The Advanced Dental Admission Test (ADAT)
Program Update for 2018

Dr. Matt Grady
Department of Testing Services
American Dental Association

American Academy of Pediatric Dentistry
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Honolulu, HI
ADAT Overview

- The purpose of the ADAT is to provide advanced dental education programs with insight into applicants’ potential for success in their program.

- The ADAT is now in its third year (2016-2018).

- The ADAT is overseen by the ADA’s Council on Dental Education and Licensure (CDEL).
Administration and Fees

- 2018 ADAT administration window
  - March 1 - August 31 (6 months)

- 2018 Fees
  - Examination fee: $365
  - Additional ADAT score reports: $37
  - Non-accredited processing fee: $200

- Retesting policy
  - Examinees may test two times per calendar year
  - Attempts must be separated by a minimum of 45 days
  - After two attempts, examinees must provide proof they are actively applying to advanced dental education programs
Score Reporting

• ADAT results are distributed through ADEA PASS and through the Department of Testing Services (DTS) Hub
  – The DTS Hub is an online score reporting portal developed by the ADA

New for 2018

• Official ADAT results are made available 3 to 4 weeks after an examinee tests
  – e.g., If an examinee tests on May 1, his or her official results will be released by June 1
  – Candidates and programs no longer need to wait until September to receive official results
  – Preliminary ADAT results are no longer reported
### ADAT Content Specifications

<table>
<thead>
<tr>
<th>Biomedical Sciences (80 items)</th>
<th>Clinical Sciences (80 items)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomic Sciences</td>
<td>Endodontics</td>
</tr>
<tr>
<td>Biochemistry-Physiology</td>
<td>Operative Dentistry</td>
</tr>
<tr>
<td>Microbiology-Pathology</td>
<td>Oral and Maxillofacial Surgery / Pain Control</td>
</tr>
<tr>
<td>Dental Anatomy-Occlusion</td>
<td>Oral Diagnosis</td>
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<td></td>
<td>Orthodontics / Pediatric Dentistry</td>
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<td></td>
<td>Periodontics</td>
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<td>Pharmacology</td>
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<tr>
<td></td>
<td>Prosthodontics</td>
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<tr>
<td></td>
<td>Principles of Ethics</td>
</tr>
<tr>
<td></td>
<td>Patient Management</td>
</tr>
<tr>
<td>Data, Research Interpretation, and Evidence Based Dentistry (40 items)</td>
<td>Case-based items</td>
</tr>
<tr>
<td>Study Design</td>
<td></td>
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<tr>
<td>Data Analysis</td>
<td></td>
</tr>
<tr>
<td>Result Interpretation</td>
<td></td>
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<tr>
<td>Inference and Implication</td>
<td></td>
</tr>
</tbody>
</table>
ADAT Scoring

• ADAT examinees receive four scores

• The *ADAT Overall* score is a weighted average of the three discipline-based scores

• Scores can range from 200 to 800 in units of 10

• Few examinees score below 300 or above 700
Score Interpretation

• The **2017 ADAT User’s Guide** provides information that helps users interpret ADAT scores

• The User’s Guide contains:
  – Information about ADAT content
  – The percentiles associated with different ADAT scores
  – Descriptive statistics for ADAT scores
  – Descriptive statistics for ADAT scores, by specialty

• **What is a “good” ADAT score?**
ADAT Overall

- An **ADAT Overall** score of 550 corresponds to the 76th percentile
- An **ADAT Overall** score of 600 corresponds to the 93rd percentile
- An **ADAT Overall** score of 650 corresponds to the 98th percentile

**ADAT Overall Scores: 2016-2017**
(945 Administrations)

Mean = 505
SD = 73

Frequency

ADAT Overall Score
Biomedical Science

- A *Biomedical Science* score of 550 corresponds to the 70th percentile
- A *Biomedical Science* score of 600 corresponds to the 87th percentile
- A *Biomedical Science* score of 650 corresponds to the 94th percentile
- A *Biomedical Science* score of 700 corresponds to the 98th percentile

**Biomedical Science Scores: 2016-2017**
945 Administrations

Mean = 508
SD = 93

Frequency

Biomedical Science Score

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• A Clinical Science score of 550 corresponds to the 73rd percentile
• A Clinical Science score of 600 corresponds to the 88th percentile
• A Clinical Science score of 650 corresponds to the 95th percentile
• A Clinical Science score of 700 corresponds to the 99th percentile
DRIEBD

- A **DRIEBD** score of 550 corresponds to the 72\textsuperscript{nd} percentile
- A **DRIEBD** score of 600 corresponds to the 88\textsuperscript{th} percentile
- A **DRIEBD** score of 650 corresponds to the 95\textsuperscript{th} percentile
- A **DRIEBD** score of 700 corresponds to the 98\textsuperscript{th} percentile

**DRIEBD Scores: 2016-2017**

- 945 Administrations

Mean = 502
SD = 96
Pediatric Dentistry

- In the first two years, about 300 examinees sent their ADAT results to one or more Pediatric Dentistry program.

- These examinees scored just *slightly* lower than the general population of ADAT examinees.

### Mean score, by examinee group: 2016-2017

<table>
<thead>
<tr>
<th>ADAT Scale</th>
<th>All Examinees (N = 945)</th>
<th>Pediatric Dentistry (N = 317)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAT Overall</td>
<td>505</td>
<td>496</td>
</tr>
<tr>
<td>Biomedical Science</td>
<td>508</td>
<td>498</td>
</tr>
<tr>
<td>Clinical Science</td>
<td>504</td>
<td>493</td>
</tr>
<tr>
<td>Data, Research Interpretation, &amp; Evidence-based Dentistry</td>
<td>502</td>
<td>492</td>
</tr>
</tbody>
</table>
Pediatric Dentistry (ADAT Overall)

- An **ADAT Overall** score of 550 corresponds to the 82\textsuperscript{nd} percentile
- An **ADAT Overall** score of 600 corresponds to the 95\textsuperscript{th} percentile
- An **ADAT Overall** score of 650 corresponds to the 99\textsuperscript{th} percentile
Reliability

- ADAT scores demonstrate high reliability
- Reliability coefficients above .90 are generally considered excellent; coefficients above .70 are considered acceptable
- The ADAT Overall score is the most reliable because it is based on the examinee’s performance on the entire test

<table>
<thead>
<tr>
<th>ADAT Scale</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADAT Overall</td>
<td>.91</td>
</tr>
<tr>
<td>Biomedical Science</td>
<td>.78</td>
</tr>
<tr>
<td>Clinical Science</td>
<td>.74</td>
</tr>
<tr>
<td>Data, Research Interpretation, &amp; Evidence-based Dentistry</td>
<td>.79</td>
</tr>
</tbody>
</table>
Validity Evidence

- There is a positive relationship between ADAT performance and self-reported dental school GPA
  - i.e., Examinees with higher GPAs tend to perform better on the ADAT

*Mean ADAT score, by self-reported dental school GPA*

<table>
<thead>
<tr>
<th>Dental School GPA</th>
<th># of Examinees</th>
<th>ADAT Overall</th>
<th>BIO</th>
<th>CLI</th>
<th>DRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 to 2.5</td>
<td>18</td>
<td>412</td>
<td>458</td>
<td>379</td>
<td>381</td>
</tr>
<tr>
<td>2.6 to 3.0</td>
<td>67</td>
<td>457</td>
<td>456</td>
<td>455</td>
<td>454</td>
</tr>
<tr>
<td>3.1 to 3.5</td>
<td>299</td>
<td>488</td>
<td>487</td>
<td>490</td>
<td>482</td>
</tr>
<tr>
<td>3.6 to 4.0</td>
<td>405</td>
<td>527</td>
<td>533</td>
<td>525</td>
<td>520</td>
</tr>
<tr>
<td>Pass/Fail Grading</td>
<td>110</td>
<td>530</td>
<td>526</td>
<td>523</td>
<td>551</td>
</tr>
</tbody>
</table>
Validity Evidence

- The ADAT is administered under controlled, standardized testing conditions
- ADAT items are written by subject matter experts who receive extensive training in item writing
- The test specifications for the Clinical Sciences section of the ADAT are based on the practice analysis that supports the National Board Dental Examination (NBDE) Part II
- The test specifications for the Biomedical Science section of the ADAT are modeled after the NBDE Part I
- The ADA’s Council on Dental Education and Licensure (CDEL) reviews and approves the test specifications and Test Constructors provide additional input
ADAT Utilization

• Programs make their own decisions about how to use ADAT results

• Some programs factor ADAT results into admission decisions, whenever they are available
  – Some programs require ADAT results

• Some programs use ADAT results only in certain prescribed situations
  – To break a tie when two candidates seem equally qualified
  – When a numeric GPA is not available for a candidate

• Some programs use ADAT results to inform other admissions procedures
  – e.g., to inform the choice of interview questions

• Some programs are collecting ADAT results, but are not yet using them to inform individual admission decisions
  – These programs are becoming more comfortable with ADAT results, and deciding how they will be used in future years
ADAT Utilization (2018)

- The ADA surveys advanced programs each year to determine whether or not they will accept ADAT results.

- In 2018, most of the responding programs indicated they accept ADAT but do not require it.

- Relatively few programs require ADAT results in 2018.

### ADAT Utilization: 2018

<table>
<thead>
<tr>
<th>2018 ADAT Utilization</th>
<th>Count (%)</th>
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<tbody>
<tr>
<td>Do not accept ADAT</td>
<td>154 (34%)</td>
</tr>
<tr>
<td>Accept ADAT but do not require</td>
<td>259 (57%)</td>
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<tr>
<td>Require ADAT</td>
<td>42 (9%)</td>
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</table>

*Source.* 2017-2018 ADAT utilization survey
### ADAT Utilization (2018)

#### Pediatric Dentistry

- In 2018, 68% of responding Pediatric Dentistry programs indicated they accept ADAT but do not require it.
- 7% of responding Pediatric Dentistry programs indicated they require ADAT results in 2018.
- In total, approximately 75% of Pediatric Dentistry programs either accept or require ADAT results.

#### ADAT Utilization, by group: 2018

<table>
<thead>
<tr>
<th>2018 ADAT Utilization</th>
<th>All Programs</th>
<th>Pediatric Dentistry</th>
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<td>259 (57%)</td>
<td>41 (68%)</td>
</tr>
<tr>
<td>Require ADAT</td>
<td>42 (9%)</td>
<td>4 (7%)</td>
</tr>
</tbody>
</table>

*Source. 2017-2018 ADAT utilization survey*
ADAT Utilization, by Specialty (2018)

- Specialty areas differ with respect to ADAT utilization.
- 75% of Pediatric Dentistry programs either require or accept ADAT results.
- This is the highest percentage observed for any specialty area.
ADAT Communication

- Additional information about the ADAT is available on the ADAT website [www.ada.org/adat](http://www.ada.org/adat)
  - Examination Guide
  - User’s Guide
  - Practice Test
  - FAQs
  - Past presentations
  - Program tracker
  - Test specifications
  - Volunteer Test Constructor application
Questions?
Thank You