLOYEES BY SELECTED VARIABLES

	<i>Paid Vacation</i>	<i>Paid Sick Leave</i>	<i>Maternity Leave</i>	<i>Paid Holidays</i>	<i>Health Insurance</i>	<i>Retirement Plan</i>	<i>Uniform Allowance</i>	<i>Continuing Education</i>	<i>Dental Benefits</i>	<i>Orthodontic Benefits</i>	<i>Cafeteria Plan</i>	<i>Direct Reimbursement</i>
<i>Years in Orthodontic Practice</i>												
2-5 years	91.1%	60.0%	20.0%	91.1%	62.2%	66.7%	91.1%	75.6%	26.7%	100.0%	6.7%	13.3%
6-10 years	97.7	74.4	23.3	95.4	48.8	81.4	90.7	79.1	27.9	97.7	18.6	18.6
11-15 years	97.5	60.0	15.0	95.0	75.0	82.5	82.5	67.5	32.5	97.5	12.5	10.0
16-20 years	97.2	77.5	9.9	94.4	64.8	84.5	90.1	78.9	18.3	98.6	22.5	21.1
21-25 years	100.0	76.9	21.5	98.5	63.1	90.8	83.1	78.5	21.5	100.0	14.1	12.3
26 or more years	95.3	74.6	15.4	89.9	55.6	72.2	76.3	63.3	19.5	92.9	8.6	13.6
<i>Legal Status</i>												
Sole proprietorship	96.8	75.2	19.1	93.6	59.2	77.7	77.1	68.2	22.3	95.5	11.7	14.0
Professional corporation	95.9	71.2	15.1	92.6	60.9	78.6	87.1	73.1	22.5	97.1	13.9	15.1
<i>Turnover Rate</i>												
1-24 months	83.3	50.0	12.5	83.3	62.5	50.0	66.7	62.5	25.0	100.0	13.0	4.2
25-36 months	98.4	55.6	22.2	95.2	69.8	76.2	84.1	69.8	25.4	96.8	3.2	9.5
37 or more months	97.6	77.8	15.7	94.4	58.3	82.0	84.6	72.2	21.3	96.8	14.7	16.9
<i>Net Income</i>												
Low	95.3	63.5	11.8	90.6	55.3	63.5	75.3	71.8	22.4	94.1	13.1	10.6
Moderate	100.0	67.4	22.1	94.2	58.1	87.2	86.1	74.4	18.6	100.0	14.1	16.3
High	96.7	77.8	18.9	93.3	61.1	88.9	90.0	74.4	21.1	100.0	20.2	18.9
<i>Community Size</i>												
Rural	95.0	65.0	13.3	81.7	46.7	80.0	83.3	71.7	21.7	96.7	18.6	15.0
Small city	96.0	80.7	17.7	95.2	54.8	78.2	81.5	66.1	16.9	97.8	12.3	14.5
Large city	96.7	69.9	16.3	94.8	62.1	80.4	82.4	70.6	23.5	96.1	10.7	17.7
Metropolitan	95.8	69.8	16.7	93.8	70.8	72.9	85.4	78.1	28.1	96.9	13.7	10.4
<i>Geographic Region</i>												
New England	93.3	100.0	40.0	86.7	53.3	80.0	60.0	60.0	20.0	100.0	20.0	13.3
Middle Atlantic	91.8	73.4	14.3	85.7	65.3	73.5	85.7	55.1	18.4	93.9	8.3	8.1
South Atlantic	97.6	83.6	19.2	90.4	65.8	75.3	80.8	72.6	34.3	94.5	15.3	17.8
East South Central	100.0	77.8	11.1	88.9	44.4	100.0	94.4	66.7	38.9	100.0	5.6	16.7
East North Central	93.3	62.7	9.3	93.3	53.3	80.0	92.0	66.7	14.7	94.7	10.8	17.3
West North Central	96.3	63.0	25.9	96.30	63.0	81.5	96.3	96.3	25.9	100.0	29.6	25.9
Mountain	95.6	62.2	17.8	91.1	64.4	68.9	80.8	66.7	24.4	97.8	13.3	11.1
West South Central	95.6	75.0	11.4	96.2	51.9	80.8	80.8	78.9	17.3	98.1	11.5	7.7
Pacific	98.5	73.1	16.4	98.5	65.7	77.6	71.6	76.1	19.4	97.0	12.5	13.4
COMPOSITE	96.1	72.4	16.6	92.9	59.9	78.1	82.9	71.2	22.4	96.5	12.9	14.7