



National Matching Services Inc.

# 2014 Dental Program Director Survey Report

Results and analysis of the 2014 Dental Program Director Survey and Match

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# 1 Introduction

National Matching Services Inc. (NMS) conducted a survey of all program directors from residencies who registered for the 2014 Postdoctoral Dental Matching Program (the "Match"). The survey was developed in conjunction with the Match Steering Committee which is comprised of representatives from the American Academy of Pediatric Dentistry, Special Care Dentistry Association Council of Hospital Dentistry, American Association of Oral and Maxillofacial Surgeons, American Association of Orthodontists, American Society of Dentist Anesthesiologists and American Student Dental Association.

The purpose of the survey was to gather information on the recruitment process for dental residency positions from the perspective of the recruiter. To compile this report, NMS combined data from the survey responses with ranking and Match result data from NMS databases.

The program types that participate in the Match are:

- AEGD - Advanced Education in General Dentistry
- GPR - General Practice Residency
- OMS - Oral and Maxillofacial Surgery
- ORTH - Orthodontics
- PED - Pediatric Dentistry
- ANES - Dental Anesthesiology

## Disclaimer

The recruitment process for dental residencies is complex and involves assessment and evaluation of quantifiable and non-quantifiable factors, many of which are not addressed in this report. This report is being provided for informational purposes only and is not intended to represent any specific guidance, direction, strategy, or advice. It is a summary analysis of validated and unvalidated historic data collected by a self-selected sample of registrants in the Match.

**Without prejudice to the generality of the foregoing paragraph, we do not represent, warrant, undertake or guarantee that the use of information in the report will lead to any particular outcome or result.**

We will not be liable for any losses, including without limitation loss of or damage to income, anticipated savings, employment, contracts, or goodwill.

## Limitations

- Data in this report is based on the responses of survey respondents, the rankings submitted and outcomes obtained by these respondents in the 2014 Match. Therefore, aggregate values presented in this report may not be the same as those reported in the annual Match statistics on the Dental Match web site.
- The survey data is self-reported and the accuracy of the responses is not verified. As such, there may be selective memory, attribution, and exaggeration issues with some responses.
- Responses to individual survey questions were optional so answers were missing for some questions which may have impacted the analysis.
- The survey was distributed after the results of the 2014 Match were released. It is possible that program directors' survey responses may have been biased by the outcome they received in the Match.
- The survey did not obtain any data at the individual program or track level. Therefore, individual responses from program directors responsible for multiple tracks or programs were attributed to all of their programs. This may have introduced attribution issues when analyzing data at the program level, such as for Match results.

## 2 Survey Respondents

Participation in the survey was strong. There were 236 program directors who responded to the survey (65% of registered program directors), all of whom submitted at least one Rank Order List in the Match. The following figures provide a breakdown of the demographics of program director respondents, and the number of survey respondents by program type with a comparison to the number of Match registrations.

### 2.1 Demographics

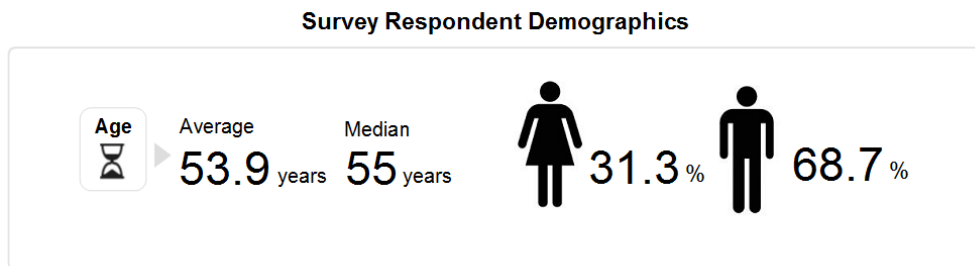
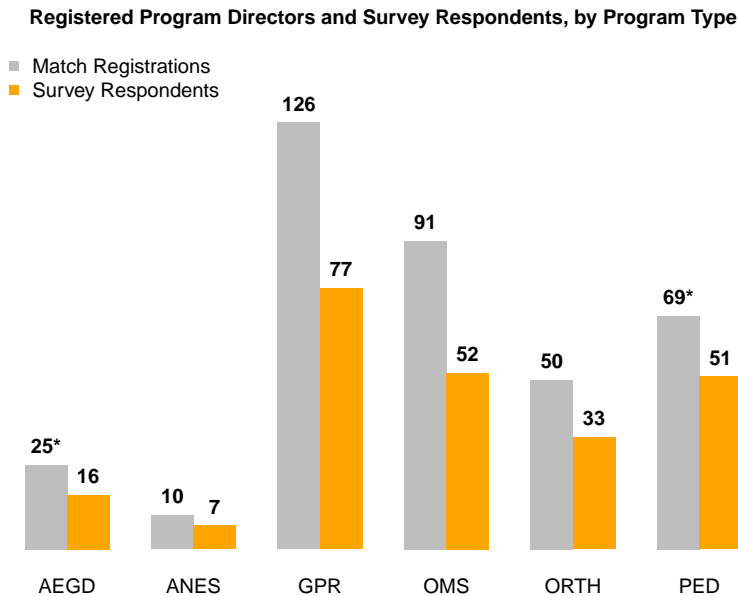


Figure 1: Age and gender of survey respondents

### 2.2 By Program Type

The breakdown of survey respondents is compared with the total number of 2014 residency registrations for the Match by program type. There was strong participation, with more than 50% of program directors in each program type responding.



The accredited AEGD and PED residencies at Lutheran Medical Center in Brooklyn each offer multiple programs in different locations across the US. In the statistics on the Dental Match web site, each of these programs are treated as a separate institution. In this figure, they are counted only once as the subject of analysis is respondents, rather than programs.

Figure 2: Match Registrations and survey respondents by program type

### 3 Applications

This section provides information on program directors' self-assessed attractiveness of their program to applicants on various factors, and a distribution of the number of applications received by program type.

#### 3.1 Program Director Perceived Attractiveness of Program to Applicants

Program Directors were asked to rate the attractiveness of their program to applicants on various factors. Attractiveness was rated on a five point scale.

- 1 - Not at all attractive
- 2 - Slightly attractive
- 3 - Moderately attractive
- 4 - Quite attractive
- 5 - Extremely attractive

Quality of curriculum, quality of faculty, and reputation were perceived to be the most attractive elements to applicants. This is consistent with data on the factors influencing an applicants decision to apply as reported in the companion *2014 Applicant Survey Report (figure 7)*. This suggests that most program directors feel their programs are aligned with the attributes sought by applicants.

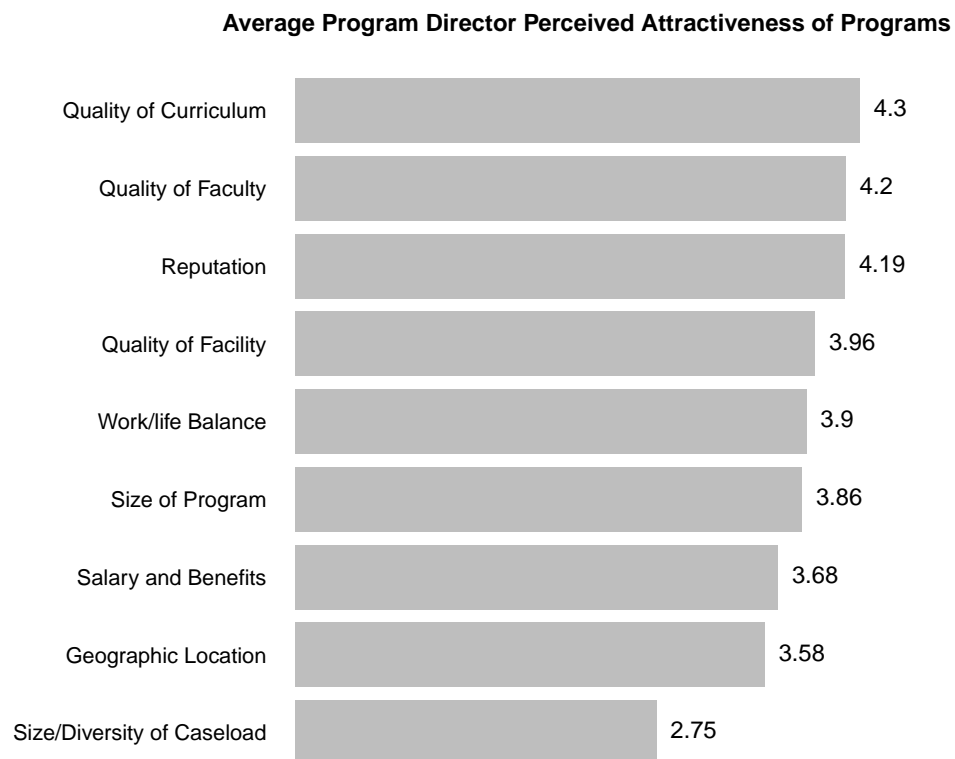


Figure 3: Overall attractiveness of programs

There is, however, some variability across program types. Below are plots of the average ratings provided by each program type across all factors.

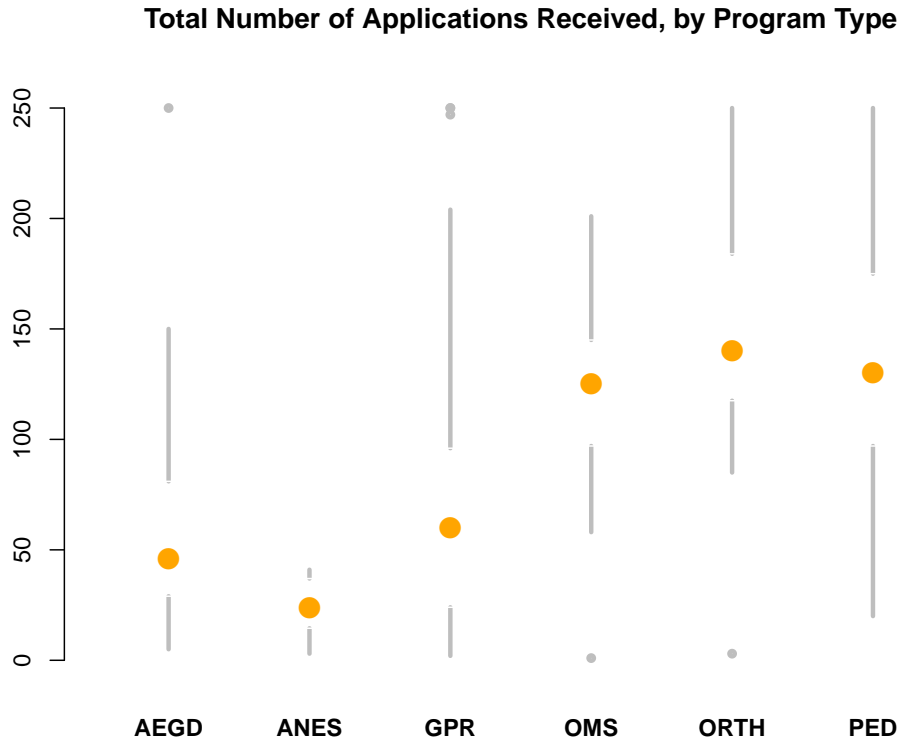


Figure 4: Attractiveness ratings by program type

### 3.2 Average Number of Applications Received

Boxplots for the total number of applications received, by program type are shown below. The orange dot represents the median number of applications received. The inner end of the grey lines, closest to the median dot, represent the 25th and 75th percentiles. The outer ends of the grey lines are the minimums and maximums, excluding outliers. Outliers are represented by grey dots. Note: The scale has been adjusted to remove some outliers to allow for easier viewing of the data.

On average OMS, ORTH and PED programs received more than twice the number of applications, as GPR, AEGD and ANES programs.



Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

Figure 5: Number of applications received, by program type

## 4 Interviews

This section provides information on the factors influencing program directors' decision to interview an applicant as well as data on the number of interviews conducted by program type.

### 4.1 Factors Influencing Program Directors' Decision to Interview

Program Directors were asked to rate the importance of various factors in influencing their decision to interview an applicant. Importance was rated on a five point scale.

- 1 - Not at all important
- 2 - Slightly important
- 3 - Moderately important
- 4 - Quite important
- 5 - Extremely important

The figure below ranks each factor from most important to least important. Class quartile and dental school transcripts were rated to be the most important factors.

**Average Importance of Factors in Determining Which Applicants to Interview**

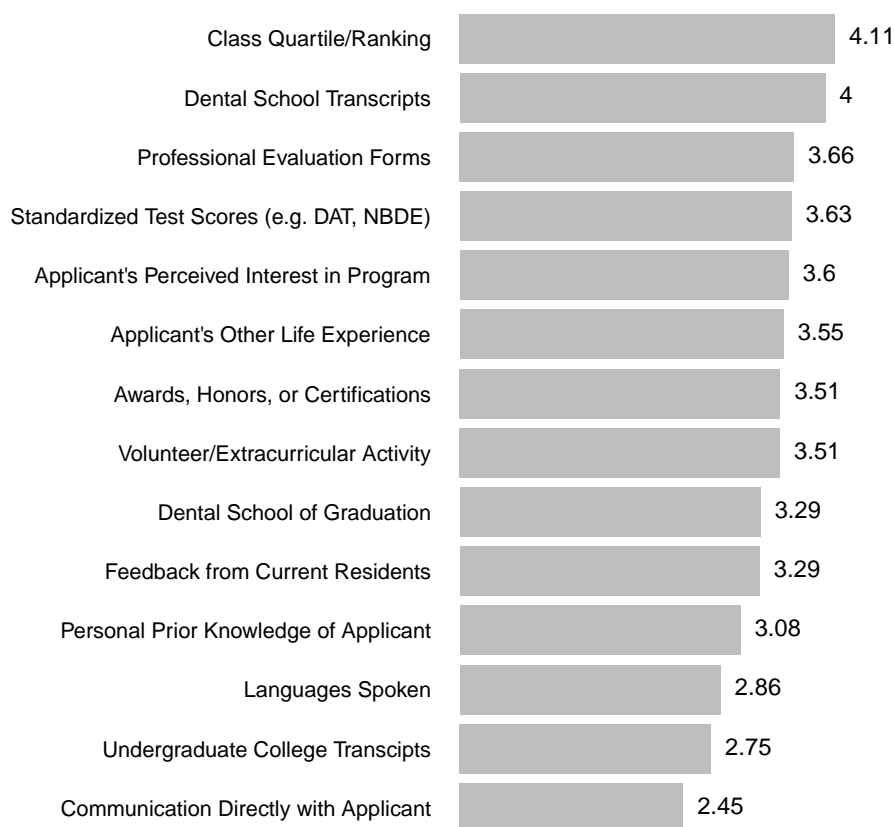


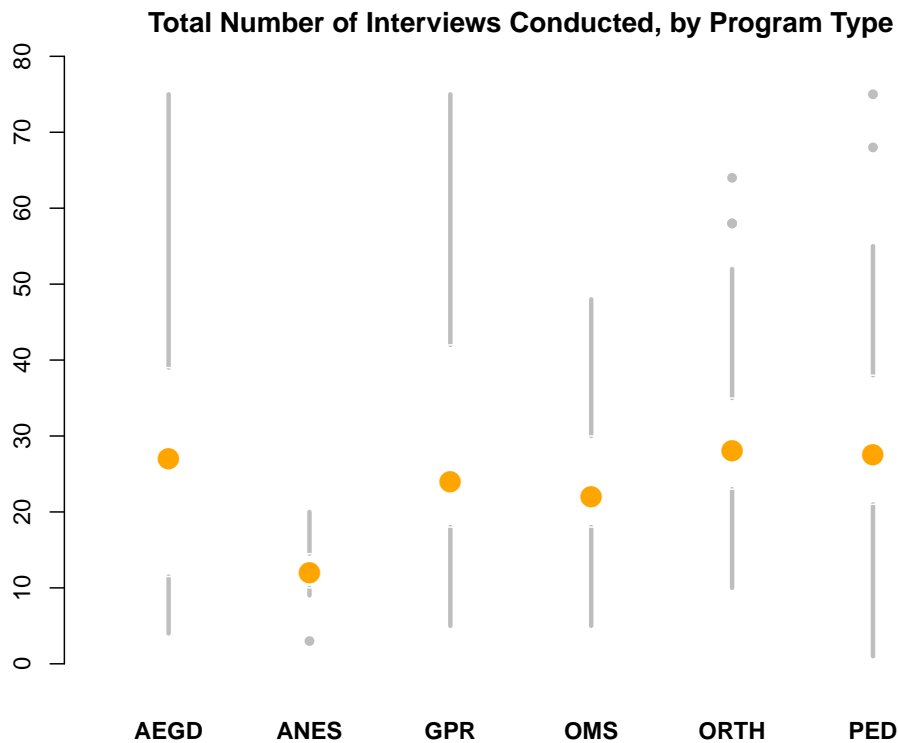
Figure 6: Factors influencing decision to interview



## 4.2 Average Number of Interviews Conducted

Boxplots for the total number of interviews conducted are shown below by program type. The orange dot represents the median number of interviews conducted. The inner end of the grey lines, closest to the median dot, represent the 25th and 75th percentiles. The outer ends of the grey lines are the minimums and maximums, excluding outliers. Outliers are represented by grey dots. Note: The scale has been adjusted to remove some outliers to allow for easier viewing of the data.

The distributions are quite similar across each program type, except for ANES which conducted fewer interviews on average than the other program types. The fact that the number of interviews conducted is similar across program types, despite differences in the number of applications received or positions offered suggests that there seems to be a practical limit to the number of interviews that can be conducted at each residency.



Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

Figure 7: Number of interviews conducted, by program type

## 5 Rankings

This section provides information on tools used by program directors to determine their rankings of applicants, the factors influencing program directors' decision to rank an applicant as well as data on the number of rankings submitted per position, by program type. Finally, there is an analysis of the variation of an applicant's rank positioning on program Rank Order Lists.

### 5.1 Tools Used to Determine Ranking Preferences

Program Directors were asked which tools, if any, they use to help determine their ranking preferences of applicants. Over 70% of program directors used some sort of averaging to incorporate the input from multiple evaluators. Over half of programs directors used a Rank Order List Worksheet to help organize and plan their rankings for submission.

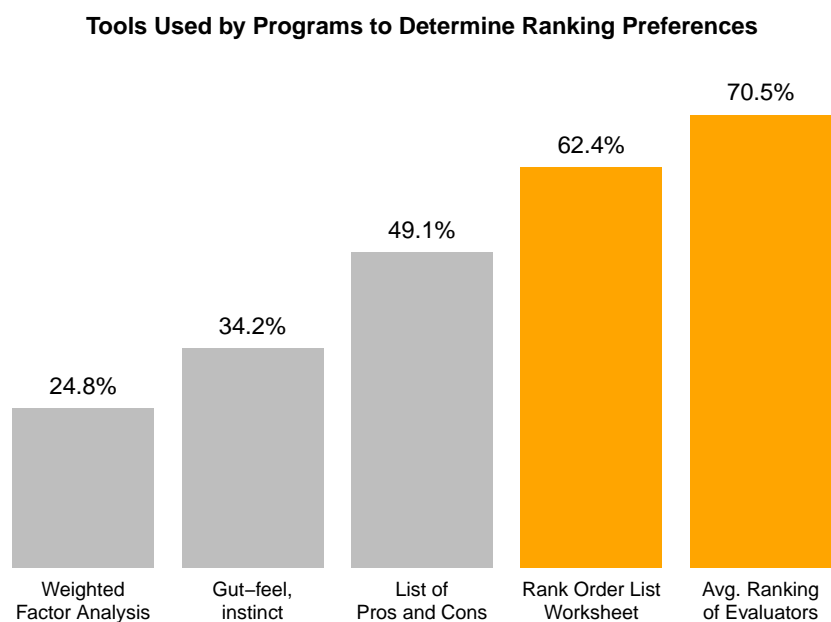


Figure 8: Percentage of program directors using various tools to determine ranking preferences

## 5.2 Factors Influencing Program Directors' Decision to Rank

Program Directors were asked to rank the importance of various factors in influencing their decision to rank to an applicant. The importance was rated on a five point scale.

- 1 - Not at all important
- 2 - Slightly important
- 3 - Moderately important
- 4 - Quite important
- 5 - Extremely important

The figure below ranks each factor from most important to least important. The top-3 factors are all based on the outcome of the applicant's interview with the program. While academic performance and references are critical for an applicant to be selected for an interview, it is the outcome of the interview that is most influential in determining whether or not the program will rank the applicant.

### Average Importance of Factors in Determining Which Applicants to Rank

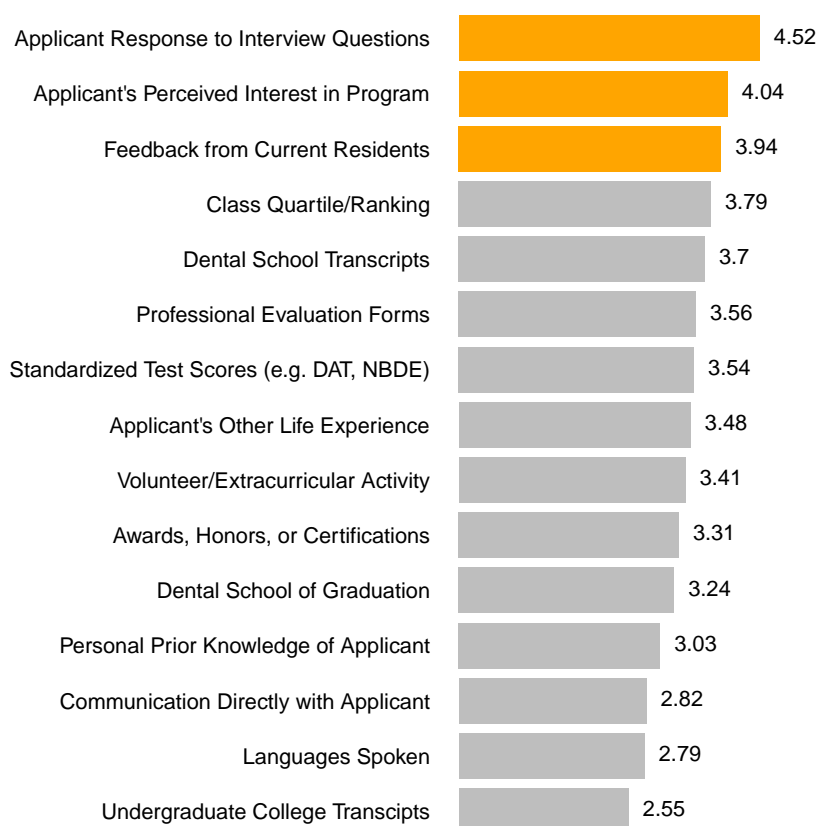
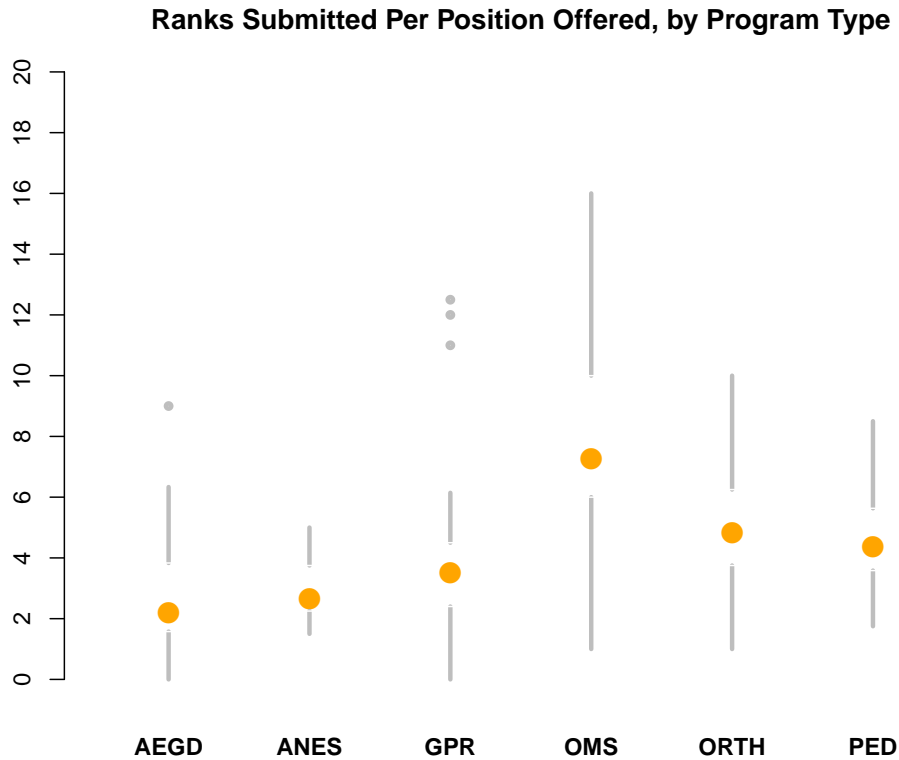


Figure 9: Factors influencing decision to rank

### 5.3 Average Number of Ranks Submitted Per Position

Boxplots for the number of ranks submitted per position offered are shown below by program type. The orange dot represents the median number of ranks submitted per position offered. The inner end of the grey lines, closest to the median dot, represent the 25th and 75th percentiles. The outer ends of the grey lines are the minimums and maximums, excluding outliers. Outliers are represented by grey dots. Note: The scale has been adjusted to remove some outliers to allow for easier viewing of the data.

OMS programs submitted the highest number of ranks per position offered followed by PED and ORTH.



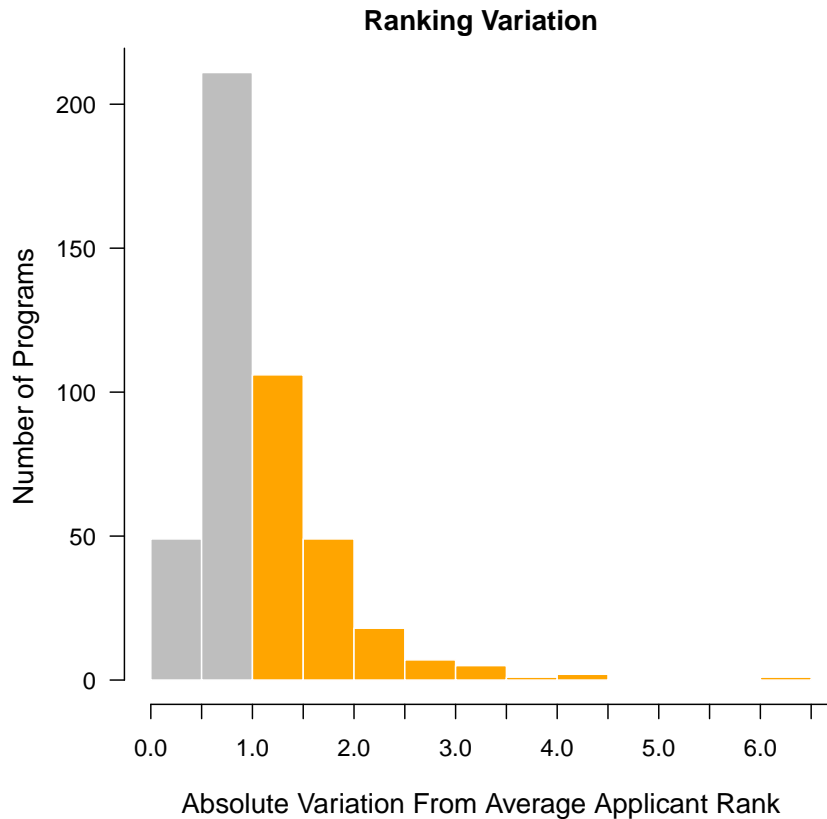
The data reported here is close to but not entirely consistent with similar calculations reported in the annual Match statistics on the Dental Match web site. This figure includes data only for respondents to the survey while the Match statistics include data for all individuals who participated in the Match.

Figure 10: Number of ranks submitted, by program type

## 5.4 Rank Variation

The following figure provides a measure of the variability of rank positioning for a given applicant on program Rank Order Lists. It attempts to answer the question: “How similar is my ranking of an applicant to the rankings that applicant received from all other programs?”.

Variation less than 1.0 implies that the rank assigned to an applicant by a program was less than 1 position different (higher or lower) than the average ranking that applicant received from all programs. It is interesting to note that roughly 40% of programs had rank variations exceeding one. For these programs, the ranking they assigned to their applicants was substantially different than the average ranking received by those applicants from all other programs. This suggests that there may be substantial differences across programs in the methods and results of their evaluations of the same applicant.



For the purposes of this analysis, each residency’s rankings were converted to a “standardized rank”. This is best explained by example: if the number of positions to be filled from a Rank Order List was three, then the first three applicants on this List were considered to be “first choice” applicants and given a standardized rank of 1. The next three applicants on that List were defined as “second choice” applicants and given a standardized rank of 2. And so on.

This figure includes rankings data on all programs that submitted Rank Order Lists to the Match, not just survey respondents.

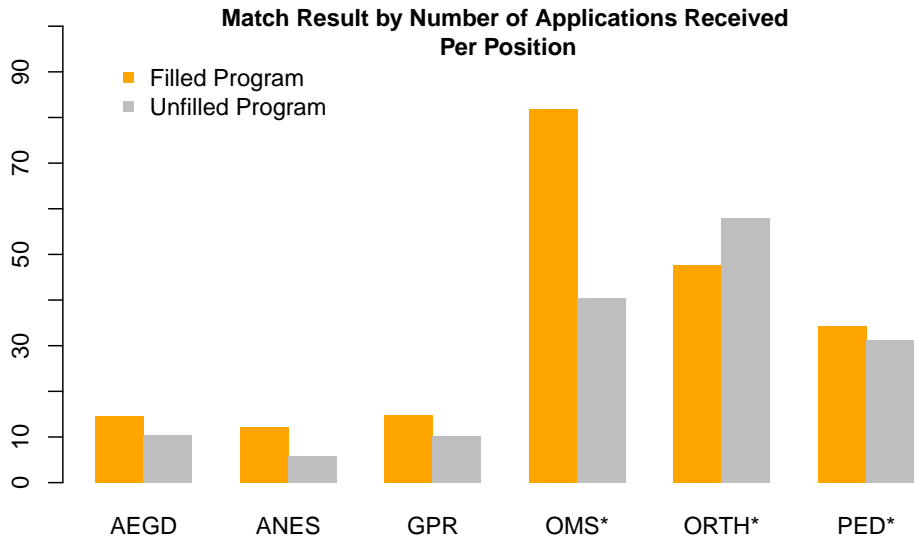
Figure 11: Rank variation on program rank order lists

## 6 Results

This section provides information on the results obtained by programs in the Match, segmented by various survey and Match data.

### 6.1 Program Result by Number of Applications Received

The figure below shows the average number of applications received per position for programs that filled and did not fill in the Match. In general, programs that fill all their available positions tend to have received more applications than programs that do not fill.



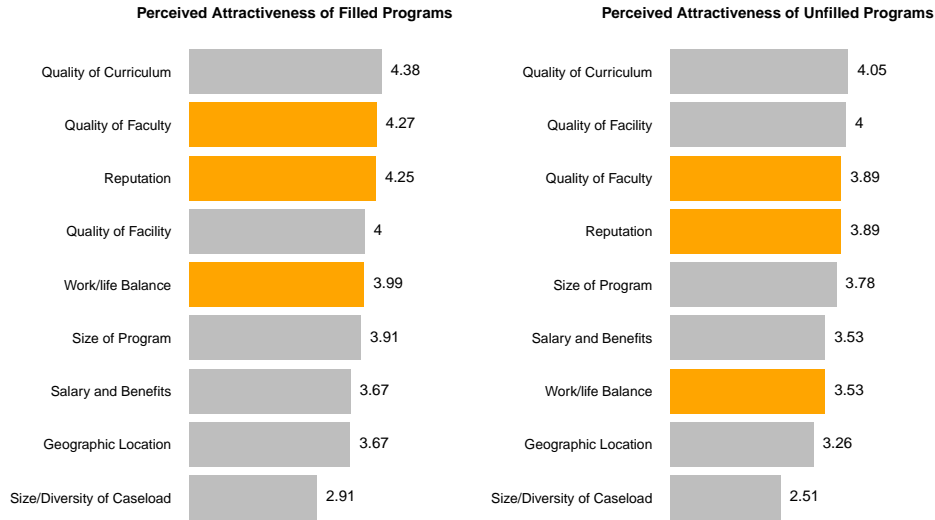
Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

(\*)Small sample size (n=2) for unfilled programs

Figure 12: Match result by number of applications received

## 6.2 Program Result by Perceived Attractiveness

The figure below shows the program director self-reported rating of the attractiveness of their program to applicants, segmented by the Match result obtained by the program. Programs with unfilled positions perceive the quality of their faculty, reputation, and work/life balance to be less attractive to applicants than programs that filled all of their available positions.

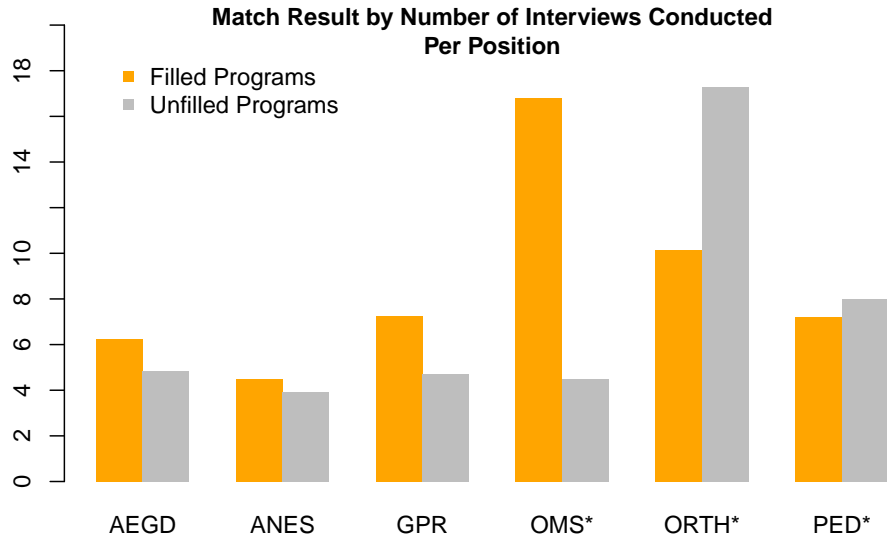


Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

Figure 13: Match result by perceived attractiveness

### 6.3 Program Result by Number of Interviews Conducted

The figure below shows the average number of interviews conducted per position for programs that filled and did not fill in the Match. In general, programs that fill all their available positions tend to have conducted more interviews per position than programs that do not fill.



Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

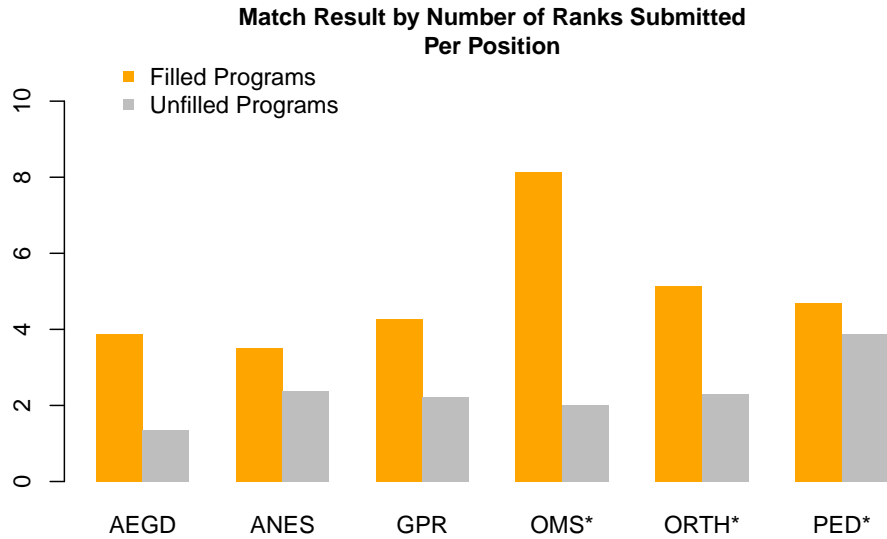
(\*)Small sample size (n=2) for unfilled programs

Figure 14: Match result by number of interviews conducted



### 6.4 Program Result by Number of Ranks Submitted

The figure below shows the average number of rankings submitted per position for programs that filled and did not fill in the Match. Programs that fill all their available positions submit more ranks per position on average than programs that do not fill.



Survey responses were gathered at the residency level, not the individual program or track level. Therefore, for residencies with multiple programs, there may be some attribution error where some responses apply to a single program while others apply to all programs within the residency.

The data reported here is close to but not entirely consistent with similar calculations reported in the annual Match statistics on the Dental Match web site. This figure includes data only for respondents to the survey while the Match statistics include data for all individuals who participated in the Match.

(\*)Small sample size (n=2) for unfilled programs

Figure 15: Match result by number of rankings submitted