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 <u>ada.org/education/testing/exams/admission-test-for-dental-hygiene-atdh</u>.

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.

Scale Type	Scale	Mean	Standard
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Composite	ATDH Overall	350.6	36.2
	English Language Skills	351.9	42.8
Discipline	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

Table 1					
Descriptive Statistics for ATDH Scale Scores: 2021					
(522 administrations)					

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 Score	ATDH	ELS	RCT	LU	QRT	ΡΑΤ	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	Г
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	43	39	37	40	_
320	24	26	30	31	35	31	30	30	_
310	16	18	25	22	26	22	23	20	_
300	8	13	17	19	15	19	18	15	_
290	4	8	11	14	9	14	11	10	_
280	2	4	7	7	5	9	7	6	_
270	1	2	5	4	3	6	4	6	
260	1	1	3	3	1	3	3	3	
250	1	1	2	1	1	2	1	3	
240		1	1	1	1	1	1	2	
230		1	1	1	1	1	1	2	
220		1	1	1		1	1	2	
210		1	1	1		1	1	2	1
200			1			1	1	1	1

Example of Percentile Interpretation:

For General Chemistry, 89% of ATDH candidates achieved a scale score of 400 or lower.

Note. Percentiles are based on the 522 ATDH administrations that took place during the testing window that spanned from September 1 through October 31, 2021.