## Understanding Admission Test for Dental Hygiene (ATDH) Results

## A Guide for Candidates

This document is designed to assist candidates with interpreting Admission Test for Dental Hygiene (ATDH) results. Additional information concerning the ATDH Program is available online at ada.org/education/testing/exams/admission-test-for-dental-hygiene-atdh.

## ATDH Scale Scores

ATDH results are determined based on a candidate's correct responses to questions (items). Results are reported as scale scores. These scale scores are not raw scores (i.e., the number of correct answers provided by the candidate). The conversion of raw scores to scale scores is accomplished using Item Response Theory procedures. Scale scores enable meaningful comparison of the performance of candidates who have tested using different test forms and at different times. The ATDH Program does not designate specific passing or failing scores.

ATDH scale scores range from 200 to 500 . Higher scale scores in a specific area indicate higher cognitive skills in that area. The following scale scores are reported to ATDH candidates and dental hygiene programs:

- ATDH Overall (Critical thinking in foundational skill areas)
- English Language Skills
- Reading Comprehension
- Language Usage
- Quantitative Reasoning
- Perceptual Ability
- Biology
- General Chemistry

The ATDH Overall score and the English Language Skills score are referred to as composite scores, because they are calculated using scores from other scales (i.e., the discipline-based scales). The ATDH Overall score is an average of scale scores from all six ATDH disciplines: Reading Comprehension, Language Usage, Quantitative Reasoning, Perceptual Ability, Biology, and General Chemistry. The final score is rounded to the nearest ten. The English Language Skills score is an average of scale scores from Reading Comprehension and Language Usage. During the ATDH's first year of implementation, the discipline-based ATDH score scales were established to each have a mean of approximately 350 and a standard deviation of approximately 50 .

## ATDH Percentiles

Appendix A presents the percentiles associated with scores on each ATDH scale. The percentiles are based on the 522 ATDH administrations that took place during the testing window that spanned from September 1 through October 31, 2021. For each scale score, the corresponding percentile can be interpreted as the percentage of ATDH candidates who achieved that scale score or lower. If a given scale score corresponds to a percentile of 88, for example, then $88 \%$ of ATDH candidates achieved that score or a lower score.

## Descriptive Statistics

Descriptive statistics for ATDH scale scores are provided in Table 1. The descriptive statistics are similarly based on the 522 ATDH administrations that took place during the testing window that spanned from September 1 through October 31, 2021. As noted previously, ATDH scale scores can range from 200 to 500.

## Table 1

Descriptive Statistics for ATDH Scale Scores: 2021
(522 administrations)

| Scale Type | Scale | Mean | Standard <br> Deviation |
| :--- | :--- | :---: | :---: |
| Composite | ATDH Overall | 350.6 | 36.2 |
|  | English Language Skills | 351.9 | 42.8 |
|  | Reading Comprehension | 349.6 | 48.0 |
|  | Language Usage | 349.8 | 50.0 |
|  | Quantitative Reasoning | 349.5 | 48.4 |
|  | Perceptual Ability | 350.0 | 49.6 |
|  | Biology | 349.5 | 48.2 |
|  | General Chemistry | 349.0 | 46.8 |

## Appendix A

Percentiles Associated with ATDH Scale Scores: 2021
(522 Administrations)
ATDH = ATDH Overall; ELS = English Language Skills; RCT = Reading Comprehension;
LU = Language Usage; QRT = Quantitative Reasoning; PAT = Perceptual Ability; BIO = Biology; GEN = General Chemistry

| Scale <br> Score | ATDH | ELS | RCT | LU | QRT | PAT | BIO | GEN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 500 |  | 99 | 99 |  | 99 | 99 | 99 | 99 |
| 490 |  | 99 | 99 | 99 | 99 | 99 | 99 | 99 |
| 480 | 99 | 99 | 98 | 99 | 99 | 99 | 98 | 99 |
| 470 | 99 | 99 | 98 | 99 | 99 | 99 | 98 | 98 |
| 460 | 99 | 99 | 98 | 99 | 99 | 99 | 98 | 98 |
| 450 | 99 | 98 | 98 | 99 | 99 | 98 | 96 | 97 |
| 440 | 99 | 97 | 97 | 99 | 95 | 96 | 96 | 97 |
| 430 | 98 | 96 | 96 | 97 | 95 | 94 | 95 | 96 |
| 420 | 96 | 95 | 94 | 97 | 93 | 93 | 93 | 94 |
| 410 | 94 | 93 | 92 | 97 | 90 | 90 | 92 | 93 |
| 400 | 93 | 89 | 89 | 89 | 88 | 88 | 89 | 89 |
| 390 | 90 | 85 | 86 | 85 | 84 | 82 | 87 | 85 |
| 380 | 86 | 81 | 79 | 85 | 80 | 78 | 82 | 80 |
| 370 | 78 | 72 | 71 | 75 | 77 | 69 | 76 | 77 |
| 360 | 67 | 64 | 67 | 65 | 67 | 65 | 68 | 69 |
| 350 | 58 | 55 | 59 | 59 | 61 | 57 | 57 | 61 |
| 340 | 47 | 47 | 46 | 49 | 54 | 46 | 47 | 50 |
| 330 | 35 | 35 | 37 | 43 | 4 | 39 | 37 | Example of <br> Percentile <br> Interpretation: |
| For General <br> Chemistry, 89\% of <br> ATDH candidates <br> achieved a scale <br> score of 400 or <br> lower. |  |  |  |  |  |  |  |  |

