

MANAGEMENT & MARKETING

(Editor's Note: This quarterly JCO column is compiled by Contributing Editor Robert Haeger. Every few months, Dr. Haeger presents a successful approach or strategy for a particular aspect of practice management. Your suggestions for future topics or authors are welcome.)

Do you wonder why patients choose your office above other practices for their orthodontic treatment? The only way to really find out is to ask decision makers in an anonymous survey. This is exactly what Dr. Julie M. Longoria and colleagues did in three large Texas cities. Their survey gives us a good overview of the important issues patients consider when selecting orthodontists. I commend them for not only developing a list of selection factors, but organizing them into categories that provide added depth of information.

The results of this study will be compounded in value if you survey your own patients and use the numbers presented here as reference points. But marketing research is only the starting point for a comprehensive, targeted office marketing plan. The next logical step would be to ask these same patients how satisfied they are with the criteria for your practice. That would allow you to establish an "importance minus satisfaction" (also known as a "performance gap") scale for your practice to provide targets for improvement. Another option would be to survey patients who did

not select your practice and consider what factors were important to them.

In any case, I recommend this month's column as a worthwhile starting point.

ROBERT S. HAEGER, DDS, MS

Factors Involved in Choosing an Orthodontist in a Competitive Market

Marketing research has shown that the selection process for professional services is often based on a less well-developed set of criteria than that for more generic services.¹ Although a few publications have examined patients' selection processes for physicians and dentists, only one study seems to have investigated the factors that are most influential in selecting orthodontists.² Especially in large metropolitan areas, the orthodontic market is highly competitive, and patients have many criteria to consider.

To help identify the factors that influence the selection of an orthodontist, we surveyed orthodontic clients from three diverse metropolitan areas in Texas.

Methodology

We proposed a survey of the primary decision makers (PDMs) for new orthodontic patients in Dallas, Houston, and San Antonio. A detailed survey was developed and reviewed by the dental, orthodontic, and statistics faculty, including a panel of five board-certified pediatric dentists and five board-certified orthodontists, at the University



Dr. Haeger

Dr. Longoria

This study was conducted in partial fulfillment of Dr. Longoria's master's thesis at the University of Texas, Houston.

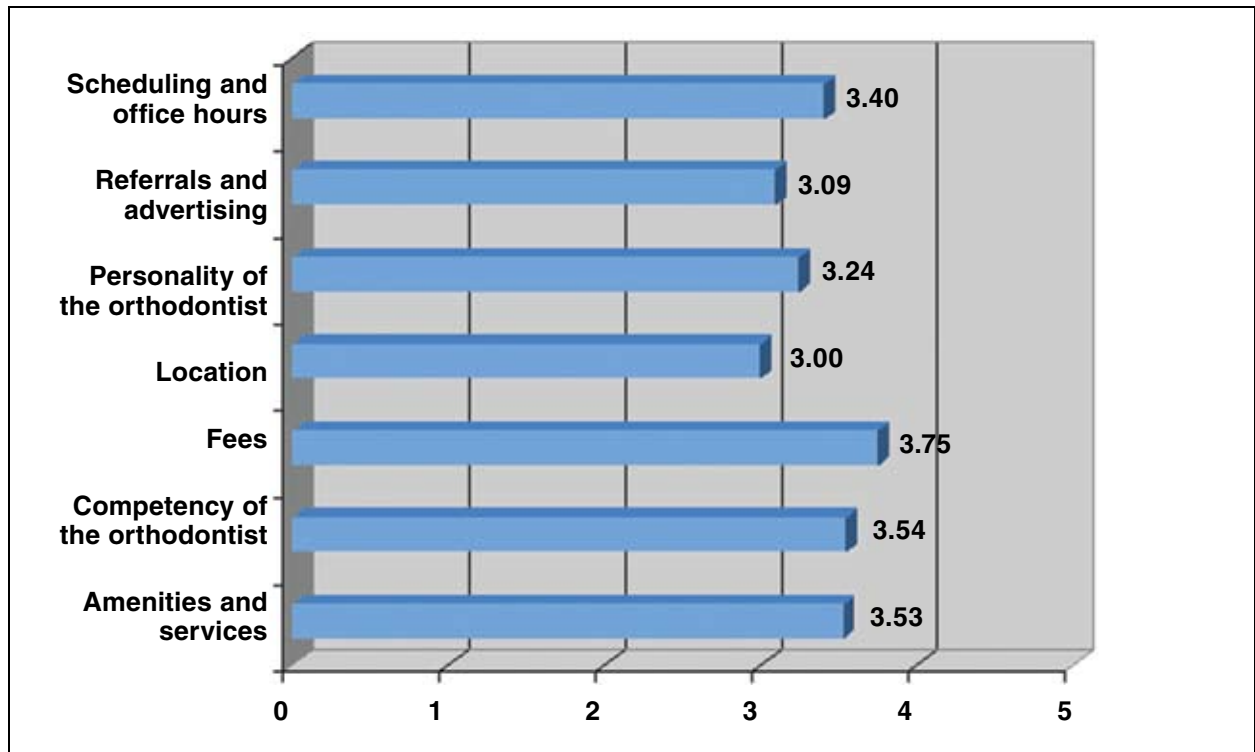


Fig. 1 Mean score of each major category.

of Texas Dental Branch Houston. The study met all HIPAA requirements, and the research protocol was approved by the Committee for the Protection of Human Subjects at the University of Texas Health Science Center at Houston.

The 43 selection factors on the questionnaire included items from Walley and colleagues' 1999 orthodontic survey,² common practice-building strategies listed in the 2009 JCO Orthodontic Practice Study,³ and additional items suggested by a panel of orthodontists. These 43 factors were divided into seven major categories:

- Scheduling and office hours
- Referrals and advertising
- Personality of the orthodontist
- Location
- Fees
- Competency of the orthodontist
- Amenities and services

The questionnaire asked the participant to rate the importance of each factor on a five-point nominal scale, from 1 (not important) to 5 (critical). If a selection factor did not apply, the participant was asked to check "NA".

All active members in the 2009-2010 AAO Membership Directory from the three metropolitan areas were invited by e-mail to participate. Each participating orthodontist agreed to distribute the survey to his or her next 10 "new start" patients,

thus minimizing the effect of "recall bias".⁴ Patients with Medicaid insurance, transfer patients, and Phase II patients (unless Phase I was completed at a different, unaffiliated clinic) were excluded from this study because they had fewer choices of orthodontists. For each qualified patient, the PDM (a patient over 18, a parent, or other guardian) was asked to participate at the first treatment appointment (appliance placement). The completed survey was returned at the PDM's convenience to the principal investigator in a self-addressed, stamped envelope.

A total of 270 surveys were distributed to 27 participating orthodontists (10 each in Dallas and Houston, seven in San Antonio), and 66 surveys were returned to the principal investigator, for a return rate of 24%. Because no identifying information about the participant or the orthodontist was included on the survey form, it would be impossible to confirm whether patients from more than one or two offices in each city actually returned the questionnaires.

Descriptive statistics were calculated with SPSS version 17,* and multivariate linear regression analysis was performed using program R version 2.10.0.**

*Registered trademark of IBM Corporation, 1 New Orchard Road, Armonk, NY 10504; www.ibm.com.

**R Foundation; www.r-project.org.

TABLE 1
MEAN RANKINGS OF SELECTION CRITERIA

Criteria	Major Category*	Mean Ranking**
Orthodontist appears competent, knowledgeable, and confident	B	4.86
Office space is clean and sterile	A	4.68
Orthodontist takes time to listen and address our concerns	E	4.58
The proposed treatment plan is reasonable	C	4.45
Orthodontist appears kind, compassionate, and caring	E	4.34
The front desk and assistants are pleasant and helpful	A	4.33
The orthodontist is usually on time for our appointments	G	4.23
Orthodontist appears poised and composed	E	4.23
The patient liked this orthodontist	E	4.19
Orthodontist is board-certified	B	4.17
Office accepts my dental insurance	C	4.08
Office space and operatories are appealing	A	4.00
Treatment plan received at very first visit	C	4.00
I can usually get an appointment time that is convenient and soon	G	3.98
Office offers an affordable payment plan	C	3.97
Orthodontist was recommended by a pediatric dentist	F	3.85
Office uses technology to present patient conditions	A	3.80
Office is close to my place of work or school	D	3.79
Orthodontist was recommended by someone in the health profession	F	3.73
Orthodontist had an additional two to three years of training	B	3.62
Orthodontist is close to home	D	3.55
Records were free	C	3.42
Office offers a special type of bracket that appeals to me	A	3.32
I was shown before-and-after pictures of actual patients	F	3.28
Orthodontist is a leader in the field	B	3.25
Orthodontist was recommended by someone <i>not</i> in a health profession	F	3.22
Office has plenty of free parking	D	3.21
Fewer appointments or faster treatment time was estimated	C	3.19
Orthodontist holds many awards or distinctions	B	3.13
Amenities in the waiting room are pleasing	A	3.12
Cost of treatment was less expensive than other offices	C	3.07
Orthodontist is funny, animated, and/or entertaining	E	3.02
Office has extended office hours on some days	G	3.00
Orthodontist has an informative website	F	2.89
Office has weekend hours	G	2.70
Orthodontist is a civic leader	B	2.60
Office offers incentives for compliance and good hygiene	A	2.60
Orthodontist teaches at the dental school	B	2.20
Braces could be placed at the very first appointment	A	2.20
Orthodontic office is close to shopping/eateries	D	1.66
Orthodontist is female	E	1.61
Orthodontist is a relative or personal acquaintance	F	1.55
Orthodontist is male	E	1.40

*A = amenities and services; B = competency of orthodontist; C = fees; D = location; E = personality of orthodontist; F = referrals and advertising; G = scheduling and office hours.

**1 = not important; 2 = low importance; 3 = important; 4 = high importance; 5 = critical.

**TABLE 2
INFLUENCE OF REFERRAL BY PEDIATRIC DENTIST**

	N/A	Not Important	Low Importance	Important	High Importance	Critical
No. of Responses	25	2	5	4	16	14
	38%	3%	8%	6%	24%	21%

Results

Although there were no statistically significant differences among the seven major categories, the fees category showed the highest mean score of 3.75; the lowest mean score, 3.0, was associated with the location category (Fig. 1).

Twenty-one of the 43 factors received mean scores of 3.5 or higher (Table 1). Thirteen had mean scores of 4.0 (“high importance”) or higher, including (in descending order): orthodontist appears competent, knowledgeable, and confident; office space is clean and sterile; orthodontist takes time to listen and address our concerns; the proposed treatment plan is reasonable; orthodontist appears kind, compassionate, and caring; the front desk and dental assistants are pleasant and helpful; the orthodontist is usually on time for our appointments; orthodontist appears poised and composed; the patient liked this orthodontist; orthodontist is board-certified; office accepts my dental insurance; office space and operatories are appealing; and treatment plan received at very first visit.

Factors considered less important, with mean scores between 2.0 (“low importance”) and 3.0 (“important”), were (in descending order): orthodontist has an informative website; office has weekend hours; orthodontist is a civic leader; office offers incentives for compliance and good hygiene; orthodontist teaches at the dental school; and braces could be placed at the very first appointment. The lowest-scoring factors, earning mean scores between 1.0 (“not important”) and 2.0, were (in descending order): office is close to shopping/eateries; orthodontist is female; orthodontist is a relative or personal acquaintance; and orthodontist is male.

The 21 highest-rated selection factors and

the eight lowest-rated factors were tested against each of the demographic variables using a multivariate linear regression model. No significant difference was found between any single factor and any demographic variable.

Special note was made of the pediatric dentist’s influence in determining the selection of an orthodontist. Of the 41 patients who responded to this question, 73% said it was “highly important” or “critical” in their selection process. The mean ranking was 3.85, placing this factor among the top 21 selection criteria (Table 2).

Discussion

All seven major categories were represented among the 21 most important selection factors (Fig. 1), but the most (five) were in the amenities and services category, including cleanliness and attractiveness of the office and friendliness and helpful nature of the staff. Still, the category with the highest overall mean score was fees. Obviously, in a struggling economy, offices that provide affordable payment plans and insurance coverage will have an advantage in areas with a high density of orthodontists.

The categories of competency and personality of the orthodontist included several high-ranking selection criteria, indicating that fees are not the only driving consideration. Mean rankings higher than 3.0 (“important”) were given to the factors of orthodontist is board-certified, treatment plan is reasonable, and orthodontist appears competent. This finding corroborates several previous studies regarding the selection of medical doctors and dentists, in which the most important selection criteria were demeanor, knowledge of the doctor, and competency.^{5,6}

Some of the results of this study were consistent with JCO's most recent 2009 survey of U.S. orthodontists, which found increasing usage of lingual orthodontics, no-charge initial visits, and extended payment periods.³ In our study, free records and special appliances such as lingual brackets both had mean scores of more than 3.0, indicating that PDMs found these to be important in their selection. On the other hand, while the JCO survey found an increasing number of offices opening one or more Saturdays per month, we found that weekend office hours were deemed less important than many other factors by PDMs (mean = 2.7).

One of the practice-building trends on the decline, according to the JCO study, is referrals from general dentists.³ In our survey, however, the vast majority of respondents (85%) reported that they were brought to orthodontic practices by referrals. Of the 41 respondents (62% of the total sample) who reported being referred by a pediatric dentist, 73% said the referral was "important" or "highly important" in their selection of an orthodontist. We did not ask whether the referring pediatric dentist offered either simple or complex orthodontic treatment, which could be an important consideration for an orthodontist who might be opening a practice near a pediatric dentist.

The mean score for a recommendation by someone in the dental/health profession who was not a pediatric dentist was 3.73, and the mean score for a recommendation by someone not in the dental/health profession was 3.22. Overall, PDMs seem to consider a referral, no matter the source, to be important in their selection of an orthodontist.

Conclusion

Many factors contribute to the selection of one orthodontist over another; our survey highlights some of the most important areas in which a practice can influence decision makers. Further investigation with a larger sample size would help confirm or deny the results of our study, and similar studies should be developed for general dentistry and the other dental specialties. It would also be worthwhile to survey general dentists and

pediatric dentists on how they choose the orthodontists to whom they refer, since referral appears to be an important selection factor for their patients.

JULIE M. LONGORIA, DDS, MSD
11455 Fallbrook
Houston, TX 77065
julielongoriadds@gmail.com

JERYL ENGLISH, DDS, MS
Chair, Graduate Program Director, and Professor
Department of Orthodontics

PAULA N. O'NEILL, MED, EDD
Professor of Diagnostic Sciences
Associate Dean for Educational Research
and Professional Development
Department of Pediatric Dentistry

QUYNH TAN, DDS, MS
Associate Clinical Professor
Department of Pediatric Dentistry

GISELA VELASQUEZ, DDS, MS
Clinical Assistant Professor
Department of Pediatric Dentistry

MUHAMMAD WALJI, PHD
Assistant Professor
Department of Pediatric Dentistry
Dental Branch at Houston
University of Texas

REFERENCES

1. Hill, C.J. and Neeley, S.E.: Differences in the consumer decision process for professional vs. generic services, *J. Serv. Mktg.* 2:17-23, 1988.
2. Walley, E.K.; Silberman, S.L.; and Tuncay, O.C.: Patient and parent preferences for orthodontic practices, *Clin. Orthod. Res.* 2:110-123, 1999.
3. Keim, R.G.; Gottlieb, E.L.; Nelson, A.H.; and Vogels, D.S. III: 2009 JCO Orthodontic Practice Study, *J. Clin. Orthod.* 43:625-634, 2009.
4. Garfunkel, E.: The consumer speaks: How patients select and how much they know about dental health care personnel, *J. Prosth. Dent.* 43:380-384, 1980.
5. Hill, C.J.; Garner, S.J.; and Hanna, M.E.: Investigating differences in choice decisions for physicians, dentists and lawyers, *Health Mktg. Q.* 10:147-161, 1993.
6. Crane, F.G. and Lynch, J.E.: Consumer selection of physicians and dentists: An examination of choice criteria and cue usage, *J. Health Care Mktg.* 8:16-19, 1988.