



Maryland High School Assessments

**Maryland High School Assessment and
Modified High School Assessment
2010 Technical Report**

**Algebra/Data Analysis
Biology
English
Government**

**Educational Testing Service
November 2010
Revised, February 2011**

Foreword

The technical information included in this report is intended for use by those who evaluate tests, interpret scores, or use test results in making educational decisions. It is assumed that the reader has some technical knowledge of test construction and measurement procedures, as stated in *Standards of Educational and Psychological Testing* (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999).

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CHAPTER I: HIGH SCHOOL ASSESSMENTS

Section 1. Introduction

The Maryland High School Assessments (MD HSAs) consist of end-of-course tests in Algebra/Data Analysis, Biology, English, and Government. The MD HSAs are referred to as “end-of-course” tests because students take each test as they complete the appropriate coursework. In addition, results from the Algebra/Data Analysis, Biology, and English administrations are used in the Maryland State Department of Education (MSDE) Adequate Yearly Progress (AYP) reports, required under the No Child Left Behind (NCLB) Act for the 2010 school year.

Students entering ninth grade in the 2005–2006 school year and in subsequent school years are required to earn satisfactory scores on all four MD HSAs in order to earn a Maryland High School Diploma.¹ Information on the interpretation of scores is provided to students, parents, schools, and other stakeholders via the MSDE website.

All MD HSAs are comprised of selected-response (SR) items, which require students to choose between four short response options. In addition, Algebra/Data Analysis tests include items that require a student-produced response (SPR); students must grid in their responses on the answer document. The SR and SPR items are machine-scored. As of May 2009, the MD HSAs are administered online as well as in paper-and-pencil format. A study of the comparability of online and paper forms of the May 2009 MD HSAs was conducted and the resulting report is provided in the 2009 HSA Technical Report in Appendix 1C. All MD HSA items, regardless of test administration date, are based on content outlined in Maryland’s Core Learning Goals (CLGs).²

This report provides information about the October 2009 administration and the January, April, May, and Summer 2010 administrations. For the October 2009 administration, one form was administered. For the January 2010 administration, three forms were administered. Two forms were used for the primary administration, and one form was used for the makeup administration. For the April 2010 administration, one form was administered. For the May 2010 administration, twelve test forms were administered: ten for the primary testing window and one for each of two makeup testing windows. For the Summer 2010 administration, two primary forms were administered: one for the first week of testing and one for the second week of testing.

Each test form consisted of operational and field test items. The operational items were used to produce student scores. Field test items were scored along with the operational items, but examinees’ scores on these items were not included in the computation of their total test scores. For the January and May administrations, performance on the field test items was analyzed, and all flagged items were reviewed. Field test items that were approved by ETS content specialists

¹ More information on the testing requirement for graduation is available on the Maryland State Department of Education website at http://mdk12.org/assessments/high_school/index.html.

² The HSA Core Learning Goals documents can be found on the Maryland School Improvement website at <http://www.mdk12.org/assessments/standards/9-12.html>.

and calibrated were then marked as available for use in the item bank. Items that were deemed unacceptable were marked as “Unavailable” and may be revised and field tested again in the future. With the exception of items selected for public release, the operational items that are returned to the item bank must remain unused for at least one year to minimize item exposure.

The item response model used to calibrate the items in the MD HSAs is the three-parameter logistic (3PL) model. This model is used to generate both total test scores and subscores using item-pattern (IP) scoring. Total test results in the scale score metric are reported to students. Subscores are not reported to students but are aggregated at the classroom level to provide teachers and administrators with additional information about student performance in each of the subscore categories.

Beginning with the 2004 administration, pre-equated item parameters typically have been used to generate student scores. Prior to 2004, students’ scores were based on item parameters estimated after each the administration. When pre-equated item parameters are used, the parameters are not estimated following an administration; instead, existing bank parameters are used to produce student scores. Using this approach, scores can be calculated and assigned to students immediately after their answer documents have been processed.

All technical support and analyses were carried out in accordance with both the *ETS Standards for Quality and Fairness* (2002) and the *Standards for Educational and Psychological Testing*, issued jointly by the American Educational Research Association [AERA], American Psychological Association [APA], and National Council on Measurement in Education [NCME] (1999).

The MD HSA chapter of this technical report consists of six other sections and two appendices.

- Section 2 describes the procedures used for test construction, and administration.
- Section 3 discusses the validity of the MD HSAs.
- Section 4 delineates the scoring procedures and score types.
- Section 5 describes the results of analyses of test reliability and decision consistency and decision accuracy.
- Section 6 provides summary statistics and descriptive information about student characteristics.
- Section 7 gives the results of the analysis of the field test data, including classical item analysis, differential item functioning, and item calibration and scaling.
- Appendix 1A provides classical item statistics for each operational test item by form administered.
- Appendix 1B provides classical item statistics for each field test item administered.

Section 2. Test Construction and Administration

Test Development

Planning

Planning for the test development process began with the creation of item development plans for each content area. ETS content leaders collaborated with their content counterparts at MSDE to create these plans. The item bank was reviewed to determine how well the available item pool matched the test form requirements set forth in the test form blueprint as defined by the Core Learning Goals and the 2009–2010 form construction templates provided by MSDE. Areas that contained low item counts were given priority when determining which indicators were to be addressed by the item writers. After these areas with critical need were defined and addressed, any remaining items to be developed (as determined by the requirements set forth in the RFP) were distributed among the indicators in a fashion that would best ensure sufficient numbers of items for use in the construction of forms for future administrations.

Item Types

As noted in Section 1, two item types were included on the 2009-2010 MD HSA tests. Table 2.1 shows how these item types and associated points were distributed by content area. Each SR and SPR item is worth one point These item types include the following:

- Selected response (SR)—questions in multiple-choice format with four answer options;
- Student-produced response (SPR)—an item type used in Algebra only, for which the student works the problem and records the answer in an answer grid.

Table 2.1 Number of Operational Items by Item Type for Each MD HSA Content Area

Content Area	Operational Items by Item Type		
	SR	SPR	Total
Algebra	43	10	53
Biology	76	-	76
English	60	-	60
Government	82	-	82

Test Specifications and Design

MSDE predetermined the basic test design and provided it to ETS in the form of the content-specific “Test Specifications—Test Form Matrix” document. This basic test design document provided information based on specified expectations and the distribution of the number of items by item type for each reporting category. How the specific items were placed throughout the forms was left to the collaborative efforts of ETS and MSDE content specialists. Construction of

the forms was based on test blueprints approved by MSDE. Blueprints for each content area are presented in Tables 2.2 to 2.5.

Item Writing

Item writers were employed to develop high-quality test items that were aligned with the Core Learning Goals. Nearly all the item writers were Maryland educators. Only a small portion of the total number of items written were developed by ETS content specialists. Item writers were selected on the basis of their depth of content knowledge and familiarity with the MD HSA program. Many were experienced MD HSA item writers.

Item writers were trained on general item writing techniques as well as writing guidelines that are specific to the MD HSA program. Approximately one month after the initial item writer training, a follow-up training session was provided. The session was designed to evaluate how well the item writers' writing skills had developed to that point, to facilitate peer review of items, and to provide constructive feedback to guide the rest of their writing assignment.

Upon completion of their writing assignment, item writers submitted their items to ETS. Items that were accepted proceeded to the item review and revision process.

Item Review and Revision

All items underwent a series of editorial reviews in accordance with the following procedures:

- Items were edited according to standard rules developed in conjunction with MSDE.
- Items were reviewed for accuracy, organization, comprehension, style, usage, consistency, and fairness/sensitivity.
- Item content was reviewed to establish whether the item measured the intended Goal-Expectation-Indicator-Assessment Limit, with the Goal being the broadest category and Assessment Limit being the narrowest parameter of content being assessed. Assessment Limit is defined as the maximum domain from which test questions will be developed.
- Copyright and/or trademark permissions were verified for any materials requiring permissions, for both field test and operational material.
- Internal reviews were conducted and historical records were established for all version changes.

After ETS performed the required internal reviews, items were submitted to MSDE for review. If the MSDE content specialist requested an original version of the item as submitted by the item writer, a copy was provided. Any associated stimulus material, graphic, and/or art was provided as well as information regarding the Goal-Expectation-Indicator-Assessment Limit that each question addressed.

MSDE content specialists performed a review of the items and provided feedback to ETS content specialists. The edits were incorporated into the items. MSDE and ETS content specialists then met to conduct a side-by-side review of the items. Any final edits to the items were made. Finally, the items were prepared for review by the Content and Bias/Sensitivity Review Committees.

The Content and Bias/Sensitivity Review Committees are diverse groups of Maryland educators who reviewed each item to ensure that its content (a) accurately reflected what was taught in Maryland schools; (b) correctly matched the intended CLG indicator; and (c) did not unfairly favor or disadvantage an individual or group.

Upon completion of this final round of reviews, MSDE and ETS content specialists conducted another side-by-side meeting to evaluate the reviews and to reconcile the results of the various groups. The ETS content specialists then made the requested edits to the items and/or revisions to the accompanying graphics. The items that survived this process were eligible for placement in the field test sections of the test forms.

Testing Accommodations

A number of alternate test formats are available to MD HSA examinees, including large-print, Braille, online audio, and Kurzweil versions of the MD HSA developed for each content area. All four alternate test formats are available at each administration. Data from these alternate formats are included in the psychometric analyses.

Test Specifications

All 2010 test forms were constructed using items from the Maryland item bank. The pool of items available for use in the construction of the 2010 forms included all items that had been administered, calibrated, and linked to the operational scale. For Algebra, Biology, and Government, the MD HSA operational scale was defined in 2003 and included items administered in 2002 and 2003. For English, the scale was redefined in 2005 when the English test was updated to become an end-of-course assessment for English 2. Items flagged for poor fit and items flagged for substantial differential item functioning (DIF) against one of the focal groups were excluded from the item pool. (See Section 7 for a more detailed account of these analyses and flagging criteria.)

Each test form was constructed to meet specific test blueprints. Tables 2.2 through 2.5 indicate the distribution of items within each reporting category by item type and the number of score points associated with each item type. All content area tests consisted of three sessions administered within a single setting. Sessions were separated by a short break.

Table 2.2 MD HSA Algebra Blueprint

	Number of Items		Total Points per Category
	SR (1 pt)	SPR (1 pt)	
Expectation 1.1 Analyzing Pattern and Functions	11	2	13
Expectation 1.2 Modeling Real-World Situations	13	4	17
Expectation 3.1 Collecting, Organizing and Analyzing Data	8	4	12
Expectation 3.2 Using Data to Make Predictions	11	0	11
Total	43	10	53

Note: Information on the referenced indicators can be found in the Maryland Core Learning Goals for Algebra, available on the Maryland School Improvement website at <http://www.mdck12.org/assessments/standards/9-12.html>.

Table 2.3 MD HSA Biology Blueprint

	Number of Items	Total Points per Category
Goal 1 Skills and Processes of Biology	16	16
Expectation 3.1 Structure and Function of Biological Molecules	12	12
Expectation 3.2 Structure and Function of Cells and Organisms	13	13
Expectation 3.3 Inheritance of Traits	13	13
Expectation 3.4 Mechanism of Evolutionary Change	9	9
Expectation 3.5 Interdependence of Organisms in the Biosphere	13	13
Total	76	76

Note: Information on the referenced indicators can be found in the Maryland Core Learning Goals for Biology, available on the Maryland School Improvement website at <http://www.mdck12.org/assessments/standards/9-12.html>.

Table 2.4 MD HSA English Blueprint

	Number of Items	Total Points per Category
1: Reading and Literature: Comprehension and Interpretation (RC) Includes indicators 1.1.1, 1.1.2, 1.1.3, 1.2.1, 1.3.3, 3.2.2	16	16
2: Reading and Literature: Making Connections and Evaluation (RE) Includes indicators 1.1.4, 1.2.2, 1.2.3, 1.2.4, 1.2.5, 1.3.5, 4.2.1	14	14
3: Writing: Composing (WC) Includes indicators 2.2.1, 2.2.2, 2.2.3, 2.2.5, 2.3.1, 2.3.3, 4.3.1	16	16
4: Writing: Language Usage and Conventions (WL) Includes indicators 3.1.3, 3.1.4, 3.1.6, 3.1.8, 3.3.1, 3.3.2	14	14
Total	60	60

Note: Information on the referenced indicators can be found in the Maryland Core Learning Goals for English, available on the Maryland School Improvement website at <http://www.mdck12.org/assessments/standards/9-12.html>.

Table 2.5 MD HSA Government Blueprint

Expectation 1.1 U.S. Government Structure, Functions and Principles	23	23
Expectation 1.2 Protecting Rights and Maintaining Order	21	21
Goal 2 Systems of Government and U.S. Foreign Policy	12	12
Goal 3 Impact of Geography on Governmental Policy	11	11
Goal 4 Economic Principles, Institutions and Processes	15	15
Total	82	82

Note: Information on the referenced indicators can be found in the Maryland Core Learning Goals for Government, available on the Maryland School Improvement website at <http://www.mdck12.org/assessments/standards/9-12.html>.

Item Selection and Form Design

To conserve the item pool, each test form consisted of a common set of operational items shared across forms within an administration as well as a unique set of items. Within a given administration (i.e., October, January, April, May, Summer), approximately 60 percent of the operational items in each form were common across the test sections. The remaining items in the forms consisted of combinations of items that varied across forms. The guidelines used to construct the forms are provided in Tables 2.6 to 2.10. The exact composition of the forms varied slightly based on available items in the pool.

Table 2.6 Form Construction Specifications for the MD HSA October 2009 Administration

Primary Week Form R
Operational items—Unique items from the pool—100%
Field Test Section—Used operational items from the item bank as FT placeholders

Table 2.7 Form Construction Specifications for the MD HSA January 2010 Administration

Primary Week Form A	Primary Week Form B	Makeup 1 Form C
Common set—60%	Common set—60%	Common set—60%
Unique items from the pool—40%	Unique items from the pool—40%	Unique items from the pool—40%
Field Test Section—Unique items	Field Test Section—Unique items	Field Test Section—Reuse of field test set used in prior year

Table 2.8 Form Construction Specifications for the MD HSA April 2010 Administration

Form S
Operational items—Reuse of intact form from a prior administration
Field Test Section—Reuse of prior year field test set; no new development

Table 2.9 Form Construction Specifications for the MD HSA May 2010 Administration

Primary Week Forms D–N	Makeup 1 Form X	Makeup 2 Form Y
Common Set—60%	Common Set—60%	Common Set—60%
Unique Items from the pool—40%	Half of items from primary week's 40% unique items—20% Unique items from the pool—20%	Other half of items from primary week's 40% unique items—20% Unique items from the pool—20%
Field Test Section—Unique sets of items for Forms D–N	Field Test Section—Reuse of one or a combination of the field test sets used in forms D–N, with a preference for form D; however, the actual selection of field test items was determined by the constraints imposed by the operational items	Field Test Section—Reuse of one or a combination of the field test sets used in forms D–N, with a preference of using the same set used for form X; however, the actual selection of field test items was determined by the constraints imposed by the operational items

Table 2.10 Form Construction Specifications for the MD HSA Summer 2010 Administration

Content Area	Primary Week 1 Form P	Primary Week 2 Form Q
Algebra and English	Common Set—60% Unique items from the pool—40% Field Test Section—Reuse of prior year field test set	Common Set—60% Unique items from the pool—40% Field Test Section—Reuse of prior year field test set
Biology and Government	Reuse of intact form from a prior administration	Reuse of items from a prior administration with 40% Unique items from pool

In addition to the operational items, embedded field test items were included with each version of the test form, resulting in multiple versions of a test form containing different sets of field test items. The percentage of field test items per form varied by content area and administration, as shown in Table 2.11.

Table 2.11 Number of Operational (OP) and Field Test (FT) Items by Administration and MD HSA Content Area

Content Area	OP Items	FT Items	% FT Items
Algebra	53	16	23%
Biology	76	23	23%
English*	60	31-33	34-35%
Government	82	25	23%

* In the English test forms, the number of field test items differed slightly across administrations because the item sets varied in size.

The items being field tested were a combination of newly written items and/or previously administered items that had been revised due to content concerns or problematic item statistics. Items with problematic statistics were ones that were judged to be acceptable from a content perspective but had one or more of the following characteristics: p-values less than 0.10; item-total correlations of less than 0.15; very high omit rates; or SR items with a positive point-biserial correlation for one or more distractors. For administrations in which there was more than one primary form (January and May), the forms were spiraled at the student level. Spiraling at the student level means that multiple forms of the test were packaged in order (e.g., D, E, F, etc.) and distributed to students according to this order. Spiraling at the student level helps ensure that all forms are randomly distributed throughout the state.

Forms were constructed using the test construction software associated with the customer item bank. The goal was to match the test characteristic curves (TCCs) and the conditional standard error of measurement curves (CSEMs) with the “target” form defined as the base form used to set the operational scale. For Algebra, Biology, and Government, the base form was developed in 2003; for English the base form was developed in 2005. The TCCs and CSEMs were graphically displayed using item parameters associated with the operational items.

The following general steps were completed during the test construction process:

1. For each administration, all forms were constructed simultaneously in order to provide the best opportunity to construct parallel forms.
2. Items that matched the test blueprint were selected to match the target TCCs and CSEMs.
3. Test developers were careful to ensure that the item selections met all content specifications, including matching items to the test blueprint, distribution of keys, and avoidance of clueing³ or clanging.⁴
4. After the operational items were selected for the test forms, the field test sets were constructed. Field test sets consisted of SR items in all content areas. While the field test

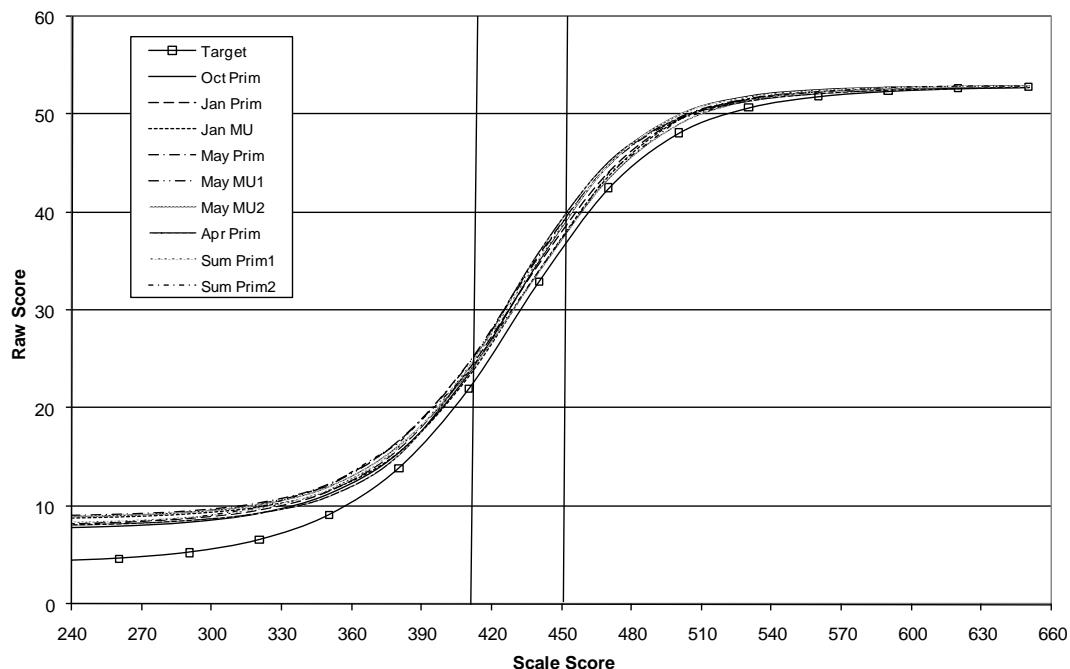
³ Clueing refers to information within a passage, stimulus, item, graphic, or other test component that allows respondents to select/construct the correct answer to one or more items in an assessment without the knowledge and/or skill targeted by the item.

⁴ Clanging occurs when an identical or resembling word(s) appears in both the item stem and one or more item distractors. Also, if two or more items that are near each other share common key words, even if the item content does not clue, the items are said to clang because the interpretation of the word in one item can affect the interpretation of another item.

sets were not constructed to meet any psychometric criteria, they were constructed to meet content criteria. For Algebra, Biology, and Government, the field test sets were estimated to be able to be completed by students in approximately 35 minutes. For English, the field test sets were estimated to be able to be completed by students in approximately 50 minutes due to the additional time required to read the passages and stimuli. The field test items were embedded in the test according to a variety of content and template criteria, including, but not limited to, coverage of the reporting categories and assessment limits, cognitive balance, key balance/distribution, and clueing/clanging within the field test set and among the surrounding operational items.

Figures 2.1 to 2.8 show the plots of the TCCs and CSEMs for the target form and forms developed for each content area. It is important to note that the TCCs and CSEMs shown in the plots are based on pre-equated item parameters and therefore are curves calculated prior to administration of the tests. In general, the TCCs and CSEMs were similar to the target curves. The TCC plots indicate that all forms for each content area were within or very close to the acceptable range of the target curve for the full range of scale score values. Where forms varied in difficulty, differences between forms were typically less than 5 percent of the total raw score across the score range, especially in the range of the cut scores. Where forms had differences slightly greater than 5 percent, these larger differences were typically seen at the very low end of the scale score range and at the high end of the scale. As expected, the CSEM plots indicate that the CSEMs for each content area were lowest in the middle range of scale scores, where the majority of student scores are located. (Please refer to figures 6.1 to 6.4 for histograms of student performance.)

Figure 2.1 Test Characteristic Curves for the MD HSA 2010 Algebra Forms



Note: Maximum possible raw score is 53.

Figure 2.2 Conditional Standard Error of Measurement for the MD HSA 2010 Algebra Forms

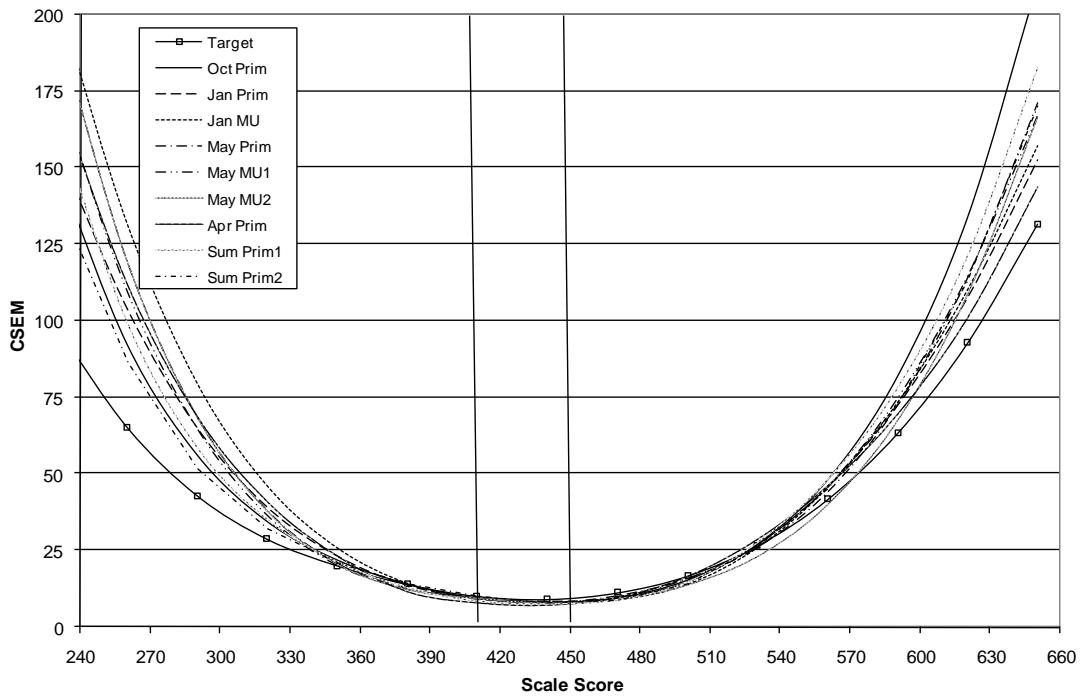
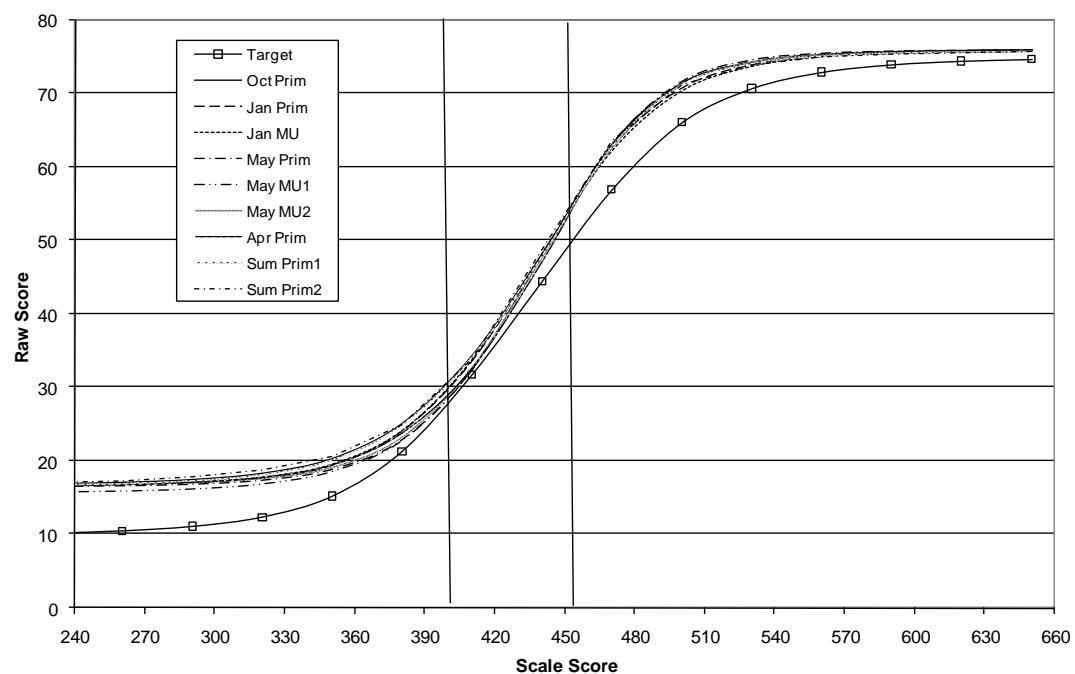


Figure 2.3 Test Characteristic Curves for the MD HSA 2010 Biology Forms



Note: Maximum possible raw score is 76.

Figure 2.4 Conditional Standard Error Measurement for the MD HSA 2010 Biology Form

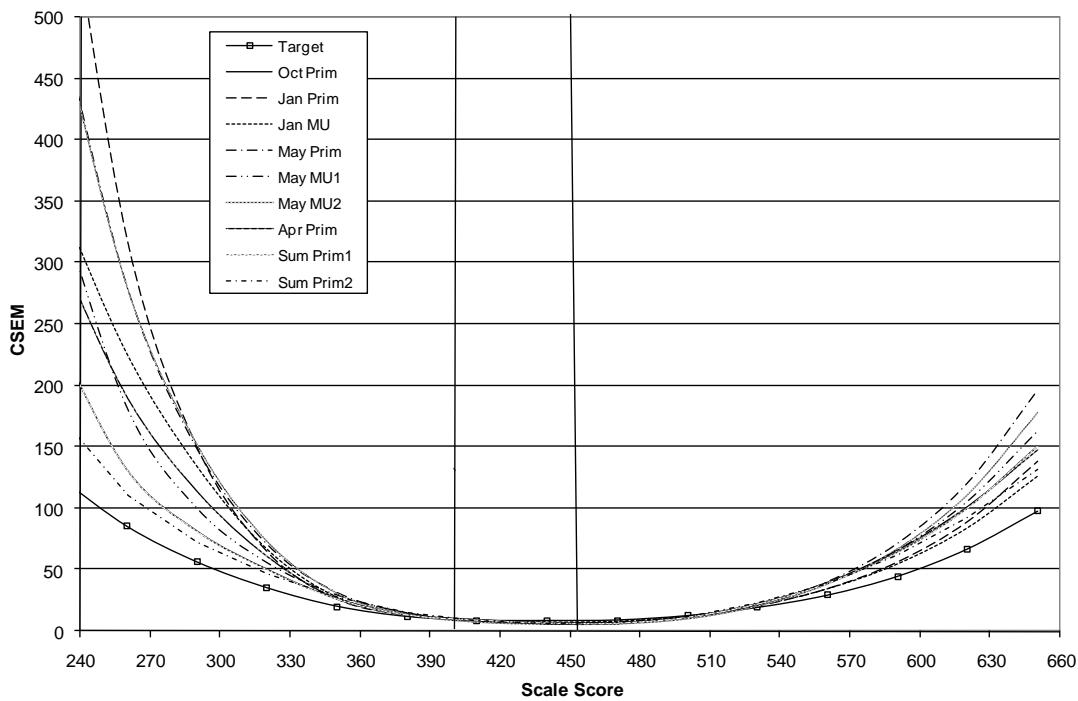
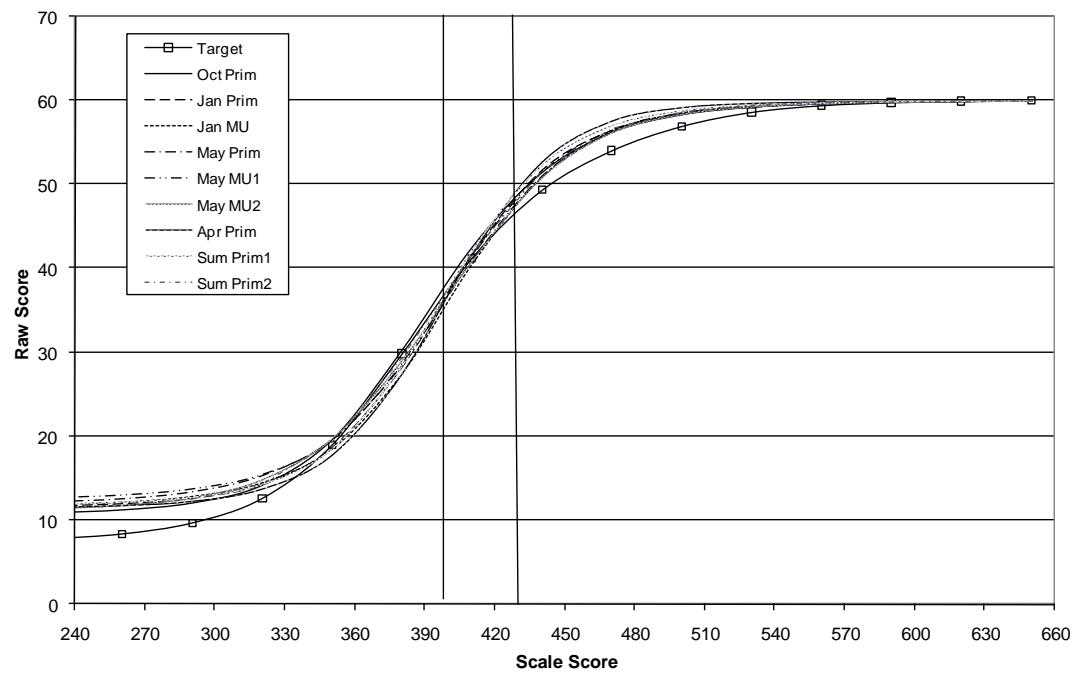


Figure 2.5 Test Characteristic Curves for the MD HSA 2010 English Forms



Note: Maximum possible raw score is 60.

Figure 2.6 Conditional Standard Error of Measurement for the MD HSA 2010 English Forms

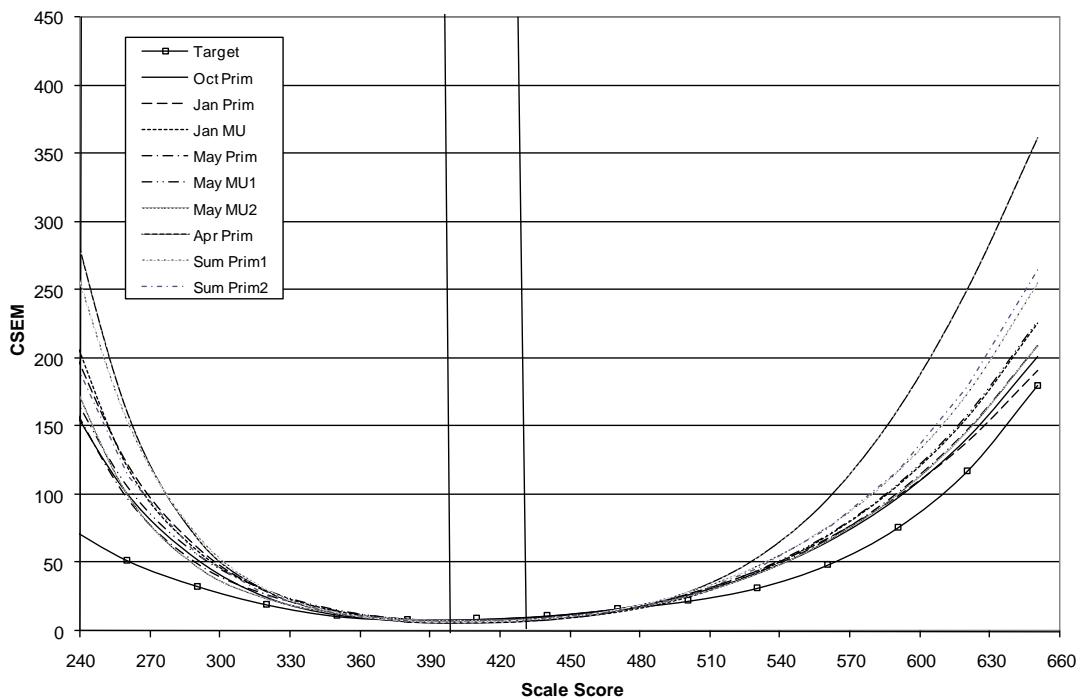
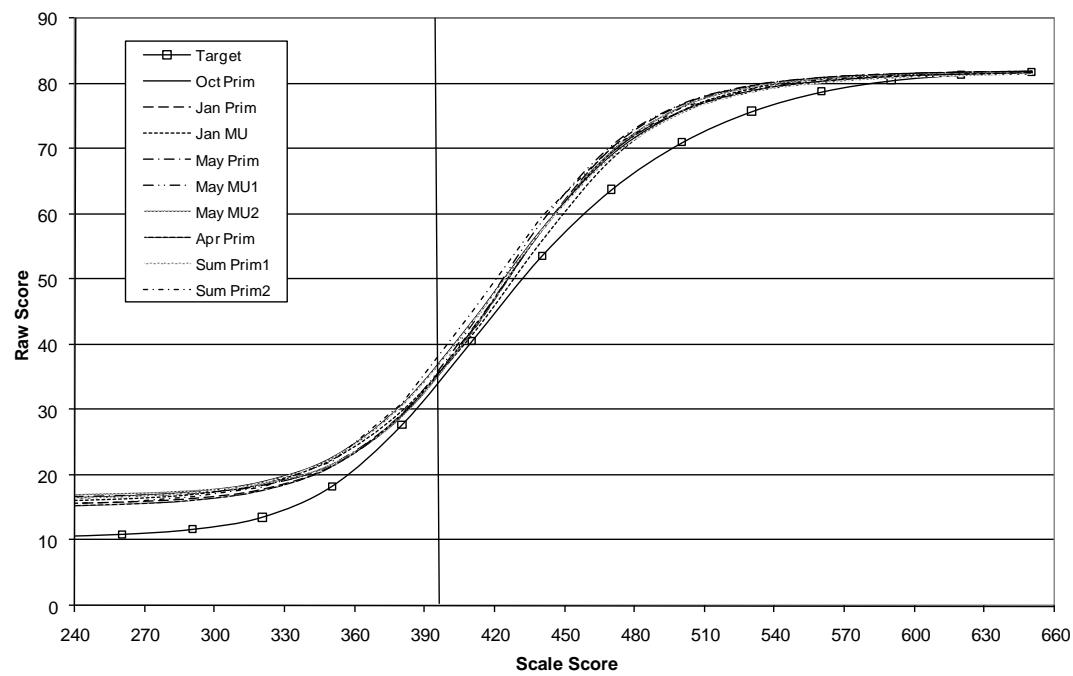
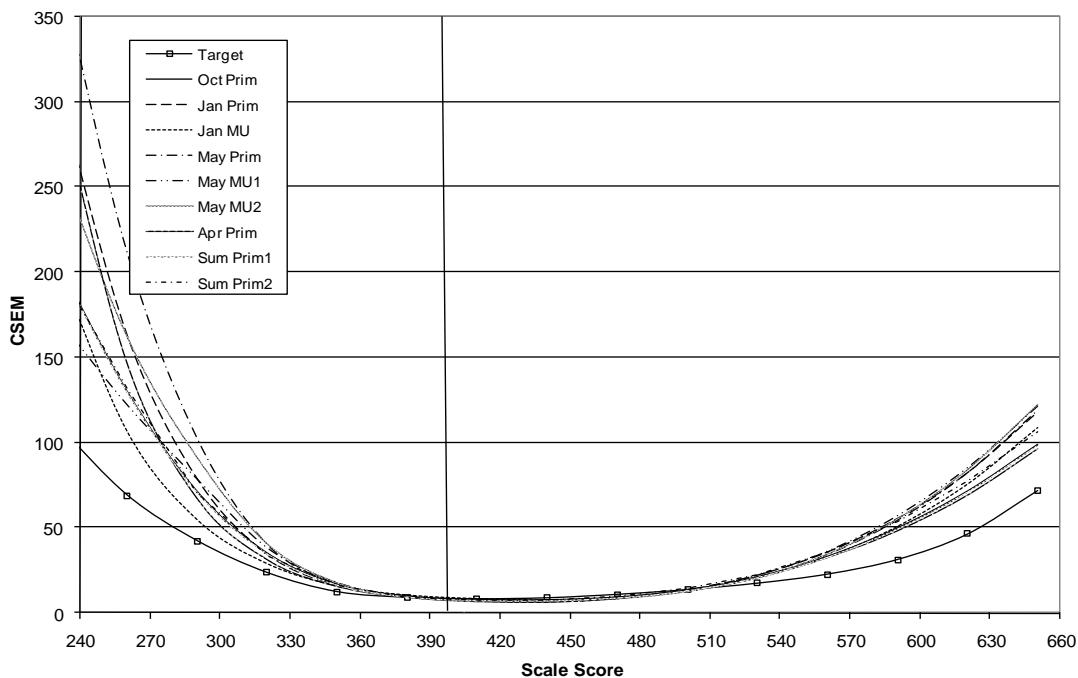


Figure 2.7 Test Characteristic Curves for the MD HSA 2010 Government Forms



Note: Maximum possible raw score is 82.

Figure 2.8 Conditional Standard Error of Measurement for the MD HSA 2010 Government Forms



Test Administration

For all MD HSA tests administered in 2009-2010, both paper-and-pencil and online versions were available.

For all administrations, paper-and-pencil primary forms were given during the first week of testing. For the January and May administrations, Makeup Form 1 was offered during the second week. For the May administration only, Makeup Form 2 was administered in the third week of testing. For the online versions in all administrations, the primary and makeup forms were spiraled equally throughout the testing window. In October only one form was administered. In January the two primary forms and one makeup form were spiraled over the two-week timeframe. In April, only one form was administered. In May the ten primary and two makeup forms were spiraled over a three-week timeframe. In Summer the two primary forms were spiraled over the two-week timeframe. All forms administered without extended time accommodations had timing limits indicated in Table 2.12.

Table 2.12 Test Timing Schedule in Minutes by MD HSA Content Area

Content Area	Session One	Break	Session Two	Break	Session Three
Algebra	50	5	50	5	50
Biology	45	5	45	5	45
English	50	5	50	5	50
Government	45	5	45	5	45

Section 3. Validity

Validity is one of the most important attributes of assessment quality and is a fundamental consideration when tests are developed and evaluated (AERA, APA, & NCME, 1999; Messick, 1989). Validity refers to the degree to which logical, empirical, and judgmental evidence supports each proposed interpretation or use of a set of scores. Validity is not based on a single study or type of study but is an ongoing process of gathering evidence to support the interpretation or use of the resulting test scores. The process begins with the test design and continues throughout the entire assessment process, including content specifications, item development, psychometric quality, and inferences made from the test results.

Students' scores on an MD HSA are inferred to reflect students' level of knowledge and skills in a content area. The scores are used to classify students in terms of their level of proficiency using cut scores established by the state.

Evidence Based on Analyses of Test Content

The MD HSAs are referred to as end-of-course tests because students take each test as they complete the appropriate coursework. Consequently items are developed to measure the knowledge and skills expected of students following completion of coursework. As discussed in Section 2, the development of test content for each MD HSA is overseen by a content expert who has a depth of knowledge and teaching experience related to the course in which the MD HSA is to be administered. Appropriate content leads who have similar qualifications review the test development work of these individuals.

Evidence based on analyses of test content includes logical analyses that determine the degree to which the items in a test represent the content domain that the test is intended to measure (AERA, APA, & NCME, 1999, p. 11). The test development process for the MD HSAs provides numerous opportunities for the MSDE to review test content and make changes to ensure that the items measure the knowledge and skills of Maryland students according to course standards. Every item that is created is referenced to a particular instructional standard (i.e., goal, expectation, or indicator). During the internal ETS development process, the specific reference is confirmed or changed to reflect changes to the item. When the item is sent to a committee of Maryland educators for a content review, the members of the committee make independent judgments about the match of the item content to the standard it is intended to measure and evaluate the appropriateness for the age of students being tested. These judgments are tabulated and reviewed by the content experts, who use the information to decide which items will advance to the field test stage of development.

Evidence Based on Analyses of Internal Test Structure

Analyses of the internal structure of a test typically involve studies of the relationship among test items and/or test components in the interest of establishing the degree to which the items or components appear to reflect the construct on which a test interpretation is based (AERA, APA & NCME, 1999, p. 13). The term construct is used here to refer to the characteristic that a test is

intended to measure; in the case of the MD HSAs, the characteristic of interest is the knowledge and skills defined by the test blueprint for each content area.

These test blueprints are derived from Maryland's Core Learning Goals for each course. The test blueprints are presented in Section 2 (see Tables 2.2 to 2.5); the CLGs can be found on the MSDE website at http://www.mdck12.org/assessments/high_school/index_a.html.

High total group internal consistencies as well as similar reliabilities between subgroups with roughly the same sample size provide additional evidence of validity. High reliability over items within a test implies that the test items within a domain are measuring the intended construct. Cronbach alpha results for each administration for the overall population, as well as for subgroups can be found in Section 6 of this report, in Tables 6.5 through 6.24.

Another way to assess the internal structure of the test is through the evaluation of Pearson correlation matrices between the individual MD HSA subscores. If subscores within a content area are strongly related to each other, this is another indicator of validity. Tables 3.1 and 3.2 highlight the Pearson correlations found between subscores within each content area of the MD HSA tests. Results indicate that each subscore is significantly positively correlated with the total Scale Score as well as the individual subscores measured in each content area.

Table 3.1 Correlations between Subscores by MD HSA Content Area – Algebra & Biology

	Algebra					Biology						
	SS	1	2	3	4	SS	1	2	3	4	5	6
Overall SS	1					1						
Subscore 1	.81	1				.74	1					
Subscore 2	.83	.62	1			.72	.51	1				
Subscore 3	.78	.57	.60	1		.67	.48	.51	1			
Subscore 4	.70	.52	.57	.52	1	.72	.50	.53	.50	1		
Subscore 5	-	-	-	-	-	.70	.50	.53	.49	.51	1	
Subscore 6	-	-	-	-	-	.74	.52	.56	.51	.54	.53	1

Note: All correlations significant at the p < .001 level.

Table 3.2 Correlations between Subscores by MD HSA Content Area – English & Government

	English					Government					
	SS	1	2	3	4	SS	1	2	3	4	5
Overall SS	1					1					
Subscore 1	.74	1				.83	1				
Subscore 2	.67	.45	1			.86	.69	1			
Subscore 3	.73	.51	.42	1		.76	.62	.62	1		
Subscore 4	.76	.52	.43	.54	1	.77	.62	.62	.56	1	
Subscore 5	-	-	-	-	-	.80	.65	.65	.59	.59	1

Note: All correlations significant at the p < .001 level.

Finally, the internal structure of the MD HSA tests can be assessed in relation to the degree to which these tests meet the requirements of the statistical models used throughout testing administrations. Confirmatory factor analyses (CFAs) for each test by content area can be conducted to examine the underlying domain structure of the MD HSA test. CFA is a useful statistical methodology as it can evaluate whether performance on items in each test reflects a single underlying characteristic or a set of distinct characteristics defined by the reporting categories for each content area. The findings from this type of analysis are helpful as they can establish whether the unidimensional model-based IRT used to calibrate the MD HSA items is appropriate.

Confirmatory Factor Analyses of the May 2010 Administration Data

To assess the dimensionality of the MD HSA tests, CFA's for each content area were conducted using test data from the primary forms of the May 2010 administration. The May administration was chosen for analysis because it is the largest and most representative administration of the MD HSAs. The May administration consisted of ten primary forms; data from operational items were combined across forms within the content areas of Algebra, Biology, English, and Government.

Mplus (Muthén & Muthén, 2007) was used to evaluate unidimensional, or one-factor, CFA models for each content area. As item level data on the MD HSA tests are dichotomous, methods available in *Mplus* that take into account the categorical nature of the data were used (see Muthén, 1998-2004).

Model parameter estimation was accomplished using a weighted least-square method with a mean and variance adjustment (*WLSMV*; Muthén, DuToit, & Spisic, 1997). This method leads to a consistent estimator of the model parameters and provides standard errors that are robust under model misspecification. For categorical data, this estimation method offers an alternative to full-weighted least squares (WLS) techniques that generally become computationally too demanding for models with more than a few observed variables (items).

Overall model fit for each CFA model by content area was examined using the scaled chi-square (χ^2) test of model fit in combination with supplemental fit indices. The Tucker-Lewis Index (TLI) compares the chi-square for the hypothesized model with that of the null or “independence” model, in which all correlations or covariances are zero. TLI values range from zero to 1.0, and values greater than 0.94 signify good fit (Hu & Bentler, 1999). The comparative fit index (CFI) and root mean square error of approximation (RMSEA) index both are based on noncentrality parameters. The CFI compares the covariance matrix predicted by the model with the observed covariance matrix, and the covariance matrix of the null model with the observed covariance matrix. A CFI value greater than 0.90 indicates acceptable model fit (Hu & Bentler, 1999). The RMSEA assesses the error in the hypothesized model predictions; values less than or equal to 0.06 indicate good fit (Hu & Bentler, 1999).

Table 3.3 shows the results of the analyses. The TLI, CFI, and RMSEA fit statistics indicated that the one-factor solutions generally fit the data well in all content areas. None of the χ^2 results

indicated good fit, given the criterion of $p > .05$; this was expected because the sample sizes were very large. These findings provide evidence that the tests for each content area measure a single dimension. This is a positive finding, given that IRT models assume unidimensionality.

Table 3.3 MD HSA Confirmatory Factor Analyses Fit Statistics

Content	Admin	Forms	# of Factors	# of Items	n	df	χ^2^*	TLI	CFI	RMSEA
Algebra	May	D-H, J-N	1	53	75,060	1,208	48,097	0.99	0.95	0.023
Biology	May	D-H, J-N	1	76	56,910	2,455	64,122	0.99	0.93	0.021
English	May	D-H, J-N	1	59	56,270	1,513	28,264	0.99	0.96	0.018
Government	May	D-H, J-N	1	82	57,079	2,765	72,542	0.99	0.94	0.021

Note: Table entries that meet or exceed the criterion are in bold.

* $p < .0005$.

Speededness

If more than five percent of students omitted an SR or SPR item the item was flagged as having a high omit rate. Table 3.4 shows omit rates for each content area by administration and item type. As can be seen, several of the SPR items were flagged for having high omit rates. This pattern is consistent with findings from previous test years. Note that in general, SPR items tend to have higher omit rates because students have to generate a response rather than choose one from the available answer choices. None of the SR items were flagged.

Table 3.4 Number of MD HSA Operational Items Flagged for High Omit Rate

Content	October		January		April		May		Summer	
	Item Types		Item Types		Item Types		Item Types		Item Types	
	SR	SPR								
Algebra	0	8	0	8	0	5	0	3	0	12
Biology	0	--	0	--	0	--	0	--	0	--
English	0	--	0	--	0	--	0	--	0	--
Government	0	--	0	--	0	--	0	--	0	--

The percentage of students who respond to the last items in a test can be used to assess the degree to which a test is speeded. When speededness occurs, a test is measuring not only students' knowledge and skills as defined by the construct of interest but also the speed at which the knowledge and skills are demonstrated, which is a second construct. In tests of achievement, it is desirable to find that speededness is not present in a test, which provides evidence that student scores on the test reflect only the intended construct. Evidence of speededness is

provided by the finding that the omit rates at the end of a test are notably higher than those observed elsewhere in the test.

Appendix 1.A presents the percentage of students who omitted items on the MD HSA operational forms. Across all content areas and administrations, the percentage of students who did not respond to the last ten items of a test was less than 5 percent per item. The only exception was for Algebra SPR items, which, when placed within the last ten items of a test form, had omit rates ranging from 3.5 percent to 11.8 percent. The higher omission rates for the SPR items are typical for this item type because students are required to solve a problem and then record the answer in an answer grid, rather than choose from among four answer choices presented by SR items. For all item types the percentage of students who omitted items located within the last ten positions on an MD HSA test form was not greater than omit rates throughout the test.

In addition to the factor analyses and the information regarding speededness presented here and the validation documentation gathered and maintained by MSDE, other information in support of the uses and interpretations of MD HSA scores appears in the following sections:

- Section 4 provides detailed information concerning the scores that were reported for the MD HSAs and the cut scores for each content area.
- Section 5 provides information concerning the test characteristics based on classical test theory for the administrations of the MD HSAs.
- Section 6 presents information regarding student characteristics for the administrations of the MD HSAs.
- Section 7 includes documentation regarding the field test analyses. Descriptions of classical item analyses, differential item functioning, item response theory calibration, and scaling are included. In addition, summary tables of item p-value and item-total correlation distributions are provided.

Section 4. Scoring Procedures

Scale Scores

The MD HSA reporting scale ranges from 240 to 650. For Algebra, Biology, and Government, the scale was established in 2003 and defined so that the scale scores had a mean of 400 and a standard deviation 40. In 2005 a scale for English was established that had the same range, mean, and standard deviation.

These scores represent ability estimates obtained using Item Response Theory (IRT, Yen & Fitzpatrick, 2006). (See IRT Calibration and Scaling in Section 7 for details about the three-parameter logistic model used for the MD HSAs.) Students' total test scores and subscores are scale scores derived using the three-parameter logistic (3PL) model and item-pattern (IP) scoring procedures.

When the 3PL model is used, the likelihood equation can have multiple maxima. Therefore, a numerical method was developed to find the scale score at the global maximum in the likelihood function (Yen, 1984).

Conditional Standard Errors of Measurement

Corresponding conditional standard errors of measurement (CSEM) were produced and are equal to the inverse of the square root of the test information function.

$$CSEM(\hat{\theta}) = \frac{1}{\sqrt{I(\hat{\theta})}}$$

where $CSEM(\hat{\theta})$ refers to the conditional standard error of measurement and $I(\hat{\theta})$ refers to the test information function for $\hat{\theta}$.

The test information function is the sum of corresponding information functions of the test items when optimal item weights are used. Item information functions depend on the item difficulty, discrimination, and conditional item score variance.

Lowest and Highest Obtainable Test Scores

The maximum likelihood procedure under the 3PL model cannot produce reasonable scale score estimates for students with perfect scores or scores below the level expected by guessing. While maximum likelihood estimates are usually available for students with extreme scores other than zero or perfect, occasionally these estimates have very large CSEMs, and differences between these extreme values have little meaning. Therefore, scores were established for these students based on a rational procedure (refer to Appendix 3.C of the 2004 Technical Report). These

values were called the lowest obtainable scale score (LOSS) and the highest obtainable scale score (HOSS).

Cut Scores

MSDE established the cut scores associated with each of the performance levels in the content areas other than English in 2003.⁵ The English cut scores were established during the standard-setting meeting held in October 2005. One cut-score was established for Biology and one was established for Government. Because Algebra and English results are used as the high school mathematics and English/language arts components of the Maryland accountability plan under NCLB, two cut scores were established for these content areas. To comply with NCLB requirements for secondary science, an Advanced cut score for Biology was established in 2008. These values are given in Table 4.1.

Table 4.1 MD HSA Cut Scores by Content Area

Content Area	Cut-Score	
	Proficient	Advanced
Algebra	412	450
Biology	400	452
English	396	429
Government	394	

Beginning with the class of 2009, students must obtain either a passing score on all four MD HSAs or an overall combined score of 1602. Passing status is achieved when a student's score meets or exceeds the Proficient cut score, as listed in Table 4.1. Students graduating prior to 2009 were not required to pass the MD HSAs but were required to take the tests.

Year-to-Year Scale Maintenance

The MD HSAs for Algebra, Biology, and Government have been pre-equated since 2004; English has been pre-equated since 2005. In the pre-equated design, a pool of IRT-calibrated items expressed on the reporting scale exists for test form construction. The item parameter estimates for new forms are obtained from the bank and are used to build test forms that are parallel across administrations. Student scores are produced with the new form bank-obtained item parameter estimates, thereby linking scores from one administration to the other.

To increase the item pool, the MD HSA embeds field test items in the operational test forms. The field test data for the January and May administration are calibrated with the operational items at that time. The calibrations are linked to the reporting scale using all operational items as anchors and the Stocking and Lord procedure (Stocking & Lord, 1983). Having all operational items

⁵ Technical documentation on the standard-setting method used to establish the MD HSA cut scores is available on the Maryland State Department of Education website at <http://www.marylandpublicschools.org/msde/divisions/planningresultstest/maryland+standard+setting+technical+reports.htm>.

serve as linking items ensures that the linking set is and large enough to provide stable and reliable results. Item bank parameter estimates are established at the time of the field test and are not updated following each administration.

To ensure that items behave the same way across administrations, construction of new forms follows guidelines defined by Kolen and Brennan (1995). These guidelines are:

1. Items should appear in the same contexts and positions as when the item parameter estimates were established. Operational item are placed as close as possible to the same position they were in when parameters were estimated and within the same third of the total test form.
2. Operational items should appear in similar positions on the test. It may be problematic if an item is positioned in very different locations on the two forms, such as at the beginning of the test on one form and at the end of the test on another form. Operational items that appear in more than one form occupy consistent positions across forms; MSDE must approve any deviations.
3. The text is exactly the same in the old and new forms. Minor editorial changes and rearranging answer choices are discouraged; otherwise the items may function differently. All requests for minor editorial changes must undergo psychometric review to evaluate the implications for the response process.

Section 5. Test Characteristics

Provided in this section is a discussion of the results of analyses of test reliability and decision consistency and accuracy for all MD HSA test forms administered.

Reliability

The general concept of reliability concerns the precision of a test score. Of interest is quantifying the degree to which a score will vary from an average result obtained over many testing occasions due to random factors (Haertel, 2006). A variety of theories and methods can be used to estimate reliability.

Classical test theory defines reliability as the proportion of total score variance that is true-score variance. Several different ways of estimating this proportion exist. One estimate of reliability that is commonly used is Cronbach's alpha (Cronbach, 1951), an internal consistency measure. It is derived from analysis of the consistency of performance over items within a test and provides a lower-bound estimate of a test's reliability. Cronbach's alpha can be expressed as:

$$\alpha = \frac{n}{n-1} \left[1 - \frac{\sum_{i=1}^n \sigma_i^2}{\sigma_x^2} \right],$$

where n is the number of items, σ_i^2 is the variance of scores on the i -th item, and σ_x^2 is the variance of the total score (sum of scores on the individual items). Sample estimates are substituted for the population variances in this formula to provide reliability estimates.

The results for the reliability analyses of the total test score are presented with the summary statistics in Tables 6.9 to 6.28. The tables show that the overall reliability of the MD HSAs administered during the January and May sessions ranged from 0.82 to 0.94 for the primary forms, and from 0.78 to 0.95 for the makeup forms. The overall reliability results for the October forms ranged from 0.62 to 0.82. The overall reliability results for the April forms ranged from 0.76 to 0.90. The overall reliability results for the Summer forms ranged from 0.70 to 0.88.

Decision Accuracy and Decision Consistency

The accuracy of decisions based on specified cut scores was assessed for Reliability of Classification using the computer program *RELCLASS*, which is ETS proprietary software. *RELCLASS* provides two statistics that describe the reliability of classifications based on test scores (Livingston & Lewis, 1995). Specifically, information from an administration of one form is used to estimate the following:

Decision accuracy, or the extent to which examinees are classified in the same way as they would be on the basis of the average of all possible forms of a test. Decision accuracy answers the question: How does the actual classification of test takers, based on their single-form scores, agree with the classification that would be made on the basis of their true scores, if their true scores were somehow known?

Decision consistency, or the extent to which examinees are classified in the same way as they would be on the basis of a single form of a test other than the one for which data are available. Decision consistency answers the question: What is the agreement between the classifications based on two non-overlapping, equally difficult forms of the test?

RELCLASS estimates decision accuracy using an estimated joint distribution of reported performance-level classifications on the current form of the exam and the performance-level classifications based on an all-forms average (true score). *RELCLASS* estimates decision consistency using an estimated joint distribution of reported performance-level classifications on the current form of the exam and performance-level classifications on the alternate (parallel) form. In each case, the proportion of performance-level classifications with exact agreement is the sum of the entries in the diagonal of the contingency table representing the joint distribution.

The results are provided in Tables 5.1 to 5.20 by content area for the October, January, April, May, and Summer forms. The tables show that decision accuracy values, which describe the agreement between classifications based on an observable variable (scores on one form of a test) and classifications based on an unobservable variable (the test takers' true scores), ranged from 0.79 to 0.89 across all performance levels and from 0.83 to 0.93 for the Proficient and Above classifications in Algebra, Biology, and English. Decision consistency values, which describe the agreement between classifications based on two variables (scores on the form students have taken and a parallel form of the same test that is not administered to the students), ranged from 0.71 to 0.84 across all performance levels and from 0.77 to 0.90 for the Proficient and Above classifications in Algebra, Biology, and English.

Note that in all cases the decision accuracy indices are somewhat larger than the decision consistency indices. This is due to differences in the estimation procedures. The estimation procedure for decision accuracy includes a random component on one of the two variables, whereas in estimating decision consistency each variable includes a random component (Livingston & Lewis, 1995).

Table 5.1 Decision Accuracy and Consistency: MD HSA Algebra October 2009 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	450–650	.00	.00	.00	.01
	412–449	.00	.10	.05	.15
	240–411	.01	.06	.77	.84
Estimated Proportion Correctly Classified*: Total = 0.87 , Proficient & Above = 0.88					
Decision Consistency	450–650	.01	.00	.00	.01
	412–449	.01	.08	.06	.15
	240–411	.01	.10	.73	.84
Estimated Proportion Consistently Classified*: Total = 0.82 , Proficient & Above = 0.83					

*Inconsistencies between cell entries and totals are due to rounding.

Table 5.2 Decision Accuracy and Consistency: MD HSA Algebra January 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
January Primary					
Decision Accuracy	450–650 412–449 240–411	.02 .01 .01	.01 .12 .06	.00 .05 .73	.02 .18 .80
	Estimated Proportion Correctly Classified: Total*: = 0.87, Proficient & Above = 0.89				
Decision Consistency	450–650 412–449 240–411	.02 .02 .01	.01 .10 .09	.00 .06 .70	.02 .18 .80
	Estimated Proportion Consistently Classified*: Total = 0.82 ; Proficient & Above = 0.84				
January Form C					
Decision Accuracy	450–650 412–449 240–411	.01 .01 .01	.00 .10 .07	.00 .05 .75	.02 .16 .83
	Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.87				
Decision Consistency	450–650 412–449 240–411	.01 .02 .02	.00 .08 .10	.00 .06 .72	.02 .16 .83
	Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.83				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.3 Decision Accuracy and Consistency: MD HSA Algebra April 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	450–650 412–449 240–411	.00 .00 .02	.00 .07 .07	.00 .03 .81	.01 .10 .90
	Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89				
Decision Consistency	450–650 412–449 240–411	.01 .01 .02	.00 .05 .10	.00 .04 .77	.01 .10 .90
	Estimated Proportion Consistently Classified*: Total = 0.84, Proficient & Above = 0.84				

*Inconsistencies between cell entries and totals are due to rounding.

Table 5.4 Decision Accuracy and Consistency: MD HSA Algebra May 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
May Primary					
Decision Accuracy	450–650 412–449 240–411	0.18 0.06 0.01	0.04 0.28 0.06	0.00 0.03 0.34	0.22 0.37 0.41
	Estimated Proportion Correctly Classified*: Total = 0.80 , Proficient & Above = 0.90				
Decision Consistency	450–650 412–449 240–411	0.16 0.08 0.01	0.06 0.24 0.07	0.00 0.05 0.33	0.22 0.37 0.41
	Estimated Proportion Consistently Classified*: Total = 0.73 , Proficient & Above = 0.87				
May Form X					
Decision Accuracy	450–650 412–449 240–411	0.24 0.05 0.01	0.03 0.23 0.05	0.00 0.03 0.36	0.27 0.32 0.42
	Estimated Proportion Correctly Classified*: Total = 0.83 , Proficient & Above = 0.91				
Decision Consistency	450–650 412–449 240–411	0.22 0.07 0.01	0.05 0.20 0.06	0.00 0.05 0.35	0.27 0.32 0.42
	Estimated Proportion Consistently Classified*: Total = 0.77 , Proficient & Above = 0.89				
May Form Y					
Decision Accuracy	450–650 412–449 240–411	0.17 0.03 0.00	0.04 0.24 0.04	0.00 0.06 0.42	0.21 0.33 0.46
	Estimated Proportion Correctly Classified*: Total = 0.83 , Proficient & Above = 0.90				
Decision Consistency	450–650 412–449 240–411	0.16 0.05 0.00	0.05 0.20 0.06	0.00 0.08 0.40	0.21 0.33 0.46
	Estimated Proportion Consistently Classified*: Total = 0.76 , Proficient & Above = 0.87				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.5 Decision Accuracy and Consistency: MD HSA Algebra Summer 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Summer Form P					
Decision Accuracy	450–650 412–449 240–411	0.01 0.01 0.01	0.00 0.14 0.07	0.00 0.05 0.70	0.02 0.20 0.78
	Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.87				
Decision Consistency	450–650 412–449 240–411	0.01 0.02 0.01	0.00 0.12 0.10	0.00 0.06 0.67	0.02 0.20 0.78
	Estimated Proportion Consistently Classified*: Total = 0.80, Proficient & Above = 0.82				
Summer Form Q					
Decision Accuracy	450–650 412–449 240–411	0.03 0.04 0.00	0.00 0.15 0.04	0.00 0.08 0.65	0.03 0.27 0.69
	Estimated Proportion Correctly Classified*: Total = 0.83, Proficient & Above = 0.88				
Decision Consistency	450–650 412–449 240–411	0.03 0.06 0.00	0.00 0.12 0.07	0.00 0.09 0.62	0.03 0.27 0.69
	Estimated Proportion Consistently Classified*: Total = 0.78, Proficient & Above = 0.84				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.6 Decision Accuracy and Consistency: MD HSA Biology October 2009 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	452–650 400–451 240–399	.00 .00 .01	.00 .10 .08	.00 .07 .73	.00 .18 .82
	Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above = 0.83				
Decision Consistency	452–650 400–451 240–399	.00 .01 .02	.00 .09 .13	.00 .08 .67	.00 .18 .82
	Estimated Proportion Consistently Classified*: Total = 0.76, Proficient & Above = 0.77				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.7 Decision Accuracy and Consistency: MD HSA Biology January 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
January Primary					
Decision Accuracy	452–650 400–451 240–399	.09 .02 .01	.02 .28 .05	.00 .04 .50	.10 .34 .56
	Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.90				
Decision Consistency	452–650 400–451 240–399	.08 .03 .01	.02 .25 .07	.00 .06 .48	.10 .34 .56
	Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.87				
January Form C					
Decision Accuracy	452–650 400–451 240–399	.04 .01 .01	.01 .19 .07	.00 .03 .64	.05 .22 .73
	Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.89				
Decision Consistency	452–650 400–451 240–399	.04 .02 .01	.01 .16 .09	.00 .05 .62	.05 .22 .73
	Estimated Proportion Consistently Classified*: Total = 0.82, Proficient & Above = 0.85				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.8 Decision Accuracy and Consistency: MD HSA Biology April 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	452–650 400–451 240–399	.00 .00 .02	.01 .08 .08	.00 .05 .77	.01 .13 .86
	Estimated Proportion Correctly Classified*: Total = 0.85, Proficient & Above = 0.86				
Decision Consistency	452–650 400–451 240–399	.01 .01 .02	.00 .06 .12	.00 .06 .72	.01 .13 .86
	Estimated Proportion Consistently Classified*: Total = 0.79, Proficient & Above = 0.80				

*Inconsistencies between cell entries and totals are due to rounding.

Table 5.9 Decision Accuracy and Consistency: MD HSA Biology May 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
May Primary					
Decision Accuracy	452–650 400–451 240–399	.19 .04 .00	.03 .41 .01	.00 .05 .26	.22 .50 .27
	Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.93				
Decision Consistency	452–650 400–451 240–399	.18 .05 .00	.04 .38 .03	.00 .07 .25	.22 .50 .27
	Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.90				
May Form X					
Decision Accuracy	452–650 400–451 240–399	.14 .04 .00	.02 .33 .02	.00 .06 .39	.16 .43 .41
	Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.92				
Decision Consistency	452–650 400–451 240–399	.13 .05 .00	.03 .30 .04	.00 .08 .38	.16 .43 .41
	Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.89				
May Form Y					
Decision Accuracy	452–650 400–451 240–399	.19 .04 .00	.03 .40 .02	.00 .06 .27	.22 .49 .29
	Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.93				
Decision Consistency	452–650 400–451 240–399	.18 .05 .00	.04 .37 .03	.00 .07 .26	.22 .49 .29
	Estimated Proportion Consistently Classified*: Total = 0.80, Proficient & Above = 0.90				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.10 Decision Accuracy and Consistency: MD HSA Biology Summer 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Summer Form P					
Decision Accuracy	452–650 400–451 240–399	.00 .00 .02	.00 .12 .08	.00 .06 .72	.01 .17 .82
	Estimated Proportion Correctly Classified*: Total = 0.84, Proficient & Above = 0.84				
Decision Consistency	452–650 400–451 240–399	.01 .01 .02	.00 .09 .12	.00 .07 .67	.01 .17 .82
	Estimated Proportion Consistently Classified*: Total = 0.77, Proficient & Above = 0.79				
Summer Form Q					
Decision Accuracy	452–650 400–451 240–399	.01 .05 .00	.00 .21 .05	.00 .09 .58	.01 .36 .63
	Estimated Proportion Correctly Classified*: Total = 0.80, Proficient & Above = 0.86				
Decision Consistency	452–650 400–451 240–399	.01 .07 .00	.00 .18 .08	.00 .11 .55	.01 .36 .63
	Estimated Proportion Consistently Classified*: Total = 0.74, Proficient & Above = 0.81				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.11 Decision Accuracy and Consistency: MD HSA English October 2009 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	429–650 396–428 240–395	.01 .01 .01	.00 .12 .05	.00 .04 .75	.01 .17 .82
	Estimated Proportion Correctly Classified*: Total = 0.89, Proficient & Above = 0.89				
Decision Consistency	429–650 396–428 240–395	.01 .02 .01	.00 .10 .08	.00 .05 .72	.01 .17 .82
	Estimated Proportion Consistently Classified*: Total = 0.84, Proficient & Above = 0.85				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.12 Decision Accuracy and Consistency: MD HSA English January 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
January Primary					
Decision Accuracy	429–650 396–428 240–395	.05 .00 .02	.07 .28 .09	.00 .00 .48	.12 .28 .60
	Estimated Proportion Correctly Classified*: Total = 0.81, Proficient & Above = 0.88				
Decision Consistency	429–650 396–428 240–395	.05 .03 .03	.06 .23 .10	.00 .02 .46	.12 .28 .60
	Estimated Proportion Consistently Classified*: Total = 0.75, Proficient & Above = 0.84				
January Form C					
Decision Accuracy	429–650 396–428 240–395	.03 .01 .01	.00 .14 .07	.00 .04 .70	.03 .19 .78
	Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.88				
Decision Consistency	429–650 396–428 240–395	.03 .03 .01	.00 .11 .09	.00 .05 .67	.03 .19 .78
	Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.84				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.13 Decision Accuracy and Consistency: MD HSA English April 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy					
Decision Accuracy	429–650 396–428 240–395	.01 .01 .01	.00 .11 .06	.00 .04 .77	.01 .15 .84
	Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89				
Decision Consistency	429–650 396–428 240–395	.01 .02 .02	.00 .09 .09	.00 .05 .74	.01 .15 .84
	Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above = 0.85				

*Inconsistencies between cell entries and totals are due to rounding.

Table 5.14 Decision Accuracy and Consistency: MD HSA English May 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
May Primary					
Decision Accuracy	429–650 396–428 240–395	.23 .10 .00	.03 .31 .05	.00 .04 .25	.26 .44 .30
	Estimated Proportion Correctly Classified*: Total = 0.79, Proficient & Above = 0.92				
Decision Consistency	429–650 396–428 240–395	.20 .11 .00	.06 .27 .05	.00 .06 .25	.26 .44 .30
	Estimated Proportion Consistently Classified*: Total = 0.71, Proficient & Above = 0.89				
May Form X					
Decision Accuracy	429–650 396–428 240–395	.14 .05 .00	.03 .24 .02	.00 .08 .44	.17 .37 .46
	Estimated Proportion Correctly Classified*: Total = 0.83, Proficient & Above = 0.90				
Decision Consistency	429–650 396–428 240–395	.13 .06 .00	.03 .21 .04	.00 .10 .42	.17 .37 .46
	Estimated Proportion Consistently Classified*: Total = 0.76, Proficient & Above = 0.86				
May Form Y					
Decision Accuracy	429–650 396–428 240–395	.23 .05 .00	.03 .28 .04	.00 .05 .31	.27 .39 .35
	Estimated Proportion Correctly Classified*: Total = 0.82, Proficient & Above = 0.91				
Decision Consistency	429–650 396–428 240–395	.22 .07 .00	.05 .24 .05	.00 .07 .30	.27 .39 .35
	Estimated Proportion Consistently Classified*: Total = 0.76, Proficient & Above = 0.88				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.15 Decision Accuracy and Consistency: MD HSA English Summer 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Summer Form P					
Decision Accuracy	429–650 396–428 240–395	.01 .01 .01	.00 .11 .05	.00 .04 .76	.01 .17 .82
	Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89				
Decision Consistency	429–650 396–428 240–395	.01 .02 .01	.00 .09 .08	.00 .05 .73	.01 .17 .82
	Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above = 0.86				
Summer Form Q					
Decision Accuracy	429–650 396–428 240–395	.02 .01 .01	.00 .11 .06	.00 .04 .75	.02 .16 .82
	Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89				
Decision Consistency	429–650 396–428 240–395	.02 .02 .01	.00 .09 .08	.00 .05 .72	.02 .16 .82
	Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above* = 0.86				

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.16 Decision Accuracy and Consistency: MD HSA Government October 2009 Form

	Placement Scores	Proficient	Basic	Category Total*
Decision Accuracy	394–650 240–393	.17 .07	.05 .71	.22 .78
	Estimated Proportion Correctly Classified*: Total = 0.88			
Decision Consistency	394–650 240–393	.15 .11	.06 .67	.22 .78
	Estimated Proportion Consistently Classified*: Total = 0.83			

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.17 Decision Accuracy and Consistency: MD HSA Government January 2010 Forms

	Placement Scores	Proficient	Basic	Category Total*
January Primary				
Decision Accuracy	394–650 240–393	.51 .06	.01 .42	.52 .48
	Estimated Proportion Correctly Classified*: Total = 0.93			
Decision Consistency	394–650 240–393	.49 .08	.03 .40	.52 .48
	Estimated Proportion Consistently Classified*: Total = 0.90			
January Form C				
Decision Accuracy	394–650 240–393	.38 .10	.00 .52	.38 .62
	Estimated Proportion Correctly Classified*: Total = 0.90			
Decision Consistency	394–650 240–393	.36 .12	.02 .50	.38 .62
	Estimated Proportion Consistently Classified*: Total = 0.86			

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.18 Decision Accuracy and Consistency: Government April 2010 Form

	Placement Scores	Proficient	Basic	Category Total*
Decision Accuracy				
	394–650 240–393	.27 .11	.00 .62	.27 .73
	Estimated Proportion Correctly Classified*: Total = 0.89			
Decision Consistency	394–650 240–393	.26 .12	.02 .60	.27 .73
	Estimated Proportion Consistently Classified*: Total = 0.86			

*Inconsistencies between cell entries and totals are due to rounding.

Table 5.19 Decision Accuracy and Consistency: MD HSA Government May 2010 Forms

	Placement Scores	Proficient	Basic	Category Total*
May Primary				
Decision Accuracy	394–650 240–393	.72 .03	.02 .23	.74 .26
	Estimated Proportion Correctly Classified*: Total = 0.95			
Decision Consistency	394–650 240–393	.70 .04	.04 .22	.74 .26
	Estimated Proportion Consistently Classified*: Total = 0.93			
May Form X				
Decision Accuracy	394–650 240–393	.56 .05	.01 .38	.57 .43
	Estimated Proportion Correctly Classified*: Total = 0.94			
Decision Consistency	394–650 240–393	.54 .06	.02 .37	.57 .43
	Estimated Proportion Consistently Classified*: Total = 0.91			
May Form Y				
Decision Accuracy	394–650 240–393	.67 .04	.02 .28	.69 .31
	Estimated Proportion Correctly Classified*: Total = 0.95			
Decision Consistency	394–650 240–393	.66 .04	.03 .27	.69 .31
	Estimated Proportion Consistently Classified*: Total = 0.93			

* Inconsistencies between cell entries and totals are due to rounding.

Table 5.20 Decision Accuracy and Consistency: MD HSA Government Summer 2010 Forms

	Placement Scores	Proficient	Basic	Category Total*
Summer Form P				
Decision Accuracy	394–650 240–393	.20 .05	.06 .69	.26 .74
	Estimated Proportion Correctly Classified*: Total = 0.89			
Decision Consistency	394–650 240–393	.18 .09	.07 .66	.26 .74
	Estimated Proportion Consistently Classified*: Total = 0.84			
Summer Form Q				
Decision Accuracy	394–650 240–393	.30 .10	.02 .59	.32 .68
	Estimated Proportion Correctly Classified*: Total = 0.89			
Decision Consistency	394–650 240–393	.28 .11	.04 .57	.32 .68
	Estimated Proportion Consistently Classified*: Total = 0.84			

* Inconsistencies between cell entries and totals are due to rounding.

Section 6. Student Characteristics

Summary Statistics

The mean scale scores by content area for the 2010 administrations are presented in Table 6.1. Scores for all content areas were higher on average for the May administration compared with the October, January, April, and Summer administrations.

Table 6.1 MD HSA Mean Scale Scores by Administration

Content Area	October			January			April			May			Summer		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Algebra	12,957	384.4	33.9	18,901	385.2	37.5	1,737	377.7	38.3	83,611	417.9	42.1	1,605	388.1	40.7
Biology	10,014	373.3	39.8	15,505	394.4	46.2	1,921	365.1	45.3	62,069	419.9	42.8	993	375.3	45.6
English	12,161	373.7	28.7	16,901	388.4	34.4	2,188	370.9	31.5	61,572	407.3	34.2	1,377	370.1	34.0
Government	10,101	374.1	31.4	17,937	397.6	43.4	1,740	376.2	40.9	62,200	418.9	43.4	1,037	375.0	36.2

The results presented in Tables 6.2 to 6.3 are based on the combined results for students who took the tests in October 2009 and January, April, May, and Summer 2010. The mean scale scores are presented for the years 2003 to 2010 by content area in Table 6.2. Table 6.3 presents the passing rates for these years.

Table 6.2 MD HSA Mean Scale Scores over Test Years

Content Area	2003	2004	2005	2006	2007	2008	2009	2010
Algebra	408.3	411.9	409.5	421.5	421.2	420.5	414.3	408.1
Biology	400.8	406.2	404.7	415.0	414.5	414.7	409.0	408.7
English	--	--	--	393.0	412.0	404.3	399.7	398.2
Government	403.5	406.5	409.3	418.5	417.1	417.1	406.3	408.6

Note: The current English test was not administered prior to 2006.

Table 6.3 MD HSA Percentage Passing Rates (Proficient + Advanced) over Test Years

Content Area	2003	2004	2005	2006	2007	2008	2009	2010
Algebra	53.1	59.3	54.5	66.6	63.3	62.0	53.3	46.6
Biology	54.3	62.0	58.4	67.8	70.1	68.4	60.0	59.1
English	--	--	--	60.1	70.6	61.0	55.3	54.8
Government	39.8	54.6	67.1	74.1	73.3	71.5	61.1	61.7

Note: The current English test was not administered prior to 2006.

The Algebra and English tests are used for the high school mathematics and English/language arts components of the MSDE Adequate Yearly Progress report as required under the NCLB Act. Beginning with the January 2008 administration, Biology has been used for the NCLB science component. Table 6.4 presents the percentage of Algebra, Biology, and English students classified as Basic, Proficient, and Advanced in 2010.

Table 6.4 MD HSA Performance Classification Rates in 2010 for Algebra, Biology, and English

Content Area	Basic	Proficient	Advanced
Algebra	53.4	30.6	16.1
Biology	40.9	42.3	16.8
English	45.3	36.0	18.8

Summary statistics for all students and for subgroups based on gender, special education programs, ethnicity, and English language fluency are presented in Tables 6.5 through 6.24. The tables include the number of students tested for whom valid scores were available, mean scale scores, and standard deviations of scale scores. In addition, raw score reliabilities are provided for the overall group of examinees and for subgroups. Figures 6.1 through 6.4 show the distributions of total scale scores for each content area for the May 2010 administration.

Table 6.5 Summary Statistics for MD HSA Algebra: October 2009 Form

	Primary Form R				
	Mean	SD	N	%	Alpha
Overall	384.4	33.9	12,957	100.0	0.76
Gender					
Male	384.3	36.1	6,298	48.6	0.79
Female	384.7	31.0	6,235	48.1	0.73
Missing	381.5	41.3	424	3.3	0.81
Special Education					
Yes	371.2	41.0	1,355	10.5	0.75
No	385.9	32.8	11,283	87.1	0.76
Exited	386.5	28.5	94	0.7	0.66
Exited and placed in 504a	*	*	14	0.1	*
504	386.8	30.0	211	1.6	0.72
Ethnicity					
American Indian	388.3	28.2	64	0.5	0.75
Asian/Pacific Islander	393.0	37.0	254	2.0	0.86
African American	381.8	33.7	8,458	65.3	0.74
White	391.6	34.0	2,380	18.4	0.80
Hispanic	386.7	29.7	1,264	9.8	0.72
Missing	383.2	39.7	537	4.1	0.81
Limited English Proficient					
Yes	375.4	33.4	300	2.3	0.64
No	384.6	33.9	12,593	97.2	0.77
Exited	385.0	32.1	64	0.5	0.68

* Statistics not reported for sample size less than 50 (N<50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.6 Summary Statistics for MD HSA Algebra: January 2010 Forms

	Primary Form A-B					Makeup Form C				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	385.8	36.9	16,259	100.0	0.82	381.4	40.9	2,642	100.0	0.78
Gender										
Male	387.5	37.7	8,147	50.1	0.83	382.7	41.2	1,290	48.8	0.79
Female	384.1	35.8	7,859	48.3	0.80	380.5	40.0	1,318	49.9	0.77
Missing	383.3	41.5	253	1.6	0.79	*	*	34	1.3	*
Special Education										
Yes	372.4	40.6	1,852	11.4	0.78	365.6	44.7	276	10.5	0.71
No	387.5	35.9	13,973	85.9	0.82	383.5	40.1	2,283	86.4	0.79
Exited	394.7	33.9	93	0.6	0.85	*	*	20	0.8	*
Exited and placed in 504	*	*	13	0.1	*	*	*	2	0.1	*
504	386.0	37.9	328	2.0	0.83	374.2	36.9	61	2.3	0.71
Ethnicity										
American Indian	382.6	37.4	89	0.6	0.81	*	*	13	0.5	*
Asian/Pacific Islander	397.2	37.1	280	1.7	0.86	*	*	41	1.6	*
African American	379.0	35.3	9,933	61.1	0.73	374.9	40.7	1,653	62.6	0.69
White	403.7	35.3	3,788	23.3	0.87	397.9	39.3	605	22.9	0.86
Hispanic	384.2	34.9	1,778	10.9	0.76	384.2	32.9	281	10.6	0.68
Missing	385.0	39.4	391	2.4	0.81	*	*	49	1.9	*
Limited English Proficient										
Yes	378.2	38.0	693	4.3	0.76	373.2	45.9	82	3.1	0.71
No	386.1	36.8	15,427	94.9	0.82	381.7	40.7	2,540	96.1	0.78
Exited	391.1	28.2	139	0.9	0.79	*	*	20	0.8	*

* Statistics not reported for sample size less than 50 (N<50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.7 Summary Statistics for MD HSA Algebra: April 2010 Form

	Primary Form S				
	Mean	SD	N	%	Alpha
Overall	377.7	38.3	1,737	100.0	0.76
Gender					
Male	377.9	38.9	824	47.4	0.77
Female	376.9	37.8	894	51.5	0.73
Missing	*	*	19	1.1	*
Special Education					
Yes	368.3	43.1	111	6.4	0.77
No	378.6	38.0	1,579	90.9	0.76
Exited	*	*	6	0.4	*
Exited and placed in 504	*	*	1	0.1	*
504	*	*	40	2.3	*
Ethnicity					
American	*	*	5	0.3	*
Indian					
Asian/Pacific Islander	*	*	33	1.9	*
African American	375.3	39.0	1,276	73.5	0.74
White	373.9	41.0	136	7.8	0.83
Hispanic	386.5	33.2	258	14.9	0.73
Missing	*	*	29	1.7	*
Limited English Proficient					
Yes	387.1	29.5	136	7.8	0.74
No	376.8	38.9	1,579	90.9	0.76
Exited	*	*	22	1.3	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services

Table 6.8 Summary Statistics for MD HSA Algebra: May 2010 Forms

	Primary Forms D-H, J-N						Makeup 1 Form X						Makeup 2 Form Y					
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	Alpha
Overall Gender	418.0	41.6	75,060	100.0	0.91	418.1	47.0	6,347	100.0	0.93	414.5	43.5	2,204	100.0	0.91			
Male	418.5	43.2	37,496	50.0	0.92	418.8	49.2	3,178	50.1	0.93	415.7	44.3	1,076	48.8	0.91			
Female	417.7	39.9	37,305	49.7	0.91	418.0	44.7	3,101	48.9	0.93	413.5	42.7	1,123	51.0	0.91			
Missing	393.0	50.7	259	0.4	0.89	392.4	38.8	68	1.1	0.86	*	*	5	0.2	*			
Special Education																		
Yes	390.0	46.9	5,463	7.3	0.88	385.3	55.1	344	5.4	0.91	379.1	53.5	136	6.2	0.88			
No	420.6	40.3	67,337	89.7	0.91	420.2	45.9	5,815	91.6	0.93	417.0	41.9	2,008	91.1	0.91			
Exited	410.1	43.7	654	0.9	0.90	426.3	44.5	63	1.0	0.91	*	*	18	0.8	*			
Exited and placed in 504	417.8	34.4	79	0.1	0.89	*	*	7	0.1	*	*	*	2	0.1	*			
504	408.5	40.0	1,527	2.0	0.90	407.3	43.1	118	1.9	0.91	*	*	40	1.8	*			
Ethnicity																		
American Indian	415.8	34.6	460	0.6	0.88	435.3	42.2	85	1.3	0.92	*	*	11	0.5	*			
Asian/Pacific Islander	446.0	36.9	4,137	5.5	0.91	452.8	41.4	291	4.6	0.91	441.0	43.9	114	5.2	0.92			
African American	400.1	38.7	33,135	44.1	0.87	394.0	42.4	2,773	43.7	0.87	397.9	40.9	1,084	49.2	0.86			
White	436.8	35.5	25,140	33.5	0.90	432.2	41.2	1,283	20.2	0.91	435.8	37.6	715	32.4	0.91			
Hispanic	419.4	39.9	11,772	15.7	0.91	440.1	39.4	1,816	28.6	0.92	413.7	37.8	270	12.3	0.88			
Missing	395.6	49.3	416	0.6	0.90	390.4	48.8	99	1.6	0.90	*	*	10	0.5	*			
Limited English Proficient																		
Yes	393.9	46.4	1,837	2.5	0.89	385.3	46.2	59	0.9	0.87	*	*	38	1.7	*			
No	418.6	41.4	72,220	96.2	0.91	418.4	47.1	6,242	98.4	0.93	414.7	43.8	2,128	96.6	0.91			
Exited	420.5	36.9	1,003	1.3	0.90	*	*	46	0.7	*	*	*	38	1.7	*			

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.9 Summary Statistics for MD HSA Algebra: Summer 2010 Forms

	Primary 1 Form P					Primary 2 Form Q				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall Gender	389.9	34.9	907	100.0	0.80	385.6	47.1	698	100.0	0.84
Male	390.0	34.3	464	51.2	0.80	383.9	45.9	385	55.2	0.83
Female	389.6	35.4	440	48.5	0.80	388.2	48.5	288	41.3	0.86
Missing	*	*	3	0.3	*	*	*	25	3.6	*
Special Education										
Yes	370.2	49.7	55	6.1	0.78	352.5	54.0	98	14.0	0.71
No	391.2	33.3	851	93.8	0.80	391.0	44.0	588	84.2	0.85
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	1	0.1	*	*	*	12	1.7	*
Ethnicity										
American Indian	*	*	4	0.4	*	*	*	7	1.0	*
Asian/Pacific Islander	*	*	14	1.5	*	*	*	24	3.4	*
African American	386.3	32.7	379	41.8	0.73	379.5	49.7	215	30.8	0.82
White	394.2	39.9	191	21.1	0.84	391.0	46.6	145	20.8	0.86
Hispanic	389.9	32.9	88	9.7	0.78	*	*	20	2.9	*
Missing	391.7	33.4	231	25.5	0.81	382.9	44.3	287	41.1	0.81
Limited English Proficient										
Yes	*	*	11	1.2	*	*	*	11	1.6	*
No	390.2	34.7	893	98.5	0.80	385.4	47.3	683	97.9	0.84
Exited	*	*	3	0.3	*	*	*	4	0.6	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition service

Table 6.10 Summary Statistics for MD HSA Biology: October 2009 Form

	Primary Form R				
	Mean	SD	N	%	Alpha
Overall	373.3	39.8	10,014	100.0	0.62
Gender					
Male	373.0	41.5	4,730	47.2	0.63
Female	373.6	38.3	4,975	49.7	0.60
Missing	372.6	38.4	309	3.1	0.72
Special Education					
Yes	363.2	48.1	1,024	10.2	0.59
No	374.5	38.7	8,728	87.2	0.62
Exited	378.9	30.2	65	0.7	0.23
Exited and placed in 504	*	*	8	0.1	*
504	371.2	37.8	189	1.9	0.53
Ethnicity					
American Indian	*	*	43	0.4	*
Asian/Pacific Islander	385.2	33.7	233	2.3	0.77
African American	370.3	40.7	6,517	65.1	0.56
White	380.5	38.0	1,868	18.7	0.69
Hispanic	376.8	36.1	935	9.3	0.56
Missing	372.8	40.4	418	4.2	0.69
Limited English Proficient					
Yes	371.9	41.4	238	2.4	0.60
No	373.3	39.8	9,702	96.9	0.62
Exited	380.6	33.3	74	0.7	0.57

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.11 Summary Statistics for MD HSA Biology: January 2010 Forms

	Primary Form A-B					Makeup Form C				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall Gender	396.6	45.9	13,269	100.0	0.92	381.2	46.0	2,236	100.0	0.88
Male	397.4	47.9	6,450	48.6	0.92	381.7	48.7	1,076	48.1	0.89
Female	396.1	43.7	6,620	49.9	0.91	380.7	43.4	1,136	50.8	0.86
Missing	387.3	45.8	199	1.5	0.91	*	*	24	1.1	*
Special Education										
Yes	377.6	43.4	1,154	8.7	0.83	373.3	43.4	178	8.0	0.81
No	398.6	45.7	11,728	88.4	0.92	382.1	46.3	1,994	89.2	0.88
Exited	398.7	35.3	115	0.9	0.88	*	*	11	0.5	*
Exited and placed in 504	*	*	13	0.1	*	*	*	1	0.0	*
504	390.3	45.2	259	2.0	0.89	372.6	39.0	52	2.3	0.58
Ethnicity										
American Indian	*	*	46	0.4	*	*	*	13	0.6	*
Asian/Pacific Islander	417.2	50.6	330	2.5	0.95	412.6	61.3	52	2.3	0.97
African American	375.9	40.5	6,081	45.8	0.76	369.6	42.1	1,346	60.2	0.67
White	422.7	38.9	5,294	39.9	0.93	407.0	45.6	544	24.3	0.93
Hispanic	384.4	39.4	1,198	9.0	0.85	381.6	37.2	243	10.9	0.79
Missing	384.6	40.0	320	2.4	0.87	*	*	38	1.7	*
Limited English Proficient										
Yes	370.8	37.2	269	2.0	0.63	363.9	46.8	62	2.8	0.62
No	397.2	45.9	12,884	97.1	0.92	381.7	45.9	2,153	96.3	0.88
Exited	394.6	40.2	116	0.9	0.89	*	*	21	0.9	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

b LEP Exited indicates students who have exited English language acquisition services.

Table 6.12 Summary Statistics for MD HSA Biology: April 2010 Form

	Primary Form S				
	Mean	SD	N	%	Alpha
Overall	365.1	45.3	1,921	100.0	0.67
Gender					
Male	363.2	47.7	909	47.3	0.69
Female	366.4	43.1	983	51.2	0.64
Missing	*	*	29	1.5	*
Special Education					
Yes	358.8	45.8	116	6.0	0.72
No	365.9	45.2	1,752	91.2	0.68
Exited	*	*	8	0.4	*
Exited and placed in 504	*	*	0	0.0	*
504	*	*	45	2.3	*
Ethnicity					
American Indian	*	*	6	0.3	*
Asian/Pacific Islander	*	*	46	2.4	*
African American	362.6	45.7	1,393	72.5	0.63
White	367.6	47.1	140	7.3	0.78
Hispanic	369.6	42.5	296	15.4	0.63
Missing	*	*	40	2.1	*
Limited English Proficient					
Yes	370.2	37.5	144	7.5	0.45
No	364.6	45.8	1,748	91.0	0.68
Exited	*	*	29	1.5	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition service.

Table 6.13 Summary Statistics for MD HSA Biology: May 2010 Forms

	Primary Forms D-H, J-N						Makeup 1 Form X						Makeup 2 Form Y			
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	
Overall Gender	420.7	42.4	56,910	100.0	0.94	407.1	47.5	3,311	100.0	0.94	419.3	43.2	1,848	100.0	0.93	
Male	421.8	44.0	28,111	49.4	0.94	408.4	47.9	1,640	49.5	0.94	421.8	44.0	954	51.6	0.94	
Female	419.7	40.7	28,658	50.4	0.93	406.4	46.7	1,628	49.2	0.94	417.0	41.6	891	48.2	0.93	
Missing	399.2	45.5	141	0.3	0.93	*	*	43	1.3	*	*	*	3	0.2	*	
Special Education																
Yes	393.2	47.7	3,679	6.5	0.91	386.8	53.5	231	7.0	0.92	399.6	46.9	92	5.0	0.92	
No	422.9	41.2	51,877	91.2	0.94	409.0	46.5	2,988	90.2	0.94	421.0	42.4	1,700	92.0	0.93	
Exited	408.5	39.8	347	0.6	0.92	*	*	26	0.8	*	*	*	13	0.7	*	
Exited and placed in 504	*	*	36	0.1	*	*	*	2	0.1	*	*	*	1	0.1	*	
504	409.1	43.3	971	1.7	0.93	399.0	45.7	64	1.9	0.91	*	*	42	2.3	*	
Ethnicity																
American Indian	418.0	37.1	383	0.7	0.93	*	*	23	0.7	*	*	*	9	0.5	*	
Asian/Pacific Islander	447.6	36.2	3,540	6.2	0.94	442.0	51.5	177	5.4	0.96	449.8	44.6	114	6.2	0.95	
African American	402.2	41.6	23,315	41.0	0.90	391.3	45.5	1,651	49.9	0.90	399.6	42.5	779	42.2	0.89	
White	437.3	35.7	20,705	36.4	0.94	427.3	39.5	1,057	31.9	0.94	435.6	34.2	760	41.1	0.93	
Hispanic	420.3	38.9	8,738	15.4	0.93	406.7	43.8	343	10.4	0.93	419.0	37.6	178	9.6	0.93	
Missing	394.0	52.2	229	0.4	0.93	384.1	46.9	60	1.8	0.87	*	*	8	0.4	*	
Limited English Proficient																
Yes	404.3	44.4	897	1.6	0.91	*	*	20	0.6	*	*	*	23	1.2	*	
No	420.9	42.3	55,561	97.6	0.94	407.1	47.5	3,273	98.9	0.94	419.5	43.3	1,815	98.2	0.93	
Exited	424.5	38.8	452	0.8	0.92	*	*	18	0.5	*	*	*	10	0.5	*	

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.14 Summary Statistics for MD HSA Biology: Summer 2010 Forms

	Primary 1 Form P					Primary 2 Form Q				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	372.1	43.6	620	100.0	0.70	380.7	48.4	373	100.0	0.82
Gender										
Male	372.2	45.5	309	49.8	0.75	378.5	53.3	194	52.0	0.85
Female	372.5	41.1	309	49.8	0.63	383.1	44.7	158	42.4	0.79
Missing	*	*	2	0.3	*	*	*	21	5.6	*
Special Education										
Yes	*	*	32	5.2	*	362.2	61.2	70	18.8	0.86
No	371.8	42.6	587	94.7	0.63	385.3	42.5	294	78.8	0.79
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504	*	*	0	0.0	*	*	*	1	0.3	*
504	*	*	1	0.2	*	*	*	8	2.1	*
Ethnicity										
American Indian	*	*	1	0.2	*	*	*	1	0.3	*
Asian/Pacific Islander	*	*	9	1.5	*	*	*	10	2.7	*
African American	371.0	42.0	276	44.5	0.65	376.2	54.9	128	34.3	0.83
White	388.0	39.5	102	16.5	0.81	390.0	48.7	76	20.4	0.86
Hispanic	375.7	33.4	58	9.4	0.66	*	*	13	3.5	*
Missing	363.4	48.6	174	28.1	0.63	377.6	42.2	145	38.9	0.70
Limited English Proficient										
Yes	*	*	12	1.9	*	*	*	3	0.8	*
No	372.2	43.6	605	97.6	0.71	380.2	48.5	367	98.4	0.81
Exited	*	*	3	0.5	*	*	*	3	0.8	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

b LEP Exited indicates students who have exited English language acquisition services.

Table 6.15 Summary Statistics for MD HSA English: October 2009 Form

	Primary Form R				
	Mean	SD	N	%	Alpha
Overall	373.7	28.7	12,161	100.0	0.82
Gender					
Male	370.8	30.6	6,599	54.3	0.83
Female	377.1	25.8	5,306	43.6	0.81
Missing	377.7	28.4	256	2.1	0.84
Special Education					
Yes	363.3	32.1	1,392	11.5	0.82
No	375.2	27.9	10,464	86.1	0.82
Exited	367.7	29.8	84	0.7	0.82
Exited and placed in 504	*	*	11	0.1	*
504	368.8	28.2	210	1.7	0.80
Ethnicity					
American Indian	367.5	39.0	50	0.4	0.84
Asian/Pacific Islander	381.7	22.4	406	3.3	0.79
African American	372.6	27.5	7,387	60.7	0.81
White	374.4	32.3	2,746	22.6	0.85
Hispanic	374.5	27.5	1,173	9.7	0.81
Missing	379.6	29.7	399	3.3	0.86
Limited English Proficient					
Yes	365.9	27.1	277	2.3	0.81
No	373.8	28.8	11,803	97.1	0.82
Exited	381.5	22.5	81	0.7	0.82

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.16 Summary Statistics for MD HSA English: January 2010 Forms

	Primary Form A-B					Makeup Form C				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	390.2	34.0	14,768	100.0	0.90	375.7	33.9	2,133	100.0	0.85
Gender										
Male	386.2	34.8	7,912	53.6	0.90	373.0	34.8	1,156	54.2	0.84
Female	395.1	32.6	6,696	45.3	0.90	379.1	32.8	960	45.0	0.85
Missing	384.6	28.6	160	1.1	0.84	*	*	17	0.8	*
Special Education										
Yes	371.1	32.4	1,478	10.0	0.82	363.0	37.0	147	6.9	0.82
No	392.6	33.5	12,884	87.2	0.90	376.9	33.4	1,937	90.8	0.85
Exited	386.3	33.7	106	0.7	0.88	*	*	12	0.6	*
Exited and placed in 504	*	*	14	0.1	*	*	*	0	0.0	*
504	383.3	34.4	286	1.9	0.90	*	*	37	1.7	*
Ethnicity										
American Indian	386.3	37.4	58	0.4	0.90	*	*	9	0.4	*
Asian/Pacific Islander	390.8	35.5	451	3.1	0.90	382.1	32.7	55	2.6	0.85
African American	378.3	28.2	6,613	44.8	0.82	370.4	31.3	1,277	59.9	0.78
White	406.2	34.8	5,820	39.4	0.92	389.0	39.9	503	23.6	0.91
Hispanic	382.2	29.8	1,569	10.6	0.85	375.0	27.6	262	12.3	0.80
Missing	383.6	28.5	257	1.7	0.85	*	*	27	1.3	*
Limited English Proficient										
Yes	368.4	29.0	482	3.3	0.78	362.6	32.8	71	3.3	0.76
No	391.0	34.0	14,106	95.5	0.90	376.1	34.0	2,029	95.1	0.85
Exited	387.1	24.0	180	1.2	0.84	*	*	33	1.6	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.17 Summary Statistics for MD HSA English: April 2010 Form

	Primary Forms S				
	Mean	SD	N	%	Alpha
Overall	370.9	31.5	2,188	100.0	0.81
Gender					
Male	367.9	34.9	1,171	53.5	0.83
Female	374.4	26.6	997	45.6	0.79
Missing	*	*	20	0.9	*
Special Education					
Yes	368.5	33.5	152	7.0	0.83
No	371.4	31.3	1,981	90.5	0.81
Exited	*	*	9	0.4	*
Exited and placed in 504	*	*	1	0.1	*
504	*	*	45	2.1	*
Ethnicity					
American Indian	*	*	8	0.4	*
Asian/Pacific Islander	371.5	25.5	100	4.6	0.81
African American	369.3	31.5	1,404	64.2	0.80
White	372.0	40.8	217	9.9	0.87
Hispanic	375.1	27.0	409	18.7	0.80
Missing	377.8	27.7	50	2.3	0.80
Limited English Proficient					
Yes	369.0	25.2	227	10.4	0.71
No	371.0	32.5	1,913	87.4	0.82
Exited	*	*	48	2.2	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.18 Summary Statistics for MD HSA English: May 2010 Forms

	Primary Forms D-H, J-N						Makeup 1 Form X						Makeup 2 Form Y					
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	Alpha
Overall	408.1	33.6	56,270	100.0	0.90	394.5	39.5	3,478	100.0	0.91	407.3	36.3	1,824	100.0	0.91			
Gender																		
Male	404.1	35.4	28,377	50.4	0.90	389.6	42.7	1,787	51.4	0.91	401.0	37.3	930	51.0	0.91			
Female	412.3	31.1	27,717	49.3	0.89	400.0	34.9	1,668	48.0	0.90	414.1	34.0	891	48.9	0.90			
Missing	388.0	34.6	176	0.3	0.87	*	*	23	0.7	*	*	*	3	0.2	*			
Special Education																		
Yes	378.5	38.7	3,986	7.1	0.87	372.9	42.9	245	7.0	0.89	377.4	34.9	102	5.6	0.89			
No	410.7	32.0	50,873	90.4	0.90	396.5	38.5	3,141	90.3	0.91	409.4	35.8	1,671	91.6	0.91			
Exited	390.9	31.1	371	0.7	0.88	*	*	20	0.6	*	*	*	8	0.4	*			
Exited and placed in 504	*	*	42	0.1	*	*	*	2	0.1	*	*	*	3	0.2	*			
504	397.8	34.7	998	1.8	0.90	384.5	43.6	70	2.0	0.91	*	*	40	2.2	*			
Ethnicity																		
American Indian	404.3	31.6	384	0.7	0.89	*	*	17	0.5	*	*	*	13	0.7	*			
Asian/Pacific Islander	423.5	32.5	3,550	6.3	0.89	410.9	34.7	157	4.5	0.92	424.8	37.0	103	5.7	0.91			
African American	395.3	32.0	22,764	40.5	0.88	384.4	36.8	1,723	49.5	0.88	393.1	32.4	757	41.5	0.88			
White	420.1	30.5	20,616	36.6	0.89	408.9	39.0	1,130	32.5	0.92	420.7	32.9	741	40.6	0.90			
Hispanic	407.9	32.3	8,540	15.2	0.90	392.6	39.3	416	12.0	0.91	403.8	40.4	203	11.1	0.91			
Missing	387.8	36.0	416	0.7	0.87	*	*	35	1.0	*	*	*	7	0.4	*			
Limited English Proficient																		
Yes	374.5	38.9	628	1.1	0.86	*	*	26	0.8	*	*	*	23	1.3	*			
No	408.5	33.5	55,202	98.1	0.90	394.8	39.5	3,431	98.7	0.91	407.9	36.2	1,789	98.1	0.91			
Exited	399.9	23.2	440	0.8	0.81	*	*	21	0.6	*	*	*	12	0.7	*			

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.19 Summary Statistics for MD HSA English: Summer 2010 Forms

	Primary 1 Form P					Primary 2 Form Q				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	370.3	33.1	819	100.0	0.83	369.7	35.4	558	100.0	0.84
Gender										
Male	365.3	36.1	452	55.2	0.83	365.9	35.9	323	57.9	0.84
Female	377.1	27.4	360	44.0	0.83	376.2	34.5	208	37.3	0.85
Missing	*	*	7	0.9	*	*	*	27	4.8	*
Special Education										
Yes	*	*	42	5.1	*	352.5	38.1	79	14.2	0.78
No	370.4	32.7	775	94.6	0.83	371.9	34.3	461	82.6	0.84
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	2	0.2	*	*	*	18	3.2	*
Ethnicity										
American Indian	*	*	6	0.7	*	*	*	5	0.9	*
Asian/Pacific Islander	*	*	13	1.6	*	*	*	15	2.7	*
African American	368.1	32.5	366	44.7	0.81	367.6	34.8	172	30.8	0.83
White	377.3	31.4	134	16.4	0.85	379.7	34.4	119	21.3	0.88
Hispanic	374.4	26.6	81	9.9	0.81	*	*	30	5.4	*
Missing	367.6	36.9	219	26.7	0.85	365.5	36.6	217	38.9	0.82
Limited English Proficient										
Yes	*	*	13	1.6	*	*	*	20	3.6	*
No	370.7	33.0	804	98.2	0.83	369.6	36.0	533	95.5	0.85
Exited	*	*	2	0.2	*	*	*	5	0.9	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.20 Summary Statistics for MD HSA Government: October 2009 Form

	Primary Form R				
	Mean	SD	N	%	Alpha
Overall	374.1	31.4	10,101	100.0	0.77
Gender					
Male	373.5	33.4	4,827	47.8	0.80
Female	374.4	29.2	5,058	50.1	0.74
Missing	378.3	35.0	216	2.1	0.85
Special Education					
Yes	362.4	36.9	1,209	12.0	0.75
No	375.8	30.3	8,627	85.4	0.77
Exited	370.8	23.1	79	0.8	0.62
Exited and placed in 504	*	*	13	0.1	*
504	372.7	31.7	173	1.7	0.77
Ethnicity					
American	*	*	47	0.5	*
Indian					
Asian/Pacific Islander	379.8	36.5	254	2.5	0.86
African American	372.9	30.6	6,310	62.5	0.74
White	375.9	32.5	2,235	22.1	0.80
Hispanic	373.7	32.1	893	8.8	0.80
Missing	379.6	31.9	362	3.6	0.83
Limited English Proficient					
Yes	361.6	37.2	219	2.2	0.72
No	374.3	31.2	9,829	97.3	0.77
Exited	376.0	33.8	53	0.5	0.80

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.21 Summary Statistics for MD HSA Government: January 2010 Forms

	Primary Form A-B					Makeup Form C				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	399.4	43.6	15,587	100.0	0.94	385.3	40.2	2,350	100.0	0.90
Gender										
Male	400.3	45.7	7,759	49.8	0.94	385.3	43.8	1,130	48.1	0.91
Female	398.8	41.6	7,674	49.2	0.94	385.4	36.4	1,195	50.9	0.89
Missing	383.5	32.4	154	1.0	0.86	*	*	25	1.1	*
Special Education										
Yes	377.0	39.4	1,677	10.8	0.88	364.5	40.0	203	8.6	0.81
No	402.4	43.4	13,447	86.3	0.94	387.6	39.6	2,075	88.3	0.90
Exited ^b	396.3	40.4	165	1.1	0.92	*	*	23	1.0	*
Exited and placed in 504	*	*	17	0.1	*	*	*	0	0.0	*
504	394.5	42.0	281	1.8	0.93	*	*	49	2.1	*
Ethnicity										
American Indian	396.6	45.8	79	0.5	0.93	*	*	12	0.5	*
Asian/Pacific Islander	412.5	48.6	390	2.5	0.95	*	*	49	2.1	*
African American	379.3	36.1	6,489	41.6	0.87	374.4	36.9	1,302	55.4	0.83
White	420.1	40.9	6,937	44.5	0.94	404.4	41.4	699	29.7	0.93
Hispanic	389.3	39.9	1,444	9.3	0.91	386.3	34.2	248	10.6	0.87
Missing	387.4	38.0	248	1.6	0.89	*	*	40	1.7	*
Limited English Proficient										
Yes	372.5	37.4	382	2.5	0.84	377.9	37.6	55	2.3	0.84
No	400.1	43.6	15,048	96.5	0.94	385.4	40.3	2,273	96.7	0.90
Exited	399.4	34.6	157	1.0	0.91	*	*	22	0.9	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.22 Summary Statistics for MD HSA Government: April 2010 Form

	Primary Form S				
	Mean	SD	N	%	Alpha
Overall	376.2	40.9	1,740	100.0	0.90
Gender					
Male	375.9	43.5	819	47.1	0.91
Female	376.2	38.2	895	51.4	0.89
Missing	*	*	26	1.5	*
Special Education					
Yes	364.8	35.6	76	4.4	0.86
No	377.1	41.3	1,618	93.0	0.90
Exited	*	*	8	0.5	*
Exited and placed in 504	*	*	0	0.0	*
504	*	*	38	2.2	*
Ethnicity					
American	*	*	4	0.2	*
Indian					
Asian/Pacific Islander	405.3	47.6	85	4.9	0.95
African American	370.2	36.0	1,129	64.9	0.85
White	394.0	56.2	194	11.2	0.95
Hispanic	378.3	37.1	296	17.0	0.86
Missing	*	*	32	1.8	*
Limited English Proficient					
Yes	375.0	39.8	196	11.3	0.85
No	376.2	41.3	1,511	86.8	0.90
Exited	*	*	33	1.9	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.23 Summary Statistics for MD HSA Government: May 2010 Forms

	Primary Forms D-H, J-N						Makeup 1 Form X						Makeup 2 Form Y					
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha	Mean	SD	Alpha
Overall Gender	420.0	42.7	57,079	100.0	0.94	402.0	49.8	3,291	100.0	0.94	414.6	46.8	1,830	100.0	0.95			
Male	421.3	45.1	28,442	49.8	0.95	403.6	51.3	1,694	51.5	0.95	416.0	49.3	911	49.8	0.95			
Female	418.9	40.0	28,311	49.6	0.94	400.6	48.1	1,580	48.0	0.94	413.4	43.9	912	49.8	0.94			
Missing	413.0	46.5	326	0.6	0.94	*	*	17	0.5	*	*	*	7	0.4	*			
Special Education																		
Yes	388.2	45.5	4,116	7.2	0.92	382.7	47.2	258	7.8	0.93	385.8	48.7	104	5.7	0.93			
No	423.0	41.3	51,409	90.1	0.94	404.0	49.5	2,942	89.4	0.95	416.7	46.3	1,680	91.8	0.95			
Exited	405.1	39.9	446	0.8	0.92	*	*	23	0.7	*	*	*	7	0.4	*			
Exited and placed in 504	*	*	49	0.1	*	*	*	2	0.1	*	*	*	2	0.1	*			
504	404.7	43.4	1,059	1.9	0.93	405.8	41.6	66	2.0	0.93	*	*	37	2.0	*			
Ethnicity																		
American Indian	414.6	41.2	411	0.7	0.94	*	*	25	0.8	*	*	*	7	0.4	*			
Asian/Pacific Islander	443.6	38.6	3,540	6.2	0.94	433.5	40.7	157	4.8	0.95	437.9	36.4	135	7.4	0.94			
African American	403.3	39.4	23,208	40.7	0.92	385.9	46.2	1,715	52.1	0.92	395.4	44.5	741	40.5	0.92			
White	435.2	40.3	20,121	35.3	0.94	423.7	49.0	976	29.7	0.95	430.5	42.6	707	38.6	0.95			
Hispanic	420.5	40.0	9,343	16.4	0.94	407.7	42.9	388	11.8	0.94	416.8	45.5	223	12.2	0.95			
Missing	414.2	49.0	456	0.8	0.94	*	*	30	0.9	*	*	*	17	0.9	*			
Limited English Proficient																		
Yes	390.2	45.5	936	1.6	0.91	*	*	25	0.8	*	*	*	18	1.0	*			
No	420.5	42.5	55,711	97.6	0.94	402.1	49.9	3,233	98.2	0.95	414.6	47.0	1,792	97.9	0.95			
Exited	419.0	35.7	432	0.8	0.93	*	*	33	1.0	*	*	*	20	1.1	*			

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.24 Summary Statistics for MD HSA Government: Summer 2010 Forms

	Primary 1 Form P					Primary 2 Form Q				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	371.8	36.4	591	100.0	0.81	379.3	35.6	446	100.0	0.88
Gender										
Male	369.2	40.8	294	49.8	0.83	379.2	36.2	247	55.4	0.89
Female	374.4	31.3	295	49.9	0.78	381.7	32.7	178	39.9	0.88
Missing	*	*	2	0.3	*	*	*	21	4.7	*
Special Education										
Yes	*	*	32	5.4	*	369.8	31.1	79	17.7	0.81
No	371.8	36.2	555	93.9	0.81	381.0	36.2	355	79.6	0.89
Exited	*	*	3	0.5	*	*	*	1	0.2	*
Exited and laced in 504	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	1	0.2	*	*	*	11	2.5	*
Ethnicity										
American Indian	*	*	2	0.3	*	*	*	0	0.0	*
Asian/Pacific Islander	*	*	9	1.5	*	*	*	8	1.8	*
African American	371.7	37.7	253	42.8	0.82	377.0	35.1	185	41.5	0.86
White	384.5	30.8	99	16.8	0.86	384.2	36.2	90	20.2	0.90
Hispanic	371.8	28.0	64	10.8	0.67	*	*	22	4.9	*
Missing	364.0	39.0	164	27.8	0.78	375.0	34.8	141	31.6	0.87
Limited English Proficient										
Yes	*	*	13	2.2	*	*	*	8	1.8	*
No	372.1	36.6	577	97.6	0.81	379.0	35.7	437	98.0	0.88
Exited	*	*	1	0.2	*	*	*	1	0.2	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Figure 6.1 Histogram of Total Scale Scores for MD HSA May 2010 Algebra

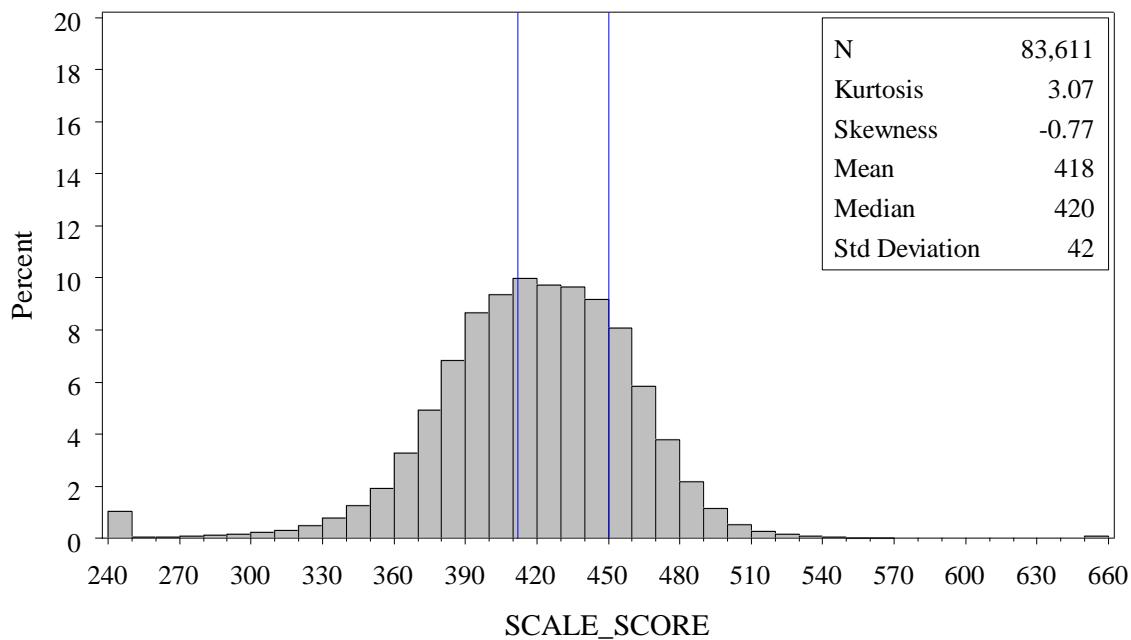


Figure 6.2 Histogram of Total Scale Scores for MD HSA May 2010 Biology

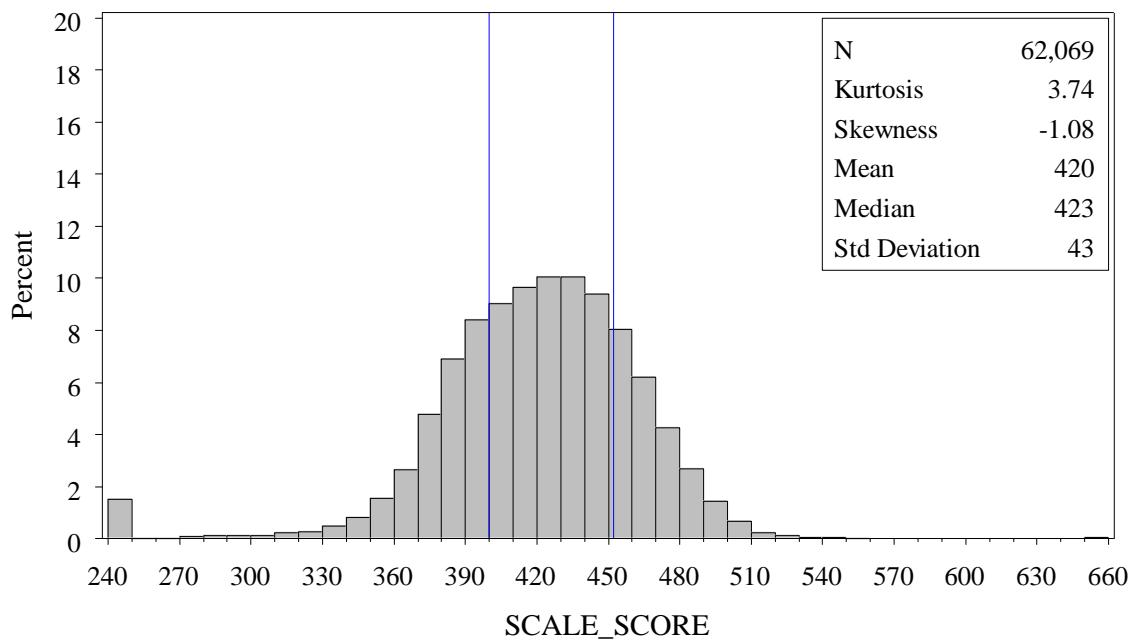


Figure 6.3 Histogram of Total Scale Scores for MD HSA May 2010 English

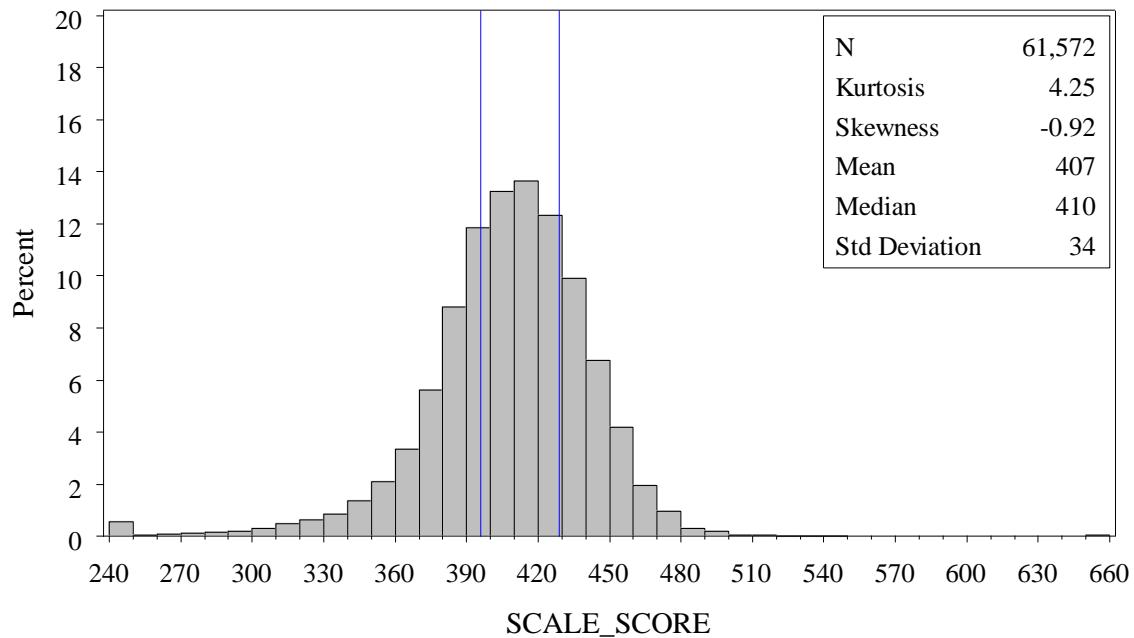
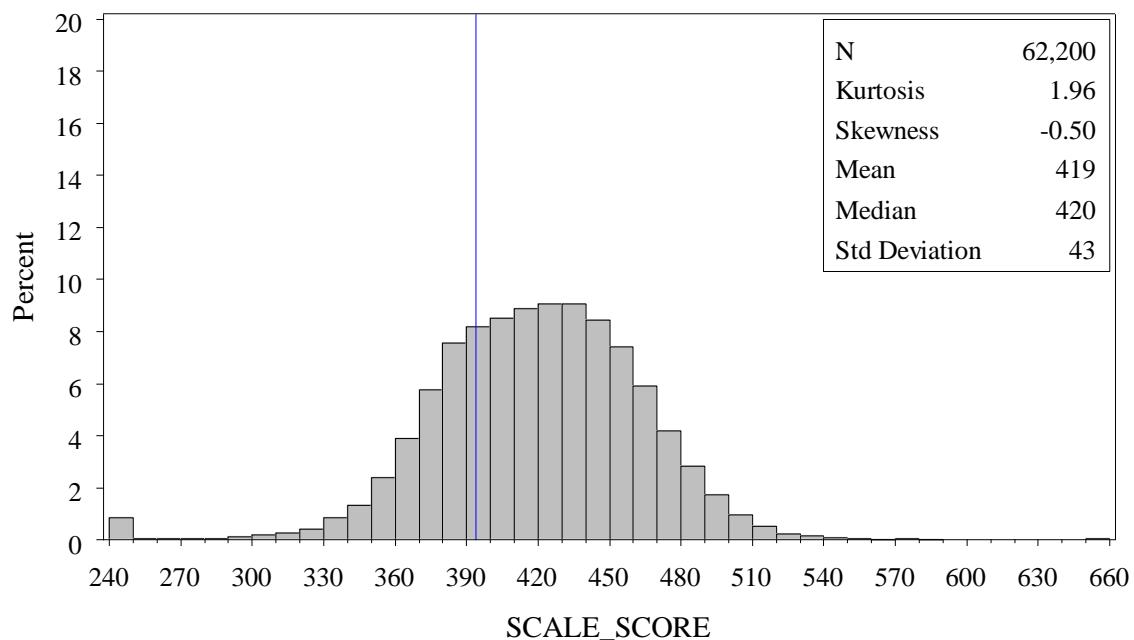


Figure 6.4 Histogram of Total Scale Scores for MD HSA May 2010 Government



Demographic Characteristics

Described in Tables 6.25 to 6.28 are the demographic characteristics of the students that took the October, January, April, May, and Summer MD HSAs. All demographic results are based on the final Research files delivered to MSDE.

The number of students participating in the May administration was greater than the number of students participating in the January administration. As a result, only one field test version was included in the January administration to ensure sufficient sample sizes for the analyses of the field test items.

Due to the small numbers of students participating in the October, April, and Summer administrations, those forms did not contain new field test items. Instead, previously administered field test sections were embedded in these Summer forms to ensure that the test length was comparable.

Table 6.25 Demographic Information for MD HSA Algebra

	October Form		January Primary Forms		January Makeup Form		April Form		May Primary Forms		May Makeup Forms		Summer Forms	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Overall Gender	12,957	100.0	16,259	100.0	2,642	100.0	1,737	100.0	75,060	100.0	8,551	100.0	1,605	100.0
Male	6,298	48.6	8,147	50.1	1,290	48.8	824	47.4	37,496	50.0	4,254	49.7	849	52.9
Female	6,235	48.1	7,859	48.3	1,318	49.9	894	51.5	37,305	49.7	4,224	49.4	728	45.4
Missing	424	3.3	253	1.6	34	1.3	19	1.1	259	0.3	73	0.9	28	1.7
Special Education														
Yes	1,355	10.5	1,852	11.4	276	10.4	111	6.4	5,463	7.3	480	5.6	153	9.5
No	11,283	87.1	13,973	85.9	2,283	86.4	1,579	90.9	67,337	89.7	7,823	91.5	1,439	89.7
Exited	94	0.7	93	0.6	20	0.8	6	0.3	654	0.9	81	0.9	0	0.0
Exited and placed in 504 ^a	14	0.1	13	0.1	2	0.1	1	0.1	79	0.1	9	0.1	0	0.0
504	211	1.6	328	2.0	61	2.3	40	2.3	1,527	2.0	158	1.8	13	0.8
Ethnicity														
American Indian	64	0.5	89	0.5	13	0.5	5	0.3	460	0.6	96	1.1	11	0.7
Asian/Pacific Islander	254	2.0	280	1.7	41	1.6	33	1.9	4,137	5.5	405	4.7	38	2.4
African American	8,458	65.3	9,933	61.1	1,653	62.6	1,276	73.5	33,135	44.1	3,857	45.1	594	37.0
White	2,380	18.4	3,788	23.3	605	22.9	136	7.8	25,140	33.5	1,998	23.4	336	20.9
Hispanic	1,264	9.8	1,778	10.9	281	10.6	258	14.9	11,772	15.7	2,086	24.4	108	6.7
Missing	537	4.1	391	2.4	49	1.9	29	1.7	416	0.6	109	1.3	518	32.3
Limited English Proficient														
Yes	300	2.3	693	4.3	82	3.1	136	7.8	1,837	2.4	97	1.1	22	1.4
No	12,593	97.2	15,427	94.9	2,540	96.1	1,579	90.9	72,220	96.2	8,370	97.9	1,576	98.2
Exited ^b	64	0.5	139	0.9	20	0.8	22	1.3	1,003	1.3	84	1.0	7	0.4

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.26 Demographic Information for MD HSA Biology

	October Form		January Primary Forms		January Makeup Form		April Form		May Primary Forms		May Makeup Forms		Summer Forms	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Overall Gender	10,014	100.0	13,269	100.0	2,236	100.0	1,921	100.0	56,910	100.0	5,159	100.0	993	100.0
Male	4,730	47.2	6,450	48.6	1,076	48.1	909	47.3	28,111	49.4	2,594	50.3	503	50.7
Female	4,975	49.7	6,620	49.9	1,136	50.8	983	51.2	28,658	50.4	2,519	48.8	467	47.0
Missing	309	3.1	199	1.5	24	1.1	29	1.5	141	0.2	46	0.9	23	2.3
Special Education														
Yes	1,024	10.2	1,154	8.7	178	8.0	116	6.0	3,679	6.5	323	6.3	102	10.3
No	8,728	87.2	11,728	88.4	1,994	89.2	1,752	91.2	51,877	91.2	4,688	90.9	881	88.7
Exited	65	0.6	115	0.9	11	0.5	8	0.4	347	0.6	39	0.8	0	0.0
Exited and placed in 504 ^a	8	0.1	13	0.1	1	0.0	0	0.0	36	0.1	3	0.1	1	0.1
504	189	1.9	259	2.0	52	2.3	45	2.3	971	1.7	106	2.1	9	0.9
Ethnicity														
American Indian	43	0.4	46	0.3	13	0.6	6	0.3	383	0.7	32	0.6	2	0.2
Asian/Pacific Islander	233	2.3	330	2.5	52	2.3	46	2.4	3,540	6.2	291	5.6	19	1.9
African American	6,517	65.1	6,081	45.8	1,346	60.2	1,393	72.5	23,315	41.0	2,430	47.1	404	40.7
White	1,868	18.7	5,294	39.9	544	24.3	140	7.3	20,705	36.4	1,817	35.2	178	17.9
Hispanic	935	9.3	1,198	9.0	243	10.9	296	15.4	8,738	15.4	521	10.1	71	7.2
Missing	418	4.2	320	2.4	38	1.7	40	2.1	229	0.4	68	1.3	319	32.1
Limited English Proficient														
Yes	238	2.4	269	2.0	62	2.8	144	7.5	897	1.6	43	0.8	15	1.5
No	9,702	96.9	12,884	97.1	2,153	96.3	1,748	91.0	55,561	97.6	5,088	98.6	972	97.9
Exited ^b	74	0.7	116	0.9	21	0.9	29	1.5	452	0.8	28	0.5	6	0.6

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.27 Demographic Information for MD HSA English

		October Form		January Primary Forms		January Makeup Form		April Form		May Primary Forms		May Makeup Forms		Summer Forms	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%
Overall Gender		12,161	100.0	14,768	100.0	2,133	100.0	2,188	100.0	56,270	100.0	5,302	100.0	1,377	100.0
Male		6,599	54.3	7,912	53.6	1,156	54.2	1,171	53.5	28,377	50.4	2,717	51.2	775	56.3
Female		5,306	43.6	6,696	45.3	960	45.0	997	45.6	27,717	49.3	2,559	48.3	568	41.2
Missing		256	2.1	160	1.1	17	0.8	20	0.9	176	0.3	26	0.5	34	2.5
Special Education															
Yes		1,392	11.4	1,478	10.0	147	6.9	152	6.9	3,986	7.1	347	6.5	121	8.8
No		10,464	86.0	12,884	87.2	1,937	90.8	1,981	90.5	50,873	90.4	4,812	90.8	1,236	89.8
Exited		84	0.7	106	0.7	12	0.6	9	0.4	371	0.7	28	0.5	0	0.0
Exited and placed in 504 ^a		11	0.1	14	0.1	0	0.0	1	0.0	42	0.1	5	0.1	0	0.0
504		210	1.7	286	1.9	37	1.7	45	2.1	998	1.8	110	2.1	20	1.5
Ethnicity															
American Indian		50	0.4	58	0.4	9	0.4	8	0.4	384	0.7	30	0.6	11	0.8
Asian/Pacific Islander		406	3.3	451	3.1	55	2.6	100	4.6	3,550	6.3	260	4.9	28	2.0
African American		7,387	60.7	6,613	44.8	1,277	59.9	1,404	64.2	22,764	40.5	2,480	46.8	538	39.1
White		2,746	22.6	5,820	39.4	503	23.6	217	9.9	20,616	36.6	1,871	35.3	253	18.4
Hispanic		1,173	9.6	1,569	10.6	262	12.3	409	18.7	8,540	15.2	619	11.7	111	8.1
Missing		399	3.3	257	1.7	27	1.3	50	2.3	416	0.7	42	0.8	436	31.7
Limited English Proficient															
Yes		277	2.3	482	3.3	71	3.3	227	10.4	628	1.1	49	0.9	33	2.4
No		11,803	97.1	14,106	95.5	2,029	95.1	1,913	87.4	55,202	98.1	5,220	98.5	1,337	97.1
Exited ^b		81	0.7	180	1.2	33	1.5	48	2.2	440	0.8	33	0.6	7	0.5

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 6.28 Demographic Information for MD HSA Government

	October Form		January Primary Forms		January Makeup Form		April Form		May Primary Forms		May Makeup Forms		Summer Forms	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Overall Gender	10,101	100.0	15,587	100.0	2,350	100.0	1,740	100.0	57,079	100.0	5,121	100.0	1,037	100.0
Male	4,827	47.8	7,759	49.8	1,130	48.1	819	47.1	28,442	49.8	2,605	50.9	541	52.2
Female	5,058	50.1	7,674	49.2	1,195	50.9	895	51.4	28,311	49.6	2,492	48.7	473	45.6
Missing	216	2.1	154	1.0	25	1.1	26	1.5	326	0.6	24	0.5	23	2.2
Special Education														
Yes	1,209	12.0	1,677	10.8	203	8.6	76	4.4	4,116	7.2	362	7.1	111	10.7
No	8,627	85.4	13,447	86.3	2,075	88.3	1,618	93.0	51,409	90.1	4,622	90.3	910	87.8
Exited	79	0.8	165	1.1	23	1.0	8	0.5	446	0.8	30	0.6	4	0.4
Exited and placed in 504 ^a	13	0.1	17	0.1	0	0.0	0	0.0	49	0.1	4	0.1	0	0.0
504	173	1.7	281	1.8	49	2.1	38	2.2	1,059	1.9	103	2.0	12	1.2
Ethnicity														
American Indian	47	0.5	79	0.5	12	0.5	4	0.2	411	0.7	32	0.6	2	0.2
Asian/Pacific Islander	254	2.5	390	2.5	49	2.1	85	4.9	3,540	6.2	292	5.7	17	1.6
African American	6,310	62.5	6,489	41.6	1,302	55.4	1,129	64.9	23,208	40.7	2,456	48.0	438	42.2
White	2,235	22.1	6,937	44.5	699	29.7	194	11.1	20,121	35.3	1,683	32.9	189	18.2
Hispanic	893	8.8	1,444	9.3	248	10.6	296	17.0	9,343	16.4	611	11.9	86	8.3
Missing	362	3.6	248	1.6	40	1.7	32	1.8	456	0.8	47	0.9	305	29.4
Limited English Proficient														
Yes	219	2.2	382	2.5	55	2.3	196	11.3	936	1.6	43	0.8	21	2.0
No	9,829	97.3	15,048	96.5	2,273	96.7	1,511	86.8	55,711	97.6	5,025	98.1	1,014	97.8
Exited ^b	53	0.5	157	1.0	22	0.9	33	1.9	432	0.8	53	1.0	2	0.2

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Section 7. Field Test Analyses

Following the receipt of the final score file from Pearson for the January and May administrations, the field test analyses for SR and SPR items were completed. The analyses consisted of four components: classical item analyses, differential item functioning (DIF), calibration, and scaling. All the analyses were completed using GENASYS, an ETS proprietary software program. The analysis procedures for each component are described in detail below. All valid records available were used as samples for the analyses, including those for students learning English as a second language, students with IEP or 504 plans, and students receiving accommodations. Only records invalidated by the test administrator and records with no item responses to the first five items were excluded from the analysis sample.

Classical Item Analyses

Classical item analyses involve computing a set of statistics based on classical test theory for every item in each form. The statistics provide key information about the quality of the items from an empirical perspective. The statistics estimated for the HSA field test items, and associated criteria used to flag items for the content specialists' review, are described below.

Classical item difficulty (“p-value”): This statistic indicates the mean item score expressed as a proportion of the maximum obtainable item score. For SR and SPR items, it is equivalent to the proportion of examinees in the sample that answered the item correctly. Desired p-values generally fall within the range of 0.25 to 0.90. Occasionally, items that fall outside this range can be justified for inclusion in an item bank based upon the quality and educational importance of the item content or the ability to measure students with very high or low achievement, especially if the students have not yet received instruction in the content.

Item-total correlation of the correct response option for SR and SPR items: This statistic describes the relationship between performance on the specific item and performance on the total test, including the item under study. It is sometimes referred to as a discrimination index. For SR and SPR items, the item-total correlation is the point-biserial correlation. Values less than 0.20 are generally considered to have a weaker than desired relationship, therefore these items receive careful consideration by ETS staff and MSDE before including them on future forms. Items with negative correlations can indicate there are serious problems with the item content (e.g., multiple correct answers, unusually complex content), there is an incorrect key, or students have not been taught the content.

Proportion of students choosing each response option (SR items): This statistic indicates the percent of examinees selecting each answer choice, or option. Options not selected by any students or selected by a very low proportion of

students indicate problems with plausibility of the option. Items that do not have all answer options functioning may be discarded or revised and field tested again.

Point-biserial correlation of incorrect response option (SR items) with the total raw score: These statistics describe the relationship between selecting an incorrect response option for a specific item and performance on the total test, including the item under study. Typically, the correlation between an incorrect answer and total test performance is weak or negative. Values are typically compared and contrasted with the discrimination index. When the magnitude of these point-biserial correlations for the incorrect answer is stronger relative to the correct answer, the item will be carefully reviewed for content-related problems. Alternatively, positive point-biserial correlations on incorrect options may indicate that students have not had sufficient opportunity to learn the material.

Percent of students omitting an item: This statistic is useful for identifying problems with test features, such as testing time and item/test layout. Typically, it is assumed that if students have an adequate amount of testing time, 95 percent should attempt to answer each question. When a pattern of omit percentages exceeds 5 percent for a series of items at the end of a timed section, this may indicate that there was insufficient time for students to complete all items. For individual items, if the omit percentage is greater than 5 percent for a single SR or SPR item, this could be an indication of an item/test layout problem. For example, students might accidentally skip an item that follows a lengthy stem.

In addition, a series of flags was created to identify items with extreme values. Flagged items were subject to additional scrutiny prior to the inclusion of the items in the final calibrations. The following flagging criteria were applied to all items tested in the 2010 assessments:

- *Difficulty flag:* P-values less than 0.10 or greater than 0.90.⁶
- *Discrimination flag:* Item-total correlation less than 0.10.
- *Distractor flag:* SR point-biserial correlation positive for incorrect option.
- *Omit flag:* Percent omitted is greater than 5 for SR and SPR items.

Distributions of p-values and item-total correlations for the field test items administered in January 2010 are shown in Tables 7.1 and 7.2, respectively. Corresponding results for the field test items administered in May 2010 are shown in Tables 7.3 and 7.4, respectively.

Following the classical item analyses, items with poor item statistics and items that were not scored as per MSDE's instructions were removed from further analyses (see Table

⁶ Difficulty flagging criteria for p-values in the January administration included values less than .25 or greater than .90. The discrimination flagging criterion for the item total correlations in the January administration was values less than .15. These criteria were revised prior to the May administration to bring statistical flagging criteria in line with criteria used for building test forms.

7.5). These items have been identified for revision and possible additional field testing. Table 7.6 presents the number of items that were retained for further analyses and evaluation after being flagged for statistical reasons, including extreme p-values, low item-total correlations, and/or high omits rates. Calibration results indicated the items were estimated reasonably, and therefore they were not removed from scaling.

Table 7.1 Distribution of p -Values for the MD HSA January 2010 Field Test Items

P-Value	Percentage and Number of Items							
	Algebra ^a		Biology		English		Government	
	%	N	%	N	%	N	%	N
P < 0.25	19	6	9	4	3	2	10	5
0.25 ≤ P < 0.35	23	7	17	8	17	10	14	7
0.35 ≤ P < 0.45	13	4	26	12	23	14	12	6
0.45 ≤ P < 0.55	23	7	33	15	17	10	18	9
0.55 ≤ P < 0.65	3	1	9	4	17	10	16	8
0.65 ≤ P < 0.75	16	5	7	3	17	10	12	6
0.75 ≤ P < 0.85	3	1	0	0	7	4	18	9
P ≥ 0.85	0	0	0	0	0	0	0	0
Descriptive Statistics								
N Items		31		46		60		50
Mean		0.41		0.42		0.49		0.52
SD		0.20		0.13		0.16		0.20
Min		0.04		0.18		0.20		0.10
Max		0.80		0.70		0.80		0.84

^a SPR items included

Table 7.2 Distribution of Item-Total Correlations for the MD HSA January 2010 Field Test Items

Correlation	Percentage and Number of Items							
	Algebra ^a		Biology		English		Government	
	%	N	%	N	%	N	%	N
R < 0.15	10	3	7	3	8	5	4	2
0.15 ≤ R < 0.25	10	3	15	7	13	8	12	6
0.25 ≤ R < 0.35	52	16	26	12	28	17	16	8
0.35 ≤ R < 0.45	23	7	28	13	43	26	52	26
0.45 ≤ R < 0.55	6	2	22	10	7	4	16	8
0.55 ≤ R < 0.65	0	0	2	1	0	0	0	0
0.65 ≤ R < 0.75	0	0	0	0	0	0	0	0
R ≥ 0.75	0	0	0	0	0	0	0	0
Descriptive Statistics								
N Items		31		46		60		50
Mean		0.30		0.35		0.32		0.36
SD		0.10		0.12		0.10		0.10
Min		0.08		0.09		0.08		0.13
Max		0.49		0.57		0.48		0.53

^a SPR items included

Table 7.3 Distribution of p -Values for the MD HSA May 2010 Field Test Items

P-Value	Percentage and Number of Items							
	Algebra ^a		Biology		English		Government	
	%	N	%	N	%	N	%	N
P < 0.25	10	16	2	5	3	9	1	2
0.25 ≤ P < 0.35	14	22	6	13	3	10	4	10
0.35 ≤ P < 0.45	21	33	14	32	11	37	12	30
0.45 ≤ P < 0.55	13	21	21	49	15	48	14	34
0.55 ≤ P < 0.65	21	33	22	50	24	77	22	54
0.65 ≤ P < 0.75	14	23	23	52	22	70	22	54
0.75 ≤ P < 0.85	5	8	9	20	18	58	20	50
P ≥ 0.85 ^b	3	4	3	8	4	13	4	11
Descriptive Statistics								
N Items		160		229		322		245
Mean		0.49		0.57		0.60		0.62
SD		0.19		0.16		0.16		0.16
Min		0.11		0.18		0.12		0.17
Max		0.97		0.95		0.89		0.97

^a SPR items included; ^b P-value > 0.90: 2 Algebra, 4 Biology, and 2 Government items

Table 7.4 Distribution of Item-Total Correlations for the MD HSA May 2010 Field Test Items

Correlation	Percentage and Number of Items							
	Algebra ^a		Biology		English		Government	
	%	N	%	N	%	N	%	N
R < 0.15 ^c	4	7	2	4	6	18	3	7
0.15 ≤ R < 0.25	6	10	10	24	19	61	7	18
0.25 ≤ R < 0.35	18	29	23	53	26	85	17	41
0.35 ≤ R < 0.45	29	47	35	80	34	110	42	103
0.45 ≤ R < 0.55	33	52	26	60	15	48	29	71
0.55 ≤ R < 0.65	9	14	3	8	0	0	2	5
0.65 ≤ R < 0.75	1	1	0	0	0	0	0	0
R ≥ 0.75	0	0	0	0	0	0	0	0
Descriptive Statistics								
N Items	160		229		322		245	
Mean	0.41		0.38		0.33		0.39	
SD	0.12		0.10		0.11		0.10	
Min	0.09		0.08		0.08		0.10	
Max	0.66		0.61		0.53		0.59	

^a SPR items included; ^c R < 0.10: 1 Algebra, 1 Biology, and 5 English items

Table 7.5 MD HSA Field Test Items Excluded from Calibration

Administration	Content	ItemID	Form	Sequence	Response Type	Reason
January	Algebra	133398	B	5	SR	RBis = 0.05
	English	264662	B	84	SR	RBis = -0.11
	English	261674	A	83	SR	RBis = 0.02
May	Biology	349023	D	48	SR	RBis = 0.08
	English	349440	H	9	SR	RBis = 0.08
	English	338906	H	60	SR	RBis = 0.07
	English	321012	H	72	SR	RBis = -0.18
	English	338878	J	9	SR	RBis = 0.09
	English	349216	L	59	SR	RBis = -0.07
	English	332104	L	64	SR	RBis = 0.01
	English	349346	M	61	SR	RBis = 0.09
	English	349293	N	11	SR	RBis = 0.03
	Government	324432	F	21	SR	RBis = 0.10
	Government	339195	G	92	SR	RBis = -0.10
	Government	348867	H	74	SR	RBis = -0.02
	Government	339051	L	45	SR	RBis = 0.03
	Government	324413	M	31	SR	RBis = 0.01
	Government	324440	X	61	SR	In makeup form only, not representative sample

Table 7.6 MD HSA Field Test Items with Statistical Flags Retained in Calibration

January	P-Value < 0.25	P-Value > 0.90	R_ITT < 0.15	Distractor Pt-Bis > 0	Omit Rate > 5%	C-Level DIF	Missing Response ^a	Total Flags	N Items ^b
Algebra	6	0	3	5	8	1	0	23	13
Biology	4	0	3	10	0	0	0	17	10
English	2	0	5	10	0	3	0	20	13
Government	5	0	2	7	0	3	0	17	11

May	P-Value < 0.10	P-Value > 0.90	R_ITT < 0.10	Distractor Pt-Bis > 0	Omit Rate > 5%	C-Level DIF	Missing Response ^a	Total Flags	N Items ^b
Algebra	0	2	1	17	20	4	0	44	42
Biology	0	4	1	21	0	7	0	33	29
English	0	0	5	51	0	3	0	59	53
Government	0	2	0	17	0	3	0	22	22

^a SR option with 0 students; ^b Represents total number of unique items.

Differential Item Functioning

Following the classical item analyses, differential item functioning analyses were completed. One goal of test development is to assemble a set of items that provides an estimate of student ability that is as fair and accurate as possible for all groups within the population. DIF statistics are used to identify items whereby identifiable groups of students with the same underlying level of ability (e.g., Females, African Americans, Hispanics) have different probabilities of answering correctly. If the item is more difficult for an identifiable subgroup, the item may be measuring something different from the intended construct. However, it is important to recognize that DIF-flagged items might be related to actual differences in relevant knowledge or skill (item impact) or statistical Type I error. A subsequent review by MSDE and ETS content experts is conducted to investigate the source and meaning of evident differences.

ETS used the Mantel-Haenszel DIF detection method. As part of the Mantel-Haenszel procedure, the statistic described by Holland & Thayer (1988), known as MH D-DIF, was used⁷. This statistic is expressed as the difference between the focal and reference group

⁷ The formula for the estimate of constant odds ratio is

$$\hat{\alpha}_{MH} = \frac{\left(\sum_m \frac{R_{rm} W_{fm}}{N_m} \right)}{\left(\sum_m \frac{R_{fm} W_{rm}}{N_m} \right)},$$

performance on an item after conditioning on total test score. Negative MH D-DIF statistics favor the reference group, and positive values favor the focal group. The classification logic used for flagging items is based on a combination of absolute differences and significance testing. Items that are not significantly different based on the MH D-DIF ($p > 0.05$) are considered to have similar performance between the two studied groups and to be functioning appropriately. For items where the statistical test indicates significant differences ($p < 0.05$), the effect size is used to determine the direction and severity of the DIF. The male and white groups were treated as the reference groups for gender and ethnicity, respectively; the female and other race and ethnic groups were considered the focal groups.

Based on their DIF statistics, items are classified into one of three categories and assigned values of A, B, or C. Category A items contain negligible DIF, Category B items exhibit slight or moderate DIF, and Category C items have moderate to large DIF. Negative values imply that, conditional on the matching variable, the focal group has a lower mean item score than the reference group. In contrast, a positive value implies that, conditional on the matching variable, the reference group has a lower mean item score than the focal group.

Among the items field-tested in January, one Algebra item, three English items, and three Government items were flagged for C-level DIF. Among the items field tested in May, four Algebra items, seven Biology items, three English items, and three Government items were flagged for C-level DIF. These flags were recorded in the item bank. Flagged items are reviewed by ETS and MSDE content specialists as well as by ETS senior staff to determine their availability for future use.

IRT Calibration and Scaling

One purpose of item calibration and scaling is to create a common scale for expressing the difficulty estimates of all the items across all versions of a test. The resulting scale has a mean score of 0 and a standard deviation of 1. This scale is often referred to as the “theta” metric and is not used for reporting purposes because the values typically range from -3 to $+3$. Therefore, the scale is usually transformed to a reporting scale (also known as a scale score), which can be more meaningfully interpreted by students, teachers, and other stakeholders.

where

- R_{rm} = number in reference group at ability level m answering the item right,
- W_{fm} = number in focal group at ability level m answering the item wrong,
- R_{fm} = number in focal group at ability level m answering the item right,
- W_{rm} = number in reference group at ability level m answering the item wrong,
- N_m = total group at ability level m.

This can then be used in the following formula (Holland & Thayer, 1985):

$$MH\ D - DIF = -2.35 \ln [\alpha_{MH}] .$$

As noted previously, the IRT model used to calibrate the MD HSA test items was the 3-parameter logistic (3PL) model. Item response theory expresses the probability that a student will achieve a certain score on an item (such as correct or incorrect) as a function of the item's statistical properties and the ability level (or proficiency level) of the student.

The 3PL model relates the probability that a person with ability θ will respond correctly to item i as follows:

$$P_i(\theta) = c_i + \frac{1 - c_i}{1 + e^{-1.7a_i(\theta - b_i)}},$$

where

- a_i is the slope parameter of item i , characterizing its discrimination;
- b_i is the location parameter of item i , characterizing its difficulty; and
- c_i is the lower asymptote parameter of item i , reflecting the chance that students with very low proficiency will select the correct answer, sometimes called the “pseudo-guessing” level.

A proprietary version of the *PARSCALE* computer program (Muraki & Bock, 1995) was used for all item calibration work. The resulting calibrations were then scaled to the bank estimates using Stocking and Lord's (1983) test characteristic curve (TCC) method and the operational items as the anchor set.

The calibration and equating process is outlined in the steps below.

1. For each test, all items were calibrated using a sparse matrix design that places all items on a common scale. Essentially, this means that the data were set up using the following format. In the diagram below, X's represent items and spaces indicate missing data. For example, items included on version 2 but not on version 1, 3, 4, or 5 were treated as “not reached” for the purposes of the analyses and are denoted as “missing” in the diagram below.

Common	Unique 1	Unique 2	Unique 3	Unique 4	Unique 5
XXXXXXX	XXXXXXX				
XXXXXXX		XXXXXXX			
XXXXXXX			XXXXXXX		
XXXXXXX				XXXXXXX	
XXXXXXX					XXXXXXX

2. Once the items have been calibrated, results were reviewed to determine if any items failed to calibrate.

3. After the final calibration parameter estimates were obtained, the items were then linked to the bank scale using the TCC method. Specifically, the banked parameter estimates of the primary form operational items were used to place the field test items onto the operational reporting scale.

Once the items were calibrated and placed onto the operational scale, they were loaded into the item bank. Items that were not calibrated were listed as unavailable (see Table 7.5).

CHAPTER II: MODIFIED HIGH SCHOOL ASSESSMENTS

Section 8. Introduction

The Maryland Modified High School Assessments (MD Mod-HSAs) were introduced in May 2008. These assessments are a modified version of the MD HSAs designed for special education students with Individualized Education Programs (IEPs). Eligibility to take the MD Mod-HSAs is determined by a student's IEP and evidence of progress in learning course content.

The MD Mod-HSAs consist of end-of-course tests in Algebra/Data Analysis, Biology, English, and Government and assess the same skills as the MD HSAs. The MD Mod-HSAs may be taken in place of one or more of the MD HSAs.

Students who entered ninth grade in the 2005–2006 school year or subsequent school years are required to earn satisfactory scores on all four content areas measured by the MD Mod-HSAs or HSAs in order to earn a Maryland High School Diploma.⁸ Results from the Algebra, Biology, and English administrations are used in the Maryland State Department of Education (MSDE) Adequate Yearly Progress (AYP) reports, required under the No Child Left Behind (NCLB) Act. Information on the interpretation of scores is provided to students, parents, schools, and other stakeholders via the MSDE website.

MD Mod-HSA items were derived from banked MD HSA items, with the question format simplified. For example, the MD Mod-HSAs contain selected response (SR) items that have three answer options instead of four, and the items have a reduced reading load and simplified graphics. All items are based on content outlined in Maryland's Core Learning Goals (CLGs).⁹

MD Mod-HSA forms are administered both online and in paper format. The goal is eventually to have most students test online, with only the special Braille, Kurzweil, and large-print forms administered on paper.

Detailed information regarding the development of MD Mod-HSA forms as well as descriptions of the methods used to align them to the MD HSA reporting scale are provided in the Maryland Modified High School Assessment 2008 Technical Report.¹⁰

⁸ More information on state graduation requirements is available on the Maryland State Department of Education website at <http://www.marylandpublicschools.org/MSDE/testing/hsa/>.

⁹ The MD HSA Core Learning Goals documents can be found on the Maryland School Improvement website at <http://www.md12.org/assessments/standards/9-12.html>.

¹⁰ The report is available at <http://marylandpublicschools.org/MSDE/divisions/planningresultstest/HSA+Technical+Reports.htm>.

This chapter of the 2010 technical report provides information about the October 2009 administration and the January, April, May, and Summer (July/August) 2010 administrations of the MD Mod-HSAs.

The item response model used to calibrate the items in the MD Mod-HSAs was the three-parameter logistic (3PL) model. Currently, this model is used to estimate both total test scores and subscores. Both total test scores and subscores were estimated using item-pattern (IP) scoring. Total test results in the scale score metric are reported to students. Subscores are not reported to students but are aggregated at the classroom level to provide teachers and administrators with information about student performance in each of the subscore categories.

The MD Mod-HSA forms are constructed using pre-equated item parameters. When pre-equated item parameters are used, the parameters are not estimated following an administration; instead, existing bank parameters are used to produce student scores. Using this approach, scores can be calculated and assigned to students immediately after their answer documents have been processed.

All technical support and analyses were carried out in accordance with both the *ETS Standards for Quality and Fairness* (2002) and the *Standards for Educational and Psychological Testing*, issued jointly by the American Educational Research Association, American Psychological Association, and National Council on Measurement in Education (AERA, APA, & NCME, 1999).

This chapter of the technical report consists of five other sections and one appendix. Section 9 describes the procedures used for test construction and administration. Section 10 discusses the validity of the MD Mod-HSAs. Section 11 describes the scoring procedures and score types. Section 12 describes the results of analyses of test reliability and decision consistency and decision accuracy. Section 13 presents summary statistics and descriptive information about student characteristics. Appendix 2 provides classical item statistics for each operational form.

Section 9. Test Construction and Administration

Test Development

Planning

Planning for the test development process began with the creation of the MD Mod-HSA blueprints and item modification/development plans for each content area. MSDE content specialists collaborated with Maryland educators, both special education and content area experts, to develop a plan for modifying and developing content for the modified assessments. The MD HSA item bank was reviewed to determine how well the available item pool could be modified to meet the item requirements of the MD Mod-HSAs and blueprint requirements as identified across the CLGs. Items, passages, and stimuli identified as modifiable were revised according to item plans, using such modifications as reducing the number of response options from four to three, simplifying language and graphics, grouping text within longer passages, and repeating critical passage text within an item. When deficits in the pool of modifiable items were identified, MSDE and its collaborative partners developed additional items.

Test Specifications and Design

MSDE defined the basic test design and provided it to Educational Testing Service (ETS). The blueprints for the 50-item test design are presented below in the section on test specifications. The basic test design defined the reporting categories and the number of items in each reporting. Decisions about the distribution of items throughout the forms were left to the collaborative efforts of the ETS and MSDE content specialists.

Construction of the operational forms was based on test blueprints approved by MSDE.

Item Type

The MD Mod-HSAs consist of selected response items only. Each of the four content areas—Algebra, Biology, English, and Government—contained 50 operational items worth a total of 50 score points.

Item Modification, Development, Review, and Revision

MSDE oversaw the initial item modification and development. MSDE content and special education specialists worked with Maryland educators to modify existing MD HSA items and to develop new items written specifically for the MD Mod-HSA program. These items underwent review and revision at MSDE prior to their submission to ETS for inclusion in the MD Mod-HSA item bank.

Once received by ETS, all items were uploaded into the item bank and all graphics and stimulus materials were revised as requested. At this point, all items underwent a series of editorial reviews in accordance with the following procedures:

- Items were edited according to standard rules developed in conjunction with MSDE.
- Items were reviewed for accuracy, organization, comprehension, style, usage, consistency, and fairness/sensitivity.
- Item content was reviewed to establish whether the item measured the intended Goal-Expectation-Indicator-Assessment Limit.
- Verification was made that copyright and/or trademark permissions had been obtained for any materials requiring permissions.
- Internal reviews were conducted and historical records established for all version changes.

After ETS performed the required internal reviews, item revision recommendations were submitted to MSDE for their review. Any associated stimulus material, graphic, and/or art was provided as well as information regarding the Goal-Expectation-Indicator-Assessment Limit that each question addressed.

MSDE performed a final review of the items and provided feedback to ETS content specialists. Suggested edits were incorporated into the items. The items were then prepared for a final round of reviews by the Content Review and Bias/Sensitivity Review Committees.

The committees, selected by MSDE, were composed of diverse groups of Maryland educators. The committees reviewed each item to ensure that the content (a) accurately reflected what was taught in Maryland schools; (b) correctly matched the intended CLG indicator; and (c) did not unfairly favor or disadvantage an individual or group. A total of 699 items were reviewed across all four content areas. Of these items, 8 (0.01%) were rejected by the Bias/Sensitivity Review Committee, while 159 (22.7%) were accepted with edits. In total, the two committees accepted a total of 532 (76.1%) of the 699 MD Mod-HSA test items.

Upon completion of this final round of reviews, MSDE and ETS content specialists conducted another side-by-side meeting to evaluate the reviews. The ETS content specialists then made any necessary final edits to the items and/or revisions to the accompanying graphics. The items that survived this process were then eligible for placement in the MD Mod-HSA forms.

Test Specifications

Tables 9.1 through 9.4 identify each reporting category and the number of items in each category.

Table 9.1 MD Mod-HSA Algebra Blueprint

Reporting Category	Number of items
Expectation 1.1 Analyzing Pattern and Functions	13
Expectation 1.2 Modeling Real-World Situations	16
Expectation 3.1 Collecting, Organizing, and Analyzing Data	11
Expectation 3.2 Using Data to Make Predictions	10
Total	50

Note: Information about the referenced expectations can be found in the Maryland Core Learning Goals for Algebra on the Maryland School Improvement website at <http://www.mdck12.org/assessments/standards/9-12.html>

Table 9.2 MD Mod-HSA Biology Blueprint

Reporting Category	Number of items
Goal 1 Skills and Processes of Biology	11
Expectation 3.1 Structure and Function of Biological Molecules	8
Expectation 3.2 Structure and Function of Cells and Organisms	9
Expectation 3.3 Inheritance of Traits	8
Expectation 3.4 Mechanism of Evolutionary Change	6
Expectation 3.5 Interdependence of Organisms in the Biosphere	8
Total	50

Note: Information about the referenced goal and expectations can be found in the Maryland Core Learning Goals for Biology on the Maryland School Improvement website at <http://www.mdck12.org/assessments/standards/9-12.html>

Table 9.3 MD Mod-HSA English Blueprint

Reporting Category	Number of Items
1: Reading and Literature: Comprehension and Interpretation Includes indicators 1.1.1; 1.1.2; 1.1.3; 1.2.1; 1.3.3; 3.2.2.	13
2: Reading and Literature: Making Connections and Evaluation Includes indicators 1.1.4; 1.2.2; 1.2.3; 1.2.4; 1.2.5; 1.3.5; 4.2.1.	13
3: Writing—Composing Includes indicators 2.2.1; 2.2.2; 2.2.3; 2.2.5; 2.3.1; 2.3.3; 4.3.1.	13
4: Writing—Language Usage and Conventions Includes indicators 3.1.3; 3.1.4; 3.1.6; 3.1.8; 3.3.1; 3.3.2.	11
Total	50

Note: Information about the referenced indicators can be found in the Maryland Core Learning Goals for English on the Maryland School Improvement website at <http://www.mdk12.org/assessments/standards/9-12.html>

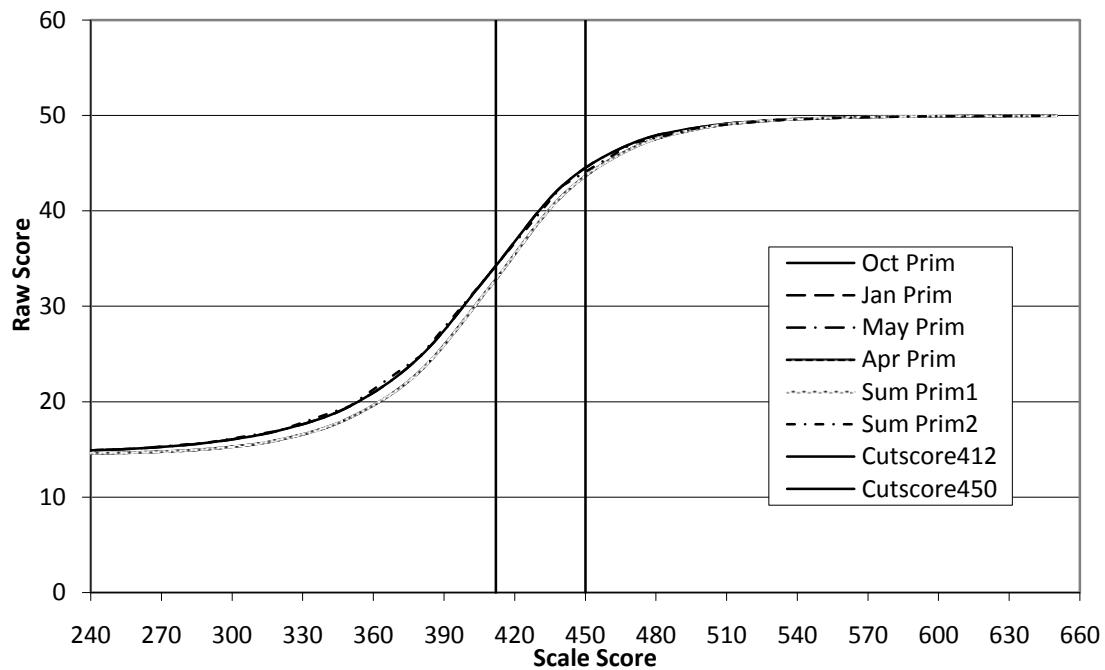
Table 9.4 MD Mod-HSA Government Blueprint

Reporting Category	Number of Items
Expectation 1.1 U.S. Government Structure, Functions, and Principles	14
Expectation 1.2 Protecting Rights and Maintaining Order	12
Goal 2 Systems of Government and U.S. Foreign Policy	8
Goal 3 Impact of Geography on Governmental Policy	7
Goal 4 Economic Principles, Institutions and Processes	9
Total	50

Note: Information about the referenced expectations and goals can be found in the Maryland Core Learning Goals for Government on the Maryland School Improvement website at <http://www.mdk12.org/assessments/standards/9-12.html>

Figures 9.1 through 9.8 show the plots of the TCCs and CSEMs for the forms developed for each content area. It is important to note that the TCCs and CSEMs shown in the plots are based on preequated item parameters and therefore are curves calculated prior to administration of the tests. As expected, the CSEM plots indicate that the CSEMs for each content area were lowest in the middle range of scale scores (375 to 475). The majority of students score in the middle range, where the CSEMs are smallest. (Refer to Section 13, figures 13.1 to 13.4 for histograms of student performance.)

Figure 9.1 Test Characteristic Curves for the MD Mod-HSA 2010 Algebra Forms



Note: Maximum possible raw score is 50.

Figure 9.2 Conditional Standard Errors of Measurement for the MD Mod-HSA 2010 Algebra Forms

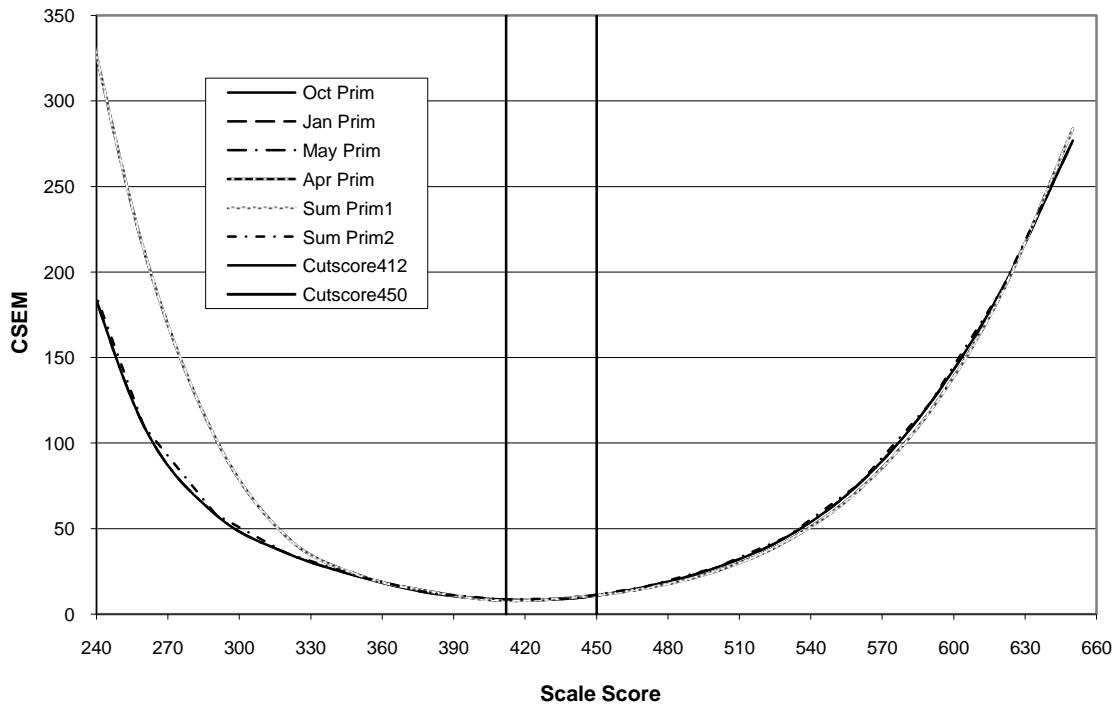
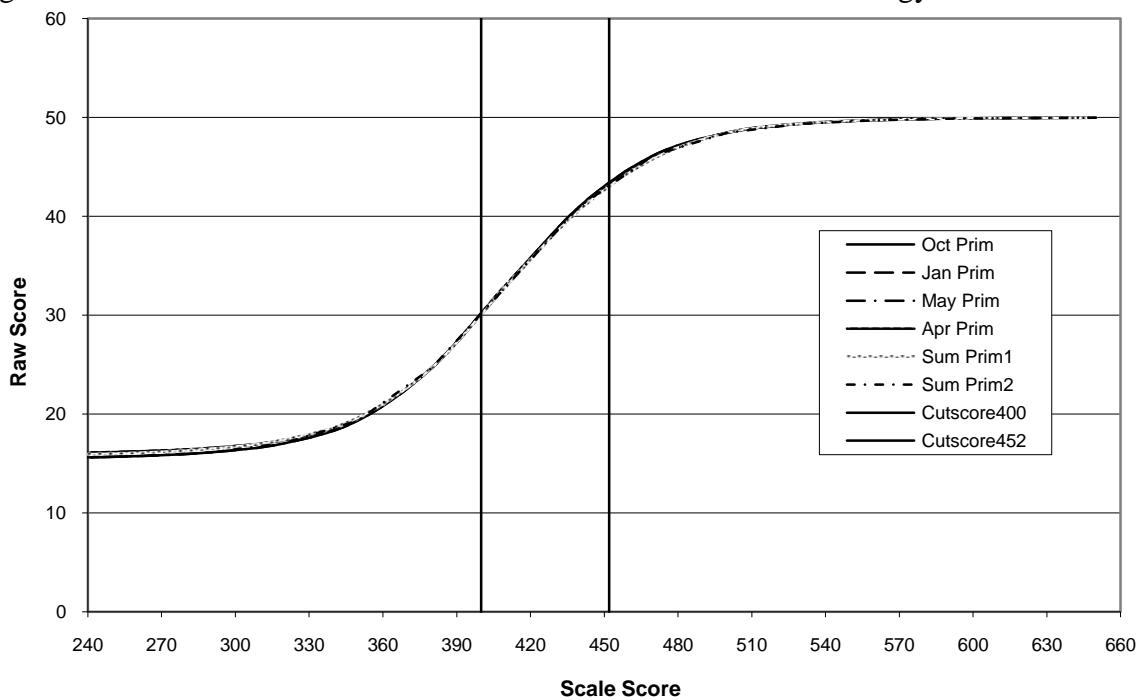


Figure 9.3 Test Characteristic Curves for the MD Mod-HSA 2010 Biology Forms



Note: Maximum possible raw score is 50.

Figure 9.4 Conditional Standard Errors of Measurement for the MD Mod-HSA 2010 Biology Forms

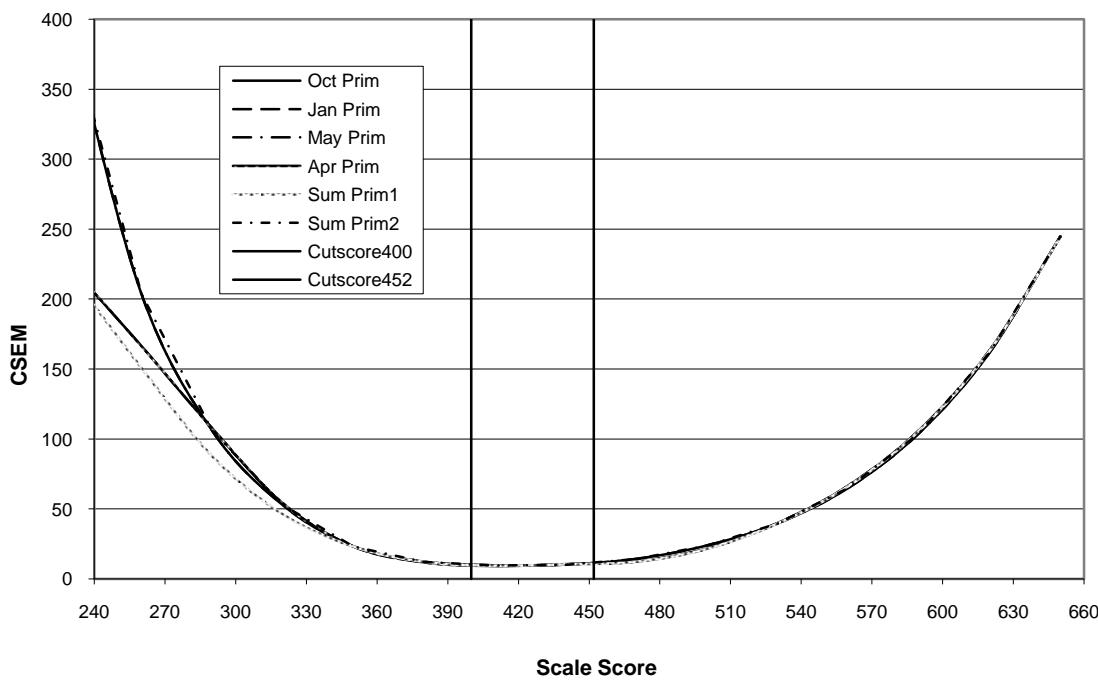
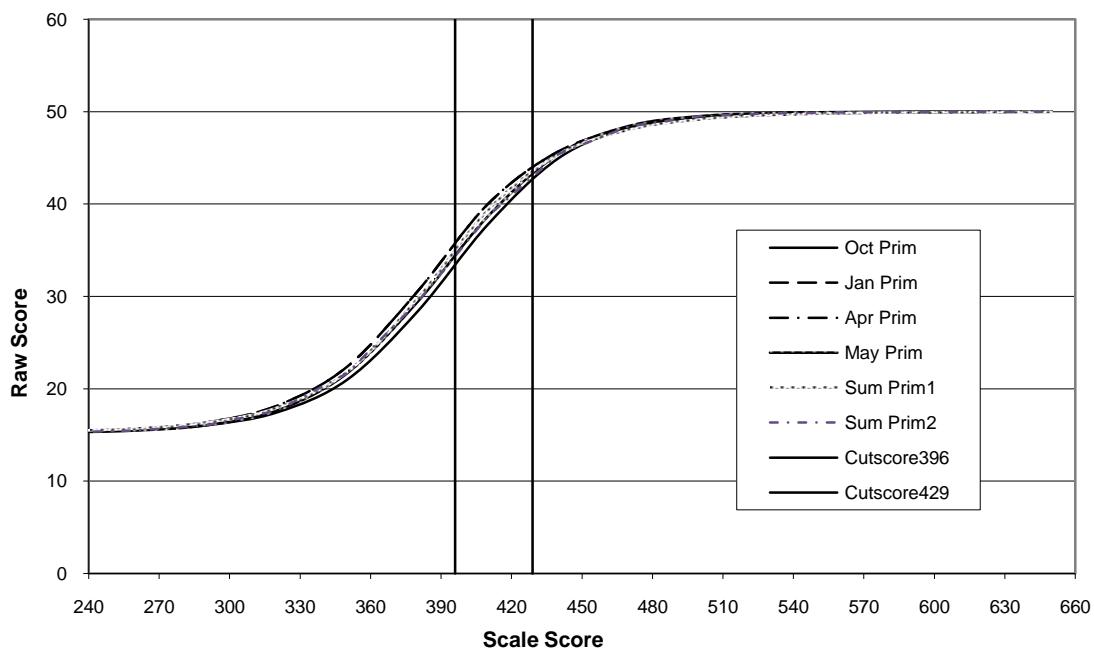


Figure 9.5 Test Characteristic Curves for the MD Mod-HSA 2010 English Forms



Note: Maximum possible raw score is 50.

Figure 9.6 Conditional Standard Errors of Measurement for the MD Mod-HSA 2010 English Forms

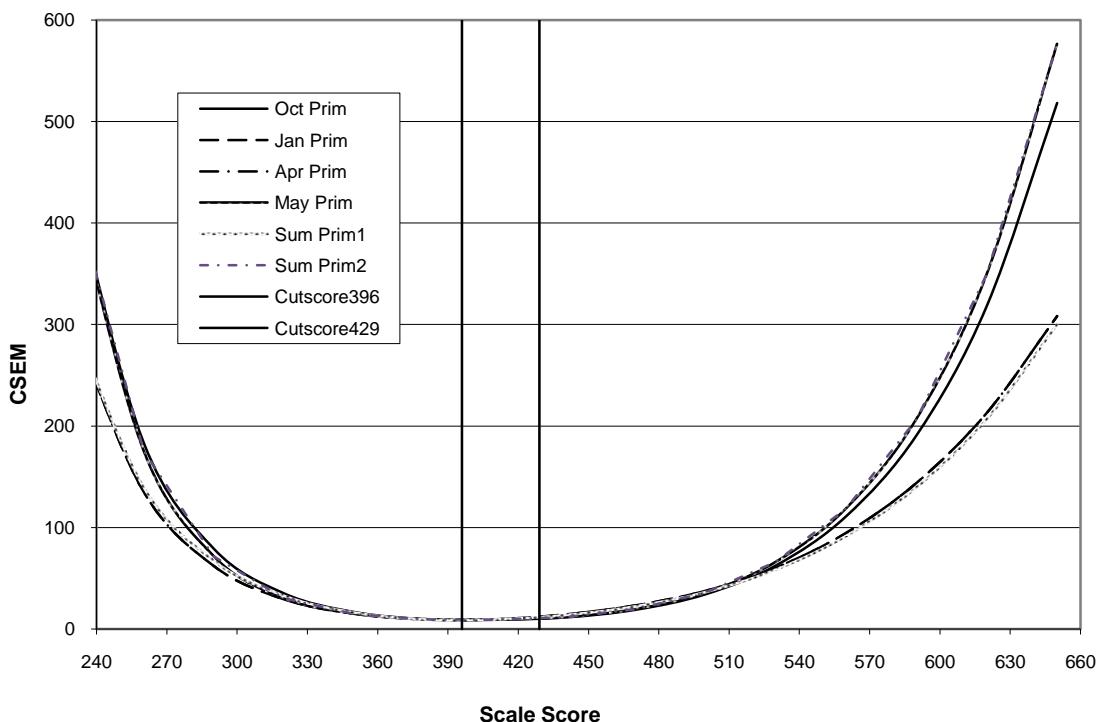
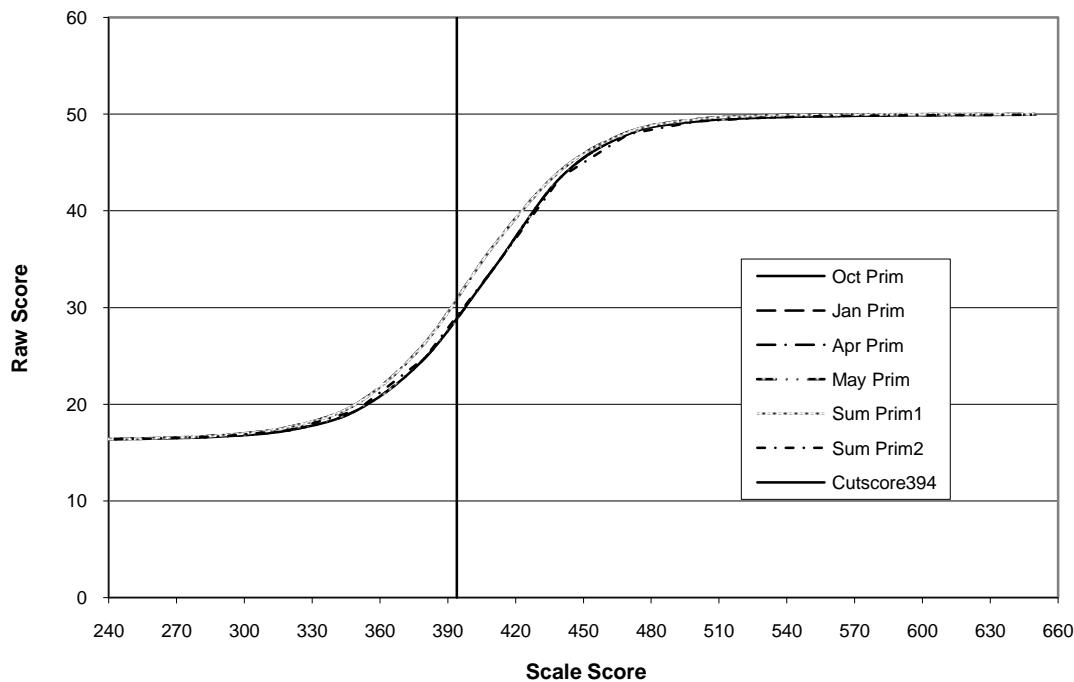
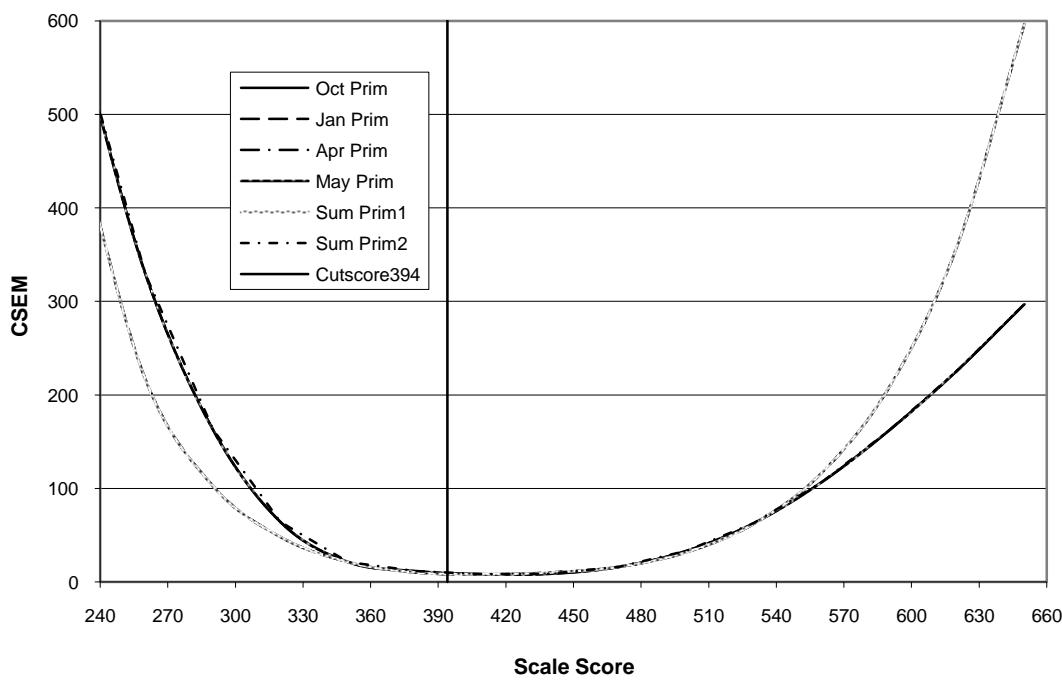


Figure 9.7 Test Characteristic Curves for the MD Mod-HSA 2010 Government Forms



Note: Maximum possible raw score is 50.

Figure 9.8 Conditional Standard Errors of Measurement for the MD Mod-HSA 2010 Government Forms



Test Administration

The MD Mod-HSA tests were administered both online and on paper in October 2009 and January, April, May, and Summer 2010. One paper and one online MD Mod-HSA form per content area was administered during each administration, with the exception of Summer 2010, where two paper and two online forms were administered.

The forms for Algebra, Biology, English, and Government consist of two sessions administered within a single sitting. Sessions are separated by a short break. All forms administered without accommodations have the timing limits shown in Table 9.5.

Table 9.5 MD Mod-HSA Testing Timing Schedule in Minutes by Content Area

Content Area	Session 1	Break	Session 2
Algebra	50	5	50
Biology	30	5	30
English	50	5	40
Government	30	5	30

Section 10. Validity

Validity is one of the most important attributes of assessment quality. Validity refers to the degree to which logical, empirical, and judgmental evidence supports each proposed interpretation or use of a set of scores, and it is one of the most fundamental considerations in developing and evaluating tests (AERA, APA, & NCME, 1999; Messick, 1989). Validity is not based on a single study or type of study but is an ongoing process of gathering evidence supporting the interpretation or use of the resulting test scores. The process begins with the test design and continues throughout the entire assessment process, including design, content specifications, item development, psychometric quality, and inferences made from the test results.

Students' scores on an MD Mod-HSA are inferred to reflect students' level of knowledge and skills in a content area. The scores are used to classify students in terms of their level of proficiency, based on cut scores established by the state.

Evidence Based on Analyses of Test Content

The Maryland Mod-HSAs are referred to as end-of-course tests because students take each test as they complete the appropriate coursework. Banked HSA items were selected and adapted for the MD Mod-HSAs to measure the knowledge and skills expected of students following completion of coursework.

The constructs measured by each MD Mod-HSA are described in detail in the Maryland high school curriculum standards, or Core Learning Goals. All ETS content staff working on item selection and development have been trained in the CLGs. The test blueprint documents presented in Section 9 (see Tables 9.1 to 9.4) were created in collaboration with committees of Maryland educators and were derived from the Maryland goals, expectations, and indicators.

The process of selecting and adapting banked MD HSA items for use as MD Mod-HSA items is summarized briefly in Section 9 and described in detail in the Maryland Modified High School Assessment 2008 Technical Report.¹¹ Banked items were referenced to a particular instructional standard (i.e., goal, expectation, or indicator). During the internal ETS development process, the specific reference was confirmed or changed to reflect changes to the item. When the item went to a committee of Maryland educators for content review, the members of the committee made independent judgments about the match of the item content to the standard it was intended to measure and evaluated the appropriateness for the age and cognitive ability of the students being tested.

¹¹ Available at <http://marylandpublicschools.org/MSDE/divisions/planningresultstest/HSA+Technical+Reports.htm>.

Evidence Based on Analyses of Internal Test Structure

Analyses of the internal structure of a test typically involve studies of the relationship among test items and/or test components in the interest of establishing the degree to which the items or components appear to reflect the construct on which a test interpretation is based (AERA, APA & NCME, 1999, p. 13). The term construct is used here to refer to the characteristic that a test is intended to measure; in the case of the MD Mod-HSAs, the characteristic of interest is the knowledge and skills defined by the test blueprint for each content area.

These test blueprints are derived from Maryland's Core Learning Goals for each course. The test blueprints are presented in Section 9 (see Tables 9.1 through 9.4); the CLGs can be found on the MSDE website at

http://www.md12.org/assessments/high_school/index_a.html

High internal consistency, as is discussed in Section 12, constitutes evidence of validity as high reliability over items within a test implies that the test items within a domain are measuring a single construct. The internal structure of the test can also be assessed through the evaluation of correlation matrices between individual MD Mod-HSA subscores. Subscores that are strongly related to each other are indicators of construct validity. Tables 10.1 and 10.2 contain the Pearson correlations found between subscores within each content area of the MD Mod-HSA tests. Results indicate that each subscore is significantly positively correlated with the total Scale Score as well as the individual subscores measured in each content area.

Table 10.1 Correlations between MD Mod-HSA Subscores by Content Area – Algebra & Biology

	Algebra					Biology						
	SS	1	2	3	4	SS	1	2	3	4	5	6
Overall SS	1						1					
Subscore 1	.69	1					.67	1				
Subscore 2	.60	.36	1				.43	.20	1			
Subscore 3	.67	.33	.35	1			.58	.30	.28	1		
Subscore 4	.37	.25	.24	.23	1		.52	.28	.29	.33	1	
Subscore 5	-	-	-	-	-		.49	.28	.21	.29	.28	1
Subscore 6	-	-	-	-	-		.52	.27	.24	.32	.31	.22

Note: All correlations significant at the p < .001 level.

Table 10.2 Correlations between MD Mod-HSA Subscores by Content Area – English & Government

	English					Government					
	SS	1	2	3	4	SS	1	2	3	4	5
Overall SS	1					1					
Subscore 1	.66	1				.64	1				
Subscore 2	.65	.43	1			.66	.40	1			
Subscore 3	.69	.39	.38	1		.57	.35	.37	1		
Subscore 4	.57	.31	.31	.31	1	.59	.35	.34	.29	1	
Subscore 5	-	-	-	-	-	.50	.30	.37	.33	.27	1

Note: All correlations significant at the p < .001 level.

Evidence of the internal structure of an assessment also comes from evaluation of the dimensionality of the test — whether performance on items that compose each test reflects a single underlying characteristic or a set of distinct characteristics. Previous exploratory factor analytic (EFA) studies evaluating the dimensionality of the MD Mod-HSA operational forms have indicated a single underlying dimension¹². To establish the validity of a single factor model over test content areas on the MD Mod-HSA, confirmatory factor analysis (CFA) can be used.

Confirmatory Factor Analyses of the May 2010 MD Mod-HSA Administration Data

To assess the dimensionality of the MD Mod-HSA tests, CFA's for each content area were conducted using test data from the primary form of the May 2010 administration. The May administration was chosen for analysis because it is the largest and most representative administration of the MD Mod-HSAs. The May administration consisted of one primary form; data from operational items were combined across forms within the content areas of Algebra, Biology, English, and Government.

Mplus (Muthén & Muthén, 2007) was used to evaluate unidimensional, or one-factor, CFA models for each content area. As item level data on the MD HSA tests are dichotomous, methods available in *Mplus* that take into account the categorical nature of the data were used (see Muthén, 1998-2004).

Model parameter estimation was accomplished using a weighted least-square method with a mean and variance adjustment (*WLSMV*; Muthén, DuToit, & Spisic, 1997). This method leads to a consistent estimator of the model parameters and provides standard errors that are robust under model misspecification. For categorical data, this estimation method offers an alternative to the full-weighted least square (WLS) technique that generally becomes computationally too demanding for models with more than a few observed variables (items).

¹² When the Mod-HSA was created in 2008, EFA was conducted. Please refer to the Maryland Modified High School Assessment 2008 Technical Report for details.

Overall model fit for each CFA model by content area was examined using the scaled chi-square (χ^2) test of model fit in combination with supplemental fit indices. The Tucker-Lewis Index (TLI) compares the chi-square for the hypothesized model with that of the null or “independence” model, in which all correlations or covariances are zero. TLI values range from zero to 1.0, and values around 0.94 signify good fit (Hu & Bentler, 1999). The comparative fit index (CFI) and root mean square error of approximation (RMSEA) index both are based on noncentrality parameters. The CFI compares the covariance matrix predicted by the model with the observed covariance matrix, and the covariance matrix of the null model with the observed covariance matrix. Higher CFI values indicate better model fit (Hu & Bentler, 1999). The RMSEA assesses the error in the hypothesized model predictions; values less than or equal to 0.06 indicate good fit (Hu & Bentler, 1999).

Table 10.3 shows the results of the analyses. Fit statistics indicated that the one-factor solutions generally fit the data well in all content areas. None of the χ^2 results indicated good fit, given the criterion of $p > .05$; however this was expected because the sample sizes were very large. These findings provide evidence suggesting the tests for each content area measure a single underlying dimension.

Table 10.3 MD Mod-HSA Confirmatory Factor Analyses Fit Statistics

Content	Forms	# of Factors	# of Items	n	df	χ^2^*	TLI	CFI	RMSEA
Algebra**	410/1010	1	48	4,189	810	2880.61	.884	.888	.025
Biology	410/1010	1	50	2,639	780	1202.46	.952	.940	.014
English	410/1010	1	50	2,902	800	1507.88	.950	.935	.017
Government	410/1010	1	50	2,778	787	1518.77	.951	.930	.018

Note: Table entries that meet or exceed the criterion are in bold.

* $p < .0005$.

** Two items were omitted from the Algebra analyses because they were not included in operational scoring.

Speededness

The percentage of students who respond to the last items in a test can be used to assess the degree to which a test is speeded. When speededness occurs, a test is measuring not only students' knowledge and skills as defined by the construct of interest but also the speed at which the knowledge and skills are demonstrated, which is a second construct. In tests of achievement, it is desirable to find that speededness is not present in a test, which provides evidence that student scores on the test reflect only the intended construct. Evidence of speededness is provided by the finding that the omit rates at the end of a test are notably higher than those observed elsewhere in the test.

Appendix 2A presents the percentage of students who omitted items on the MD Mod-HSA operational forms. The percentage of students who did not respond to the last ten items of a test was less than 1 percent for all content areas and sessions, with the exception of two forms. The summer administrations of Algebra Form 610 (Primary 2) had 1.2 percent of students that omitted item 50 and English Form 610 (Primary 2) had 1.6 percent of students that omitted item 43. With those exceptions, the item level omit rates for the last ten items are quite low and are comparable to the omit rates for all items. This provides evidence that students had sufficient time to complete the entire test.

Further, if more than 5 percent of students omit a selected response item at any point in the test, the item is flagged as having a high omit rate. No MD Mod-HSA items were flagged for high omit rate in any content area for any administration.

Other information in support of the uses and interpretations of the MD Mod-HSA scores appears in the following sections:

- Section 11 provides detailed information concerning the scores that were reported and the cut scores for each content area.
- Section 12 provides information concerning test characteristics based on classical test theory.
- Section 13 presents information regarding student characteristics for the MD Mod-HSA administrations.

Section 11. Scoring Procedures

Scale Scores

The MD Mod-HSA reporting scale ranges from 240 to 650. This scale was aligned to the MD HSA scale, which was established in 2003. Scale scores describing both total test and subscore performance on the MD Mod-HSA are maximum likelihood estimates obtained using item-pattern (IP) scoring and the parameters estimated for the items in each operational test form.

Total test results in the scale score metric were reported to students. Subscores were not reported to students but were aggregated at the classroom level to provide teachers and administrators with additional information about student performance in each of the subscore categories.

Lowest and Highest Obtainable Test Scores

The maximum likelihood procedure under the 3PL model cannot produce reasonable scale score estimates for students with perfect scores or scores below the level expected by guessing. While maximum likelihood estimates are usually available for students with extreme scores other than zero or perfect, occasionally these estimates have very large conditional standard errors of measurement (CSEMs), and differences between these extreme values have little meaning. Therefore, scores were established for these students based on the procedure used for the MD HSA (refer to Appendix 3.C of the 2004 Technical Report). These values were called the lowest obtainable scale score (LOSS) and the highest obtainable scale score (HOSS). Starting with the summer 2005 administration of the MD HSA, MSDE decided that the LOSS and HOSS values would be 240 and 650, respectively, for all content areas. Since the MD Mod-HSA is on the same scale as the MD HSA, the same LOSS and HOSS values were used.

Cut Scores

MSDE requested that the MD Mod-HSAs be aligned with the MD HSA scales so that the cut scores established for the MD HSAs could be applied to the MD Mod-HSAs. The MD HSA cut scores associated with each performance level in the non-English content areas were established by MSDE in 2003.¹³ The MD HSA English cut scores were established during a standard setting held in October 2005.

Two cut scores were established for the Algebra and English tests, enabling students to be classified as Basic, Proficient, or Advanced. Two cut scores were needed because the

¹³ Technical documentation on the standard-setting method used to establish MD HSA cut scores is available on the Maryland State Department of Education website at <http://www.marylandpublicschools.org/divisions/planningresultstest/maryland+standard+setting+technical+reports.htm>.

results for these tests are used as the high school mathematics and English/language arts components of Maryland's system of accountability under NCLB.¹⁴ Prior to the 2007–2008 school year, Biology had only one cut-score. In 2007 an Advanced cut score was set for Biology, and the results are now used as components of the MSDE accountability system. There is only one cut score for the Government test; it is used to classify students as Basic or Proficient.

To verify that the cut scores established for the MD HSAs were appropriate for the MD Mod-HSAs, a standard setting was conducted in August 2008 using the MD Mod-HSA student results. The standard-setting panels, consisting of Maryland general and special educators, confirmed that the MD HSA cut scores were appropriate for the MD Mod-HSA.¹⁵

Students eligible to take an MD Mod-HSA and who entered grade 9 in or after the 2005–2006 academic year must pass MD Mod-HSAs or MD HSAs in all four content areas or achieve an overall combined score of 1602 as part of the requirements for graduation. The Proficient cut scores are used to determine Pass/Fail classifications. The cut scores by content area are given in Table 11.1.

Table 11.1 MD Mod-HSA Cut Scores by Content Area

Content Area	Cut-Score	
	Proficient	Advanced
Algebra	412	450
Biology	400	452
English	396	429
Government	394	--

¹⁴ Information regarding the system of accountability is available on the Maryland State Department of Education website at http://www.marylandpublicschools.org/NR/rdonlyres/0146EDA2-5F91-47DD-9A84-16164BDEA25C/18082/Acct_workbook_final_w_table_appendices_r_93008.doc.

¹⁵ Information regarding the standard-setting process for the MD Mod-HSA is available at the MSDE website at http://www.marylandpublicschools.org/NR/rdonlyres/3253C1DD-CA2E-4E64-A066-D6F36EBADF9B/18003/ModHSA_SB_Final.ppt.

Section 12. Test Characteristics

Provided in this section is a discussion of the results of analyses of test reliability and decision consistency and decision accuracy for all test forms administered.

Reliability

The general concept of reliability concerns the precision of a test score. Of interest is quantifying the degree to which a score will vary from an average result obtained over many testing occasions due to random factors (Haertel, 2006). A variety of theories and methods can be used to estimate reliability.

Classical test theory defines reliability as the proportion of total score variance that is true-score variance. Several different ways of estimating this proportion exist. The estimate of reliability given in this report is Cronbach's alpha (Cronbach, 1951), an internal consistency measure. It is derived from analysis of the consistency of performance over items within a test and provides a lower-bound estimate of a test's reliability. Cronbach's alpha can be expressed as:

$$\alpha = \frac{n}{n-1} \left[1 - \frac{\sum_{i=1}^n \sigma_i^2}{\sigma_x^2} \right],$$

where n is the number of items, σ_i^2 is the variance of scores on the i -th item, and σ_x^2 is the variance of the total score (sum of scores on the individual items).

Values for Cronbach's alpha were calculated for each test form, each test group, and selected subgroups, using the sample variances in place of the variances in the above expression. The results for the reliability analyses are presented along with other summary statistics in Tables 13.5 to 13.24 of Section 13. The tables show that the overall reliability coefficients for the MD Mod-HSA ranged from 0.61 to 0.80.

Decision Accuracy and Decision Consistency

The accuracy of decisions based on specified cut scores was assessed for reliability of classification using the ETS computer program *RELCLASS*, which provides two statistics that describe the reliability of classifications based on test scores (Livingston & Lewis, 1995). More specifically, information from an administration of one form is used to estimate the following:

Decision accuracy describes the extent to which examinees are classified in the same way as they would be on the basis of the average of all possible forms of a test. Decision accuracy answers the question: How does the actual classification of test takers, based on their single-form scores, agree with the classification that

would be made on the basis of their true scores, if their true scores were somehow known?

Decision consistency describes the extent to which examinees are classified in the same way they would be on the basis of a single form of a test other than the one for which data are available. Decision consistency answers the question: What is the agreement between the classifications based on two nonoverlapping, equally difficult forms of the test?

RELCLASS estimates decision accuracy using an estimated joint distribution of reported performance-level classifications on the current form of the test and the performance-level classifications based on an all-forms average (true score). *RELCLASS* estimates decision consistency using an estimated joint distribution of reported performance-level classifications on the current form of the test and performance-level classifications on an alternate (parallel) form. In each case, the proportion of performance-level classifications with exact agreement is the sum of the entries in the diagonal of the contingency table representing the joint distribution.

RELCLASS results were calculated using student scale scores derived from item-pattern score distributions for each form and content area. In five cases, the *RELCLASS* program would not converge due to the nature of the data (i.e., small sample sizes). The five cases were Algebra Form 510, Biology Forms 510 and 610, and English Forms 510 and 610, all taken by the Summer populations. The output provided in those tables was obtained by setting *RELCLASS* to override the convergence error and report results.

The results are provided in Tables 12.1 through 12.20 by content area for the October, January, April, May, and Summer administrations. The tables show decision accuracy values, which describe the agreement between classifications based on an observable variable (scores on one form of a test) and classifications based on an unobservable variable (the test takers' true scores). Decision accuracy values ranged from 0.84 to 0.91 across all performance levels and content areas and from 0.84 to 0.91 for the Proficient and Advanced classifications in Algebra, Biology, and English.

Decision consistency values describe the agreement between classifications based on two variables (scores on the form students have taken and a parallel form of the same test that is not administered to the students). Decision consistency values ranged from 0.77 to 0.86 across all performance levels and content areas and from 0.79 to 0.88 for the Proficient and Advanced classifications in Algebra, Biology, and English.

Note that in all cases the decision accuracy indices are somewhat larger than the decision consistency indices. This is due to differences in the estimation procedures. The estimation procedure for decision accuracy includes a random component on one of the two variables, whereas in estimating decision consistency each variable includes a random component (Livingston & Lewis, 1995).

Table 12.1 Decision Accuracy and Consistency: MD Mod-HSA Algebra October 2009 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	450–650	.00	.00	.00	.00
	412–449	.01	.04	.03	.07
	240–411	.02	.05	.86	.93
Estimated Proportion Correctly Classified*: Total = 0.90, Proficient & Above = 0.90					
Decision Consistency	450–650	.00	.00	.00	.00
	412–449	.01	.03	.03	.07
	240–411	.03	.08	.82	.93
Estimated Proportion Consistently Classified*: Total = 0.85, Proficient & Above = 0.87					

*Inconsistencies between cell entries and totals are due to rounding.

Table 12.2 Decision Accuracy and Consistency: MD Mod-HSA Algebra January 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	450–650	.00	.00	.00	.00
	412–449	.01	.05	.03	.09
	240–411	.02	.06	.84	.91
Estimated Proportion Correctly Classified: Total* = 0.88, Proficient & Above = 0.89					
Decision Consistency	450–650	.00	.00	.00	.00
	412–449	.02	.03	.03	.09
	240–411	.03	.08	.80	.91
Estimated Proportion Consistently Classified*: Total = 0.83; Proficient & Above = 0.86					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.3 Decision Accuracy and Consistency: MD Mod-HSA Algebra April 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	450–650	.01	.00	.00	.01
	412–449	.01	.05	.03	.10
	240–411	.02	.06	.82	.89
Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89					
Decision Consistency	450–650	.01	.00	.00	.01
	412–449	.02	.04	.04	.10
	240–411	.03	.08	.79	.89
Estimated Proportion Consistently Classified*: Total = 0.84, Proficient & Above = 0.86					

*Inconsistencies between cell entries and totals are due to rounding.

Table 12.4 Decision Accuracy and Consistency: MD Mod-HSA Algebra May 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	450–650	.00	.00	.00	.00
	412–449	.01	.05	.03	.09
	240–411	.02	.06	.83	.91
Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89					
Decision Consistency	450–650	.00	.00	.00	.00
	412–449	.02	.03	.04	.09
	240–411	.03	.08	.80	.91
Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above = 0.86					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.5 Decision Accuracy and Consistency: MD Mod-HSA Algebra Summer 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Summer Primary 1	450–650	.00	.00	.00	.00
	412–449	.00	.03	.03	.05
	240–411	.01	.05	.89	.95
Estimated Proportion Correctly Classified*: Total = 0.91, Proficient & Above = 0.91					
Decision Consistency	450–650	.00	.00	.00	.00
	412–449	.00	.02	.04	.05
	240–411	.03	.08	.84	.95
Estimated Proportion Consistently Classified*: Total = 0.86, Proficient & Above = 0.86					
Summer Primary 2	450–650	.00	.00	.00	.00
	412–449	.02	.04	.02	.07
	240–411	.02	.05	.86	.93
Estimated Proportion Correctly Classified*: Total = 0.89, Proficient & Above = 0.91					
Decision Consistency	450–650	.00	.00	.00	.00
	412–449	.02	.02	.02	.07
	240–411	.03	.07	.83	.93
Estimated Proportion Consistently Classified*: Total = 0.86, Proficient & Above = 0.88					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.6 Decision Accuracy and Consistency: MD Mod-HSA Biology October 2009 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	452–650	.00	.00	.00	.00
	400–451	.00	.06	.05	.11
	240–399	.00	.07	.81	.89
Estimated Proportion Consistently Classified*: Total = 0.87, Proficient & Above = 0.87					
Decision Consistency	452–650	.00	.00	.00	.00
	400–451	.00	.05	.06	.11
	240–399	.02	.12	.76	.89
Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.81					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.7 Decision Accuracy and Consistency: MD Mod-HSA Biology January 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	452–650	.00	.00	.00	.00
	400–451	.00	.06	.05	.10
	240–399	.01	.08	.81	.90
Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.87					
Decision Consistency	452–650	.00	.00	.00	.00
	400–451	.00	.05	.05	.10
	240–399	.02	.12	.75	.90
Estimated Proportion Consistently Classified*: Total = 0.80, Proficient & Above = 0.81					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.8 Decision Accuracy and Consistency: MD Mod-HSA Biology April 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	452–650	.00	.01	.00	.01
	400–451	.00	.07	.05	.12
	240–399	.01	.07	.79	.87
Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.87					
Decision Consistency	452–650	.01	.00	.00	.01
	400–451	.00	.06	.05	.12
	240–399	.02	.11	.74	.87
Estimated Proportion Consistently Classified*: Total = 0.81, Proficient & Above = 0.81					

*Inconsistencies between cell entries and totals are due to rounding.

Table 12.9 Decision Accuracy and Consistency: MD Mod-HSA Biology May 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	452–650	.00	.00	.00	.00
	400–451	.01	.12	.06	.18
	240–399	.01	.07	.74	.81
Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.87					
Decision Consistency	452–650	.00	.00	.00	.00
	400–451	.02	.10	.07	.18
	240–399	.01	.10	.70	.81
Estimated Proportion Consistently Classified*: Total = 0.80, Proficient & Above = 0.82					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.10 Decision Accuracy and Consistency: MD Mod-HSA Biology 2010 Summer Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Summer Primary 1	452–650	.00	.00	.00	.00
	400–451	.00	.03	.05	.08
	240–399	.00	.09	.83	.92
Estimated Proportion Correctly Classified*: Total = 0.86, Proficient & Above = 0.86					
Decision Consistency	452–650	.00	.00	.00	.00
	400–451	.00	.04	.04	.08
	240–399	.02	.12	.78	.92
Estimated Proportion Consistently Classified*: Total = 0.82, Proficient & Above = 0.82					
Summer Primary 2	452–650	.00	.00	.00	.00
	400–451	.01	.10	.06	.17
	240–399	.01	.08	.74	.83
Estimated Proportion Correctly Classified*: Total = 0.84, Proficient & Above = 0.84					
Decision Consistency	452–650	.00	.00	.00	.00
	400–451	.02	.08	.07	.17
	240–399	.02	.12	.69	.83
Estimated Proportion Consistently Classified*: Total = 0.77, Proficient & Above = 0.79					

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.11 Decision Accuracy and Consistency: MD Mod-HSA English October 2009 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	429–650	.01	.00	.00	.01
	396–428	.01	.07	.04	.12
	240–395	.02	.06	.80	.88
	Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.89				
Decision Consistency	429–650	.01	.00	.00	.01
	396–428	.02	.05	.04	.12
	240–395	.01	.09	.77	.88
	Estimated Proportion Consistently Classified*: Total = 0.82, Proficient & Above = 0.85				

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.12 Decision Accuracy and Consistency: MD Mod-HSA English January 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	429–650	.00	.00	.00	.00
	396–428	.01	.06	.04	.11
	240–395	.01	.06	.82	.89
	Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.89				
Decision Consistency	429–650	.00	.00	.00	.00
	396–428	.02	.04	.04	.11
	240–395	.02	.08	.78	.89
	Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above = 0.85				

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.13 Decision Accuracy and Consistency: MD Mod-HSA English April 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	429–650	.01	.00	.00	.01
	396–428	.02	.08	.05	.15
	240–395	.01	.05	.79	.84
	Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.89				
Decision Consistency	429–650	.01	.00	.00	.01
	396–428	.03	.06	.05	.15
	240–395	.02	.07	.76	.84
	Estimated Proportion Consistently Classified*: Total = 0.83, Proficient & Above = 0.86				

*Inconsistencies between cell entries and totals are due to rounding.

Table 12.14 Decision Accuracy and Consistency: MD Mod-HSA English May 2010 Form

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Decision Accuracy	429–650	.00	.00	.00	.00
	396–428	.02	.07	.04	.14
	240–395	.01	.06	.79	.86
	Estimated Proportion Correctly Classified*: Total = 0.87, Proficient & Above = 0.89				
Decision Consistency	429–650	.00	.00	.00	.00
	396–428	.03	.06	.05	.14
	240–395	.02	.08	.76	.86
	Estimated Proportion Consistently Classified*: Total = 0.82, Proficient & Above = 0.85				

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.15 Decision Accuracy and Consistency: MD Mod-HSA English Summer 2010 Forms

	Placement Scores	Advanced	Proficient	Basic	Category Total*
Summer Form 5	429–650	.00	.00	.00	.00
	396–428	.00	.02	.04	.06
	240–395	.01	.06	.87	.94
	Estimated Proportion Correctly Classified*: Total = 0.89, Proficient & Above = 0.89				
Decision Consistency	429–650	.00	.00	.00	.00
	396–428	.01	.02	.03	.06
	240–395	.02	.08	.84	.94
	Estimated Proportion Consistently Classified*: Total = 0.86, Proficient & Above = 0.87				
Summer Form 6	429–650	.00	.00	.00	.00
	396–428	.00	.05	.08	.13
	240–395	.00	.04	.83	.87
	Estimated Proportion Correctly Classified*: Total = 0.88, Proficient & Above = 0.88				
Decision Consistency	429–650	.00	.00	.00	.00
	396–428	.00	.06	.08	.13
	240–395	.00	.09	.78	.87
	Estimated Proportion Consistently Classified*: Total = 0.84, Proficient & Above* = 0.84				

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.16 Decision Accuracy and Consistency: MD Mod-HSA Government October 2009 Form

	Placement Scores	Proficient	Basic	Category Total*
Decision Accuracy	394–650	.09	.03	.12
	240–393	.07	.81	.88
	Estimated Proportion Correctly Classified*: Total = 0.90			
Decision Consistency	394–650	.08	.04	.12
	240–393	.11	.77	.88
	Estimated Proportion Consistently Classified*: Total = 0.85			

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.17 Decision Accuracy and Consistency: MD Mod-HSA Government January 2010 Form

	Placement Scores	Proficient	Basic	Category Total*
Decision Accuracy	394–650	.13	.06	.18
	240–393	.06	.76	.82
	Estimated Proportion Correctly Classified*: Total = 0.88			
Decision Consistency	394–650	.12	.06	.18
	240–393	.10	.72	.82
	Estimated Proportion Consistently Classified*: Total = 0.84			

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.18 Decision Accuracy and Consistency: MD Mod-HSA Government April 2010 Form

	Placement Scores	Proficient	Basic	Category Total*
Decision Accuracy	394–650	.12	.04	.17
	240–393	.07	.77	.84
	Estimated Proportion Correctly Classified*: Total = 0.89			
Decision Consistency	394–650	.11	.05	.17
	240–393	.10	.73	.84
	Estimated Proportion Consistently Classified*: Total = 0.85			

*Inconsistencies between cell entries and totals are due to rounding.

Table 12.19 Decision Accuracy and Consistency: MD Mod-HSA Government May 2010 Form

	Placement Scores	Proficient	Basic	Category Total*
Decision Accuracy	394–650	.15	.05	.20
	240–393	.06	.75	.80
	Estimated Proportion Correctly Classified*: Total = 0.89			
Decision Consistency	394–650	.14	.06	.20
	240–393	.09	.71	.80
	Estimated Proportion Consistently Classified*: Total = 0.85			

* Inconsistencies between cell entries and totals are due to rounding.

Table 12.20 Decision Accuracy and Consistency: MD Mod-HSA Government Summer 2010 Forms

	Placement Scores	Proficient	Basic	Category Total*
Summer Primary 1	394–650	.11	.03	.14
	240–393	.07	.79	.86
	Estimated Proportion Correctly Classified*: Total = 0.90			
Decision Consistency	394–650	.10	.04	.14
	240–393	.10	.76	.86
	Estimated Proportion Consistently Classified*: Total = 0.86			
Summer Primary 2	394–650	.10	.04	.14
	240–393	.07	.79	.86
	Estimated Proportion Correctly Classified*: Total = 0.89			
Decision Consistency	394–650	.10	.05	.14
	240–393	.11	.74	.86
	Estimated Proportion Consistently Classified*: Total = 0.84			

* Inconsistencies between cell entries and totals are due to rounding.

Section 13. Student Characteristics

Summary Statistics

Students' scale score means and standard deviations are presented in Table 13.1. Results from online and paper test-takers were pooled for the analyses. All results are based on the final Research files sent to MSDE.

Table 13.1 MD Mod-HSA Mean Scale Scores by Content Area and Test Administration

Content Area	October			January			April			May			Summer		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Algebra	2,337	359.1	48.9	2,819	361.6	50.0	626	363.0	51.1	4,189	360.5	51.9	248	356.2	48.2
Biology	1,710	366.5	37.2	1,911	362.7	42.6	582	364.3	43.0	2,639	368.6	43.2	205	364.3	42.5
English	2,114	360.2	40.1	2,247	358.3	39.7	644	358.6	41.9	2,902	360.6	40.4	229	356.5	36.2
Government	1,590	352.7	46.7	1,963	356.1	49.2	497	354.8	50.3	2,778	357.9	48.6	219	353.6	49.5

The results presented in Tables 13.2 and 13.3 are based on the combined results for students who took the tests in October 2009 and January, April, May, and Summer 2010. The mean scale scores are presented for the years 2008 and 2010 by content area in Table 13.2. Table 13.3 presents the passing rates for these years.

Table 13.2 MD Mod-HSA Mean Scale Scores by Content Area and Test Year

Content Area	2008	2009	2010
Algebra	360.1	363.2	360.5
Biology	360.2	365.0	366.0
English	353.2	360.2	359.6
Government	357.2	359.2	355.9

Table 13.3 MD Mod-HSA Percentage Passing Rates (Proficient + Advanced) by Content Area and Test Year

Content Area	2008	2009	2010
Algebra	9.8	9.2	8.8
Biology	16.1	14.5	13.8
English	10.4	12.2	12.6
Government	19.9	20.3	17.1

The Algebra and English tests are used for the high school mathematics and English/language arts components of the MSDE Adequate Yearly Progress report as required under the NCLB Act. Beginning with the January 2008 administration, Biology was used

for the NCLB science component. Table 13.4 presents the percentage of Algebra, English, and Biology students classified as Basic, Proficient, and Advanced in 2009. Figures 13.1 through 13.4 show the distribution of scale scores for the May 2009 administration for each content area.

Table 13.4 MD Mod-HSA Percentage of Students in Each Performance Category by Content Area

Content Area*	Basic	Proficient	Advanced
Algebra	91.2	8.5	0.3
Biology	86.2	13.5	0.3
English	87.4	12.1	0.5

*Government does not have an Advanced cut-score and therefore is not included in this table.

Summary statistics for all students and for subgroups based on gender, special education programs, ethnicity, and English language fluency are presented in Tables 13.5 through 13.28. The tables include the number of students tested for whom valid scores were available, mean scale scores, and standard deviations of scale scores. In addition, raw score reliabilities are provided for the overall group of examinees and for subgroups.

Figure 13.1 Histogram of Total Scale Scores for MD Mod-HSA May 2010 Algebra

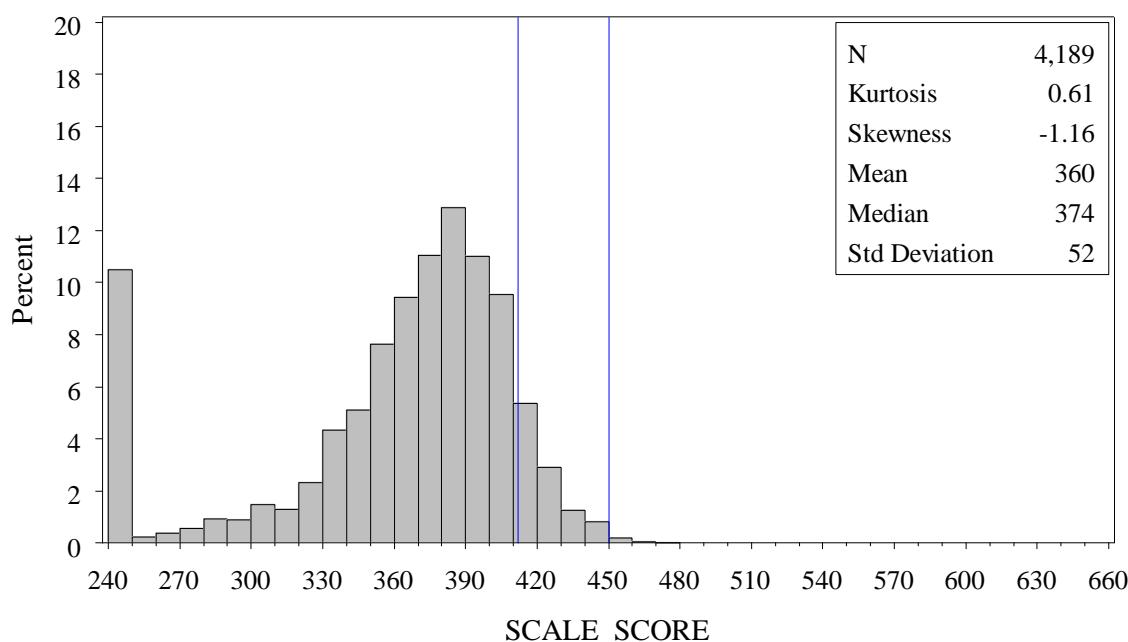


Figure 13.1 Histogram of Total Scale Scores for MD Mod-HSA May 2010 Biology

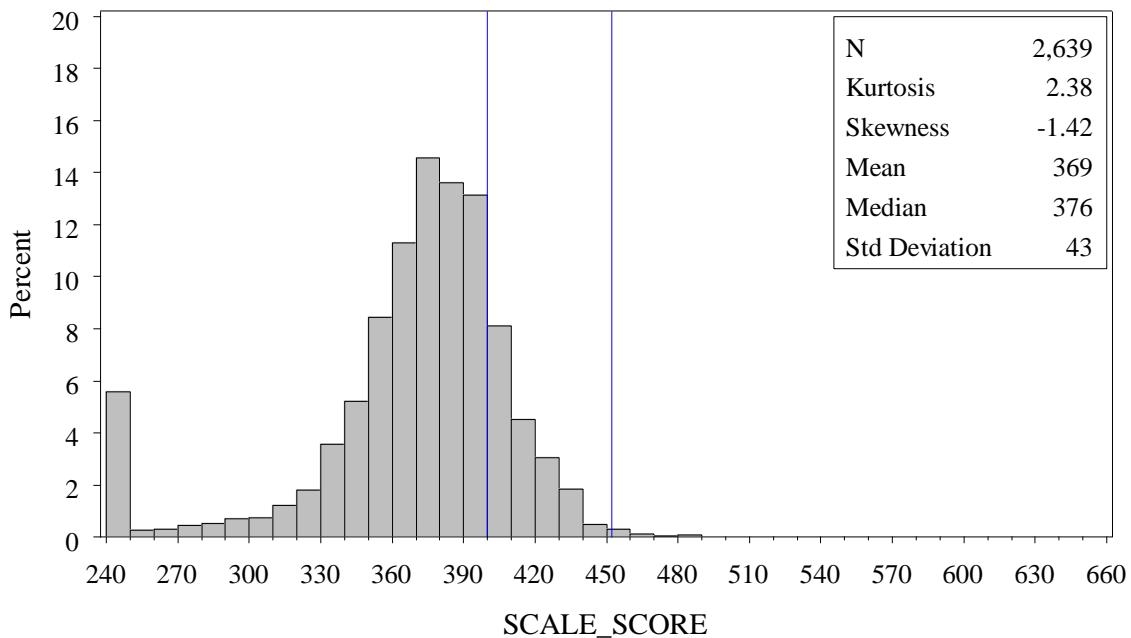


Figure 13.1 Histogram of Total Scale Scores for MD Mod-HSA May 2010 English

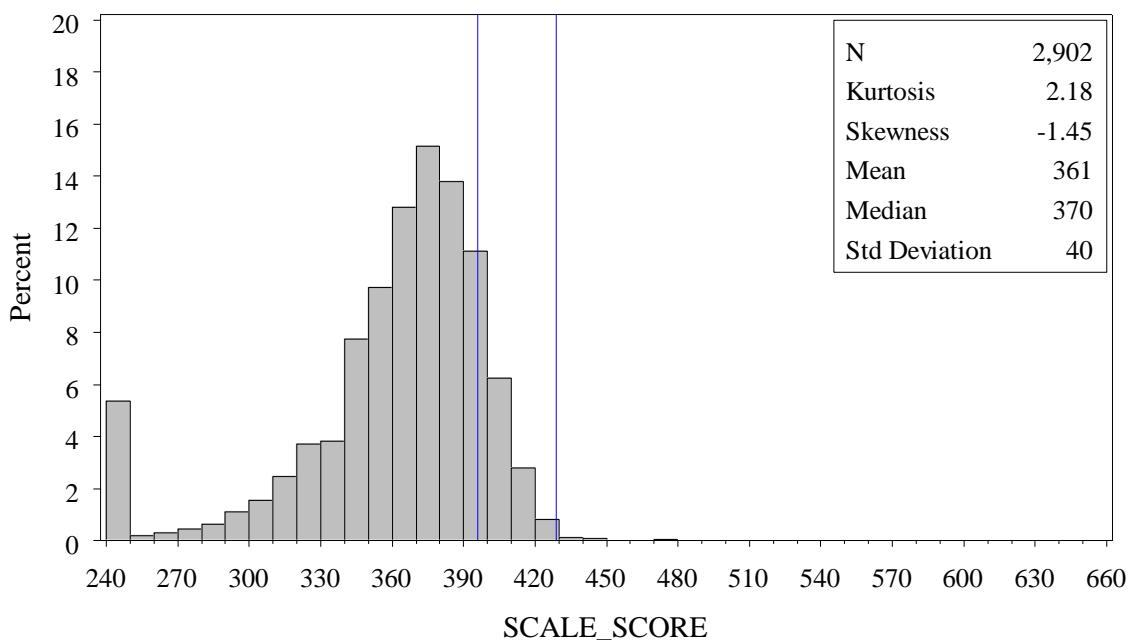


Figure 13.1 Histogram of Total Scale Scores for MD Mod-HSA May 2010 Government

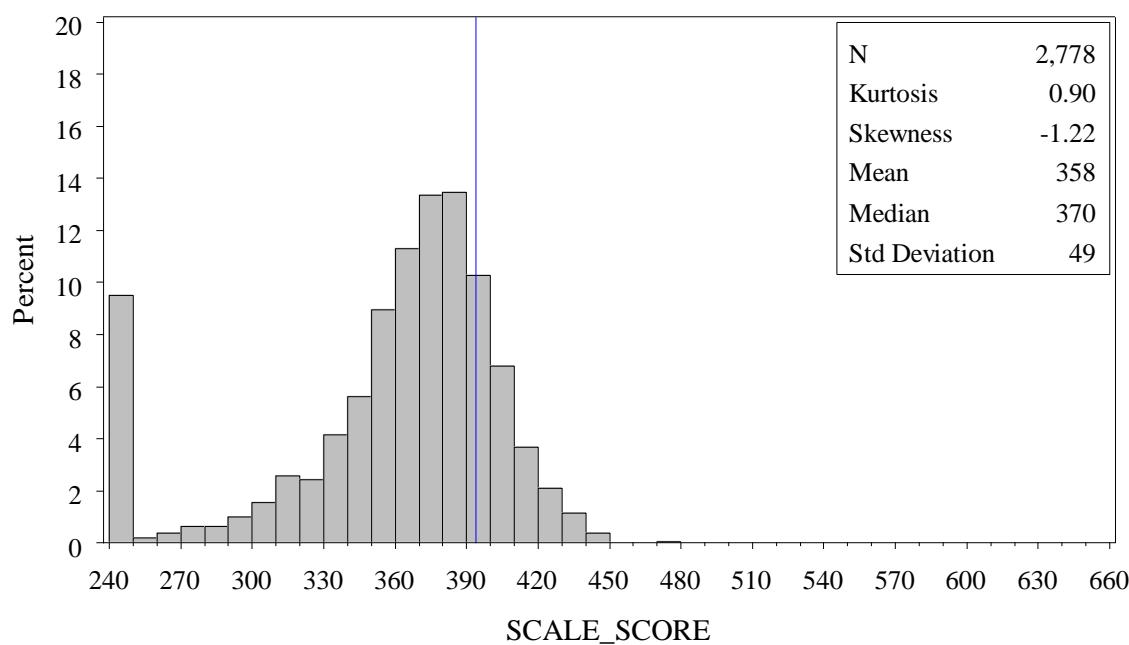


Table 13.5 Summary Statistics for MD Mod-HSA Algebra: October 2009 Form

	Form 110				
	Mean	SD	N	%	Alpha
Overall	359.1	48.9	2,337	100.0	0.74
Gender					
Male	358.8	49.1	1,441	61.7	0.75
Female	359.9	48.9	844	36.1	0.74
Missing	354.6	45.7	52	2.2	0.66
Special Education					
Yes	360.5	48.5	1,575	67.4	0.74
No	355.9	49.9	742	31.8	0.75
Exited	*	*	9	0.4	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	11	0.5	*
Ethnicity					
American Indian	*	*	9	0.4	*
Asian/Pacific Islander	*	*	31	1.3	*
African American	353.7	49.8	1,461	62.5	0.73
White	370.8	43.5	628	26.9	0.75
Hispanic	366.4	51.7	149	6.4	0.78
Missing	351.7	48.9	59	2.5	0.67
Limited English Proficient					
Yes	*	*	11	0.5	*
No	359.1	48.9	2,320	99.3	0.74
Exited ^b	*	*	6	0.3	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.6 Summary Statistics for MD Mod-HSA Algebra: January 2010 Form

	Form 210				
	Mean	SD	N	%	Alpha
Overall	361.6	50.0	2,819	100.0	0.75
Gender					
Male	363.5	49.4	1,833	65.0	0.75
Female	358.0	50.7	968	34.3	0.74
Missing	*	*	18	0.6	*
Special Education					
Yes	362.8	48.6	2,160	76.6	0.74
No	357.5	54.4	632	22.4	0.77
Exited	*	*	16	0.6	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	11	0.4	*
Ethnicity					
American Indian	*	*	19	0.7	*
Asian/Pacific Islander	*	*	32	1.1	*
African American	356.7	51.1	1,873	66.4	0.74
White	373.3	44.9	549	19.5	0.76
Hispanic	369.7	44.5	325	11.5	0.72
Missing	*	*	21	0.7	*
Limited English Proficient					
Yes	*	*	15	0.5	*
No	361.6	50.1	2,787	98.9	0.75
Exited ^b	*	*	17	0.6	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.7 Summary Statistics for MD Mod-HSA Algebra: April 2010 Form

	Form 310				
	Mean	SD	N	%	Alpha
Overall	363.0	51.1	626	100.0	0.78
Gender					
Male	364.9	51.6	381	60.9	0.79
Female	361.1	49.8	237	37.9	0.76
Missing	*	*	8	1.3	*
Special Education					
Yes	365.8	49.3	504	80.5	0.78
No	351.1	57.2	113	18.1	0.76
Exited	*	*	8	1.3	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	1	0.2	*
Ethnicity					
American Indian	*	*	2	0.3	*
Asian/Pacific Islander	*	*	5	0.8	*
African American	361.4	51.8	477	76.2	0.79
White	368.6	44.5	83	13.3	0.62
Hispanic	371.7	49.8	51	8.2	0.79
Missing	*	*	8	1.3	*
Limited English Proficient					
Yes	*	*	3	0.5	*
No	362.9	51.1	621	99.2	0.78
Exited ^b	*	*	2	0.3	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.8 Summary Statistics for MD Mod-HSA Algebra: May 2010 Form

		Form 410				
		Mean	SD	N	%	Alpha
Overall		360.5	51.9	4,189	100.0	0.76
Gender						
	Male	360.9	52.0	2,688	64.2	0.76
	Female	360.3	51.4	1,432	34.2	0.75
	Missing	346.4	58.5	69	1.7	0.75
Special Education						
	Yes	362.5	50.5	3,389	80.9	0.75
	No	350.7	57.7	758	18.1	0.78
	Exited	*	*	23	0.6	*
	Exited and placed in 504 ^a	*	*	0	0.0	*
	504	*	*	19	0.5	*
Ethnicity						
	American Indian	*	*	26	0.6	*
	Asian/Pacific Islander	375.2	47.0	59	1.4	0.82
	African American	353.5	54.0	2,624	62.6	0.74
	White	375.4	44.3	763	18.2	0.79
	Hispanic	371.0	45.5	631	15.1	0.74
	Missing	348.8	57.0	86	2.1	0.73
Limited English Proficient						
	Yes	*	*	26	0.6	*
	No	360.4	52.0	4,128	98.5	0.76
	Exited ^b	*	*	35	0.8	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.9 Summary Statistics for MD Mod-HSA Algebra: Summer 2010 Forms

	Form 510					Form 610				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	359.5	43.2	164	100.0	0.69	349.9	56.5	84	100.0	0.80
Gender										
Male	362.2	40.1	103	62.8	0.69	*	*	46	54.8	*
Female	354.2	48.2	60	36.6	0.69	*	*	35	41.7	*
Missing	*	*	1	0.6	*	*	*	3	3.6	*
Special Education										
Yes	352.6	46.7	55	33.5	0.67	*	*	40	47.6	*
No	362.9	41.1	109	66.5	0.70	*	*	43	51.2	*
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504 ^a	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	0	0.0	*	*	*	1	1.2	*
Ethnicity										
American Indian	*	*	0	0.0	*	*	*	1	1.2	*
Asian/Pacific Islander	*	*	2	1.2	*	*	*	0	0.0	*
African American	356.2	44.2	102	62.2	0.61	*	*	31	36.9	*
White	*	*	32	19.5	*	*	*	27	32.1	*
Hispanic	*	*	11	6.7	*	*	*	3	3.6	*
Missing	*	*	17	10.4	*	*	*	22	26.2	*
Limited English Proficient										
Yes	*	*	2	1.2	*	*	*	0	0.0	*
No	359.6	43.4	162	98.8	0.69	349.9	56.5	84	100.0	0.80
Exited ^b	*	*	0	0.0	*	*	*	0	0.0	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.10 Summary Statistics for MD Mod-HSA Biology: October 2009 Form

	Form 110				
	Mean	SD	N	%	Alpha
Overall	366.5	37.2	1,710	100.0	0.62
Gender	Male	367.2	37.1	1,073	62.8
	Female	365.7	37.1	622	36.4
	Missing	*	*	15	0.9
Special Education	Yes	367.4	36.1	1,218	71.2
	No	363.7	40.0	472	27.6
	Exited	*	*	12	0.7
	Exited and placed in 504 ^a	*	*	0	0.0
	504	*	*	8	0.5
Ethnicity	American Indian	*	*	5	0.3
	Asian/Pacific Islander	*	*	27	1.6
	African American	363.9	38.0	1,080	63.2
	White	373.6	35.1	445	26.0
	Hispanic	365.6	33.7	132	7.7
	Missing	*	*	21	1.2
					*
Limited English Proficient	Yes	*	*	7	0.4
	No	366.5	37.2	1,700	99.4
	Exited ^b	*	*	3	0.2
					*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.11 Summary Statistics for MD Mod-HSA Biology: January 2010 Form

	Form 210				
	Mean	SD	N	%	Alpha
Overall	362.7	42.6	1,911	100.0	0.62
Gender					
Male	363.5	42.7	1,237	64.7	0.64
Female	361.4	42.3	671	35.1	0.60
Missing	*	*	3	0.2	*
Special Education					
Yes	363.0	42.1	1,509	79.0	0.62
No	362.0	44.4	373	19.5	0.65
Exited	*	*	19	1.0	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	10	0.5	*
Ethnicity					
American Indian	*	*	8	0.4	*
Asian/Pacific Islander	*	*	30	1.6	*
African American	359.1	44.0	1,276	66.8	0.61
White	374.6	37.2	379	19.8	0.65
Hispanic	364.0	39.8	208	10.9	0.60
Missing	*	*	10	0.5	*
Limited English Proficient					
Yes	*	*	9	0.5	*
No	362.8	42.6	1,889	98.9	0.62
Exited ^b	*	*	13	0.7	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.12 Summary Statistics for MD Mod-HSA Biology: April 2010 Form

	Form 310				
	Mean	SD	N	%	Alpha
Overall	364.3	43.0	582	100.0	0.68
Gender	Male	365.4	44.5	366	62.9 0.70
	Female	362.4	40.4	215	36.9 0.63
	Missing	*	*	1	0.2 *
Special Education	Yes	365.0	41.8	468	80.4 0.68
	No	360.8	47.4	106	18.2 0.67
	Exited	*	*	7	1.2 *
	Exited and placed in 504 ^a	*	*	0	0.0 *
	504	*	*	1	0.2 *
Ethnicity	American Indian	*	*	1	0.2 *
	Asian/Pacific Islander	*	*	7	1.2 *
	African American	362.6	44.6	450	77.3 0.70
	White	374.9	26.3	56	9.6 0.47
	Hispanic	367.6	38.2	65	11.2 0.63
	Missing	*	*	3	0.5 *
	Limited English Proficient				
Limited English Proficient	Yes	*	*	3	0.5 *
	No	364.2	43.0	578	99.3 0.68
	Exited ^b	*	*	1	0.2 *

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.13 Summary Statistics for MD Mod-HSA Biology: May 2010 Form

	Form 410				
	Mean	SD	N	%	Alpha
Overall	368.6	43.2	2,639	100.0	0.74
Gender					
Male	369.2	44.8	1,716	65.0	0.75
Female	367.4	40.1	905	34.3	0.69
Missing	*	*	18	0.7	*
Special Education					
Yes	368.4	43.2	2,200	83.4	0.73
No	369.3	43.8	415	15.7	0.76
Exited	*	*	15	0.6	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	9	0.3	*
Ethnicity					
American Indian	*	*	20	0.8	*
Asian/Pacific Islander	*	*	39	1.5	*
African American	364.0	45.3	1,677	63.6	0.73
White	377.6	39.4	505	19.1	0.74
Hispanic	377.3	35.4	366	13.9	0.72
Missing	*	*	32	1.2	*
Limited English Proficient					
Yes	*	*	11	0.4	*
No	368.6	43.2	2,612	99.0	0.74
Exited ^b	*	*	16	0.6	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.14 Summary Statistics for MD Mod-HSA Biology: Summer 2010 Forms

	Form 510					Form 610				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	363.0	39.8	134	100.0	0.61	366.7	47.3	71	100.0	0.67
Gender										
Male	360.2	43.0	89	66.4	0.64	*	*	44	62.0	*
Female	*	*	44	32.8	*	*	*	26	36.6	*
Missing	*	*	1	0.8	*	*	*	1	1.4	*
Special Education						*	*	0	0.0	*
Yes	*	*	44	32.8	*	*	*	37	52.1	*
No	363.5	39.4	90	67.2	0.59	*	*	34	47.9	*
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504 ^a	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	0	0.0	*	*	*	0	0.0	*
Ethnicity										
American Indian	*	*	0	0.0	*	*	*	1	1.4	*
Asian/Pacific Islander	*	*	1	0.8	*	*	*	0	0.0	*
African American	359.9	40.9	84	62.7	0.62	*	*	28	39.4	*
White	*	*	29	21.6	*	*	*	14	19.7	*
Hispanic	*	*	9	6.7	*	*	*	4	5.6	*
Missing	*	*	11	8.2	*	*	*	24	33.8	*
Limited English Proficient										
Yes	*	*	2	1.5	*	*	*	0	0.0	*
No	363.3	39.8	132	98.5	0.61	366.7	47.3	71	100.0	0.67
Exited ^b	*	*	0	0.0	*	*	*	0	0.0	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.15 Summary Statistics for MD Mod-HSA English: October 2009 Form

	Form 110				
	Mean	SD	N	%	Alpha
Overall	360.2	40.1	2,114	100.0	0.77
Gender					
Male	358.2	42.3	1,341	63.4	0.78
Female	363.3	35.9	757	35.8	0.77
Missing	*	*	16	0.8	*
Special Education					
Yes	359.9	39.6	1,467	69.4	0.77
No	360.3	41.6	628	29.7	0.79
Exited	*	*	12	0.6	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	7	0.3	*
Ethnicity					
American Indian	*	*	5	0.2	*
Asian/Pacific Islander	*	*	30	1.4	*
African American	357.5	41.0	1,273	60.2	0.78
White	366.4	36.9	606	28.7	0.76
Hispanic	358.9	40.2	162	7.7	0.77
Missing	*	*	38	1.8	*
Limited English Proficient					
Yes	*	*	10	0.5	*
No	360.4	39.9	2,102	99.4	0.77
Exited ^b	*	*	2	0.1	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.16 Summary Statistics for MD Mod-HSA English: January 2010 Form

	Form 210				
	Mean	SD	N	%	Alpha
Overall	358.3	39.7	2,247	100.0	0.76
Gender					
Male	356.9	40.7	1,467	65.3	0.76
Female	361.0	37.6	775	34.5	0.78
Missing	*	*	5	0.2	*
Special Education					
Yes	358.9	37.7	1,744	77.6	0.74
No	356.4	46.2	479	21.3	0.82
Exited	*	*	14	0.6	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	10	0.5	*
Ethnicity					
American Indian	*	*	11	0.5	*
Asian/Pacific Islander	*	*	30	1.3	*
African American	356.3	40.8	1,424	63.4	0.76
White	364.3	36.3	516	23.0	0.76
Hispanic	357.5	39.0	260	11.6	0.74
Missing	*	*	6	0.3	*
Limited English Proficient					
Yes	*	*	9	0.4	*
No	358.4	39.6	2,227	99.1	0.76
Exited ^b	*	*	11	0.5	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.17 Summary Statistics for MD Mod-HSA English: April 2010 Form

		Form 310				
		Mean	SD	N	%	Alpha
Overall		358.6	41.9	644	100.0	0.80
Gender						
	Male	358.1	42.5	409	63.5	0.81
	Female	359.5	41.1	232	36.0	0.79
	Missing	*	*	3	0.5	*
Special Education						
	Yes	358.5	41.1	514	79.8	0.79
	No	358.8	45.6	122	18.9	0.83
	Exited	*	*	6	0.9	*
	Exited and placed in 504 ^a	*	*	0	0.0	*
	504	*	*	2	0.3	*
Ethnicity						
	American Indian	*	*	2	0.3	*
	Asian/Pacific Islander	*	*	8	1.2	*
	African American	356.8	43.0	479	74.4	0.81
	White	366.2	34.1	75	11.7	0.72
	Hispanic	361.3	42.7	76	11.8	0.80
	Missing	*	*	4	0.6	*
Limited English Proficient						
	Yes	*	*	2	0.3	*
	No	358.8	41.9	640	99.4	0.80
	Exited ^b	*	*	2	0.3	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.18 Summary Statistics for MD Mod-HSA English: May 2010 Form

		Form 410				
		Mean	SD	N	%	Alpha
Overall		360.6	40.4	2,902	100.0	0.78
Gender						
	Male	359.1	40.7	1,908	65.8	0.77
	Female	363.6	39.2	968	33.4	0.79
	Missing	*	*	26	0.9	*
Special Education						
	Yes	361.5	39.1	2,392	82.4	0.77
	No	355.8	46.2	485	16.7	0.80
	Exited	*	*	14	0.5	*
	Exited and placed in 504 ^a	*	*	0	0.0	*
	504	*	*	11	0.4	*
Ethnicity						
	American Indian	*	*	19	0.7	*
	Asian/Pacific Islander	*	*	45	1.6	*
	African American	358.1	41.1	1,751	60.3	0.78
	White	364.4	40.2	588	20.3	0.79
	Hispanic	365.6	37.8	462	15.9	0.77
	Missing	*	*	37	1.3	*
Limited English Proficient						
	Yes	*	*	12	0.4	*
	No	360.7	40.2	2,873	99.0	0.78
	Exited ^b	*	*	17	0.6	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.19 Summary Statistics for MD Mod-HSA English: Summer 2010 Forms

	Form 510					Form 610				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	350.6	38.6	168	100.0	0.70	372.8	21.5	61	100.0	0.68
Gender										
Male	349.0	38.2	107	63.7	0.70	*	*	39	63.9	*
Female	352.0	39.1	59	35.1	0.66	*	*	16	26.2	*
Missing	*	*	2	1.2	*	*	*	6	9.8	*
Special Education										
Yes	348.5	42.6	56	33.3	0.74	*	*	21	34.4	*
No	351.7	36.6	112	66.7	0.68	*	*	40	65.6	*
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504 ^a	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	0	0.0	*	*	*	0	0.0	*
Ethnicity										
American Indian	*	*	0	0.0	*	*	*	1	1.6	*
Asian/Pacific Islander	*	*	2	1.2	*	*	*	0	0.0	*
African American	353.6	35.9	103	61.3	0.70	*	*	18	29.5	*
White	*	*	34	20.2	*	*	*	17	27.9	*
Hispanic	*	*	13	7.7	*	*	*	4	6.6	*
Missing	*	*	16	9.5	*	*	*	21	34.4	*
Limited English Proficient										
Yes	*	*	2	1.2	*	*	*	0	0.0	*
No	350.5	38.8	166	98.8	0.70	372.8	21.5	61	100.0	0.68
Exited ^b	*	*	0	0.0	*	*	*	0	0.0	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.20 Summary Statistics for MD Mod-HSA Government: October 2009 Form

	Form 110				
	Mean	SD	N	%	Alpha
Overall	352.7	46.7	1,590	100.0	0.73
Gender					
Male	352.9	47.4	986	62.0	0.73
Female	352.4	45.3	592	37.2	0.74
Missing	*	*	12	0.8	*
Special Education					
Yes	351.9	46.5	1,133	71.3	0.72
No	354.8	46.9	438	27.6	0.76
Exited	*	*	10	0.6	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	9	0.6	*
Ethnicity					
American Indian	*	*	3	0.2	*
Asian/Pacific Islander	*	*	27	1.7	*
African American	349.9	48.0	977	61.5	0.73
White	358.6	44.4	423	26.6	0.75
Hispanic	351.1	44.9	116	7.3	0.68
Missing	*	*	44	2.8	*
Limited English Proficient					
Yes	*	*	9	0.6	*
No	352.8	46.8	1,578	99.3	0.73
Exited ^b	*	*	3	0.2	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.21 Summary Statistics for MD Mod-HSA Government: January 2010 Form

	Form 210				
	Mean	SD	N	%	Alpha
Overall	356.1	49.2	1,963	100.0	0.74
Gender	Male	355.2	50.4	1269	64.65
	Female	357.7	47.2	689	35.1
	Missing	*	*	5	0.3
Special Education	Yes	355.8	48.5	1555	79.22
	No	357.6	52.8	382	19.5
	Exited	*	*	16	0.8
	Exited and placed in 504 ^a	*	*	0	0.0
	504	*	*	10	0.5
Ethnicity	American Indian	*	*	5	0.3
	Asian/Pacific Islander	*	*	36	1.8
	African American	354.4	49.5	1,228	62.6
	White	361.9	47.8	453	23.1
	Hispanic	354.0	49.1	230	11.7
	Missing	*	*	11	0.6
Limited English Proficient	Yes	*	*	12	0.6
	No	356.2	49.2	1,937	98.7
	Exited ^b	*	*	14	0.7

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.22 Summary Statistics for MD Mod-HSA Government: April 2010 Form

	Form 310				
	Mean	SD	N	%	Alpha
Overall	354.8	50.3	497	100.0	0.76
Gender					
Male	358.4	48.8	312	62.8	0.76
Female	348.2	52.7	179	36.0	0.76
Missing	*	*	6	1.2	*
Special Education					
Yes	353.2	50.6	394	79.3	0.76
No	360.1	49.9	96	19.3	0.77
Exited	*	*	5	1.0	*
Exited and placed in 504 ^a	*	*	0	0.0	*
504	*	*	2	0.4	*
Ethnicity					
American Indian	*	*	2	0.4	*
Asian/Pacific Islander	*	*	4	0.8	*
African American	352.5	52.4	369	74.3	0.76
White	*	*	47	9.5	*
Hispanic	359.4	41.8	65	13.1	0.77
Missing	*	*	10	2.0	*
Limited English Proficient					
Yes	*	*	3	0.6	*
No	354.7	50.4	492	99.0	0.76
Exited ^b	*	*	2	0.4	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.23 Summary Statistics for MD Mod-HSA Government: May 2010 Form

	Form 410				
	Mean	SD	N	%	Alpha
Overall	357.9	48.6	2,778	100.0	0.79
Gender	Male	359.5	48.7	1,788	64.4
	Female	355.4	47.9	956	34.4
	Missing	*	*	34	1.2
Special Education	Yes	358.1	48.2	2,288	82.4
	No	356.3	50.8	462	16.6
	Exited	*	*	18	0.7
	Exited and placed in 504 ^a	*	*	0	0.0
	504	*	*	10	0.4
Ethnicity	American Indian	*	*	21	0.8
	Asian/Pacific Islander	*	*	42	1.5
	African American	356.6	48.4	1,674	60.3
	White	360.0	50.0	598	21.5
	Hispanic	359.5	47.1	404	14.5
	Missing	*	*	39	1.4
Limited English Proficient	Yes	*	*	16	0.6
	No	358.0	48.4	2,748	98.9
	Exited ^b	*	*	14	0.5
					*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.24 Summary Statistics for MD Mod-HSA Government: Summer 2010 Forms

	Form 510					Form 610				
	Mean	SD	N	%	Alpha	Mean	SD	N	%	Alpha
Overall	350.3	53.0	136	100.0	0.78	358.9	43.0	83	100.0	0.73
Gender										
Male	350.8	54.0	86	63.2	0.81	366.7	37.1	52	62.7	0.75
Female	349.5	51.8	50	36.8	0.70	*	*	30	36.1	*
Missing	*	*	0	0.0	*	*	*	1	1.2	*
Special Education										
Yes	345.8	56.5	53	39.0	0.80	362.7	37.1	52	62.7	0.61
No	353.2	50.7	83	61.0	0.77	*	*	31	37.4	*
Exited	*	*	0	0.0	*	*	*	0	0.0	*
Exited and placed in 504 ^a	*	*	0	0.0	*	*	*	0	0.0	*
504	*	*	0	0.0	*	*	*	0	0.0	*
Ethnicity										
American Indian	*	*	0	0.0	*	*	*	1	1.2	*
Asian/Pacific Islander	*	*	1	0.7	*	*	*	0	0.0	*
African American	353.1	46.6	84	61.8	0.70	*	*	39	47.0	*
White	*	*	29	21.3	*	*	*	24	28.9	*
Hispanic	*	*	10	7.4	*	*	*	6	7.2	*
Missing	*	*	12	8.8	*	*	*	13	15.7	*
Limited English Proficient										
Yes	*	*	2	1.5	*	*	*	0	0.0	*
No	350.4	53.3	134	98.5	0.78	358.9	43.0	83	100.0	0.73
Exited ^b	*	*	0	0.0	*	*	*	0	0.0	*

* Statistics not reported for sample size less than 50 (N < 50).

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Demographic Characteristics

Summary statistics describing the demographic characteristics of the students who received scores on the MD Mod-HSAs are provided in Tables 13.25 through 13.28. Statistics are provided for the October 2009 and the January, April, May, and Summer 2010 administrations of Algebra, Biology, English, and Government. The results from online and paper test-takers were pooled for the analyses. All demographic results are based on the final Research file sent to MSDE.

Table 13.25 Demographic Information for MD Mod-HSA Algebra

	October Form		January Form		April Form		May Form		Summer Forms	
	N	%	N	%	N	%	N	%	N	%
Overall	2,337	100.0	2,819	100.0	626	100.0	4,189	100.0	248	100.0
Gender										
Male	1,441	61.7	1,833	65.0	381	60.9	2,688	64.2	149	60.1
Female	844	36.1	968	34.3	237	37.9	1,432	34.2	95	38.3
Missing	52	2.2	18	0.6	8	1.3	69	1.7	4	1.6
Special Education										
Yes	1,575	67.4	2,160	76.6	504	80.5	3,389	80.9	95	38.3
No	742	31.8	632	22.4	113	18.1	758	18.1	152	61.3
Exited	9	0.4	16	0.6	8	1.3	23	0.6	0	0.0
Exited and placed in 504 ^a	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
504	11	0.5	11	0.4	1	0.2	19	0.5	1	0.4
Ethnicity										
American Indian	9	0.4	19	0.7	2	0.3	26	0.6	1	0.4
Asian/Pacific Islander	31	1.3	32	1.1	5	0.8	59	1.4	2	0.8
African American	1,461	62.5	1,873	66.4	477	76.2	2,624	62.6	133	53.6
White	628	26.9	549	19.5	83	13.3	763	18.2	59	23.8
Hispanic	149	6.4	325	11.5	51	8.2	631	15.1	14	5.6
Missing	59	2.5	21	0.7	8	1.3	86	2.1	39	15.7
Limited English Proficient										
Yes	11	0.5	15	0.5	3	0.5	26	0.6	2	0.8
No	2,320	99.3	2,787	98.9	621	99.2	4,128	98.5	246	99.2
Exited ^b	6	0.3	17	0.6	2	0.3	35	0.8	0	0.0

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.26 Demographic Information for MD Mod-HSA Biology

	October Form		January Form		April Form		May Form		Summer Forms	
	N	%	N	%	N	%	N	%	N	%
Overall	1,710	100.0	1,911	100.0	582	100.0	2,639	100.0	205	100.0
Gender										
Male	1,073	62.8	1,237	64.7	366	62.9	1,716	65.0	133	64.9
Female	622	36.4	671	35.1	215	36.9	905	34.3	70	34.1
Missing	15	0.9	3	0.2	1	0.2	18	0.7	2	1.0
Special Education										
Yes	1,218	71.2	1,509	79.0	468	80.4	2,200	83.4	81	39.5
No	472	27.6	373	19.5	106	18.2	415	15.7	124	60.5
Exited	12	0.7	19	1.0	7	1.2	15	0.6	0	0.0
Exited and placed in 504 ^a	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
504	8	0.5	10	0.5	1	0.2	9	0.3	0	0.0
Ethnicity										
American Indian	5	0.3	8	0.4	1	0.2	20	0.8	1	0.5
Asian/Pacific Islander	27	1.6	30	1.6	7	1.2	39	1.5	1	0.5
African American	1,080	63.2	1,276	66.8	450	77.3	1,677	63.6	112	54.6
White	445	26.0	379	19.8	56	9.6	505	19.1	43	21.0
Hispanic	132	7.7	208	10.9	65	11.2	366	13.9	13	6.3
Missing	21	1.2	10	0.5	3	0.5	32	1.2	35	17.1
Limited English Proficient										
Yes	7	0.4	9	0.5	3	0.5	11	0.4	2	1.0
No	1,700	99.4	1,889	98.9	578	99.3	2,612	99.0	203	99.0
Exited ^b	3	0.2	13	0.7	1	0.2	16	0.6	0	0.0

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.27 Demographic Information for MD Mod-HSA English

	October Form		January Form		April Form		May Form		Summer Forms	
	N	%	N	%	N	%	N	%	N	%
Overall	2,114	100.0	2,247	100.0	644	100.0	2,902	100.0	229	100.0
Gender										
Male	1,341	63.4	1,467	65.3	409	63.5	1,908	65.8	146	63.8
Female	757	35.8	775	34.5	232	36.0	968	33.4	75	32.8
Missing	16	0.8	5	0.2	3	0.5	26	0.9	8	3.5
Special Education										
Yes	1,467	69.4	1,744	77.6	514	79.8	2,392	82.4	77	33.6
No	628	29.7	479	21.3	122	18.9	485	16.7	152	66.4
Exited	12	0.6	14	0.6	6	0.9	14	0.5	0	0.0
Exited and placed in 504 ^a	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
504	7	0.3	10	0.5	2	0.3	11	0.4	0	0.0
Ethnicity										
American Indian	5	0.2	11	0.5	2	0.3	19	0.7	1	0.4
Asian/Pacific Islander	30	1.4	30	1.3	8	1.2	45	1.6	2	0.9
African American	1,273	60.2	1,424	63.4	479	74.4	1,751	60.3	121	52.8
White	606	28.7	516	23.0	75	11.7	588	20.3	51	22.3
Hispanic	162	7.7	260	11.6	76	11.8	462	15.9	17	7.4
Missing	38	1.8	6	0.3	4	0.6	37	1.3	37	16.2
Limited English Proficient										
Yes	10	0.5	9	0.4	2	0.3	12	0.4	2	0.9
No	2,102	99.4	2,227	99.1	640	99.4	2,873	99.0	227	99.1
Exited ^b	2	0.1	11	0.5	2	0.3	17	0.6	0	0.0

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

Table 13.28 Demographic Information for MD Mod-HSA Government

	October Form		January Form		April Form		May Form		Summer Forms	
	N	%	N	%	N	%	N	%	N	%
Overall	1,590	100.0	1,963	100.0	497	100.0	2,778	100.0	219	100.0
Gender										
Male	986	62.0	1,269	64.7	312	62.8	1,788	64.4	138	63.0
Female	592	37.2	689	35.1	179	36.0	956	34.4	80	36.5
Missing	12	0.8	5	0.3	6	1.2	34	1.2	1	0.5
Special Education										
Yes	1,133	71.3	1,555	79.2	394	79.3	2,288	82.4	105	47.9
No	438	27.6	382	19.5	96	19.3	462	16.6	114	52.1
Exited	10	0.6	16	0.8	5	1.0	18	0.7	0	0.0
Exited and placed in 504 ^a	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
504	9	0.6	10	0.5	2	0.4	10	0.4	0	0.0
Ethnicity										
American Indian	3	0.2	5	0.3	2	0.4	21	0.8	1	0.5
Asian/Pacific Islander	27	1.7	36	1.8	4	0.8	42	1.5	1	0.5
African American	977	61.5	1,228	62.6	369	74.3	1,674	60.3	123	56.2
White	423	26.6	453	23.1	47	9.5	598	21.5	53	24.2
Hispanic	116	7.3	230	11.7	65	13.1	404	14.5	16	7.3
Missing	44	2.8	11	0.6	10	2.0	39	1.4	25	11.4
Limited English Proficient										
Yes	9	0.6	12	0.6	3	0.6	16	0.6	2	0.9
No	1,578	99.3	1,937	98.7	492	99.0	2,748	98.9	217	99.1
Exited ^b	3	0.2	14	0.7	2	0.4	14	0.5	0	0.0

^a A 504 plan is a legal document falling under the provisions of the Rehabilitation Act of 1973 that provides a program of instructional services to assist students with special needs who are in a regular education setting.

^b LEP Exited indicates students who have exited English language acquisition services.

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Appendix 1A. MD HSA Classical Item Statistics: Operational Forms

Table 1.A1 Item Statistics, Operational Items: MDHSA Algebra—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	56658	SR	0.64	0.30	-0.19	0.30	-0.11	-0.15	0.1
R	O	51534	SR	0.37	0.28	-0.09	-0.16	-0.07	0.28	1.1
R	O	54826	SR	0.21	0.29	0.29	-0.09	-0.08	-0.11	0.1
R	O	211029	SR	0.47	0.31	-0.13	-0.16	0.31	-0.12	0.9
R	O	79144	SR	0.27	0.30	-0.17	0.00	-0.12	0.30	0.3
R	O	54852	SPR	0.06	0.24	0.24	-0.11			17.7
R	O	135109	SPR	0.16	0.37	0.37	-0.27			4.9
R	O	255107	SR	0.24	0.30	-0.14	-0.13	-0.05	0.30	0.9
R	O	106658	SR	0.32	0.24	0.24	-0.10	-0.08	-0.09	0.7
R	O	79015	SR	0.26	0.20	-0.11	-0.06	0.20	-0.02	1.0
R	O	51462	SR	0.40	0.26	-0.11	0.26	-0.10	-0.10	0.6
R	O	56638	SR	0.31	0.26	0.26	-0.04	-0.10	-0.13	0.7
R	O	79040	SPR	0.08	0.22	0.22	-0.11			13.4
R	O	79016	SPR	0.06	0.27	0.27	-0.15			14.1
R	O	223241	SR	0.33	0.31	-0.04	0.31	-0.12	-0.17	1.6
R	O	54863	SR	0.44	0.32	0.32	-0.15	-0.16	-0.09	2.1
R	O	56717	SR	0.44	0.23	-0.15	0.23	-0.09	-0.03	2.8
R	O	54710	SR	0.52	0.27	-0.15	-0.16	0.27	-0.09	2.4
R	O	136694	SR	0.67	0.29	-0.14	-0.13	-0.19	0.29	0.3
R	O	51427	SR	0.62	0.34	0.34	-0.17	-0.18	-0.14	0.6
R	O	79116	SR	0.56	0.26	-0.08	0.26	-0.16	-0.10	0.4
R	O	255069	SPR	0.03	0.27	0.27	-0.08			10.2
R	O	255070	SPR	0.27	0.39	0.39	-0.31			6.8
R	O	51500	SR	0.72	0.34	-0.27	-0.09	0.34	-0.10	0.3
R	O	67545	SR	0.21	0.27	0.27	-0.05	-0.06	-0.14	0.6
R	O	54888	SR	0.30	0.22	-0.11	-0.07	0.22	-0.05	0.7
R	O	106652	SR	0.23	0.17	0.17	-0.02	-0.12	-0.01	0.8
R	O	51485	SR	0.26	0.19	-0.05	-0.07	-0.07	0.19	1.1
R	O	215913	SR	0.14	0.15	0.15	-0.08	-0.05	0.02	0.9
R	O	50423	SPR	0.04	0.29	0.29	-0.09			10.2
R	O	52342	SR	0.43	0.24	-0.09	0.24	-0.12	-0.07	0.7
R	O	223246	SR	0.32	0.11	0.11	-0.18	-0.16	0.08	0.7
R	O	52348	SR	0.57	0.30	-0.12	0.30	-0.14	-0.13	0.9
R	O	56551	SR	0.74	0.32	-0.19	-0.17	0.32	-0.14	0.7
R	O	106548	SR	0.32	0.30	0.30	-0.03	-0.16	-0.14	1.0
R	O	215920	SR	0.64	0.33	-0.14	-0.21	0.33	-0.12	0.7
R	O	106642	SR	0.23	0.29	-0.13	-0.07	-0.06	0.29	1.2
R	O	51490	SPR	0.57	0.38	0.38	-0.33			3.2
R	O	132834	SPR	0.32	0.45	0.45	-0.36			6.8
R	O	43141	SPR	0.28	0.36	0.36	-0.26			7.9
R	O	43218	SR	0.50	0.33	-0.10	-0.13	-0.18	0.33	0.7
R	O	67403	SR	0.15	0.07	0.07	-0.02	0.08	-0.12	0.8
R	O	56807	SR	0.35	0.35	-0.09	-0.18	-0.13	0.35	0.8

Table 1.A1 Item Statistics, Operational Items: MDHSA Algebra—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	67556	SR	0.40	0.39	0.39	-0.20	-0.20	-0.05	0.7
R	O	67437	SR	0.21	0.16	-0.05	-0.03	0.16	-0.05	0.8
R	O	67407	SR	0.24	0.28	0.28	-0.09	-0.11	-0.09	0.8
R	O	56573	SR	0.36	0.22	-0.12	-0.05	0.22	-0.09	0.7
R	O	67560	SR	0.30	0.27	-0.02	0.27	-0.10	-0.14	0.7
R	O	43188	SR	0.32	0.31	-0.18	-0.10	0.31	-0.03	1.0
R	O	67439	SR	0.42	0.30	-0.11	-0.14	-0.11	0.30	0.8
R	O	56714	SR	0.32	0.36	-0.07	0.36	-0.15	-0.17	0.7
R	O	56777	SR	0.32	0.11	-0.04	-0.10	0.11	0.05	1.1
R	O	54837	SR	0.64	0.19	-0.05	-0.12	0.19	-0.10	0.9
Mean				0.35	0.28	0.06	-0.06	-0.01	-0.01	2.5
SD				0.18	0.08	0.21	0.17	0.17	0.17	3.9

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4=option-total correlation, %Omits=percent of omitted responses

Table 1.A2 Item Statistics, Operational Items: MDHSA Biology—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	57055	SR	0.42	0.20	-0.09	0.20	-0.09	-0.07	0.1
R	O	223418	SR	0.28	0.09	0.06	0.09	-0.13	-0.04	0.1
R	O	52527	SR	0.36	0.22	-0.08	-0.11	0.22	-0.07	0.3
R	O	52526	SR	0.77	0.23	-0.09	-0.11	0.23	-0.16	0.1
R	O	68271	SR	0.38	0.19	-0.10	-0.05	-0.08	0.19	0.2
R	O	137253	SR	0.42	0.28	-0.09	-0.14	-0.12	0.28	0.1
R	O	137252	SR	0.43	0.23	0.23	-0.08	-0.13	-0.07	0.2
R	O	52673	SR	0.30	0.18	-0.10	0.18	0.02	-0.14	0.1
R	O	52681	SR	0.27	0.18	0.00	-0.11	0.18	-0.06	0.2
R	O	67650	SR	0.23	0.15	-0.10	0.15	-0.02	-0.01	0.2
R	O	68266	SR	0.43	0.19	-0.06	-0.07	-0.11	0.19	0.2
R	O	215956	SR	0.32	0.14	-0.05	-0.01	0.14	-0.11	0.2
R	O	215943	SR	0.31	0.18	-0.05	0.18	0.00	-0.17	0.2
R	O	108581	SR	0.22	0.14	0.02	-0.06	-0.08	0.14	0.2
R	O	56995	SR	0.22	0.12	-0.03	-0.07	0.12	0.00	0.2
R	O	55195	SR	0.11	0.14	0.02	-0.05	-0.07	0.14	0.3
R	O	55196	SR	0.32	0.24	0.24	-0.15	-0.16	-0.02	0.3
R	O	68223	SR	0.54	0.29	0.29	-0.12	-0.16	-0.11	0.2
R	O	79463	SR	0.09	0.05	0.05	-0.08	0.01	0.05	0.4
R	O	55004	SR	0.46	0.26	-0.13	0.26	-0.12	-0.08	0.5
R	O	68235	SR	0.31	0.15	-0.05	0.15	-0.08	-0.03	0.5
R	O	55064	SR	0.42	0.19	-0.11	-0.14	0.19	0.02	0.5

Table 1.A2 Item Statistics, Operational Items: MDHSA Biology—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	55062	SR	0.45	0.31	-0.10	-0.12	-0.15	0.31	0.5
R	O	108552	SR	0.21	0.16	0.16	-0.06	-0.04	-0.03	0.7
R	O	52481	SR	0.30	0.17	-0.07	-0.03	0.17	-0.09	0.6
R	O	52741	SR	0.24	0.10	-0.02	0.10	-0.08	0.02	0.4
R	O	79305	SR	0.23	0.17	0.17	-0.08	-0.01	-0.05	0.4
R	O	79304	SR	0.35	0.19	0.19	-0.04	-0.08	-0.07	0.4
R	O	79319	SR	0.28	0.10	-0.03	-0.04	0.10	-0.02	0.6
R	O	133021	SR	0.34	0.26	-0.07	-0.13	-0.07	0.26	0.5
R	O	133024	SR	0.21	0.14	-0.08	-0.06	0.02	0.14	0.4
R	O	55265	SR	0.24	0.05	0.05	-0.01	-0.02	0.00	0.4
R	O	223438	SR	0.33	0.15	0.15	-0.02	-0.12	-0.04	0.5
R	O	223441	SR	0.10	0.09	-0.04	-0.05	0.05	0.09	0.5
R	O	55152	SR	0.39	0.31	-0.09	-0.12	0.31	-0.14	0.4
R	O	56978	SR	0.29	0.25	0.25	-0.14	-0.02	-0.10	0.5
R	O	65132	SR	0.09	0.06	0.01	-0.06	0.02	0.06	0.5
R	O	192092	SR	0.36	0.15	0.04	-0.14	0.15	-0.08	0.6
R	O	133443	SR	0.67	0.24	-0.10	-0.15	0.24	-0.06	0.5
R	O	65151	SR	0.24	0.09	0.10	-0.06	-0.12	0.09	0.4
R	O	136107	SR	0.49	0.19	-0.14	0.19	-0.08	-0.03	0.4
R	O	136108	SR	0.21	0.12	0.12	0.08	-0.12	-0.10	0.4
R	O	67672	SR	0.46	0.26	0.26	-0.11	-0.10	-0.11	0.4
R	O	214530	SR	0.18	0.07	0.07	0.05	-0.05	-0.10	0.4
R	O	108486	SR	0.49	0.19	0.19	-0.10	-0.09	-0.06	0.4
R	O	68141	SR	0.15	0.13	-0.04	-0.04	0.13	0.00	0.5
R	O	68142	SR	0.35	0.23	0.23	-0.08	-0.10	-0.06	0.6
R	O	79509	SR	0.36	0.19	-0.03	-0.08	0.19	-0.09	0.5
R	O	67677	SR	0.39	0.27	-0.04	-0.14	-0.12	0.27	0.5
R	O	67678	SR	0.26	0.18	-0.10	-0.01	-0.07	0.18	0.5
R	O	67584	SR	0.16	0.09	0.01	-0.10	0.09	0.05	0.5
R	O	256479	SR	0.59	0.30	-0.13	0.30	-0.15	-0.14	0.5
R	O	256481	SR	0.37	0.30	-0.03	-0.10	-0.18	0.30	0.6
R	O	65069	SR	0.26	0.10	-0.04	-0.12	0.10	0.09	0.6
R	O	57098	SR	0.39	0.11	-0.07	0.11	-0.09	0.05	0.6
R	O	60564	SR	0.56	0.26	-0.12	0.26	-0.12	-0.09	0.5
R	O	60526	SR	0.21	0.21	-0.05	-0.11	0.21	-0.03	0.5
R	O	53511	SR	0.28	0.20	-0.04	0.20	-0.09	-0.09	0.6
R	O	52649	SR	0.37	0.20	-0.13	-0.20	0.04	0.20	0.5
R	O	52781	SR	0.59	0.26	-0.12	0.26	-0.09	-0.12	0.5
R	O	68149	SR	0.25	0.12	0.00	-0.05	0.12	-0.04	0.6
R	O	67569	SR	0.33	0.15	-0.09	0.15	-0.08	0.01	0.6
R	O	67572	SR	0.31	0.10	-0.08	0.10	-0.07	0.06	0.6
R	O	67592	SR	0.28	0.04	-0.09	0.04	-0.08	0.12	0.5
R	O	67617	SR	0.50	0.26	-0.13	-0.11	0.26	-0.09	0.6

Table 1.A2 Item Statistics, Operational Items: MDHSA Biology—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	67618	SR	0.32	0.25	0.25	-0.12	-0.14	0.00	0.6
R	O	65049	SR	0.32	0.20	-0.07	-0.10	0.20	-0.03	0.7
R	O	108539	SR	0.24	0.10	-0.03	0.02	0.10	-0.07	0.7
R	O	214531	SR	0.15	0.16	0.09	-0.15	-0.02	0.16	0.6
R	O	65072	SR	0.33	0.16	-0.04	0.16	-0.06	-0.06	0.6
R	O	108511	SR	0.33	0.12	-0.10	-0.06	0.12	0.05	0.6
R	O	53469	SR	0.75	0.23	-0.10	0.23	-0.12	-0.11	0.5
R	O	52586	SR	0.42	0.18	0.18	-0.09	-0.04	-0.07	0.6
R	O	52591	SR	0.50	0.23	-0.11	0.23	-0.13	-0.06	0.6
R	O	57088	SR	0.33	0.17	-0.08	0.17	-0.11	0.02	0.7
R	O	68106	SR	0.44	0.23	0.23	-0.07	-0.13	-0.05	0.8
Mean				0.34	0.18	0.00	-0.01	-0.01	0.00	0.4
SD				0.14	0.07	0.12	0.13	0.12	0.12	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A3 Item Statistics, Operational Items: MDHSA English—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	223327	SR	0.42	0.30	-0.14	-0.19	0.30	-0.05	0.2
R	O	223328	SR	0.70	0.33	-0.17	0.33	-0.18	-0.15	0.2
R	O	223330	SR	0.35	0.22	0.22	-0.18	0.00	-0.13	0.3
R	O	223329	SR	0.58	0.27	0.27	-0.18	-0.13	-0.10	0.2
R	O	223332	SR	0.43	0.22	0.22	-0.12	-0.16	0.00	0.3
R	O	223370	SR	0.58	0.28	-0.08	-0.21	0.28	-0.10	0.2
R	O	256456	SR	0.77	0.43	-0.22	-0.25	-0.19	0.43	0.2
R	O	256458	SR	0.61	0.35	-0.12	0.35	-0.24	-0.16	0.3
R	O	256457	SR	0.41	0.21	-0.12	-0.06	0.21	-0.09	0.3
R	O	251161	SR	0.72	0.35	0.35	-0.20	-0.16	-0.15	0.7
R	O	251151	SR	0.54	0.29	-0.11	0.29	-0.16	-0.12	0.7
R	O	251148	SR	0.36	0.25	-0.15	-0.16	0.25	0.01	0.9
R	O	175704	SR	0.57	0.36	-0.16	-0.24	0.36	-0.10	1.1
R	O	175705	SR	0.23	0.18	0.18	-0.04	-0.02	-0.12	1.2
R	O	175707	SR	0.35	0.20	0.02	-0.17	-0.15	0.20	1.3
R	O	175708	SR	0.64	0.31	-0.18	-0.22	0.31	-0.06	1.4
R	O	95581	SR	0.74	0.37	-0.21	-0.18	0.37	-0.18	0.3
R	O	95582	SR	0.36	0.26	-0.18	-0.08	0.26	-0.03	0.3
R	O	95583	SR	0.63	0.43	-0.22	-0.22	-0.16	0.43	0.4
R	O	95584	SR	0.68	0.36	-0.20	0.36	-0.15	-0.17	0.4
R	O	95585	SR	0.42	0.25	0.00	-0.16	-0.16	0.25	0.4

Table 1.A3 Item Statistics, Operational Items: MDHSA English—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	% Omits
R	O	95587	SR	0.54	0.29	-0.11	0.29	-0.14	-0.13	0.4
R	O	95588	SR	0.59	0.44	-0.14	-0.23	-0.28	0.44	0.3
R	O	179996	SR	0.52	0.37	-0.18	-0.21	-0.12	0.37	0.5
R	O	179999	SR	0.23	0.16	-0.10	0.08	-0.19	0.16	0.5
R	O	179998	SR	0.49	0.30	-0.17	-0.20	0.30	-0.05	0.5
R	O	180000	SR	0.29	0.15	0.15	-0.08	-0.07	0.01	0.6
R	O	180001	SR	0.51	0.25	-0.07	-0.14	0.25	-0.10	0.5
R	O	180002	SR	0.28	0.23	-0.09	-0.11	-0.02	0.23	0.5
R	O	180003	SR	0.55	0.31	-0.06	0.31	-0.22	-0.21	0.6
R	O	180004	SR	0.56	0.33	-0.08	-0.23	0.33	-0.14	0.6
R	O	95991	SR	0.42	0.20	-0.07	0.20	-0.06	-0.11	0.7
R	O	95992	SR	0.49	0.38	-0.21	-0.23	-0.10	0.38	0.7
R	O	95993	SR	0.61	0.32	0.32	-0.12	-0.22	-0.17	0.7
R	O	95994	SR	0.50	0.33	0.33	-0.15	-0.16	-0.11	0.7
R	O	95995	SR	0.57	0.32	-0.16	0.32	-0.12	-0.18	0.7
R	O	95665	SR	0.70	0.43	-0.19	-0.25	0.43	-0.19	0.9
R	O	96104	SR	0.57	0.36	-0.23	-0.11	0.36	-0.17	0.9
R	O	130091	SR	0.48	0.32	-0.17	-0.13	0.32	-0.09	1.0
R	O	214672	SR	0.43	0.33	-0.07	-0.16	-0.16	0.33	0.4
R	O	214674	SR	0.34	0.12	-0.07	0.12	-0.06	0.01	0.5
R	O	214675	SR	0.30	0.17	-0.13	-0.17	0.17	0.04	0.5
R	O	130977	SR	0.41	0.33	0.33	-0.12	-0.16	-0.11	0.6
R	O	130978	SR	0.58	0.32	-0.15	0.32	-0.21	-0.06	0.7
R	O	130979	SR	0.56	0.29	0.29	-0.09	-0.14	-0.16	0.5
R	O	130982	SR	0.61	0.42	-0.22	0.42	-0.23	-0.13	0.5
R	O	130984	SR	0.55	0.44	-0.17	-0.22	-0.19	0.44	0.5
R	O	130985	SR	0.52	0.40	-0.12	-0.21	0.40	-0.19	0.6
R	O	130965	SR	0.56	0.33	-0.17	0.33	-0.23	-0.05	0.5
R	O	130980	SR	0.33	0.19	-0.14	-0.13	0.19	0.07	0.6
R	O	130966	SR	0.31	0.29	0.02	-0.17	-0.17	0.29	0.6
R	O	130967	SR	0.43	0.26	-0.01	0.26	-0.17	-0.13	0.6
R	O	256294	SR	0.66	0.37	-0.13	-0.25	0.37	-0.16	0.6
R	O	251223	SR	0.28	0.20	-0.03	-0.08	-0.07	0.20	0.7
R	O	251224	SR	0.32	0.22	-0.13	-0.07	0.22	-0.04	0.6
R	O	251225	SR	0.22	0.19	0.19	0.00	-0.12	-0.02	0.7
R	O	251226	SR	0.33	0.23	-0.01	-0.19	0.23	-0.04	0.7
R	O	251227	SR	0.50	0.34	-0.18	0.34	-0.18	-0.09	0.7
R	O	95999	SR	0.36	0.20	-0.02	0.20	-0.09	-0.13	0.6
R	O	96000	SR	0.63	0.35	0.35	-0.13	-0.22	-0.13	0.7
Mean				0.49	0.29	-0.05	-0.04	0.00	-0.01	0.6
SD				0.14	0.08	0.17	0.21	0.22	0.19	0.3

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A4 Item Statistics, Operational Items: MDHSA Government—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	68674	SR	0.59	0.31	-0.12	-0.13	-0.19	0.31	0.0
R	O	68033	SR	0.57	0.26	-0.16	0.26	-0.13	-0.08	0.0
R	O	52191	SR	0.63	0.33	-0.14	-0.18	-0.17	0.33	0.1
R	O	256403	SR	0.72	0.22	-0.16	0.22	-0.08	-0.11	0.0
R	O	135581	SR	0.42	0.23	0.23	-0.07	-0.15	-0.06	0.1
R	O	79573	SR	0.17	0.26	-0.07	-0.07	0.26	-0.09	0.1
R	O	55632	SR	0.58	0.26	-0.15	-0.17	0.26	-0.09	0.0
R	O	108482	SR	0.51	0.21	0.21	-0.08	-0.11	-0.09	0.1
R	O	108371	SR	0.31	0.13	0.04	0.13	-0.12	-0.12	0.1
R	O	60431	SR	0.30	0.14	-0.11	-0.15	0.03	0.14	0.1
R	O	51733	SR	0.54	0.28	0.28	-0.14	-0.11	-0.14	0.1
R	O	58423	SR	0.32	0.20	0.20	-0.04	-0.12	-0.08	0.1
R	O	108433	SR	0.36	0.21	-0.08	0.21	-0.13	-0.05	0.2
R	O	50943	SR	0.50	0.22	-0.07	0.22	-0.10	-0.15	0.1
R	O	79729	SR	0.38	0.28	-0.03	-0.17	-0.13	0.28	0.1
R	O	79713	SR	0.29	0.23	-0.05	0.23	-0.08	-0.14	0.1
R	O	256378	SR	0.58	0.29	-0.11	-0.16	-0.17	0.29	0.1
R	O	223252	SR	0.22	0.21	-0.08	-0.05	-0.07	0.21	0.1
R	O	60555	SR	0.41	0.11	0.03	-0.12	0.11	-0.04	0.3
R	O	79587	SR	0.53	0.37	0.37	-0.16	-0.20	-0.15	0.2
R	O	79623	SR	0.41	0.06	-0.08	0.06	0.01	0.00	0.3
R	O	256341	SR	0.46	0.23	-0.16	-0.12	0.23	-0.03	0.3
R	O	79748	SR	0.22	0.27	-0.10	0.27	-0.07	-0.10	0.3
R	O	65184	SR	0.39	0.20	-0.04	-0.18	0.20	-0.03	0.5
R	O	58204	SR	0.17	0.07	0.07	0.01	-0.07	0.01	0.5
R	O	68555	SR	0.57	0.36	0.36	-0.17	-0.18	-0.14	0.5
R	O	137320	SR	0.19	0.17	-0.07	-0.04	-0.03	0.17	0.6
R	O	68686	SR	0.34	0.16	-0.16	-0.15	0.16	0.07	0.7
R	O	223264	SR	0.71	0.30	-0.20	0.30	-0.16	-0.07	0.1
R	O	51094	SR	0.48	0.25	-0.06	-0.06	-0.19	0.25	0.3
R	O	79603	SR	0.21	0.03	0.05	0.03	-0.04	-0.05	0.3
R	O	79592	SR	0.15	-0.08	-0.03	-0.08	-0.14	0.16	0.2
R	O	79648	SR	0.31	0.14	-0.01	-0.08	0.14	-0.05	0.2
R	O	68758	SR	0.44	0.38	-0.17	-0.13	-0.19	0.38	0.2
R	O	68759	SR	0.39	0.29	-0.07	-0.15	-0.13	0.29	0.2
R	O	108451	SR	0.32	0.23	-0.11	-0.13	0.23	-0.02	0.3
R	O	137308	SR	0.34	0.19	0.03	0.19	-0.16	-0.13	0.2
R	O	68050	SR	0.22	0.16	-0.05	0.16	-0.05	-0.05	0.3
R	O	108394	SR	0.19	0.20	0.20	-0.18	0.04	-0.05	0.2
R	O	55505	SR	0.35	0.16	-0.02	-0.09	0.16	-0.08	0.4
R	O	50894	SR	0.59	0.27	-0.14	-0.13	0.27	-0.12	0.2
R	O	58223	SR	0.34	0.19	0.19	-0.09	-0.11	-0.01	0.5
R	O	50836	SR	0.48	0.39	0.39	-0.21	-0.17	-0.13	0.2
R	O	79753	SR	0.22	0.24	-0.05	-0.10	-0.08	0.24	0.3

Table 1.A4 Item Statistics, Operational Items: MDHSA Government—October Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
R	O	51115	SR	0.45	0.34	-0.14	-0.14	-0.15	0.34	0.4
R	O	241963	SR	0.33	0.20	-0.16	-0.12	0.20	0.04	0.2
R	O	108422	SR	0.29	0.21	-0.06	0.21	-0.15	0.00	0.2
R	O	68059	SR	0.22	0.25	0.25	-0.04	-0.11	-0.09	0.3
R	O	51764	SR	0.43	0.24	-0.19	0.24	-0.05	-0.10	0.3
R	O	79719	SR	0.41	0.24	0.24	-0.08	-0.14	-0.08	0.3
R	O	108435	SR	0.57	0.32	-0.18	-0.11	-0.16	0.32	0.4
R	O	65208	SR	0.38	0.20	-0.07	-0.13	0.20	-0.03	0.5
R	O	108440	SR	0.51	0.29	-0.08	-0.22	0.29	-0.08	0.4
R	O	79621	SR	0.38	0.27	-0.07	0.27	-0.16	-0.12	0.5
R	O	68529	SR	0.38	0.24	-0.06	-0.11	0.24	-0.11	0.5
R	O	65182	SR	0.54	0.36	-0.15	-0.17	-0.17	0.36	0.3
R	O	68068	SR	0.25	0.17	-0.08	-0.03	0.17	-0.07	0.3
R	O	79710	SR	0.45	0.23	-0.08	-0.13	0.23	-0.07	0.4
R	O	52211	SR	0.31	0.16	-0.03	0.16	-0.07	-0.08	0.3
R	O	68532	SR	0.45	0.30	0.30	-0.11	-0.14	-0.12	0.3
R	O	65205	SR	0.29	0.13	0.02	0.13	-0.06	-0.11	0.4
R	O	64798	SR	0.44	0.22	-0.08	-0.12	0.22	-0.07	0.5
R	O	256343	SR	0.52	0.25	0.25	-0.18	-0.07	-0.12	0.3
R	O	58343	SR	0.53	0.40	0.40	-0.16	-0.24	-0.13	0.3
R	O	58364	SR	0.37	0.18	-0.14	-0.12	0.18	0.03	0.5
R	O	214493	SR	0.17	0.01	-0.15	-0.10	0.17	0.01	0.4
R	O	64793	SR	0.47	0.33	0.33	-0.13	-0.18	-0.11	0.5
R	O	51748	SR	0.33	0.20	-0.15	0.20	0.03	-0.14	0.4
R	O	64804	SR	0.47	0.26	-0.13	-0.15	0.26	-0.06	0.4
R	O	108421	SR	0.32	0.28	-0.08	0.28	-0.10	-0.12	0.4
R	O	214500	SR	0.32	0.29	-0.08	-0.10	-0.12	0.29	0.3
R	O	68790	SR	0.21	0.10	0.07	-0.06	0.10	-0.14	0.4
R	O	51196	SR	0.39	0.15	-0.07	0.01	-0.14	0.15	0.4
R	O	108348	SR	0.20	0.19	-0.09	-0.10	0.01	0.19	0.4
R	O	50998	SR	0.35	0.19	-0.11	0.19	-0.07	-0.02	0.4
R	O	256505	SR	0.15	0.08	0.11	0.08	-0.11	-0.08	0.4
R	O	79658	SR	0.23	0.12	-0.01	-0.01	0.12	-0.09	0.5
R	O	256348	SR	0.45	0.27	-0.13	0.27	-0.11	-0.14	0.4
R	O	50985	SR	0.51	0.31	0.31	-0.19	-0.11	-0.14	0.4
R	O	50910	SR	0.26	0.24	0.24	-0.03	-0.13	-0.07	0.5
R	O	214492	SR	0.25	0.15	-0.18	-0.06	0.15	0.09	0.5
R	O	50911	SR	0.25	0.20	0.20	-0.11	-0.02	-0.07	0.6
Mean				0.38	0.22	0.00	-0.03	-0.02	0.00	0.3
SD				0.14	0.09	0.16	0.15	0.15	0.15	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A5 Item Statistics, Operational Items: MDHSA Algebra—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	56632	SR	0.29	0.47	-0.04	-0.44	0.47	-0.02	0.1
A-B	L	54729	SR	0.52	0.29	-0.05	0.29	-0.13	-0.20	0.1
A-B	L	56682	SR	0.51	0.34	-0.18	-0.18	0.34	-0.10	0.6
A-B	L	54684	SR	0.32	0.35	0.35	-0.19	-0.14	-0.05	1.4
A-B	O	79026	SR	0.44	0.43	-0.07	-0.17	-0.29	0.43	0.4
A-B	L	79035	SR	0.31	0.20	0.20	0.00	-0.07	-0.16	0.4
A-B	L	255072	SPR	0.46	0.42	0.42	-0.37			3.8
A-B	L	106627	SR	0.30	0.28	-0.13	0.28	-0.12	-0.03	0.2
A-B	L	54735	SR	0.33	0.21	0.21	-0.10	-0.13	-0.03	0.4
A-B	L	79044	SR	0.14	0.09	0.05	-0.18	0.01	0.09	0.3
A-B	L	54848	SR	0.23	0.38	-0.15	-0.02	-0.17	0.38	0.3
A-B	L	132836	SR	0.65	0.28	-0.17	-0.12	0.28	-0.12	0.4
A-B	O	51536	SR	0.30	0.14	-0.17	0.14	0.07	-0.04	0.5
A-B	L	255084	SPR	0.18	0.47	0.47	-0.35			7.7
A-B	L	223244	SPR	0.42	0.38	0.38	-0.32			5.3
A-B	L	54655	SR	0.54	0.24	-0.15	-0.04	0.24	-0.15	1.0
A-B	O	106553	SR	0.35	0.34	0.34	-0.15	-0.14	-0.09	1.4
A-B	L	106584	SR	0.47	0.31	-0.13	-0.17	0.31	-0.11	1.4
A-B	O	54618	SR	0.60	0.39	-0.18	-0.17	0.39	-0.19	0.3
A-B	O	54898	SR	0.56	0.33	-0.16	-0.11	-0.18	0.33	0.4
A-B	L	106575	SR	0.47	0.27	-0.10	-0.18	0.27	-0.05	0.7
A-B	O	51459	SR	0.40	0.34	-0.12	-0.18	-0.11	0.34	1.1
A-B	L	54747	SR	0.46	0.38	-0.13	-0.18	0.38	-0.19	0.6
A-B	L	133390	SPR	0.08	0.30	0.30	-0.16			6.7
A-B	L	215935	SPR	0.05	0.35	0.35	-0.15			8.4
A-B	O	51476	SR	0.36	0.43	-0.17	-0.27	0.43	-0.09	0.6
A-B	L	51387	SR	0.32	0.16	-0.04	-0.05	-0.07	0.16	0.9
A-B	L	56689	SR	0.45	0.38	-0.11	0.38	-0.17	-0.21	0.5
A-B	O	79045	SR	0.24	0.15	0.15	-0.02	-0.11	0.01	0.7
A-B	O	56657	SR	0.31	0.08	-0.13	0.10	0.08	-0.14	0.9
A-B	O	106656	SR	0.49	0.37	-0.16	0.37	-0.18	-0.12	0.9
A-B	L	106614	SPR	0.36	0.50	0.50	-0.42			4.8
A-B	O	50395	SPR	0.13	0.46	0.46	-0.29			7.5
A-B	L	56757	SR	0.17	0.25	0.28	-0.03	0.25	-0.36	0.9
A-B	O	255111	SR	0.59	0.37	-0.19	-0.19	0.37	-0.14	1.3
A-B	O	223240	SR	0.50	0.43	0.43	-0.14	-0.22	-0.19	0.7
A-B	O	67405	SR	0.33	0.26	-0.13	0.26	-0.08	-0.13	0.7
A-B	L	132831	SPR	0.10	0.29	0.29	-0.12			12.1
A-B	L	79048	SPR	0.04	0.26	0.26	-0.07			14.7
A-B	O	135114	SR	0.30	0.31	-0.10	-0.14	-0.07	0.31	0.6
A-B	O	51574	SR	0.73	0.40	0.40	-0.17	-0.22	-0.21	0.6
A-B	L	51447	SR	0.32	0.21	-0.11	0.21	-0.18	0.05	1.0
A-B	O	54889	SR	0.25	0.43	-0.19	-0.17	-0.07	0.43	0.6

Table 1.A5 Item Statistics, Operational Items: MDHSA Algebra—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	O	50368	SR	0.43	0.43	0.43	-0.17	-0.18	-0.18	0.9
A-B	L	67467	SR	0.40	0.32	-0.15	-0.19	-0.11	0.32	0.6
A-B	L	50369	SR	0.27	0.21	-0.16	0.21	-0.05	0.02	0.8
A-B	L	56453	SR	0.34	0.14	-0.06	0.14	-0.06	-0.01	0.8
A-B	L	223242	SPR	0.04	0.28	0.28	-0.11			11.8
A-B	O	56789	SR	0.52	0.31	-0.15	0.31	-0.16	-0.11	0.7
A-B	L	56791	SR	0.73	0.23	-0.08	-0.12	0.23	-0.13	0.8
A-B	O	56790	SR	0.41	0.21	-0.07	0.21	-0.18	-0.01	0.8
A-B	O	56742	SR	0.28	0.29	0.29	-0.10	-0.13	-0.04	1.0
A-B	L	56776	SR	0.49	0.28	-0.16	0.28	-0.13	-0.07	1.1
Mean				0.36	0.31	0.05	-0.07	0.01	-0.02	2.1
SD				0.17	0.10	0.24	0.20	0.22	0.19	3.3

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A6 Item Statistics, Operational Items: MDHSA Algebra—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	56632	SR	0.29	0.47	-0.04	-0.44	0.47	-0.02	0.1
C	L	54729	SR	0.52	0.29	-0.05	0.29	-0.13	-0.20	0.1
C	L	56682	SR	0.51	0.34	-0.18	-0.18	0.34	-0.10	0.6
C	L	54684	SR	0.32	0.35	0.35	-0.19	-0.14	-0.05	1.4
C	O	136689	SR	0.44	0.34	0.34	-0.22	-0.14	-0.07	0.2
C	L	79035	SR	0.31	0.20	0.20	0.00	-0.07	-0.16	0.4
C	L	255072	SPR	0.46	0.42	0.42	-0.37			3.8
C	L	106627	SR	0.30	0.28	-0.13	0.28	-0.12	-0.03	0.2
C	L	54735	SR	0.33	0.21	0.21	-0.10	-0.13	-0.03	0.4
C	L	79044	SR	0.14	0.09	0.05	-0.18	0.01	0.09	0.3
C	L	54848	SR	0.23	0.38	-0.15	-0.02	-0.17	0.38	0.3
C	L	132836	SR	0.65	0.28	-0.17	-0.12	0.28	-0.12	0.4
C	O	223236	SR	0.46	0.37	-0.12	-0.18	-0.17	0.37	0.4
C	L	255084	SPR	0.18	0.47	0.47	-0.35			7.7
C	L	223244	SPR	0.42	0.38	0.38	-0.32			5.3
C	L	54655	SR	0.54	0.24	-0.15	-0.04	0.24	-0.15	1.0
C	O	223435	SR	0.15	0.21	0.21	-0.08	-0.10	0.02	0.9
C	L	106584	SR	0.47	0.31	-0.13	-0.17	0.31	-0.11	1.4
C	O	79114	SR	0.61	0.29	-0.13	-0.18	0.29	-0.06	0.8
C	O	56440	SR	0.59	0.25	-0.14	0.25	-0.15	-0.05	0.8
C	L	106575	SR	0.47	0.27	-0.10	-0.18	0.27	-0.05	0.7

Table 1.A6 Item Statistics, Operational Items: MDHSA Algebra—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	O	51513	SR	0.36	0.30	0.30	-0.05	-0.19	-0.09	0.8
C	L	54747	SR	0.46	0.38	-0.13	-0.18	0.38	-0.19	0.6
C	L	133390	SPR	0.08	0.30	0.30	-0.16			6.7
C	L	215935	SPR	0.05	0.35	0.35	-0.15			8.4
C	O	54902	SR	0.30	0.31	-0.18	-0.03	-0.12	0.31	0.8
C	L	51387	SR	0.32	0.16	-0.04	-0.05	-0.07	0.16	0.9
C	L	56689	SR	0.45	0.38	-0.11	0.38	-0.17	-0.21	0.5
C	O	79046	SR	0.13	0.12	0.01	0.01	-0.07	0.12	1.1
C	O	51470	SR	0.36	0.28	-0.09	-0.11	0.28	-0.13	1.0
C	O	54872	SR	0.30	0.32	-0.10	-0.12	-0.12	0.32	1.3
C	L	106614	SPR	0.36	0.50	0.50	-0.42			4.8
C	O	106633	SPR	0.29	0.35	0.35	-0.28			3.8
C	L	56757	SR	0.17	0.25	0.28	-0.03	0.25	-0.36	0.9
C	O	106609	SR	0.59	0.41	-0.15	0.41	-0.20	-0.19	0.9
C	O	54557	SR	0.61	0.38	0.38	-0.21	-0.18	-0.10	1.3
C	O	211066	SR	0.46	0.31	-0.04	-0.18	-0.15	0.31	1.3
C	L	132831	SPR	0.10	0.29	0.29	-0.12			12.1
C	L	79048	SPR	0.04	0.26	0.26	-0.07			14.7
C	O	79017	SR	0.19	0.15	-0.07	-0.02	0.15	-0.03	1.4
C	O	52335	SR	0.38	0.38	-0.11	0.38	-0.19	-0.15	1.1
C	L	51447	SR	0.32	0.21	-0.11	0.21	-0.18	0.05	1.0
C	O	106568	SR	0.37	0.40	0.40	-0.19	-0.17	-0.08	1.2
C	O	106597	SR	0.35	0.21	-0.01	0.21	-0.12	-0.07	1.2
C	L	67467	SR	0.40	0.32	-0.15	-0.19	-0.11	0.32	0.6
C	L	50369	SR	0.27	0.21	-0.16	0.21	-0.05	0.02	0.8
C	L	56453	SR	0.34	0.14	-0.06	0.14	-0.06	-0.01	0.8
C	L	223242	SPR	0.04	0.28	0.28	-0.11			11.8
C	O	106659	SR	0.31	0.23	-0.08	-0.16	0.23	-0.01	1.3
C	L	56791	SR	0.73	0.23	-0.08	-0.12	0.23	-0.13	0.8
C	O	51402	SR	0.50	0.29	-0.14	0.29	-0.16	-0.04	1.4
C	O	54726	SR	0.22	0.28	0.28	-0.12	-0.13	0.00	1.4
C	L	56776	SR	0.49	0.28	-0.16	0.28	-0.13	-0.07	1.1
Mean				0.35	0.30	0.06	-0.06	0.00	-0.01	2.2
SD				0.17	0.09	0.22	0.21	0.20	0.17	3.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A7 Item Statistics, Operational Items: MDHSA Biology—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	133437	SR	0.52	0.28	-0.06	-0.21	-0.12	0.28	0.1
A-B	O	55172	SR	0.51	0.33	-0.15	0.33	-0.17	-0.15	0.0
A-B	L	137259	SR	0.37	0.29	-0.04	0.29	-0.21	-0.10	0.1
A-B	L	256488	SR	0.36	0.27	0.07	-0.24	0.27	-0.16	0.1
A-B	O	256490	SR	0.41	0.38	-0.16	0.38	-0.17	-0.15	0.1
A-B	O	54987	SR	0.39	0.44	0.44	-0.18	-0.22	-0.12	0.1
A-B	L	68167	SR	0.27	0.45	-0.14	-0.12	-0.26	0.45	0.1
A-B	O	55112	SR	0.31	0.17	-0.18	0.17	0.06	-0.14	0.3
A-B	L	55113	SR	0.37	0.39	0.39	-0.17	-0.15	-0.14	0.3
A-B	O	192081	SR	0.65	0.42	-0.13	0.42	-0.18	-0.30	0.1
A-B	L	214545	SR	0.47	0.44	-0.18	-0.15	-0.24	0.44	0.2
A-B	L	67647	SR	0.22	0.29	-0.06	0.29	-0.07	-0.15	0.3
A-B	O	223417	SR	0.35	0.27	0.27	-0.07	-0.17	-0.13	0.2
A-B	O	223440	SR	0.26	0.32	0.32	-0.07	-0.19	-0.05	0.3
A-B	L	223439	SR	0.34	0.50	-0.12	-0.22	0.50	-0.24	0.3
A-B	L	251269	SR	0.54	0.37	-0.24	-0.16	0.37	-0.12	0.2
A-B	L	251268	SR	0.35	0.29	0.29	-0.04	-0.18	-0.18	0.3
A-B	L	108653	SR	0.80	0.38	0.38	-0.18	-0.25	-0.16	0.3
A-B	L	108649	SR	0.66	0.47	0.47	-0.22	-0.29	-0.17	0.4
A-B	L	223429	SR	0.46	0.40	0.40	-0.20	-0.21	-0.07	0.4
A-B	L	68227	SR	0.44	0.29	0.02	0.29	-0.24	-0.20	0.4
A-B	O	68228	SR	0.22	0.26	0.26	-0.01	-0.13	-0.10	0.5
A-B	O	52501	SR	0.59	0.45	-0.15	-0.18	-0.31	0.45	0.5
A-B	L	56978	SR	0.38	0.49	0.49	-0.23	-0.23	-0.11	0.6
A-B	L	57024	SR	0.49	0.42	-0.24	-0.17	0.42	-0.15	0.6
A-B	L	68177	SR	0.45	0.39	-0.09	0.39	-0.26	-0.12	0.6
A-B	L	52691	SR	0.38	0.22	-0.04	-0.16	0.22	-0.07	0.2
A-B	O	67663	SR	0.50	0.42	-0.27	0.42	-0.14	-0.14	0.2
A-B	O	108520	SR	0.39	0.38	-0.14	0.38	-0.23	-0.12	0.2
A-B	L	108552	SR	0.30	0.41	0.41	-0.23	-0.16	-0.04	0.3
A-B	O	136097	SR	0.41	0.18	0.18	0.04	-0.17	-0.15	0.2
A-B	L	136096	SR	0.41	0.36	0.36	-0.21	-0.05	-0.20	0.3
A-B	L	133015	SR	0.47	0.44	-0.20	-0.19	-0.19	0.44	0.2
A-B	L	133016	SR	0.33	0.41	-0.11	-0.13	-0.20	0.41	0.3
A-B	L	79401	SR	0.41	0.21	0.09	-0.23	0.21	-0.20	0.3
A-B	O	79440	SR	0.54	0.32	-0.10	0.32	-0.18	-0.17	0.3
A-B	L	55263	SR	0.53	0.39	-0.16	-0.24	0.39	-0.14	0.3
A-B	L	55260	SR	0.33	0.31	-0.16	-0.11	-0.08	0.31	0.3
A-B	O	65126	SR	0.58	0.44	0.44	-0.21	-0.18	-0.23	0.3
A-B	L	55083	SR	0.72	0.41	-0.17	-0.27	0.41	-0.17	0.2
A-B	L	55084	SR	0.49	0.28	0.28	-0.13	-0.18	-0.06	0.3
A-B	O	57065	SR	0.42	0.32	-0.11	0.32	-0.15	-0.13	0.3
A-B	O	108560	SR	0.35	0.41	-0.17	0.41	-0.19	-0.10	0.4
A-B	L	57142	SR	0.23	0.28	0.28	0.06	-0.19	-0.12	0.3

Table 1.A7 Item Statistics, Operational Items: MDHSA Biology—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	79289	SR	0.40	0.31	-0.13	0.31	-0.10	-0.13	0.3
A-B	L	79290	SR	0.52	0.53	-0.22	-0.22	-0.27	0.53	0.3
A-B	O	55016	SR	0.48	0.42	-0.22	-0.27	0.42	-0.04	0.4
A-B	O	65142	SR	0.61	0.37	-0.13	-0.20	0.37	-0.21	0.4
A-B	O	53449	SR	0.62	0.46	-0.16	0.46	-0.20	-0.30	0.4
A-B	O	256525	SR	0.43	0.37	-0.07	-0.18	0.37	-0.22	0.5
A-B	L	256527	SR	0.48	0.44	0.44	-0.25	-0.21	-0.11	0.5
A-B	O	79468	SR	0.47	0.54	-0.18	-0.29	-0.21	0.54	0.3
A-B	O	67632	SR	0.49	0.44	-0.22	0.44	-0.20	-0.14	0.3
A-B	L	136144	SR	0.48	0.41	-0.14	0.41	-0.18	-0.22	0.4
A-B	L	135597	SR	0.37	0.38	-0.13	-0.18	-0.12	0.38	0.4
A-B	O	79291	SR	0.29	0.32	0.32	0.03	-0.27	-0.12	0.4
A-B	L	108532	SR	0.45	0.48	-0.16	-0.31	0.48	-0.13	0.3
A-B	L	108531	SR	0.46	0.50	-0.14	0.50	-0.27	-0.25	0.3
A-B	O	67642	SR	0.60	0.41	-0.21	-0.21	0.41	-0.17	0.4
A-B	L	67641	SR	0.30	0.41	-0.15	-0.13	-0.16	0.41	0.4
A-B	L	64705	SR	0.44	0.51	-0.18	0.51	-0.20	-0.26	0.5
A-B	O	64744	SR	0.39	0.45	-0.15	0.45	-0.31	-0.07	0.3
A-B	L	64746	SR	0.41	0.47	-0.22	-0.23	0.47	-0.12	0.3
A-B	L	214526	SR	0.32	0.36	0.36	-0.23	-0.04	-0.16	0.4
A-B	O	55102	SR	0.43	0.45	0.45	-0.28	-0.11	-0.19	0.4
A-B	O	57132	SR	0.42	0.33	0.08	-0.20	0.33	-0.27	0.4
A-B	O	214534	SR	0.43	0.40	0.40	-0.19	-0.17	-0.13	0.4
A-B	L	67696	SR	0.33	0.25	0.25	-0.21	-0.25	0.13	0.4
A-B	L	136111	SR	0.35	0.25	0.25	-0.19	-0.01	-0.07	0.5
A-B	O	136112	SR	0.33	0.29	0.29	-0.13	-0.14	-0.06	0.5
A-B	L	57184	SR	0.28	0.47	0.02	0.47	-0.24	-0.25	0.4
A-B	L	55031	SR	0.50	0.55	-0.24	-0.29	-0.19	0.55	0.5
A-B	O	215986	SR	0.33	0.43	0.43	-0.22	-0.15	-0.10	0.5
A-B	L	215987	SR	0.46	0.28	0.28	-0.11	-0.14	-0.12	0.5
A-B	L	133436	SR	0.24	0.31	0.31	0.00	-0.17	-0.12	0.5
A-B	L	207713	SR	0.68	0.29	-0.16	-0.12	0.29	-0.15	0.5
Mean				0.43	0.37	0.04	-0.02	-0.06	-0.05	0.3
SD				0.12	0.09	0.25	0.26	0.24	0.22	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A8 Item Statistics, Operational Items: MDHSA Biology—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	133437	SR	0.52	0.28	-0.06	-0.21	-0.12	0.28	0.1
C	O	68213	SR	0.44	0.32	-0.17	0.32	-0.12	-0.12	0.0
C	L	137259	SR	0.37	0.29	-0.04	0.29	-0.21	-0.10	0.1
C	L	256488	SR	0.36	0.27	0.07	-0.24	0.27	-0.16	0.1
C	O	256497	SR	0.62	0.24	-0.14	-0.12	-0.10	0.24	0.0
C	O	52481	SR	0.32	0.34	-0.11	-0.16	0.34	-0.10	0.1
C	L	68167	SR	0.27	0.45	-0.14	-0.12	-0.26	0.45	0.1
C	O	55110	SR	0.35	0.32	-0.10	-0.19	0.32	-0.09	0.0
C	L	55113	SR	0.37	0.39	0.39	-0.17	-0.15	-0.14	0.3
C	O	56997	SR	0.32	0.39	-0.16	-0.17	-0.12	0.39	0.0
C	L	214545	SR	0.47	0.44	-0.18	-0.15	-0.24	0.44	0.2
C	L	67647	SR	0.22	0.29	-0.06	0.29	-0.07	-0.15	0.3
C	O	68224	SR	0.28	0.34	-0.11	-0.15	0.34	-0.09	0.4
C	O	223442	SR	0.25	0.22	0.22	-0.11	-0.04	-0.05	0.3
C	L	223439	SR	0.34	0.50	-0.12	-0.22	0.50	-0.24	0.3
C	L	251269	SR	0.54	0.37	-0.24	-0.16	0.37	-0.12	0.2
C	L	251268	SR	0.35	0.29	0.29	-0.04	-0.18	-0.18	0.3
C	L	108653	SR	0.80	0.38	0.38	-0.18	-0.25	-0.16	0.3
C	L	108649	SR	0.66	0.47	0.47	-0.22	-0.29	-0.17	0.4
C	L	223429	SR	0.46	0.40	0.40	-0.20	-0.21	-0.07	0.4
C	L	68227	SR	0.44	0.29	0.02	0.29	-0.24	-0.20	0.4
C	O	68230	SR	0.24	0.18	0.18	0.05	-0.11	-0.10	0.6
C	O	55008	SR	0.45	0.32	-0.15	-0.06	0.32	-0.19	0.7
C	L	56978	SR	0.38	0.49	0.49	-0.23	-0.23	-0.11	0.6
C	L	57024	SR	0.49	0.42	-0.24	-0.17	0.42	-0.15	0.6
C	L	68177	SR	0.45	0.39	-0.09	0.39	-0.26	-0.12	0.6
C	L	52691	SR	0.38	0.22	-0.04	-0.16	0.22	-0.07	0.2
C	O	52556	SR	0.29	0.27	0.27	-0.11	-0.09	-0.09	0.3
C	O	68294	SR	0.32	0.21	0.06	0.21	-0.21	-0.07	0.2
C	L	108552	SR	0.30	0.41	0.41	-0.23	-0.16	-0.04	0.3
C	O	136098	SR	0.39	0.39	-0.18	0.39	-0.17	-0.12	0.2
C	L	136096	SR	0.41	0.36	0.36	-0.21	-0.05	-0.20	0.3
C	L	133015	SR	0.47	0.44	-0.20	-0.19	-0.19	0.44	0.2
C	L	133016	SR	0.33	0.41	-0.11	-0.13	-0.20	0.41	0.3
C	L	79401	SR	0.41	0.21	0.09	-0.23	0.21	-0.20	0.3
C	O	214543	SR	0.47	0.39	-0.12	0.39	-0.22	-0.15	0.3
C	L	55263	SR	0.53	0.39	-0.16	-0.24	0.39	-0.14	0.3
C	L	55260	SR	0.33	0.31	-0.16	-0.11	-0.08	0.31	0.3
C	O	214550	SR	0.33	0.21	0.21	-0.19	-0.01	-0.04	0.2
C	L	55083	SR	0.72	0.41	-0.17	-0.27	0.41	-0.17	0.2
C	L	55084	SR	0.49	0.28	0.28	-0.13	-0.18	-0.06	0.3
C	O	53512	SR	0.43	0.32	0.32	-0.10	-0.16	-0.14	0.3
C	O	57103	SR	0.37	0.39	-0.13	-0.17	-0.18	0.39	0.3
C	L	57142	SR	0.23	0.28	0.28	0.06	-0.19	-0.12	0.3

Table 1.A8 Item Statistics, Operational Items: MDHSA Biology—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	79289	SR	0.40	0.31	-0.13	0.31	-0.10	-0.13	0.3
C	L	79290	SR	0.52	0.53	-0.22	-0.22	-0.27	0.53	0.3
C	O	52645	SR	0.24	0.25	-0.14	0.01	-0.17	0.25	0.3
C	O	64991	SR	0.29	0.35	-0.18	-0.06	-0.14	0.35	0.4
C	O	68251	SR	0.38	0.30	-0.15	-0.12	0.30	-0.10	0.4
C	O	256524	SR	0.47	0.39	-0.15	0.39	-0.20	-0.15	0.4
C	L	256527	SR	0.48	0.44	0.44	-0.25	-0.21	-0.11	0.5
C	O	57123	SR	0.57	0.24	-0.08	-0.18	0.24	-0.06	0.4
C	O	68249	SR	0.31	0.32	-0.06	0.32	-0.16	-0.12	0.4
C	L	136144	SR	0.48	0.41	-0.14	0.41	-0.18	-0.22	0.4
C	L	135597	SR	0.37	0.38	-0.13	-0.18	-0.12	0.38	0.4
C	O	64984	SR	0.33	0.29	-0.07	-0.06	0.29	-0.19	0.3
C	L	108532	SR	0.45	0.48	-0.16	-0.31	0.48	-0.13	0.3
C	L	108531	SR	0.46	0.50	-0.14	0.50	-0.27	-0.25	0.3
C	O	67640	SR	0.51	0.26	-0.07	-0.15	0.26	-0.12	0.4
C	L	67641	SR	0.30	0.41	-0.15	-0.13	-0.16	0.41	0.4
C	L	64705	SR	0.44	0.51	-0.18	0.51	-0.20	-0.26	0.5
C	O	64745	SR	0.50	0.35	-0.20	0.35	-0.17	-0.08	0.4
C	L	64746	SR	0.41	0.47	-0.22	-0.23	0.47	-0.12	0.3
C	L	214526	SR	0.32	0.36	0.36	-0.23	-0.04	-0.16	0.4
C	O	64724	SR	0.26	0.38	-0.01	-0.20	-0.18	0.38	0.4
C	O	64735	SR	0.43	0.24	0.02	-0.17	0.24	-0.12	0.4
C	O	65073	SR	0.39	0.23	-0.18	0.23	-0.14	0.03	0.3
C	L	67696	SR	0.33	0.25	0.25	-0.21	-0.25	0.13	0.4
C	L	136111	SR	0.35	0.25	0.25	-0.19	-0.01	-0.07	0.5
C	O	136110	SR	0.39	0.31	-0.16	-0.20	0.31	-0.03	0.4
C	L	57184	SR	0.28	0.47	0.02	0.47	-0.24	-0.25	0.4
C	L	55031	SR	0.50	0.55	-0.24	-0.29	-0.19	0.55	0.5
C	O	215988	SR	0.37	0.26	-0.09	-0.14	0.26	-0.06	0.3
C	L	215987	SR	0.46	0.28	0.28	-0.11	-0.14	-0.12	0.5
C	L	133436	SR	0.24	0.31	0.31	0.00	-0.17	-0.12	0.5
C	L	207713	SR	0.68	0.29	-0.16	-0.12	0.29	-0.15	0.5
Mean				0.41	0.35	0.00	-0.04	-0.02	-0.02	0.3
SD				0.12	0.09	0.21	0.23	0.24	0.22	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A9 Item Statistics, Operational Items: MDHSA English—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	96009	SR	0.64	0.37	-0.17	-0.25	0.37	-0.15	0.0
A-B	L	96010	SR	0.61	0.30	0.30	-0.05	-0.26	-0.15	0.0
A-B	L	96011	SR	0.73	0.44	-0.22	-0.20	-0.26	0.44	0.0
A-B	L	96012	SR	0.54	0.29	0.29	-0.02	-0.27	-0.19	0.0
A-B	L	96013	SR	0.44	0.41	0.41	-0.18	-0.22	-0.12	0.1
A-B	O	108779	SR	0.75	0.40	-0.23	-0.23	0.40	-0.17	0.1
A-B	O	108805	SR	0.62	0.40	0.40	-0.23	-0.18	-0.18	0.1
A-B	O	108806	SR	0.73	0.40	-0.21	-0.19	-0.24	0.40	0.1
A-B	O	108808	SR	0.55	0.21	-0.10	0.21	-0.10	-0.13	0.1
A-B	O	108809	SR	0.33	0.28	-0.21	-0.04	0.28	-0.16	0.1
A-B	O	108810	SR	0.64	0.36	-0.22	-0.20	0.36	-0.15	0.1
A-B	O	130246	SR	0.44	0.42	-0.17	-0.28	-0.08	0.42	0.1
A-B	L	256422	SR	0.28	0.22	0.22	-0.05	-0.05	-0.16	0.1
A-B	L	256423	SR	0.58	0.44	-0.14	-0.23	-0.26	0.44	0.2
A-B	L	256424	SR	0.69	0.38	-0.21	0.38	-0.20	-0.17	0.1
A-B	L	256304	SR	0.38	0.31	-0.10	0.31	-0.13	-0.14	0.3
A-B	L	251146	SR	0.41	0.33	0.33	-0.16	-0.12	-0.12	0.4
A-B	L	256416	SR	0.65	0.46	-0.20	0.46	-0.24	-0.23	0.4
A-B	L	95963	SR	0.49	0.45	0.45	-0.19	-0.23	-0.17	0.6
A-B	L	95964	SR	0.56	0.50	-0.20	-0.26	-0.22	0.50	0.6
A-B	L	95965	SR	0.50	0.43	0.43	-0.21	-0.24	-0.13	0.7
A-B	L	95966	SR	0.63	0.46	0.46	-0.21	-0.25	-0.21	0.8
A-B	O	96356	SR	0.48	0.51	-0.17	-0.32	-0.19	0.51	0.2
A-B	O	96357	SR	0.52	0.32	-0.12	-0.16	0.32	-0.16	0.4
A-B	O	96358	SR	0.72	0.43	-0.22	-0.22	0.43	-0.23	0.2
A-B	O	96359	SR	0.47	0.40	0.40	-0.19	-0.20	-0.18	0.2
A-B	O	96360	SR	0.73	0.30	-0.17	-0.12	0.30	-0.20	0.2
A-B	O	96361	SR	0.53	0.48	-0.23	-0.23	-0.19	0.48	0.2
A-B	L	130277	SR	0.50	0.37	-0.08	-0.21	-0.17	0.37	0.3
A-B	L	130139	SR	0.48	0.30	-0.04	-0.22	0.30	-0.20	0.2
A-B	L	209816	SR	0.41	0.27	0.27	-0.12	-0.20	-0.04	0.3
A-B	O	96031	SR	0.44	0.25	-0.13	0.25	-0.06	-0.13	0.4
A-B	O	96032	SR	0.54	0.48	0.48	-0.23	-0.22	-0.21	0.4
A-B	O	96033	SR	0.87	0.39	-0.22	-0.26	0.39	-0.15	0.3
A-B	O	96034	SR	0.82	0.40	-0.26	0.40	-0.22	-0.13	0.3
A-B	O	96035	SR	0.59	0.21	0.21	-0.10	-0.23	-0.04	0.4
A-B	O	96036	SR	0.75	0.46	0.46	-0.27	-0.21	-0.23	0.3
A-B	O	96037	SR	0.48	0.39	-0.17	-0.23	0.39	-0.11	0.4
A-B	O	96038	SR	0.40	0.19	-0.15	-0.16	0.19	0.02	0.4
A-B	L	190853	SR	0.63	0.47	-0.19	-0.25	-0.24	0.47	0.4
A-B	L	190854	SR	0.34	0.40	0.40	-0.14	-0.18	-0.17	0.5
A-B	L	190855	SR	0.84	0.39	-0.20	-0.21	-0.22	0.39	0.5
A-B	L	190856	SR	0.72	0.38	-0.22	0.38	-0.25	-0.09	0.5
A-B	L	190857	SR	0.56	0.41	-0.12	-0.27	0.41	-0.19	0.6

Table 1.A9 Item Statistics, Operational Items: MDHSA English—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	190858	SR	0.42	0.51	-0.24	-0.22	-0.22	0.51	0.6
A-B	L	256269	SR	0.48	0.44	0.44	-0.16	-0.26	-0.16	0.2
A-B	L	256270	SR	0.49	0.49	-0.24	-0.21	-0.21	0.49	0.2
A-B	L	256271	SR	0.54	0.44	-0.21	0.44	-0.21	-0.22	0.3
A-B	L	130185	SR	0.65	0.42	-0.22	0.42	-0.25	-0.17	0.3
A-B	L	130186	SR	0.44	0.27	-0.06	-0.14	0.27	-0.21	0.3
A-B	L	130187	SR	0.30	0.18	-0.17	0.18	0.06	-0.20	0.4
A-B	L	130188	SR	0.65	0.42	-0.17	0.42	-0.26	-0.21	0.3
A-B	L	130286	SR	0.35	0.46	-0.19	-0.19	0.46	-0.18	0.3
A-B	L	130189	SR	0.50	0.36	-0.18	-0.19	0.36	-0.10	0.4
A-B	L	130190	SR	0.51	0.39	-0.17	-0.26	0.39	-0.08	0.4
A-B	L	130181	SR	0.31	0.39	0.39	-0.14	-0.15	-0.13	0.4
A-B	L	130182	SR	0.69	0.42	-0.12	-0.23	-0.29	0.42	0.4
A-B	L	130183	SR	0.48	0.36	-0.24	0.36	-0.12	-0.11	0.4
A-B	L	109108	SR	0.47	0.39	-0.09	-0.28	0.39	-0.13	0.3
A-B	L	109109	SR	0.71	0.38	0.38	-0.15	-0.24	-0.18	0.4
Mean				0.55	0.38	-0.01	-0.08	-0.04	-0.02	0.3
SD				0.14	0.08	0.26	0.23	0.26	0.26	0.2

Note: Tabled item position number is based on Form A and varies somewhat on Form B.

Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A10 Item Statistics, Operational Items: MDHSA English—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	96009	SR	0.64	0.37	-0.17	-0.25	0.37	-0.15	0.0
C	L	96010	SR	0.61	0.30	0.30	-0.05	-0.26	-0.15	0.0
C	L	96011	SR	0.73	0.44	-0.22	-0.20	-0.26	0.44	0.0
C	L	96012	SR	0.54	0.29	0.29	-0.02	-0.27	-0.19	0.0
C	L	96013	SR	0.44	0.41	0.41	-0.18	-0.22	-0.12	0.1
C	O	223346	SR	0.70	0.26	-0.13	-0.21	0.26	-0.06	0.0
C	O	223348	SR	0.58	0.37	-0.11	-0.23	-0.22	0.37	0.1
C	O	223350	SR	0.46	0.31	-0.19	0.31	-0.11	-0.17	0.1
C	O	223353	SR	0.56	0.32	-0.18	0.32	-0.13	-0.13	0.1
C	O	223354	SR	0.58	0.31	0.31	-0.17	-0.17	-0.10	0.1
C	O	251102	SR	0.23	0.11	-0.15	0.11	0.07	-0.12	0.1
C	O	223357	SR	0.27	0.14	-0.11	-0.17	0.14	0.11	0.2
C	L	256422	SR	0.28	0.22	0.22	-0.05	-0.05	-0.16	0.1
C	L	256423	SR	0.58	0.44	-0.14	-0.23	-0.26	0.44	0.2
C	L	256424	SR	0.69	0.38	-0.21	0.38	-0.20	-0.17	0.1

Table 1.A10 Item Statistics, Operational Items: MDHSA English—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	256304	SR	0.38	0.31	-0.10	0.31	-0.13	-0.14	0.3
C	L	251146	SR	0.41	0.33	0.33	-0.16	-0.12	-0.12	0.4
C	L	256416	SR	0.65	0.46	-0.20	0.46	-0.24	-0.23	0.4
C	L	95963	SR	0.49	0.45	0.45	-0.19	-0.23	-0.17	0.6
C	L	95964	SR	0.56	0.50	-0.20	-0.26	-0.22	0.50	0.6
C	L	95965	SR	0.50	0.43	0.43	-0.21	-0.24	-0.13	0.7
C	L	95966	SR	0.63	0.46	0.46	-0.21	-0.25	-0.21	0.8
C	O	96194	SR	0.49	0.38	-0.14	-0.22	-0.11	0.38	0.4
C	O	96195	SR	0.26	0.31	-0.13	0.00	0.31	-0.20	0.4
C	O	96196	SR	0.39	0.50	-0.13	-0.25	-0.24	0.50	0.5
C	O	96197	SR	0.71	0.38	-0.20	0.38	-0.25	-0.10	0.4
C	O	96198	SR	0.22	0.10	0.00	-0.02	0.10	-0.06	0.5
C	O	96199	SR	0.31	0.33	0.33	-0.12	-0.19	-0.04	0.4
C	L	130277	SR	0.50	0.37	-0.08	-0.21	-0.17	0.37	0.3
C	L	130139	SR	0.48	0.30	-0.04	-0.22	0.30	-0.20	0.2
C	L	209816	SR	0.41	0.27	0.27	-0.12	-0.20	-0.04	0.3
C	O	109142	SR	0.43	0.20	-0.01	0.20	-0.15	-0.06	0.7
C	O	109143	SR	0.55	0.48	-0.18	-0.25	-0.21	0.48	0.8
C	O	109148	SR	0.44	0.36	-0.16	0.36	-0.17	-0.10	0.5
C	O	109145	SR	0.42	0.43	-0.15	-0.13	-0.24	0.43	0.5
C	O	109146	SR	0.49	0.20	-0.14	-0.06	0.20	-0.06	0.5
C	O	109150	SR	0.52	0.29	-0.07	-0.15	0.29	-0.18	0.7
C	O	109147	SR	0.46	0.43	-0.11	-0.25	-0.19	0.43	0.6
C	O	109149	SR	0.36	0.26	-0.15	-0.19	0.26	0.03	0.4
C	L	190853	SR	0.63	0.47	-0.19	-0.25	-0.24	0.47	0.4
C	L	190854	SR	0.34	0.40	0.40	-0.14	-0.18	-0.17	0.5
C	L	190855	SR	0.84	0.39	-0.20	-0.21	-0.22	0.39	0.5
C	L	190856	SR	0.72	0.38	-0.22	0.38	-0.25	-0.09	0.5
C	L	190857	SR	0.56	0.41	-0.12	-0.27	0.41	-0.19	0.6
C	L	190858	SR	0.42	0.51	-0.24	-0.22	-0.22	0.51	0.6
C	L	214678	SR	0.45	0.42	-0.09	-0.20	-0.23	0.42	0.9
C	L	214680	SR	0.45	0.28	-0.12	0.28	-0.14	-0.08	0.8
C	L	214814	SR	0.50	0.20	-0.07	-0.06	0.20	-0.11	0.8
C	L	130185	SR	0.65	0.42	-0.22	0.42	-0.25	-0.17	0.3
C	L	130186	SR	0.44	0.27	-0.06	-0.14	0.27	-0.21	0.3
C	L	130187	SR	0.30	0.18	-0.17	0.18	0.06	-0.20	0.4
C	L	130188	SR	0.65	0.42	-0.17	0.42	-0.26	-0.21	0.3
C	L	130286	SR	0.35	0.46	-0.19	-0.19	0.46	-0.18	0.3
C	L	130189	SR	0.50	0.36	-0.18	-0.19	0.36	-0.10	0.4
C	L	130190	SR	0.51	0.39	-0.17	-0.26	0.39	-0.08	0.4
C	L	130181	SR	0.31	0.39	0.39	-0.14	-0.15	-0.13	0.4
C	L	130182	SR	0.69	0.42	-0.12	-0.23	-0.29	0.42	0.4
C	L	130183	SR	0.48	0.36	-0.24	0.36	-0.12	-0.11	0.4

Table 1.A10 Item Statistics, Operational Items: MDHSA English—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	109108	SR	0.47	0.39	-0.09	-0.28	0.39	-0.13	0.3
C	L	109109	SR	0.71	0.38	0.38	-0.15	-0.24	-0.18	0.4
Mean				0.50	0.35	-0.03	-0.05	-0.06	0.01	0.4
SD				0.14	0.10	0.22	0.23	0.23	0.25	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A11 Item Statistics, Operational Items: MDHSA Government—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	O	68605	SR	0.78	0.41	-0.16	0.41	-0.27	-0.21	0.0
A-B	L	58157	SR	0.81	0.38	-0.16	0.38	-0.23	-0.22	0.0
A-B	O	58110	SR	0.51	0.34	0.34	-0.17	-0.10	-0.20	0.1
A-B	L	79660	SR	0.83	0.32	-0.11	-0.20	0.32	-0.19	0.0
A-B	L	51132	SR	0.35	0.34	-0.16	-0.15	-0.10	0.34	0.2
A-B	L	133474	SR	0.33	0.25	-0.13	-0.13	0.25	-0.11	0.1
A-B	L	79610	SR	0.29	0.42	-0.17	-0.20	0.42	-0.09	0.1
A-B	L	133469	SR	0.34	0.41	-0.11	0.41	-0.38	0.04	0.1
A-B	L	79714	SR	0.52	0.41	-0.17	-0.25	0.41	-0.13	0.2
A-B	O	50939	SR	0.50	0.48	-0.31	0.48	-0.15	-0.16	0.2
A-B	L	79652	SR	0.50	0.55	0.55	-0.22	-0.24	-0.29	0.1
A-B	O	79539	SR	0.45	0.55	0.55	-0.34	-0.19	-0.16	0.2
A-B	L	108438	SR	0.58	0.38	-0.18	-0.19	-0.18	0.38	0.2
A-B	L	79743	SR	0.51	0.30	0.30	-0.11	-0.19	-0.09	0.1
A-B	O	214498	SR	0.79	0.42	0.42	-0.24	-0.19	-0.24	0.1
A-B	L	55673	SR	0.53	0.47	-0.17	0.47	-0.19	-0.28	0.2
A-B	O	68681	SR	0.70	0.39	0.39	-0.22	-0.19	-0.19	0.1
A-B	L	79718	SR	0.47	0.37	-0.22	-0.21	0.37	-0.08	0.2
A-B	L	79701	SR	0.40	0.53	-0.17	0.53	-0.29	-0.19	0.2
A-B	O	79630	SR	0.58	0.47	-0.20	0.47	-0.27	-0.21	0.2
A-B	O	79674	SR	0.62	0.43	-0.25	0.43	-0.27	-0.13	0.2
A-B	L	68563	SR	0.36	0.14	0.13	-0.23	0.14	-0.11	0.2
A-B	L	79603	SR	0.32	0.40	-0.18	0.40	-0.18	-0.07	0.3
A-B	L	51003	SR	0.39	0.31	-0.13	-0.12	-0.11	0.31	0.3
A-B	O	132984	SR	0.48	0.34	-0.16	-0.07	-0.22	0.34	0.4
A-B	L	65187	SR	0.30	0.27	0.05	-0.18	-0.18	0.27	0.4
A-B	L	242073	SR	0.74	0.45	-0.27	0.45	-0.23	-0.18	0.4
A-B	O	51016	SR	0.55	0.54	0.54	-0.23	-0.25	-0.26	0.4
A-B	L	51072	SR	0.53	0.25	-0.11	0.25	-0.22	-0.03	0.2
A-B	L	68496	SR	0.41	0.43	-0.15	-0.20	-0.19	0.43	0.2

Table 1.A11 Item Statistics, Operational Items: MDHSA Government—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	51235	SR	0.45	0.25	-0.03	-0.12	0.25	-0.22	0.2
A-B	O	68054	SR	0.40	0.36	0.36	-0.24	-0.06	-0.17	0.3
A-B	O	68695	SR	0.53	0.46	-0.22	-0.25	0.46	-0.15	0.2
A-B	O	108381	SR	0.29	0.38	-0.15	-0.23	0.38	-0.03	0.2
A-B	L	79689	SR	0.44	0.48	0.48	-0.24	-0.22	-0.13	0.3
A-B	O	68709	SR	0.58	0.53	-0.24	-0.27	0.53	-0.24	0.2
A-B	O	256371	SR	0.46	0.40	0.40	-0.24	-0.14	-0.14	0.2
A-B	L	67974	SR	0.47	0.36	-0.23	-0.23	0.36	-0.07	0.3
A-B	L	68537	SR	0.35	0.38	0.38	-0.21	-0.15	-0.17	0.2
A-B	O	52263	SR	0.41	0.54	-0.22	-0.22	-0.22	0.54	0.3
A-B	L	108413	SR	0.51	0.47	-0.17	-0.27	0.47	-0.22	0.2
A-B	L	256402	SR	0.39	0.25	0.25	-0.11	-0.07	-0.13	0.3
A-B	L	256364	SR	0.48	0.37	-0.22	-0.27	-0.07	0.37	0.3
A-B	O	79616	SR	0.60	0.51	-0.27	0.51	-0.27	-0.19	0.2
A-B	O	214502	SR	0.70	0.38	-0.21	-0.19	-0.18	0.38	0.2
A-B	L	58379	SR	0.43	0.33	-0.18	-0.17	0.33	-0.07	0.3
A-B	L	79596	SR	0.52	0.50	-0.16	0.50	-0.30	-0.20	0.3
A-B	O	55593	SR	0.33	0.41	0.41	-0.06	-0.28	-0.19	0.3
A-B	O	64794	SR	0.55	0.49	-0.25	-0.15	-0.29	0.49	0.3
A-B	L	223263	SR	0.40	0.37	-0.04	0.37	-0.24	-0.19	0.3
A-B	O	108410	SR	0.45	0.36	-0.22	-0.19	0.36	-0.04	0.4
A-B	O	68009	SR	0.50	0.49	0.49	-0.22	-0.29	-0.16	0.3
A-B	L	135584	SR	0.17	0.21	0.21	-0.09	-0.06	-0.03	0.5
A-B	L	51182	SR	0.82	0.37	0.37	-0.25	-0.18	-0.15	0.4
A-B	L	256505	SR	0.25	0.33	0.05	0.33	-0.26	-0.16	0.5
A-B	L	68663	SR	0.38	0.50	-0.16	-0.15	-0.29	0.50	0.3
A-B	O	68013	SR	0.50	0.51	-0.21	-0.27	-0.18	0.51	0.2
A-B	L	51183	SR	0.40	0.25	0.25	0.13	-0.26	-0.20	0.3
A-B	L	64810	SR	0.58	0.49	0.49	-0.26	-0.25	-0.22	0.3
A-B	O	132966	SR	0.55	0.49	-0.23	-0.24	-0.23	0.49	0.3
A-B	O	65201	SR	0.57	0.46	-0.20	-0.21	0.46	-0.23	0.2
A-B	L	51755	SR	0.45	0.38	-0.16	0.38	-0.21	-0.09	0.3
A-B	O	51752	SR	0.47	0.57	-0.25	-0.22	-0.27	0.57	0.3
A-B	O	51191	SR	0.42	0.37	-0.15	-0.13	-0.18	0.37	0.3
A-B	O	52247	SR	0.45	0.37	0.37	-0.13	-0.16	-0.21	0.3
A-B	L	58292	SR	0.71	0.50	-0.25	-0.29	0.50	-0.21	0.3
A-B	L	51114	SR	0.41	0.47	0.47	-0.21	-0.28	-0.10	0.4
A-B	O	108356	SR	0.55	0.28	0.28	-0.12	-0.18	-0.11	0.3
A-B	L	68528	SR	0.36	0.45	-0.16	-0.12	-0.24	0.45	0.4
A-B	L	50848	SR	0.36	0.45	0.45	-0.16	-0.17	-0.20	0.4
A-B	L	108478	SR	0.67	0.45	-0.18	0.45	-0.31	-0.15	0.3
A-B	L	64824	SR	0.32	0.26	-0.17	0.26	0.00	-0.15	0.4
A-B	L	135595	SR	0.80	0.43	-0.21	0.43	-0.27	-0.20	0.3

Table 1.A11 Item Statistics, Operational Items: MDHSA Government—January Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A-B	L	50984	SR	0.63	0.43	-0.23	-0.19	0.43	-0.22	0.4
A-B	O	108366	SR	0.51	0.46	-0.25	0.46	-0.27	-0.12	0.3
A-B	O	79641	SR	0.40	0.50	-0.25	-0.23	-0.14	0.50	0.3
A-B	O	58226	SR	0.27	0.41	-0.05	-0.20	-0.24	0.41	0.3
A-B	L	68779	SR	0.33	0.37	-0.17	0.37	-0.05	-0.19	0.4
A-B	L	133473	SR	0.45	0.57	-0.20	-0.29	-0.24	0.57	0.4
A-B	L	79656	SR	0.30	0.41	-0.20	0.41	-0.22	-0.09	0.3
A-B	L	79627	SR	0.57	0.36	-0.22	0.36	-0.18	-0.12	0.4
A-B	L	79687	SR	0.50	0.52	-0.20	0.52	-0.19	-0.29	0.4
Mean				0.49	0.41	-0.02	-0.01	-0.08	-0.02	0.3
SD				0.14	0.09	0.27	0.29	0.25	0.26	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A12 Item Statistics, Operational Items: MDHSA Government—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	O	50855	SR	0.77	0.30	0.30	-0.18	-0.16	-0.15	0.0
C	L	58157	SR	0.81	0.38	-0.16	0.38	-0.23	-0.22	0.0
C	O	50912	SR	0.34	0.38	0.38	-0.16	-0.24	-0.05	0.0
C	L	79660	SR	0.83	0.32	-0.11	-0.20	0.32	-0.19	0.0
C	L	51132	SR	0.35	0.34	-0.16	-0.15	-0.10	0.34	0.2
C	L	133474	SR	0.33	0.25	-0.13	-0.13	0.25	-0.11	0.1
C	L	79610	SR	0.29	0.42	-0.17	-0.20	0.42	-0.09	0.1
C	L	133469	SR	0.34	0.41	-0.11	0.41	-0.38	0.04	0.1
C	L	79714	SR	0.52	0.41	-0.17	-0.25	0.41	-0.13	0.2
C	O	68603	SR	0.87	0.25	-0.11	-0.17	0.25	-0.11	0.2
C	L	79652	SR	0.50	0.55	0.55	-0.22	-0.24	-0.29	0.1
C	O	50881	SR	0.33	0.54	-0.20	-0.18	-0.22	0.54	0.3
C	L	108438	SR	0.58	0.38	-0.18	-0.19	-0.18	0.38	0.2
C	L	79743	SR	0.51	0.30	0.30	-0.11	-0.19	-0.09	0.1
C	O	223258	SR	0.79	0.36	-0.14	-0.22	-0.20	0.36	0.3
C	L	55673	SR	0.53	0.47	-0.17	0.47	-0.19	-0.28	0.2
C	O	108391	SR	0.62	0.37	-0.21	0.37	-0.18	-0.12	0.3
C	L	79718	SR	0.47	0.37	-0.22	-0.21	0.37	-0.08	0.2
C	L	79701	SR	0.40	0.53	-0.17	0.53	-0.29	-0.19	0.2
C	O	108358	SR	0.67	0.32	-0.12	0.32	-0.22	-0.15	0.4
C	O	58387	SR	0.31	0.33	-0.10	0.33	-0.14	-0.12	0.4
C	L	68563	SR	0.36	0.14	0.13	-0.23	0.14	-0.11	0.2
C	L	79603	SR	0.32	0.40	-0.18	0.40	-0.18	-0.07	0.3

Table 1.A12 Item Statistics, Operational Items: MDHSA Government—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	51003	SR	0.39	0.31	-0.13	-0.12	-0.11	0.31	0.3
C	O	132972	SR	0.33	0.26	-0.18	-0.07	0.26	-0.03	0.4
C	L	65187	SR	0.30	0.27	0.05	-0.18	-0.18	0.27	0.4
C	L	242073	SR	0.74	0.45	-0.27	0.45	-0.23	-0.18	0.4
C	O	68687	SR	0.39	0.39	-0.18	-0.20	0.39	-0.10	0.6
C	L	51072	SR	0.53	0.25	-0.11	0.25	-0.22	-0.03	0.2
C	L	68496	SR	0.41	0.43	-0.15	-0.20	-0.19	0.43	0.2
C	L	51235	SR	0.45	0.25	-0.03	-0.12	0.25	-0.22	0.2
C	O	68561	SR	0.17	0.18	-0.09	0.09	-0.15	0.18	0.5
C	O	256399	SR	0.35	0.10	-0.10	-0.01	0.10	0.01	0.6
C	O	68502	SR	0.36	0.45	-0.14	-0.18	-0.19	0.45	0.5
C	L	79689	SR	0.44	0.48	0.48	-0.24	-0.22	-0.13	0.3
C	O	242074	SR	0.40	0.33	-0.15	0.33	-0.12	-0.11	0.6
C	O	135589	SR	0.46	0.44	0.44	-0.26	-0.20	-0.07	0.6
C	L	67974	SR	0.47	0.36	-0.23	-0.23	0.36	-0.07	0.3
C	L	68537	SR	0.35	0.38	0.38	-0.21	-0.15	-0.17	0.2
C	O	51011	SR	0.40	0.41	-0.22	-0.18	0.41	-0.11	0.6
C	L	108413	SR	0.51	0.47	-0.17	-0.27	0.47	-0.22	0.2
C	L	256402	SR	0.39	0.25	0.25	-0.11	-0.07	-0.13	0.3
C	L	256364	SR	0.48	0.37	-0.22	-0.27	-0.07	0.37	0.3
C	O	137302	SR	0.26	0.20	0.20	0.06	-0.21	-0.02	0.6
C	O	68771	SR	0.58	0.46	-0.20	0.46	-0.23	-0.22	0.6
C	L	58379	SR	0.43	0.33	-0.18	-0.17	0.33	-0.07	0.3
C	L	79596	SR	0.52	0.50	-0.16	0.50	-0.30	-0.20	0.3
C	O	50887	SR	0.51	0.35	0.35	-0.12	-0.20	-0.11	0.6
C	O	68075	SR	0.34	0.27	0.27	-0.09	-0.16	-0.04	0.6
C	L	223263	SR	0.40	0.37	-0.04	0.37	-0.24	-0.19	0.3
C	O	68721	SR	0.46	0.38	-0.10	-0.24	0.38	-0.11	0.6
C	O	137284	SR	0.73	0.41	0.41	-0.19	-0.22	-0.20	0.6
C	L	135584	SR	0.17	0.21	0.21	-0.09	-0.06	-0.03	0.5
C	L	51182	SR	0.82	0.37	0.37	-0.25	-0.18	-0.15	0.4
C	L	256505	SR	0.25	0.33	0.05	0.33	-0.26	-0.16	0.5
C	L	68663	SR	0.38	0.50	-0.16	-0.15	-0.29	0.50	0.3
C	O	65196	SR	0.30	0.28	-0.14	0.28	-0.22	0.03	0.7
C	L	51183	SR	0.40	0.25	0.25	0.13	-0.26	-0.20	0.3
C	L	64810	SR	0.58	0.49	0.49	-0.26	-0.25	-0.22	0.3
C	O	64801	SR	0.56	0.43	-0.17	0.43	-0.21	-0.19	0.7
C	O	64803	SR	0.36	0.42	0.42	-0.20	-0.17	-0.09	0.8
C	L	51755	SR	0.45	0.38	-0.16	0.38	-0.21	-0.09	0.3
C	O	50837	SR	0.36	0.47	-0.12	-0.25	0.47	-0.16	0.7
C	O	52287	SR	0.33	0.20	-0.09	-0.02	-0.14	0.20	0.8
C	O	256408	SR	0.40	0.37	-0.15	0.37	-0.12	-0.16	0.8
C	L	58292	SR	0.71	0.50	-0.25	-0.29	0.50	-0.21	0.3

Table 1.A12 Item Statistics, Operational Items: MDHSA Government—January Makeup

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
C	L	51114	SR	0.41	0.47	0.47	-0.21	-0.28	-0.10	0.4
C	O	51107	SR	0.27	0.25	-0.07	0.25	-0.12	-0.06	0.8
C	L	68528	SR	0.36	0.45	-0.16	-0.12	-0.24	0.45	0.4
C	L	50848	SR	0.36	0.45	0.45	-0.16	-0.17	-0.20	0.4
C	L	108478	SR	0.67	0.45	-0.18	0.45	-0.31	-0.15	0.3
C	L	64824	SR	0.32	0.26	-0.17	0.26	0.00	-0.15	0.4
C	L	135595	SR	0.80	0.43	-0.21	0.43	-0.27	-0.20	0.3
C	L	50984	SR	0.63	0.43	-0.23	-0.19	0.43	-0.22	0.4
C	O	50849	SR	0.26	0.26	-0.02	-0.08	-0.13	0.26	0.9
C	O	108410	SR	0.45	0.36	-0.22	-0.19	0.36	-0.04	0.4
C	O	52267	SR	0.54	0.37	-0.09	-0.20	0.37	-0.20	1.0
C	L	68779	SR	0.33	0.37	-0.17	0.37	-0.05	-0.19	0.4
C	L	133473	SR	0.45	0.57	-0.20	-0.29	-0.24	0.57	0.4
C	L	79656	SR	0.30	0.41	-0.20	0.41	-0.22	-0.09	0.3
C	L	79627	SR	0.57	0.36	-0.22	0.36	-0.18	-0.12	0.4
C	L	79687	SR	0.50	0.52	-0.20	0.52	-0.19	-0.29	0.4
Mean				0.46	0.37	-0.03	0.02	-0.06	-0.04	0.4
SD				0.16	0.10	0.23	0.27	0.25	0.21	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A13 Item Statistics, Operational Items: MDHSA Algebra—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	O	56599	SR	0.55	0.29	-0.14	-0.20	0.29	-0.09	0.1
S	L	67519	SR	0.40	0.32	-0.23	-0.18	0.32	0.06	0.1
S	L	106655	SR	0.29	0.21	-0.03	0.21	-0.14	-0.04	0.3
S	O	54765	SR	0.19	0.20	0.20	-0.06	-0.06	-0.06	0.1
S	L	79018	SR	0.20	0.18	0.00	-0.15	0.18	-0.05	0.7
S	L	136686	SPR	0.40	0.41	0.41	-0.36			3.4
S	L	255067	SPR	0.31	0.28	0.28	-0.22			5.5
S	O	223238	SR	0.13	0.35	0.04	-0.22	-0.14	0.35	0.5
S	L	51549	SR	0.39	0.09	-0.06	0.03	0.09	-0.07	0.6
S	L	255113	SR	0.47	0.15	-0.02	0.15	-0.12	-0.05	0.9
S	O	132827	SR	0.48	0.27	-0.04	-0.21	0.27	-0.11	0.6
S	L	132822	SR	0.38	0.25	-0.11	0.00	-0.23	0.25	0.6
S	O	67496	SPR	0.42	0.47	0.47	-0.41			5.3
S	O	67495	SPR	0.19	0.33	0.33	-0.23			9.4
S	L	79085	SR	0.58	0.33	-0.14	0.33	-0.17	-0.17	0.7

Table 1.A13 Item Statistics, Operational Items: MDHSA Algebra—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	L	56562	SR	0.26	0.43	-0.19	-0.15	-0.09	0.43	1.2
S	O	106549	SR	0.17	0.22	0.22	-0.06	-0.04	-0.09	1.2
S	L	106618	SR	0.34	0.25	-0.15	-0.19	0.25	0.07	1.0
S	O	54875	SR	0.72	0.30	-0.20	0.30	-0.12	-0.13	0.2
S	O	51414	SR	0.37	0.31	0.31	-0.14	-0.15	-0.07	0.9
S	L	255108	SR	0.50	0.32	-0.14	0.32	-0.18	-0.11	0.7
S	O	56545	SPR	0.11	0.39	0.39	-0.28			4.3
S	L	255082	SPR	0.05	0.23	0.23	-0.08			7.0
S	O	79150	SR	0.15	0.18	0.00	-0.04	-0.11	0.18	0.6
S	O	67535	SR	0.22	0.10	0.09	-0.13	0.10	-0.04	0.5
S	L	106543	SR	0.27	0.23	0.23	-0.16	0.00	-0.09	0.6
S	L	132823	SR	0.47	0.31	-0.09	-0.16	0.31	-0.15	0.5
S	O	54763	SR	0.25	0.20	-0.04	-0.13	-0.04	0.20	0.3
S	L	135112	SR	0.30	0.12	-0.09	-0.05	0.12	0.03	0.8
S	O	67420	SPR	0.21	0.32	0.32	-0.22			10.1
S	L	54658	SR	0.15	0.28	-0.02	-0.09	-0.09	0.28	0.7
S	O	67427	SR	0.44	0.32	-0.17	0.32	-0.15	-0.09	0.5
S	O	79092	SR	0.40	0.31	-0.12	-0.12	-0.13	0.31	0.6
S	L	79037	SR	0.21	0.23	0.23	-0.07	-0.08	-0.05	0.7
S	L	211027	SR	0.44	0.31	-0.11	-0.13	0.31	-0.14	0.8
S	L	67474	SR	0.42	0.32	0.32	-0.17	-0.16	-0.06	0.7
S	L	211050	SR	0.28	0.19	-0.01	-0.09	-0.11	0.19	0.5
S	O	67431	SPR	0.42	0.46	0.46	-0.41			4.5
S	L	50426	SPR	0.20	0.26	0.26	-0.16			4.8
S	L	51443	SPR	0.24	0.35	0.35	-0.25			5.0
S	L	79102	SR	0.28	0.13	-0.03	-0.07	0.13	-0.02	0.8
S	L	64684	SR	0.46	0.29	0.29	-0.16	-0.11	-0.11	0.5
S	O	52344	SR	0.46	0.33	-0.20	0.33	-0.11	-0.13	0.6
S	L	67464	SR	0.32	0.33	-0.16	-0.15	0.33	-0.04	0.5
S	O	67559	SR	0.31	0.14	-0.10	0.14	0.04	-0.13	0.4
S	L	50371	SR	0.42	0.30	-0.13	0.30	-0.14	-0.09	0.7
S	O	43147	SR	0.46	0.22	-0.15	-0.02	0.22	-0.12	0.5
S	L	51398	SR	0.31	0.42	0.42	-0.19	-0.16	-0.08	0.7
S	L	67489	SR	0.39	0.12	-0.02	0.12	-0.01	-0.12	0.7
S	L	56799	SR	0.17	0.14	0.14	-0.07	-0.05	0.02	0.5
S	O	54673	SR	0.27	0.33	-0.10	-0.14	-0.09	0.33	0.5
S	L	56750	SR	0.18	0.28	0.28	-0.04	-0.10	-0.11	0.5
S	L	54767	SR	0.33	0.30	0.30	-0.09	-0.12	-0.12	0.7
Mean				0.33	0.27	0.07	-0.07	-0.01	0.00	1.6
SD				0.13	0.09	0.21	0.18	0.17	0.16	2.3

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A14 Item Statistics, Operational Items: MDHSA Biology—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	O	52663	SR	0.39	0.27	-0.07	0.27	-0.13	-0.14	0.1
S	L	52490	SR	0.57	0.31	-0.10	-0.18	0.31	-0.16	0.2
S	O	192077	SR	0.18	0.27	0.00	-0.14	-0.12	0.27	0.1
S	O	192084	SR	0.37	0.20	-0.12	-0.05	-0.07	0.20	0.2
S	L	68263	SR	0.09	0.15	-0.04	-0.07	0.15	0.01	0.0
S	L	79475	SR	0.15	0.14	-0.05	-0.03	-0.03	0.14	0.2
S	L	256489	SR	0.26	0.11	-0.03	0.11	-0.05	-0.03	0.3
S	L	256490	SR	0.38	0.20	-0.08	0.20	-0.14	-0.02	0.2
S	O	79402	SR	0.18	0.07	0.06	0.03	-0.14	0.07	0.3
S	L	136101	SR	0.63	0.24	-0.11	-0.16	0.24	-0.07	0.4
S	O	136099	SR	0.33	0.22	-0.06	0.22	-0.12	-0.06	0.3
S	O	79431	SR	0.52	0.31	-0.12	-0.18	0.31	-0.11	0.3
S	L	136123	SR	0.24	0.16	-0.04	0.16	-0.07	-0.05	0.4
S	L	136126	SR	0.53	0.22	-0.11	-0.11	0.22	-0.07	0.2
S	O	67671	SR	0.21	0.08	-0.04	-0.10	0.06	0.08	0.2
S	L	52559	SR	0.24	0.22	0.22	-0.01	-0.14	-0.06	0.2
S	L	251268	SR	0.30	0.13	0.13	0.01	-0.08	-0.10	0.4
S	L	251269	SR	0.45	0.24	-0.14	-0.08	0.24	-0.09	0.3
S	L	52419	SR	0.23	0.21	0.21	-0.09	-0.17	0.06	0.4
S	O	251274	SR	0.29	0.28	0.28	-0.10	-0.15	-0.05	0.4
S	O	251257	SR	0.33	0.30	-0.09	0.30	-0.13	-0.11	0.5
S	O	68244	SR	0.28	0.26	-0.01	-0.16	-0.11	0.26	0.5
S	L	108541	SR	0.19	0.14	-0.02	0.14	-0.05	-0.08	0.7
S	L	108518	SR	0.39	0.32	0.32	-0.12	-0.17	-0.09	0.6
S	O	214541	SR	0.30	0.13	-0.01	-0.11	0.13	-0.03	0.9
S	L	133449	SR	0.37	0.18	-0.10	0.18	-0.06	-0.04	0.2
S	L	133451	SR	0.30	0.10	0.00	0.10	-0.14	0.03	0.2
S	O	55268	SR	0.24	0.29	-0.10	-0.14	0.29	-0.05	0.3
S	O	54964	SR	0.22	0.20	-0.07	-0.12	0.00	0.20	0.3
S	L	52409	SR	0.15	0.17	0.00	0.17	-0.16	-0.08	0.2
S	L	135129	SR	0.34	0.22	-0.08	-0.11	-0.07	0.22	0.3
S	L	135130	SR	0.37	0.28	-0.11	-0.13	0.28	-0.10	0.1
S	O	52686	SR	0.29	0.21	-0.02	-0.08	-0.12	0.21	0.3
S	O	256551	SR	0.34	0.18	0.03	0.18	-0.15	-0.10	0.2
S	O	256522	SR	0.22	0.11	-0.15	0.00	0.11	0.04	0.3
S	L	108586	SR	0.48	0.32	0.32	-0.15	-0.17	-0.10	0.5
S	L	68153	SR	0.57	0.28	0.28	-0.14	-0.14	-0.10	0.2
S	L	68154	SR	0.27	0.13	0.00	0.13	-0.11	-0.02	0.4
S	L	57000	SR	0.25	0.11	0.11	0.02	-0.13	0.00	0.3
S	L	136093	SR	0.25	0.08	0.06	-0.11	0.08	-0.04	0.4
S	L	136094	SR	0.36	0.25	-0.07	0.25	-0.09	-0.15	0.3
S	O	52756	SR	0.31	0.14	0.03	0.14	-0.09	-0.10	0.7
S	O	68197	SR	0.49	0.20	0.20	-0.12	-0.15	0.00	0.4
S	L	108561	SR	0.60	0.34	-0.17	-0.15	-0.17	0.34	0.4

Table 1.A14 Item Statistics, Operational Items: MDHSA Biology—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	O	133051	SR	0.59	0.22	-0.10	0.22	-0.09	-0.11	0.5
S	O	133048	SR	0.33	0.20	-0.01	-0.08	-0.12	0.20	0.6
S	O	52567	SR	0.20	0.20	0.20	0.03	-0.14	-0.11	0.4
S	L	65075	SR	0.48	0.32	-0.14	-0.16	-0.11	0.32	0.6
S	L	55084	SR	0.39	0.21	0.21	-0.14	-0.07	-0.04	0.5
S	L	55085	SR	0.28	0.22	0.22	-0.15	-0.05	-0.02	0.4
S	L	133435	SR	0.31	0.32	0.32	-0.10	-0.12	-0.12	0.5
S	L	52767	SR	0.15	0.21	-0.01	-0.09	0.21	-0.07	0.3
S	L	214567	SR	0.55	0.19	-0.06	-0.09	0.19	-0.13	0.3
S	L	214569	SR	0.36	0.27	-0.04	-0.13	-0.13	0.27	0.3
S	L	108559	SR	0.26	0.14	-0.10	0.14	-0.10	0.05	0.3
S	O	256537	SR	0.22	0.12	0.12	-0.14	-0.15	0.15	0.3
S	O	256539	SR	0.19	0.07	0.03	0.07	-0.06	-0.03	0.4
S	O	52716	SR	0.28	0.06	-0.06	-0.03	0.06	0.03	0.3
S	L	79291	SR	0.24	0.16	0.16	-0.01	-0.11	-0.02	0.3
S	L	79313	SR	0.30	0.18	-0.12	0.18	-0.06	-0.01	0.3
S	L	79314	SR	0.23	0.10	-0.03	0.10	-0.07	0.00	0.4
S	O	65121	SR	0.29	0.25	-0.01	-0.15	0.25	-0.11	0.4
S	L	65052	SR	0.23	0.12	-0.03	0.05	-0.14	0.12	0.4
S	O	57188	SR	0.27	0.26	0.26	-0.10	-0.07	-0.10	0.4
S	O	256493	SR	0.25	0.15	-0.10	0.15	-0.03	-0.01	0.6
S	O	256491	SR	0.27	0.21	0.21	-0.04	-0.11	-0.07	0.5
S	L	136137	SR	0.28	0.18	0.02	0.18	-0.13	-0.07	0.3
S	L	136136	SR	0.36	0.31	-0.06	-0.17	-0.13	0.31	0.4
S	L	65058	SR	0.29	0.17	-0.02	0.17	-0.08	-0.07	0.4
S	O	192079	SR	0.25	0.22	0.22	-0.02	-0.10	-0.11	0.5
S	L	253643	SR	0.29	0.18	-0.06	-0.06	-0.07	0.18	0.3
S	O	175495	SR	0.37	0.14	0.14	-0.03	-0.08	-0.04	0.4
S	L	215987	SR	0.36	0.16	0.16	-0.02	-0.12	-0.04	0.7
S	L	215988	SR	0.33	0.11	-0.06	-0.01	0.11	-0.05	0.6
S	L	133436	SR	0.18	0.08	0.08	0.07	-0.12	-0.01	0.4
S	O	214538	SR	0.46	0.24	-0.11	-0.11	0.24	-0.08	0.3
Mean				0.32	0.20	0.02	-0.01	-0.04	0.00	0.4
SD				0.12	0.07	0.13	0.13	0.14	0.13	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A15 Item Statistics, Operational Items: MDHSA English—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	O	108901	SR	0.67	0.31	-0.14	-0.17	0.31	-0.16	0.0
S	O	108902	SR	0.38	0.24	-0.09	-0.16	0.24	-0.03	0.0
S	O	108903	SR	0.76	0.40	0.40	-0.23	-0.24	-0.15	0.0
S	O	108904	SR	0.67	0.38	0.38	-0.20	-0.22	-0.16	0.0
S	O	108906	SR	0.63	0.32	-0.19	-0.24	-0.12	0.32	0.1
S	O	130270	SR	0.50	0.14	-0.11	0.14	-0.19	0.07	0.2
S	O	256419	SR	0.55	0.26	-0.15	-0.17	0.26	-0.05	0.1
S	O	256420	SR	0.53	0.32	-0.13	-0.15	-0.16	0.32	0.0
S	O	256421	SR	0.66	0.30	-0.15	0.30	-0.14	-0.17	0.0
S	L	251157	SR	0.63	0.42	-0.18	-0.24	-0.20	0.42	0.1
S	L	256300	SR	0.62	0.42	-0.18	0.42	-0.24	-0.18	0.0
S	L	251145	SR	0.55	0.33	-0.17	0.33	-0.16	-0.12	0.1
S	O	96021	SR	0.66	0.29	-0.16	-0.22	0.29	-0.06	0.3
S	O	96022	SR	0.45	0.27	-0.11	0.27	-0.12	-0.12	0.4
S	O	96023	SR	0.32	0.38	-0.14	-0.10	-0.18	0.38	0.4
S	O	96025	SR	0.28	0.20	-0.07	-0.09	0.20	-0.05	0.3
S	L	169262	SR	0.36	0.23	0.23	-0.19	-0.04	-0.06	0.2
S	L	169269	SR	0.45	0.24	-0.07	-0.24	0.24	-0.03	0.1
S	L	169264	SR	0.63	0.45	-0.24	0.45	-0.22	-0.21	0.1
S	L	169267	SR	0.24	0.08	-0.10	0.08	-0.22	0.18	0.2
S	L	169266	SR	0.50	0.31	-0.16	-0.19	0.31	-0.08	0.2
S	L	169268	SR	0.63	0.39	-0.15	-0.23	0.39	-0.19	0.1
S	L	169270	SR	0.28	0.19	-0.08	-0.14	0.02	0.19	0.2
S	L	243346	SR	0.29	0.26	0.00	-0.18	-0.11	0.26	0.2
S	L	243345	SR	0.37	0.25	-0.11	0.25	-0.09	-0.10	0.2
S	L	218587	SR	0.29	0.30	-0.15	-0.11	-0.08	0.30	0.3
S	L	251071	SR	0.32	0.37	0.37	-0.12	-0.18	-0.12	0.2
S	L	218582	SR	0.29	0.20	-0.14	0.05	-0.17	0.20	0.3
S	L	218583	SR	0.30	0.28	-0.09	0.28	-0.11	-0.10	0.4
S	L	218584	SR	0.45	0.36	-0.15	0.36	-0.20	-0.11	0.3
S	L	218589	SR	0.29	0.11	0.05	0.11	-0.10	-0.05	0.4
S	L	214713	SR	0.36	0.26	0.26	-0.11	-0.21	0.04	0.4
S	L	214714	SR	0.45	0.21	-0.10	0.21	-0.04	-0.17	0.4
S	L	214715	SR	0.35	0.42	-0.15	-0.18	-0.14	0.42	0.5
S	L	214716	SR	0.28	0.18	0.18	-0.09	-0.07	-0.03	0.9
S	L	256291	SR	0.19	0.13	0.00	-0.09	-0.02	0.13	0.9
S	L	130276	SR	0.33	0.18	0.00	-0.05	0.18	-0.18	0.9
S	L	130140	SR	0.26	0.20	0.02	-0.04	-0.19	0.20	0.9
S	L	96222	SR	0.28	0.08	-0.06	-0.05	0.08	0.02	1.1
S	O	214660	SR	0.45	0.30	0.30	-0.12	-0.22	-0.04	0.3
S	O	214661	SR	0.47	0.28	-0.15	-0.08	0.28	-0.13	0.3
S	O	214662	SR	0.30	0.15	-0.05	-0.03	0.15	-0.09	0.4
S	L	169248	SR	0.30	0.35	-0.08	-0.15	-0.18	0.35	0.5
S	L	169250	SR	0.50	0.43	-0.22	-0.18	-0.18	0.43	0.3

Table 1.A15 Item Statistics, Operational Items: MDHSA English—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	L	169258	SR	0.59	0.33	0.33	-0.24	-0.10	-0.16	0.4
S	L	169254	SR	0.28	0.25	0.25	-0.02	-0.13	-0.11	0.3
S	L	169257	SR	0.43	0.38	-0.07	-0.21	-0.21	0.38	0.3
S	L	169249	SR	0.29	0.14	0.09	0.14	-0.12	-0.15	0.4
S	L	169251	SR	0.48	0.33	-0.07	-0.25	0.33	-0.15	0.3
S	L	169252	SR	0.32	0.23	-0.02	-0.10	-0.13	0.23	0.3
S	L	169256	SR	0.53	0.47	-0.25	0.47	-0.22	-0.17	0.4
S	L	169260	SR	0.52	0.44	-0.19	-0.21	-0.19	0.44	0.3
S	O	214684	SR	0.47	0.34	-0.08	0.34	-0.27	-0.07	0.5
S	O	214685	SR	0.51	0.28	-0.04	0.28	-0.21	-0.13	0.5
S	O	214687	SR	0.37	0.23	-0.15	0.23	-0.18	0.05	0.5
S	O	256287	SR	0.61	0.36	-0.21	-0.20	0.36	-0.08	0.4
S	O	214688	SR	0.36	0.24	-0.10	-0.05	0.24	-0.13	0.5
S	O	214690	SR	0.45	0.31	-0.11	0.31	-0.20	-0.08	0.5
S	O	109126	SR	0.39	0.35	-0.20	-0.20	-0.05	0.35	0.5
S	O	109127	SR	0.44	0.31	-0.06	0.31	-0.15	-0.18	0.4
Mean				0.44	0.29	-0.05	-0.01	-0.05	0.02	0.3
SD				0.14	0.09	0.16	0.22	0.19	0.20	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A16 Item Statistics, Operational Items: MDHSA Government—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	O	223258	SR	0.80	0.31	-0.10	-0.22	-0.17	0.31	0.0
S	O	51122	SR	0.51	0.28	-0.08	0.28	-0.22	-0.08	0.1
S	O	256368	SR	0.26	0.40	0.40	-0.04	-0.28	-0.07	0.1
S	L	79635	SR	0.36	0.39	0.39	-0.18	-0.02	-0.23	0.1
S	L	223259	SR	0.25	0.13	0.00	0.13	-0.09	-0.05	0.2
S	L	50912	SR	0.26	0.36	0.36	-0.19	-0.22	0.03	0.1
S	O	51765	SR	0.29	0.39	-0.08	0.39	-0.19	-0.15	0.3
S	O	58147	SR	0.35	0.48	0.48	-0.17	-0.20	-0.21	0.3
S	O	68032	SR	0.27	0.42	-0.14	-0.13	-0.18	0.42	0.0
S	L	55554	SR	0.32	0.41	0.41	-0.18	-0.17	-0.11	0.1
S	L	214483	SR	0.24	0.34	-0.11	-0.11	0.34	-0.14	0.3
S	L	79543	SR	0.58	0.38	-0.18	0.38	-0.17	-0.18	0.1
S	L	55549	SR	0.35	0.20	0.20	-0.05	-0.16	-0.03	0.1
S	L	79610	SR	0.23	0.29	-0.16	-0.15	0.29	0.02	0.1
S	L	223257	SR	0.41	0.28	-0.04	-0.12	0.28	-0.17	0.2
S	L	55572	SR	0.35	0.28	-0.03	0.28	-0.21	-0.10	0.2

Table 1.A16 Item Statistics, Operational Items: MDHSA Government—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	L	137288	SR	0.59	0.35	-0.11	-0.25	0.35	-0.14	0.1
S	O	79617	SR	0.24	0.27	0.27	-0.20	0.09	-0.17	0.2
S	O	79589	SR	0.59	0.35	0.35	-0.19	-0.15	-0.17	0.3
S	L	79654	SR	0.34	0.13	0.01	0.13	-0.20	0.01	0.3
S	L	51059	SR	0.26	0.21	-0.04	0.21	-0.12	-0.08	0.2
S	L	58098	SR	0.55	0.41	-0.19	-0.19	-0.19	0.41	0.3
S	L	214578	SR	0.35	0.47	-0.17	-0.20	-0.17	0.47	0.3
S	L	51231	SR	0.72	0.32	-0.21	-0.15	0.32	-0.14	0.3
S	O	256371	SR	0.38	0.37	0.37	-0.18	-0.15	-0.12	0.4
S	L	132972	SR	0.32	0.22	-0.15	-0.07	0.22	-0.02	0.4
S	L	79638	SR	0.30	0.25	0.25	-0.13	-0.14	-0.02	0.3
S	L	79701	SR	0.30	0.38	-0.17	0.38	-0.12	-0.13	0.5
S	O	55469	SR	0.42	0.38	-0.20	0.38	-0.23	-0.04	0.2
S	O	68688	SR	0.40	0.28	-0.07	-0.21	0.28	-0.06	0.2
S	O	108397	SR	0.22	0.29	0.00	-0.14	-0.15	0.29	0.2
S	L	51235	SR	0.36	0.25	0.00	-0.14	0.25	-0.18	0.2
S	O	55650	SR	0.50	0.41	-0.15	-0.15	-0.24	0.41	0.2
S	L	68573	SR	0.37	0.36	-0.09	0.36	-0.18	-0.15	0.4
S	L	68051	SR	0.41	0.23	0.05	-0.19	0.23	-0.12	0.5
S	L	108430	SR	0.42	0.39	-0.14	0.39	-0.22	-0.13	0.3
S	O	215815	SR	0.68	0.32	-0.12	-0.17	0.32	-0.18	0.3
S	L	256365	SR	0.21	0.35	-0.11	-0.09	-0.12	0.35	0.4
S	L	51045	SR	0.29	0.55	-0.19	-0.19	-0.20	0.55	0.4
S	O	68636	SR	0.35	0.16	0.03	-0.18	0.16	-0.05	0.4
S	O	65178	SR	0.50	0.37	-0.16	-0.15	-0.17	0.37	0.3
S	O	68579	SR	0.39	0.35	-0.08	0.35	-0.21	-0.16	0.3
S	L	51721	SR	0.30	0.09	0.03	0.09	-0.08	-0.04	0.5
S	L	79679	SR	0.39	0.36	-0.18	-0.14	0.36	-0.11	0.4
S	O	58409	SR	0.26	0.29	-0.15	0.00	-0.15	0.29	0.3
S	L	79737	SR	0.24	0.25	-0.15	0.25	-0.16	0.03	0.5
S	L	108350	SR	0.29	0.32	-0.12	-0.13	-0.09	0.32	0.4
S	L	137302	SR	0.29	0.28	0.28	0.02	-0.20	-0.12	0.3
S	O	55587	SR	0.58	0.35	0.35	-0.19	-0.17	-0.13	0.3
S	O	58388	SR	0.54	0.38	0.38	-0.17	-0.18	-0.17	0.3
S	L	108479	SR	0.43	0.34	-0.06	-0.19	0.34	-0.17	0.5
S	O	137284	SR	0.67	0.39	0.39	-0.20	-0.21	-0.16	0.3
S	L	79670	SR	0.30	0.33	0.33	-0.14	-0.13	-0.08	0.4
S	L	68787	SR	0.42	0.30	-0.07	0.30	-0.18	-0.11	0.5
S	O	214513	SR	0.28	0.08	-0.11	0.07	-0.04	0.08	0.7
S	L	68726	SR	0.61	0.38	-0.18	0.38	-0.24	-0.13	0.3
S	O	60451	SR	0.45	0.45	-0.18	-0.24	0.45	-0.14	0.4
S	L	68023	SR	0.30	0.48	0.48	-0.19	-0.15	-0.17	0.5
S	L	79703	SR	0.57	0.46	-0.17	-0.21	-0.25	0.46	0.2
S	L	67996	SR	0.40	0.38	-0.10	-0.23	0.38	-0.12	0.2

Table 1.A16 Item Statistics, Operational Items: MDHSA Government—April Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
S	O	215811	SR	0.52	0.48	-0.17	-0.20	-0.27	0.48	0.3
S	L	214481	SR	0.27	0.31	-0.16	0.31	-0.15	-0.04	0.3
S	O	79572	SR	0.31	0.33	-0.04	-0.12	-0.21	0.33	0.3
S	O	256364	SR	0.41	0.35	-0.16	-0.25	-0.05	0.35	0.2
S	L	215809	SR	0.21	0.35	-0.05	0.35	-0.15	-0.13	0.4
S	O	68009	SR	0.32	0.36	0.36	-0.15	-0.20	-0.08	0.5
S	L	214580	SR	0.40	0.37	-0.12	-0.18	0.37	-0.14	0.3
S	O	52257	SR	0.43	0.39	0.39	-0.23	-0.14	-0.10	0.5
S	L	79634	SR	0.29	0.16	-0.11	-0.21	0.16	0.10	0.7
S	L	64952	SR	0.35	0.04	-0.03	0.04	-0.14	0.07	0.3
S	L	52248	SR	0.43	0.16	-0.14	-0.06	0.16	-0.02	0.5
S	L	214509	SR	0.32	0.35	0.35	-0.12	-0.13	-0.14	0.5
S	L	108444	SR	0.53	0.40	-0.19	0.40	-0.23	-0.12	0.4
S	O	256382	SR	0.54	0.40	-0.18	0.40	-0.22	-0.14	0.6
S	L	79746	SR	0.34	0.37	-0.09	-0.13	-0.20	0.37	0.5
S	L	65174	SR	0.22	0.25	0.25	0.03	-0.20	-0.13	0.6
S	L	256346	SR	0.29	0.17	-0.01	-0.20	0.03	0.17	0.5
S	L	108441	SR	0.49	0.45	0.45	-0.24	-0.17	-0.19	0.4
S	O	51257	SR	0.50	0.37	0.37	-0.21	-0.18	-0.09	0.4
S	L	132967	SR	0.33	0.42	-0.14	-0.14	-0.18	0.42	0.5
S	O	50848	SR	0.28	0.33	0.33	-0.10	-0.08	-0.16	0.5
S	O	256354	SR	0.49	0.36	-0.14	-0.16	-0.18	0.36	0.6
Mean				0.39	0.33	0.02	-0.04	-0.06	0.01	0.3
SD				0.13	0.10	0.22	0.21	0.20	0.22	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A17 Item Statistics, Operational Items: MDHSA Algebra—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	L	106628	SR	0.74	0.35	-0.12	0.35	-0.26	-0.17	0.0
D-N	L	133404	SR	0.49	0.55	-0.17	-0.33	-0.22	0.55	0.5
D-N	O	51407	SR	0.81	0.39	-0.21	0.39	-0.20	-0.22	0.0
D-N	L	56662	SR	0.66	0.46	0.46	-0.20	-0.18	-0.30	0.2
D-N	O	106648	SR	0.64	0.38	-0.23	-0.22	0.38	-0.10	0.7
D-N	O	79138	SR	0.57	0.38	0.38	-0.25	-0.13	-0.21	0.4
D-N	L	51544	SPR	0.66	0.27	0.27	-0.26			0.9
D-N	O	56594	SPR	0.35	0.64	0.64	-0.57			3.0
D-N	L	56661	SR	0.61	0.47	-0.22	-0.32	0.47	-0.14	0.3

Table 1.A17 Item Statistics, Operational Items: MDHSA Algebra—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	% Omits
D-N	L	211044	SR	0.58	0.24	-0.08	-0.18	0.24	-0.12	0.1
D-N	L	56715	SR	0.76	0.39	0.39	-0.21	-0.19	-0.21	0.1
D-N	O	106554	SR	0.57	0.45	-0.18	-0.27	0.45	-0.18	0.3
D-N	O	54861	SR	0.32	0.39	-0.25	-0.01	-0.19	0.39	0.3
D-N	O	56542	SPR	0.42	0.61	0.61	-0.51			5.2
D-N	L	79532	SR	0.61	0.40	0.40	-0.25	-0.22	-0.10	0.5
D-N	L	52339	SR	0.55	0.44	0.44	-0.28	-0.24	-0.06	0.8
D-N	O	51555	SR	0.42	0.51	0.51	-0.19	-0.27	-0.22	0.9
D-N	L	79053	SR	0.78	0.43	-0.16	-0.28	0.43	-0.22	1.0
D-N	O	51452	SR	0.84	0.36	-0.27	0.36	-0.19	-0.10	0.1
D-N	L	56558	SR	0.69	0.44	0.44	-0.19	-0.27	-0.20	0.3
D-N	L	255109	SR	0.53	0.47	-0.18	-0.23	-0.23	0.47	0.8
D-N	O	56538	SR	0.37	0.40	0.40	-0.17	-0.13	-0.18	0.5
D-N	O	132829	SPR	0.39	0.66	0.66	-0.57			6.3
D-N	O	255068	SPR	0.47	0.62	0.62	-0.56			4.3
D-N	O	79090	SR	0.39	0.26	-0.14	0.26	-0.12	-0.08	0.3
D-N	L	79069	SR	0.47	0.36	-0.23	-0.07	-0.18	0.36	0.3
D-N	L	132841	SPR	0.79	0.35	0.35	-0.31			1.9
D-N	O	64688	SR	0.47	0.59	-0.06	0.59	-0.50	-0.12	0.3
D-N	O	79124	SR	0.54	0.65	-0.37	-0.31	-0.20	0.65	0.5
D-N	L	215929	SPR	0.50	0.42	0.42	-0.36			3.4
D-N	L	106576	SR	0.38	0.42	-0.07	0.42	-0.12	-0.29	0.4
D-N	L	132825	SR	0.49	0.30	-0.11	-0.21	0.30	-0.07	0.6
D-N	O	211011	SR	0.33	0.40	-0.19	0.08	-0.33	0.40	0.8
D-N	L	43195	SR	0.72	0.35	-0.21	-0.18	0.35	-0.14	0.9
D-N	O	51482	SR	0.57	0.49	0.49	-0.21	-0.26	-0.21	1.1
D-N	L	43155	SR	0.71	0.31	-0.05	0.31	-0.17	-0.24	0.6
D-N	O	64685	SR	0.61	0.57	-0.12	0.57	-0.44	-0.24	0.2
D-N	L	51578	SR	0.39	0.32	-0.10	-0.11	-0.20	0.32	0.5
D-N	L	54756	SR	0.50	0.31	-0.14	-0.11	-0.16	0.31	0.5
D-N	O	67443	SR	0.39	0.41	-0.09	0.41	-0.09	-0.29	0.4
D-N	L	67471	SPR	0.76	0.53	0.53	-0.49			2.1
D-N	L	51523	SPR	0.65	0.58	0.58	-0.51			3.8
D-N	L	67425	SR	0.42	0.25	-0.05	-0.11	0.25	-0.16	0.3
D-N	L	43159	SR	0.54	0.36	-0.24	0.36	-0.12	-0.15	0.4
D-N	L	64690	SR	0.73	0.30	-0.20	-0.15	0.30	-0.17	0.2
D-N	O	50388	SR	0.73	0.44	-0.19	-0.25	-0.23	0.44	0.3
D-N	L	52347	SR	0.41	0.39	-0.11	-0.25	0.39	-0.10	0.5
D-N	L	255080	SPR	0.43	0.41	0.41	-0.34			3.5
D-N	L	56749	SR	0.55	0.49	-0.18	-0.24	-0.27	0.49	0.3
D-N	L	54774	SR	0.86	0.41	-0.29	0.41	-0.21	-0.14	0.3
D-N	L	56752	SR	0.63	0.41	-0.18	-0.22	0.41	-0.21	0.5
D-N	O	56827	SR	0.30	0.13	-0.11	-0.05	0.13	0.03	0.4

Table 1.A17 Item Statistics, Operational Items: MDHSA Algebra—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	L	56824	SR	0.40	0.60	-0.29	-0.26	-0.20	0.60	0.6
			Mean	0.56	0.42	0.06	-0.12	-0.06	-0.01	1.0
			SD	0.15	0.12	0.32	0.30	0.27	0.29	1.4

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A18 Item Statistics, Operational Items: MDHSA Algebra—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	L	106628	SR	0.74	0.35	-0.12	0.35	-0.26	-0.17	0.0
X	L	133404	SR	0.49	0.55	-0.17	-0.33	-0.22	0.55	0.5
X	O	79140	SR	0.38	0.46	-0.09	-0.23	0.46	-0.22	0.1
X	L	56662	SR	0.66	0.46	0.46	-0.20	-0.18	-0.30	0.2
X	O	67517	SR	0.49	0.36	-0.25	-0.18	0.36	-0.13	0.1
X	O	79138	SR	0.57	0.38	0.38	-0.25	-0.13	-0.21	0.4
X	L	51544	SPR	0.66	0.27	0.27	-0.26			0.9
X	O	54566	SPR	0.45	0.53	0.53	-0.48			1.8
X	L	56661	SR	0.61	0.47	-0.22	-0.32	0.47	-0.14	0.3
X	L	211044	SR	0.58	0.24	-0.08	-0.18	0.24	-0.12	0.1
X	L	56715	SR	0.76	0.39	0.39	-0.21	-0.19	-0.21	0.1
X	O	106554	SR	0.57	0.45	-0.18	-0.27	0.45	-0.18	0.3
X	O	54861	SR	0.32	0.39	-0.25	-0.01	-0.19	0.39	0.3
X	O	54560	SPR	0.61	0.68	0.68	-0.62			3.6
X	L	79532	SR	0.61	0.40	0.40	-0.25	-0.22	-0.10	0.5
X	L	52339	SR	0.55	0.44	0.44	-0.28	-0.24	-0.06	0.8
X	O	51555	SR	0.42	0.51	0.51	-0.19	-0.27	-0.22	0.9
X	L	79053	SR	0.78	0.43	-0.16	-0.28	0.43	-0.22	1.0
X	O	51480	SR	0.33	0.34	0.34	-0.10	-0.15	-0.16	0.9
X	L	56558	SR	0.69	0.44	0.44	-0.19	-0.27	-0.20	0.3
X	L	255109	SR	0.53	0.47	-0.18	-0.23	-0.23	0.47	0.8
X	O	79088	SR	0.50	0.47	-0.11	-0.34	0.47	-0.17	0.4
X	O	132829	SPR	0.39	0.66	0.66	-0.57			6.3
X	O	255086	SPR	0.31	0.54	0.54	-0.42			6.7
X	O	51372	SR	0.81	0.40	-0.22	0.40	-0.20	-0.21	0.4
X	L	79069	SR	0.47	0.36	-0.23	-0.07	-0.18	0.36	0.3
X	L	132841	SPR	0.79	0.35	0.35	-0.31			1.9
X	O	64688	SR	0.47	0.59	-0.06	0.59	-0.50	-0.12	0.3
X	O	79124	SR	0.54	0.65	-0.37	-0.31	-0.20	0.65	0.5
X	L	215929	SPR	0.50	0.42	0.42	-0.36			3.4
X	L	106576	SR	0.38	0.42	-0.07	0.42	-0.12	-0.29	0.4

Table 1.A18 Item Statistics, Operational Items: MDHSA Algebra—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	L	132825	SR	0.49	0.30	-0.11	-0.21	0.30	-0.07	0.6
X	O	211011	SR	0.33	0.40	-0.19	0.08	-0.33	0.40	0.8
X	L	43195	SR	0.72	0.35	-0.21	-0.18	0.35	-0.14	0.9
X	O	51482	SR	0.57	0.49	0.49	-0.21	-0.26	-0.21	1.1
X	L	43155	SR	0.71	0.31	-0.05	0.31	-0.17	-0.24	0.6
X	O	43200	SR	0.67	0.64	-0.53	-0.20	0.64	-0.13	0.5
X	L	51578	SR	0.39	0.32	-0.10	-0.11	-0.20	0.32	0.5
X	L	54756	SR	0.50	0.31	-0.14	-0.11	-0.16	0.31	0.5
X	O	43150	SR	0.68	0.46	-0.24	0.46	-0.25	-0.23	0.5
X	L	67471	SPR	0.76	0.53	0.53	-0.49			2.1
X	L	51523	SPR	0.65	0.58	0.58	-0.51			3.8
X	L	67425	SR	0.42	0.25	-0.05	-0.11	0.25	-0.16	0.3
X	L	43159	SR	0.54	0.36	-0.24	0.36	-0.12	-0.15	0.4
X	L	64690	SR	0.73	0.30	-0.20	-0.15	0.30	-0.17	0.2
X	O	50388	SR	0.73	0.44	-0.19	-0.25	-0.23	0.44	0.3
X	L	52347	SR	0.41	0.39	-0.11	-0.25	0.39	-0.10	0.5
X	L	255080	SPR	0.43	0.41	0.41	-0.34			3.5
X	L	56749	SR	0.55	0.49	-0.18	-0.24	-0.27	0.49	0.3
X	L	54774	SR	0.86	0.41	-0.29	0.41	-0.21	-0.14	0.3
X	L	56752	SR	0.63	0.41	-0.18	-0.22	0.41	-0.21	0.5
X	O	56753	SR	0.51	0.39	-0.10	0.39	-0.22	-0.18	0.9
X	L	56824	SR	0.40	0.60	-0.29	-0.26	-0.20	0.60	0.6
Mean				0.56	0.43	0.05	-0.14	-0.02	-0.01	1.0
SD				0.14	0.11	0.33	0.28	0.30	0.29	1.4

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A19 Item Statistics, Operational Items: MDHSA Algebra—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	L	106628	SR	0.74	0.35	-0.12	0.35	-0.26	-0.17	0.0
Y	L	133404	SR	0.49	0.55	-0.17	-0.33	-0.22	0.55	0.5
Y	O	51407	SR	0.81	0.39	-0.21	0.39	-0.20	-0.22	0.0
Y	L	56662	SR	0.66	0.46	0.46	-0.20	-0.18	-0.30	0.2
Y	O	106648	SR	0.64	0.38	-0.23	-0.22	0.38	-0.10	0.7
Y	O	79137	SR	0.42	0.38	0.38	-0.09	-0.14	-0.26	0.2
Y	L	51544	SPR	0.66	0.27	0.27	-0.26			0.9
Y	O	56594	SPR	0.35	0.64	0.64	-0.57			3.0
Y	L	56661	SR	0.61	0.47	-0.22	-0.32	0.47	-0.14	0.3

Table 1.A19 Item Statistics, Operational Items: MDHSA Algebra—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	% Omits
Y	L	211044	SR	0.58	0.24	-0.08	-0.18	0.24	-0.12	0.1
Y	L	56715	SR	0.76	0.39	0.39	-0.21	-0.19	-0.21	0.1
Y	O	54892	SR	0.50	0.36	-0.10	-0.26	0.36	-0.12	0.0
Y	O	223336	SR	0.53	0.56	-0.09	-0.30	-0.34	0.56	0.0
Y	O	56542	SPR	0.42	0.61	0.61	-0.51			5.2
Y	L	79532	SR	0.61	0.40	0.40	-0.25	-0.22	-0.10	0.5
Y	L	52339	SR	0.55	0.44	0.44	-0.28	-0.24	-0.06	0.8
Y	O	54794	SR	0.40	0.51	0.51	-0.24	-0.21	-0.20	0.9
Y	L	79053	SR	0.78	0.43	-0.16	-0.28	0.43	-0.22	1.0
Y	O	51452	SR	0.84	0.36	-0.27	0.36	-0.19	-0.10	0.1
Y	L	56558	SR	0.69	0.44	0.44	-0.19	-0.27	-0.20	0.3
Y	L	255109	SR	0.53	0.47	-0.18	-0.23	-0.23	0.47	0.8
Y	O	56538	SR	0.37	0.40	0.40	-0.17	-0.13	-0.18	0.5
Y	O	50416	SPR	0.29	0.53	0.53	-0.43			4.9
Y	O	255068	SPR	0.47	0.62	0.62	-0.56			4.3
Y	O	79090	SR	0.39	0.26	-0.14	0.26	-0.12	-0.08	0.3
Y	L	79069	SR	0.47	0.36	-0.23	-0.07	-0.18	0.36	0.3
Y	L	132841	SPR	0.79	0.35	0.35	-0.31			1.9
Y	O	106603	SR	0.23	0.28	0.28	0.02	-0.21	-0.07	0.2
Y	O	54752	SR	0.58	0.42	-0.25	-0.17	0.42	-0.22	0.1
Y	L	215929	SPR	0.50	0.42	0.42	-0.36			3.4
Y	L	106576	SR	0.38	0.42	-0.07	0.42	-0.12	-0.29	0.4
Y	L	132825	SR	0.49	0.30	-0.11	-0.21	0.30	-0.07	0.6
Y	O	51446	SR	0.51	0.60	0.60	-0.24	-0.20	-0.37	0.5
Y	L	43195	SR	0.72	0.35	-0.21	-0.18	0.35	-0.14	0.9
Y	O	66002	SR	0.38	0.33	0.33	-0.22	-0.11	-0.06	0.7
Y	L	43155	SR	0.71	0.31	-0.05	0.31	-0.17	-0.24	0.6
Y	O	64685	SR	0.61	0.57	-0.12	0.57	-0.44	-0.24	0.2
Y	L	51578	SR	0.39	0.32	-0.10	-0.11	-0.20	0.32	0.5
Y	L	54756	SR	0.50	0.31	-0.14	-0.11	-0.16	0.31	0.5
Y	O	67443	SR	0.39	0.41	-0.09	0.41	-0.09	-0.29	0.4
Y	L	67471	SPR	0.76	0.53	0.53	-0.49			2.1
Y	L	51523	SPR	0.65	0.58	0.58	-0.51			3.8
Y	L	67425	SR	0.42	0.25	-0.05	-0.11	0.25	-0.16	0.3
Y	L	43159	SR	0.54	0.36	-0.24	0.36	-0.12	-0.15	0.4
Y	L	64690	SR	0.73	0.30	-0.20	-0.15	0.30	-0.17	0.2
Y	O	67555	SR	0.19	0.40	0.40	0.00	-0.24	-0.10	0.3
Y	L	52347	SR	0.41	0.39	-0.11	-0.25	0.39	-0.10	0.5
Y	L	255080	SPR	0.43	0.41	0.41	-0.34			3.5
Y	L	56749	SR	0.55	0.49	-0.18	-0.24	-0.27	0.49	0.3
Y	L	54774	SR	0.86	0.41	-0.29	0.41	-0.21	-0.14	0.3
Y	L	56752	SR	0.63	0.41	-0.18	-0.22	0.41	-0.21	0.5
Y	O	56827	SR	0.30	0.13	-0.11	-0.05	0.13	0.03	0.4

Table 1.A19 Item Statistics, Operational Items: MDHSA Algebra—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	% Omits
Y	L	56824	SR	0.40	0.60	-0.29	-0.26	-0.20	0.60	0.6
		Mean		0.54	0.41	0.09	-0.13	-0.04	-0.05	0.9
		SD		0.16	0.11	0.32	0.28	0.26	0.26	1.3

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A20 Item Statistics, Operational Items: MDHSA Biology—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	% Omits
D-N	L	214541	SR	0.47	0.36	-0.18	-0.16	0.36	-0.18	0.0
D-N	L	52419	SR	0.48	0.31	0.31	-0.19	-0.21	-0.07	0.1
D-N	O	68159	SR	0.65	0.36	-0.18	0.36	-0.25	-0.09	0.0
D-N	O	68161	SR	0.46	0.48	-0.14	0.48	-0.22	-0.27	0.0
D-N	O	68264	SR	0.83	0.35	-0.18	-0.20	-0.19	0.35	0.0
D-N	L	55117	SR	0.47	0.39	-0.17	0.39	-0.25	-0.09	0.1
D-N	L	68174	SR	0.62	0.39	-0.13	-0.27	0.39	-0.16	0.1
D-N	L	57061	SR	0.68	0.45	0.45	-0.23	-0.19	-0.27	0.1
D-N	L	57062	SR	0.60	0.60	0.60	-0.30	-0.33	-0.23	0.1
D-N	O	65150	SR	0.63	0.45	-0.30	-0.15	0.45	-0.19	0.1
D-N	O	52593	SR	0.66	0.28	0.28	-0.16	-0.14	-0.13	0.1
D-N	O	52594	SR	0.58	0.29	-0.24	-0.13	0.29	-0.05	0.1
D-N	L	79490	SR	0.60	0.50	-0.23	0.50	-0.31	-0.19	0.1
D-N	O	214559	SR	0.45	0.39	-0.05	-0.26	0.39	-0.20	0.1
D-N	O	214560	SR	0.71	0.32	0.32	-0.24	-0.09	-0.15	0.1
D-N	L	67669	SR	0.32	0.45	-0.12	-0.16	0.45	-0.24	0.1
D-N	L	256522	SR	0.43	0.45	-0.27	-0.27	0.45	-0.07	0.1
D-N	O	256523	SR	0.61	0.38	-0.23	-0.11	0.38	-0.28	0.1
D-N	L	214533	SR	0.64	0.51	-0.21	-0.19	-0.35	0.51	0.1
D-N	L	56979	SR	0.53	0.44	-0.30	-0.15	0.44	-0.23	0.1
D-N	L	94185	SR	0.48	0.26	-0.18	-0.27	0.26	0.01	0.2
D-N	O	94189	SR	0.33	0.24	0.02	0.24	-0.17	-0.15	0.2
D-N	L	57046	SR	0.42	0.20	0.20	-0.05	-0.08	-0.13	0.2
D-N	O	108553	SR	0.58	0.56	-0.29	-0.24	-0.28	0.56	0.3
D-N	O	57150	SR	0.51	0.62	0.62	-0.30	-0.41	-0.09	0.3
D-N	O	57151	SR	0.65	0.49	-0.13	0.49	-0.38	-0.18	0.4
D-N	L	223431	SR	0.51	0.33	0.33	-0.15	-0.18	-0.15	0.1
D-N	L	55106	SR	0.62	0.53	-0.22	0.53	-0.35	-0.19	0.2
D-N	O	52748	SR	0.59	0.46	0.46	-0.20	-0.30	-0.20	0.1
D-N	O	52749	SR	0.80	0.42	0.42	-0.23	-0.24	-0.21	0.1
D-N	O	52407	SR	0.38	0.45	-0.16	0.45	-0.10	-0.29	0.1

Table 1.A20 Item Statistics, Operational Items: MDHSA Biology—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	L	68296	SR	0.45	0.42	-0.23	-0.22	0.42	-0.11	0.1
D-N	L	67676	SR	0.64	0.33	-0.13	0.33	-0.27	-0.15	0.1
D-N	L	64999	SR	0.69	0.42	0.42	-0.20	-0.21	-0.25	0.1
D-N	L	64998	SR	0.47	0.38	-0.01	-0.24	-0.29	0.38	0.1
D-N	O	55216	SR	0.43	0.43	-0.22	-0.18	-0.14	0.43	0.1
D-N	O	65081	SR	0.62	0.36	-0.16	0.36	-0.20	-0.17	0.1
D-N	O	52700	SR	0.36	0.30	0.30	-0.10	-0.22	-0.07	0.1
D-N	O	55223	SR	0.45	0.54	-0.19	-0.18	-0.36	0.54	0.2
D-N	O	52409	SR	0.37	0.55	-0.44	0.55	-0.15	-0.13	0.1
D-N	L	52718	SR	0.65	0.43	-0.26	0.43	-0.20	-0.22	0.1
D-N	L	52720	SR	0.58	0.59	-0.25	-0.23	0.59	-0.36	0.1
D-N	O	55149	SR	0.59	0.54	-0.22	-0.22	-0.33	0.54	0.1
D-N	L	251270	SR	0.53	0.48	-0.21	-0.23	-0.22	0.48	0.2
D-N	L	251271	SR	0.61	0.54	-0.25	-0.30	0.54	-0.23	0.2
D-N	L	60547	SR	0.28	0.29	0.29	-0.24	-0.11	-0.08	0.1
D-N	L	55086	SR	0.31	0.37	-0.13	0.37	-0.25	-0.09	0.2
D-N	L	55085	SR	0.49	0.50	0.50	-0.25	-0.12	-0.34	0.2
D-N	L	67692	SR	0.55	0.47	-0.22	0.47	-0.24	-0.20	0.2
D-N	L	64733	SR	0.75	0.40	-0.16	0.40	-0.27	-0.19	0.2
D-N	L	52463	SR	0.80	0.42	0.42	-0.21	-0.24	-0.22	0.2
D-N	O	65082	SR	0.86	0.39	0.39	-0.28	-0.17	-0.17	0.1
D-N	L	60523	SR	0.21	0.20	0.20	-0.15	-0.03	0.03	0.2
D-N	O	60525	SR	0.43	0.29	-0.11	-0.09	-0.17	0.29	0.2
D-N	L	65058	SR	0.49	0.38	-0.07	0.38	-0.29	-0.14	0.2
D-N	L	65052	SR	0.27	0.34	-0.13	-0.13	-0.10	0.34	0.2
D-N	O	108555	SR	0.38	0.45	-0.21	-0.11	-0.22	0.45	0.2
D-N	L	67593	SR	0.52	0.39	-0.20	0.39	-0.23	-0.10	0.2
D-N	L	68208	SR	0.55	0.47	-0.20	-0.32	0.47	-0.17	0.1
D-N	L	68210	SR	0.70	0.49	-0.27	-0.27	0.49	-0.19	0.1
D-N	O	64734	SR	0.45	0.49	-0.15	-0.31	-0.17	0.49	0.1
D-N	L	64709	SR	0.47	0.38	-0.18	-0.07	-0.25	0.38	0.2
D-N	L	64710	SR	0.49	0.48	0.48	-0.06	-0.28	-0.31	0.1
D-N	O	65141	SR	0.59	0.42	-0.27	-0.25	0.42	-0.08	0.2
D-N	L	133049	SR	0.75	0.28	-0.14	0.28	-0.21	-0.14	0.2
D-N	L	133050	SR	0.44	0.49	0.49	-0.14	-0.32	-0.17	0.2
D-N	L	67631	SR	0.43	0.24	-0.20	0.00	0.24	-0.29	0.2
D-N	L	52543	SR	0.48	0.58	-0.34	0.58	-0.23	-0.21	0.2
D-N	L	64992	SR	0.48	0.45	-0.16	-0.34	0.45	-0.15	0.1
D-N	O	256539	SR	0.36	0.48	-0.22	0.48	-0.27	-0.03	0.2
D-N	L	256537	SR	0.42	0.36	0.36	-0.13	-0.25	-0.14	0.2
D-N	L	57134	SR	0.61	0.38	-0.20	-0.23	-0.12	0.38	0.2
D-N	L	133433	SR	0.60	0.55	-0.17	-0.31	-0.31	0.55	0.2
D-N	O	55036	SR	0.58	0.52	-0.15	-0.35	0.52	-0.25	0.2

Table 1.A20 Item Statistics, Operational Items: MDHSA Biology—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	L	256532	SR	0.39	0.37	-0.24	-0.14	0.37	-0.14	0.2
D-N	O	256534	SR	0.79	0.43	-0.22	-0.24	-0.23	0.43	0.2
Mean				0.53	0.42	-0.04	-0.04	-0.06	-0.04	0.2
SD				0.14	0.10	0.27	0.29	0.30	0.26	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A21 Item Statistics, Operational Items: MDHSA Biology—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	L	214541	SR	0.47	0.36	-0.18	-0.16	0.36	-0.18	0.0
X	L	52419	SR	0.48	0.31	0.31	-0.19	-0.21	-0.07	0.1
X	O	68158	SR	0.43	0.23	-0.20	0.02	-0.10	0.23	0.2
X	O	68160	SR	0.61	0.43	-0.25	-0.23	-0.15	0.43	0.1
X	O	68264	SR	0.83	0.35	-0.18	-0.20	-0.19	0.35	0.0
X	L	55117	SR	0.47	0.39	-0.17	0.39	-0.25	-0.09	0.1
X	L	68174	SR	0.62	0.39	-0.13	-0.27	0.39	-0.16	0.1
X	L	57061	SR	0.68	0.45	0.45	-0.23	-0.19	-0.27	0.1
X	L	57062	SR	0.60	0.60	0.60	-0.30	-0.33	-0.23	0.1
X	O	253644	SR	0.38	0.62	-0.21	-0.31	-0.23	0.62	0.2
X	O	57020	SR	0.72	0.43	0.43	-0.25	-0.22	-0.18	0.3
X	O	57021	SR	0.49	0.42	-0.24	-0.09	-0.24	0.42	0.3
X	L	79490	SR	0.60	0.50	-0.23	0.50	-0.31	-0.19	0.1
X	O	214559	SR	0.45	0.39	-0.05	-0.26	0.39	-0.20	0.1
X	O	214560	SR	0.71	0.32	0.32	-0.24	-0.09	-0.15	0.1
X	L	67669	SR	0.32	0.45	-0.12	-0.16	0.45	-0.24	0.1
X	L	256522	SR	0.43	0.45	-0.27	-0.27	0.45	-0.07	0.1
X	O	256551	SR	0.49	0.37	-0.06	0.37	-0.21	-0.27	0.5
X	L	214533	SR	0.64	0.51	-0.21	-0.19	-0.35	0.51	0.1
X	L	56979	SR	0.53	0.44	-0.30	-0.15	0.44	-0.23	0.1
X	L	94185	SR	0.48	0.26	-0.18	-0.27	0.26	0.01	0.2
X	O	94189	SR	0.33	0.24	0.02	0.24	-0.17	-0.15	0.2
X	L	57046	SR	0.42	0.20	0.20	-0.05	-0.08	-0.13	0.2
X	O	68193	SR	0.28	0.33	-0.24	-0.03	0.33	-0.16	0.5
X	O	136130	SR	0.36	0.50	-0.20	-0.32	0.50	-0.05	0.6
X	O	136129	SR	0.65	0.38	-0.18	0.38	-0.22	-0.15	0.6
X	L	223431	SR	0.51	0.33	0.33	-0.15	-0.18	-0.15	0.1
X	L	55106	SR	0.62	0.53	-0.22	0.53	-0.35	-0.19	0.2
X	O	52748	SR	0.59	0.46	0.46	-0.20	-0.30	-0.20	0.1
X	O	52750	SR	0.66	0.46	-0.26	0.46	-0.21	-0.22	0.3

Table 1.A21 Item Statistics, Operational Items: MDHSA Biology—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	O	52407	SR	0.38	0.45	-0.16	0.45	-0.10	-0.29	0.1
X	L	68296	SR	0.45	0.42	-0.23	-0.22	0.42	-0.11	0.1
X	L	67676	SR	0.64	0.33	-0.13	0.33	-0.27	-0.15	0.1
X	L	64999	SR	0.69	0.42	0.42	-0.20	-0.21	-0.25	0.1
X	L	64998	SR	0.47	0.38	-0.01	-0.24	-0.29	0.38	0.1
X	O	108515	SR	0.43	0.53	-0.15	0.53	-0.14	-0.35	0.4
X	O	65081	SR	0.62	0.36	-0.16	0.36	-0.20	-0.17	0.1
X	O	52439	SR	0.45	0.56	0.56	-0.27	-0.24	-0.21	0.5
X	O	55223	SR	0.45	0.54	-0.19	-0.18	-0.36	0.54	0.2
X	O	52409	SR	0.37	0.55	-0.44	0.55	-0.15	-0.13	0.1
X	L	52718	SR	0.65	0.43	-0.26	0.43	-0.20	-0.22	0.1
X	L	52720	SR	0.58	0.59	-0.25	-0.23	0.59	-0.36	0.1
X	O	55149	SR	0.59	0.54	-0.22	-0.22	-0.33	0.54	0.1
X	L	251270	SR	0.53	0.48	-0.21	-0.23	-0.22	0.48	0.2
X	L	251271	SR	0.61	0.54	-0.25	-0.30	0.54	-0.23	0.2
X	L	60547	SR	0.28	0.29	0.29	-0.24	-0.11	-0.08	0.1
X	L	55086	SR	0.31	0.37	-0.13	0.37	-0.25	-0.09	0.2
X	L	55085	SR	0.49	0.50	0.50	-0.25	-0.12	-0.34	0.2
X	L	67692	SR	0.55	0.47	-0.22	0.47	-0.24	-0.20	0.2
X	L	64733	SR	0.75	0.40	-0.16	0.40	-0.27	-0.19	0.2
X	L	52463	SR	0.80	0.42	0.42	-0.21	-0.24	-0.22	0.2
X	O	67622	SR	0.84	0.30	-0.18	-0.13	-0.16	0.30	0.4
X	L	60523	SR	0.21	0.20	0.20	-0.15	-0.03	0.03	0.2
X	O	60526	SR	0.38	0.36	-0.17	-0.14	0.36	-0.12	0.4
X	L	65058	SR	0.49	0.38	-0.07	0.38	-0.29	-0.14	0.2
X	L	65052	SR	0.27	0.34	-0.13	-0.13	-0.10	0.34	0.2
X	O	108555	SR	0.38	0.45	-0.21	-0.11	-0.22	0.45	0.2
X	L	67593	SR	0.52	0.39	-0.20	0.39	-0.23	-0.10	0.2
X	L	68208	SR	0.55	0.47	-0.20	-0.32	0.47	-0.17	0.1
X	L	68210	SR	0.70	0.49	-0.27	-0.27	0.49	-0.19	0.1
X	O	64734	SR	0.45	0.49	-0.15	-0.31	-0.17	0.49	0.1
X	L	64709	SR	0.47	0.38	-0.18	-0.07	-0.25	0.38	0.2
X	L	64710	SR	0.49	0.48	0.48	-0.06	-0.28	-0.31	0.1
X	O	79502	SR	0.42	0.51	-0.16	-0.24	0.51	-0.25	0.4
X	L	133049	SR	0.75	0.28	-0.14	0.28	-0.21	-0.14	0.2
X	L	133050	SR	0.44	0.49	0.49	-0.14	-0.32	-0.17	0.2
X	L	67631	SR	0.43	0.24	-0.20	0.00	0.24	-0.29	0.2
X	L	52543	SR	0.48	0.58	-0.34	0.58	-0.23	-0.21	0.2
X	L	64992	SR	0.48	0.45	-0.16	-0.34	0.45	-0.15	0.1
X	O	256539	SR	0.36	0.48	-0.22	0.48	-0.27	-0.03	0.2
X	L	256537	SR	0.42	0.36	0.36	-0.13	-0.25	-0.14	0.2
X	L	57134	SR	0.61	0.38	-0.20	-0.23	-0.12	0.38	0.2
X	L	133433	SR	0.60	0.55	-0.17	-0.31	-0.31	0.55	0.2
X	O	55036	SR	0.58	0.52	-0.15	-0.35	0.52	-0.25	0.2

Table 1.A21 Item Statistics, Operational Items: MDHSA Biology—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	L	256532	SR	0.39	0.37	-0.24	-0.14	0.37	-0.14	0.2
X	O	256534	SR	0.79	0.43	-0.22	-0.24	-0.23	0.43	0.2
Mean				0.52	0.42	-0.06	-0.03	-0.05	-0.03	0.2
SD				0.14	0.10	0.26	0.29	0.30	0.28	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A22 Item Statistics, Operational Items: MDHSA Biology—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	L	214541	SR	0.47	0.36	-0.18	-0.16	0.36	-0.18	0.0
Y	L	52419	SR	0.48	0.31	0.31	-0.19	-0.21	-0.07	0.1
Y	O	68159	SR	0.65	0.36	-0.18	0.36	-0.25	-0.09	0.0
Y	O	68161	SR	0.46	0.48	-0.14	0.48	-0.22	-0.27	0.0
Y	O	57034	SR	0.75	0.45	-0.16	0.45	-0.21	-0.32	0.0
Y	L	55117	SR	0.47	0.39	-0.17	0.39	-0.25	-0.09	0.1
Y	L	68174	SR	0.62	0.39	-0.13	-0.27	0.39	-0.16	0.1
Y	L	57061	SR	0.68	0.45	0.45	-0.23	-0.19	-0.27	0.1
Y	L	57062	SR	0.60	0.60	0.60	-0.30	-0.33	-0.23	0.1
Y	O	65150	SR	0.63	0.45	-0.30	-0.15	0.45	-0.19	0.1
Y	O	52593	SR	0.66	0.28	0.28	-0.16	-0.14	-0.13	0.1
Y	O	52594	SR	0.58	0.29	-0.24	-0.13	0.29	-0.05	0.1
Y	L	79490	SR	0.60	0.50	-0.23	0.50	-0.31	-0.19	0.1
Y	O	214558	SR	0.56	0.40	0.06	-0.42	0.40	-0.16	0.1
Y	O	214556	SR	0.73	0.52	-0.37	-0.17	0.52	-0.25	0.1
Y	L	67669	SR	0.32	0.45	-0.12	-0.16	0.45	-0.24	0.1
Y	L	256522	SR	0.43	0.45	-0.27	-0.27	0.45	-0.07	0.1
Y	O	256523	SR	0.61	0.38	-0.23	-0.11	0.38	-0.28	0.1
Y	L	214533	SR	0.64	0.51	-0.21	-0.19	-0.35	0.51	0.1
Y	L	56979	SR	0.53	0.44	-0.30	-0.15	0.44	-0.23	0.1
Y	L	94185	SR	0.48	0.26	-0.18	-0.27	0.26	0.01	0.2
Y	O	52727	SR	0.41	0.25	-0.15	-0.11	0.25	-0.05	0.3
Y	L	57046	SR	0.42	0.20	0.20	-0.05	-0.08	-0.13	0.2
Y	O	108553	SR	0.58	0.56	-0.29	-0.24	-0.28	0.56	0.3
Y	O	57150	SR	0.51	0.62	0.62	-0.30	-0.41	-0.09	0.3
Y	O	57151	SR	0.65	0.49	-0.13	0.49	-0.38	-0.18	0.4
Y	L	223431	SR	0.51	0.33	0.33	-0.15	-0.18	-0.15	0.1
Y	L	55106	SR	0.62	0.53	-0.22	0.53	-0.35	-0.19	0.2
Y	O	52747	SR	0.58	0.29	-0.13	-0.14	-0.24	0.29	0.3
Y	O	52749	SR	0.80	0.42	0.42	-0.23	-0.24	-0.21	0.1

Table 1.A22 Item Statistics, Operational Items: MDHSA Biology—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	O	255055	SR	0.21	0.32	0.03	-0.02	-0.26	0.32	0.2
Y	L	68296	SR	0.45	0.42	-0.23	-0.22	0.42	-0.11	0.1
Y	L	67676	SR	0.64	0.33	-0.13	0.33	-0.27	-0.15	0.1
Y	L	64999	SR	0.69	0.42	0.42	-0.20	-0.21	-0.25	0.1
Y	L	64998	SR	0.47	0.38	-0.01	-0.24	-0.29	0.38	0.1
Y	O	55216	SR	0.43	0.43	-0.22	-0.18	-0.14	0.43	0.1
Y	O	67616	SR	0.44	0.38	-0.09	-0.24	-0.21	0.38	0.3
Y	O	52700	SR	0.36	0.30	0.30	-0.10	-0.22	-0.07	0.1
Y	O	108559	SR	0.55	0.52	-0.18	0.52	-0.31	-0.22	0.3
Y	O	68130	SR	0.58	0.44	-0.20	-0.19	-0.23	0.44	0.3
Y	L	52718	SR	0.65	0.43	-0.26	0.43	-0.20	-0.22	0.1
Y	L	52720	SR	0.58	0.59	-0.25	-0.23	0.59	-0.36	0.1
Y	O	52680	SR	0.61	0.47	-0.23	-0.30	0.47	-0.12	0.3
Y	L	251270	SR	0.53	0.48	-0.21	-0.23	-0.22	0.48	0.2
Y	L	251271	SR	0.61	0.54	-0.25	-0.30	0.54	-0.23	0.2
Y	L	60547	SR	0.28	0.29	0.29	-0.24	-0.11	-0.08	0.1
Y	L	55086	SR	0.31	0.37	-0.13	0.37	-0.25	-0.09	0.2
Y	L	55085	SR	0.49	0.50	0.50	-0.25	-0.12	-0.34	0.2
Y	L	67692	SR	0.55	0.47	-0.22	0.47	-0.24	-0.20	0.2
Y	L	64733	SR	0.75	0.40	-0.16	0.40	-0.27	-0.19	0.2
Y	L	52463	SR	0.80	0.42	0.42	-0.21	-0.24	-0.22	0.2
Y	O	65082	SR	0.86	0.39	0.39	-0.28	-0.17	-0.17	0.1
Y	L	60523	SR	0.21	0.20	0.20	-0.15	-0.03	0.03	0.2
Y	O	60525	SR	0.43	0.29	-0.11	-0.09	-0.17	0.29	0.2
Y	L	65058	SR	0.49	0.38	-0.07	0.38	-0.29	-0.14	0.2
Y	L	65052	SR	0.27	0.34	-0.13	-0.13	-0.10	0.34	0.2
Y	O	67584	SR	0.36	0.43	-0.23	-0.28	0.43	-0.01	0.6
Y	L	67593	SR	0.52	0.39	-0.20	0.39	-0.23	-0.10	0.2
Y	L	68208	SR	0.55	0.47	-0.20	-0.32	0.47	-0.17	0.1
Y	L	68210	SR	0.70	0.49	-0.27	-0.27	0.49	-0.19	0.1
Y	O	108511	SR	0.43	0.36	-0.17	-0.18	0.36	-0.09	0.5
Y	L	64709	SR	0.47	0.38	-0.18	-0.07	-0.25	0.38	0.2
Y	L	64710	SR	0.49	0.48	0.48	-0.06	-0.28	-0.31	0.1
Y	O	65141	SR	0.59	0.42	-0.27	-0.25	0.42	-0.08	0.2
Y	L	133049	SR	0.75	0.28	-0.14	0.28	-0.21	-0.14	0.2
Y	L	133050	SR	0.44	0.49	0.49	-0.14	-0.32	-0.17	0.2
Y	L	67631	SR	0.43	0.24	-0.20	0.00	0.24	-0.29	0.2
Y	L	52543	SR	0.48	0.58	-0.34	0.58	-0.23	-0.21	0.2
Y	L	64992	SR	0.48	0.45	-0.16	-0.34	0.45	-0.15	0.1
Y	O	256538	SR	0.58	0.38	-0.17	-0.25	0.38	-0.11	0.6
Y	L	256537	SR	0.42	0.36	0.36	-0.13	-0.25	-0.14	0.2
Y	L	57134	SR	0.61	0.38	-0.20	-0.23	-0.12	0.38	0.2
Y	L	133433	SR	0.60	0.55	-0.17	-0.31	-0.31	0.55	0.2
Y	O	175495	SR	0.38	0.32	0.32	-0.15	-0.09	-0.12	0.6

Table 1.A22 Item Statistics, Operational Items: MDHSA Biology—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	L	256532	SR	0.39	0.37	-0.24	-0.14	0.37	-0.14	0.2
Y	O	256531	SR	0.84	0.39	-0.22	-0.18	0.39	-0.20	0.6
Mean				0.54	0.41	-0.04	-0.06	-0.01	-0.06	0.2
SD				0.14	0.09	0.27	0.28	0.32	0.24	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A23 Item Statistics, Operational Items: MDHSA English—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	O	130295	SR	0.83	0.31	-0.17	-0.19	-0.17	0.31	0.0
D-N	O	130299	SR	0.45	0.36	-0.02	-0.33	-0.17	0.36	0.0
D-N	O	130300	SR	0.92	0.32	-0.17	0.32	-0.19	-0.18	0.0
D-N	O	130254	SR	0.65	0.46	-0.32	-0.16	0.46	-0.23	0.1
D-N	O	256280	SR	0.51	0.26	0.26	-0.23	0.04	-0.16	0.1
D-N	L	256453	SR	0.54	0.33	-0.15	-0.22	0.33	-0.12	0.1
D-N	L	256454	SR	0.79	0.32	0.32	-0.13	-0.26	-0.13	0.1
D-N	L	256455	SR	0.78	0.37	-0.21	0.37	-0.22	-0.18	0.1
D-N	L	95982	SR	0.73	0.33	-0.12	-0.24	-0.21	0.33	0.1
D-N	L	95983	SR	0.69	0.42	-0.21	-0.26	-0.17	0.42	0.1
D-N	L	95984	SR	0.75	0.48	-0.26	-0.29	0.48	-0.18	0.2
D-N	L	95986	SR	0.79	0.38	-0.16	0.38	-0.28	-0.16	0.1
D-N	L	130261	SR	0.66	0.31	-0.09	0.31	-0.28	-0.10	0.3
D-N	L	95989	SR	0.55	0.39	-0.21	0.39	-0.17	-0.19	0.1
D-N	L	95990	SR	0.44	0.38	-0.10	-0.22	-0.17	0.38	0.3
D-N	O	251154	SR	0.58	0.38	0.38	-0.14	-0.22	-0.17	0.2
D-N	O	251155	SR	0.59	0.46	-0.21	-0.20	-0.24	0.46	0.2
D-N	O	251162	SR	0.83	0.47	-0.23	-0.28	-0.25	0.47	0.2
D-N	O	96305	SR	0.59	0.21	0.21	-0.28	-0.10	0.03	0.1
D-N	O	96306	SR	0.58	0.39	-0.19	0.39	-0.21	-0.15	0.1
D-N	O	96307	SR	0.47	-0.01	0.19	-0.04	-0.20	-0.01	0.2
D-N	O	96308	SR	0.61	0.27	-0.17	-0.12	0.27	-0.09	0.1
D-N	O	96309	SR	0.72	0.36	-0.12	-0.25	0.36	-0.22	0.1
D-N	O	96311	SR	0.54	0.35	-0.05	-0.27	0.35	-0.17	0.2
D-N	O	130102	SR	0.70	0.53	0.53	-0.20	-0.28	-0.32	0.1
D-N	O	130103	SR	0.75	0.53	-0.29	-0.23	0.53	-0.31	0.1
D-N	O	130104	SR	0.77	0.51	-0.23	-0.35	-0.22	0.51	0.1
D-N	O	130105	SR	0.79	0.37	-0.29	-0.11	0.37	-0.20	0.1
D-N	O	214665	SR	0.59	0.44	-0.16	-0.28	-0.23	0.44	0.1
D-N	O	214666	SR	0.73	0.50	0.50	-0.25	-0.28	-0.26	0.1
D-N	O	214667	SR	0.36	0.40	-0.06	-0.10	0.40	-0.30	0.1

Table 1.A23 Item Statistics, Operational Items: MDHSA English—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	L	130230	SR	0.48	0.37	-0.18	0.37	-0.12	-0.26	0.1
D-N	L	130231	SR	0.85	0.42	-0.24	-0.24	-0.21	0.42	0.1
D-N	L	130233	SR	0.36	0.36	-0.19	-0.21	-0.17	0.36	0.1
D-N	L	130232	SR	0.67	0.34	0.34	-0.27	-0.25	-0.03	0.1
D-N	L	130234	SR	0.84	0.49	0.49	-0.26	-0.29	-0.24	0.1
D-N	L	256283	SR	0.70	0.40	-0.17	-0.21	-0.23	0.40	0.1
D-N	O	251171	SR	0.72	0.50	-0.24	0.50	-0.29	-0.23	0.1
D-N	O	251166	SR	0.77	0.50	-0.27	0.50	-0.28	-0.24	0.1
D-N	O	96157	SR	0.75	0.50	-0.25	-0.28	0.50	-0.25	0.1
D-N	L	130142	SR	0.73	0.39	-0.22	-0.22	0.39	-0.16	0.2
D-N	L	130143	SR	0.73	0.42	-0.12	-0.26	0.42	-0.28	0.2
D-N	L	130144	SR	0.74	0.48	-0.28	-0.22	-0.26	0.48	0.2
D-N	L	130145	SR	0.50	0.34	-0.08	-0.27	-0.11	0.34	0.2
D-N	L	130146	SR	0.86	0.40	-0.16	-0.18	-0.29	0.40	0.2
D-N	L	130147	SR	0.75	0.52	0.52	-0.25	-0.29	-0.26	0.2
D-N	L	130148	SR	0.72	0.42	0.42	-0.23	-0.17	-0.25	0.2
D-N	L	130150	SR	0.89	0.49	-0.23	-0.25	-0.31	0.49	0.2
D-N	L	130151	SR	0.54	0.41	0.41	-0.24	-0.23	-0.20	0.2
D-N	L	130152	SR	0.52	0.46	-0.23	-0.16	-0.26	0.46	0.2
D-N	O	109099	SR	0.56	0.15	-0.18	0.15	-0.01	0.01	0.2
D-N	O	109100	SR	0.78	0.48	-0.24	-0.24	0.48	-0.29	0.2
D-N	L	108795	SR	0.46	0.21	-0.15	-0.03	0.21	-0.14	0.4
D-N	L	108796	SR	0.53	0.50	-0.24	-0.24	0.50	-0.20	0.2
D-N	L	108799	SR	0.55	0.38	0.38	-0.16	-0.11	-0.26	0.2
D-N	L	108798	SR	0.70	0.45	0.45	-0.27	-0.27	-0.15	0.3
D-N	L	108800	SR	0.87	0.49	-0.23	-0.30	0.49	-0.24	0.3
D-N	L	108803	SR	0.46	0.40	-0.17	-0.25	-0.13	0.40	0.3
D-N	L	251394	SR	0.59	0.40	0.40	-0.17	-0.23	-0.21	0.3
Mean				0.66	0.39	-0.04	-0.12	-0.04	0.00	0.2
SD				0.14	0.10	0.26	0.23	0.29	0.29	0.1

Note: Tabled item position number is based on Form D and varies somewhat on Forms E-N.

Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A24 Item Statistics, Operational Items: MDHSA English—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	O	108731	SR	0.70	0.44	-0.33	-0.22	0.44	-0.10	0.0
X	O	108732	SR	0.55	0.24	-0.19	-0.16	-0.07	0.24	0.0
X	O	108735	SR	0.71	0.34	-0.15	-0.19	-0.20	0.34	0.1
X	O	108733	SR	0.53	0.45	0.45	-0.24	-0.29	-0.08	0.1

Table 1.A24 Item Statistics, Operational Items: MDHSA English—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	O	108734	SR	0.43	0.24	-0.19	0.24	-0.25	0.07	0.1
X	L	256453	SR	0.54	0.33	-0.15	-0.22	0.33	-0.12	0.1
X	L	256454	SR	0.79	0.32	0.32	-0.13	-0.26	-0.13	0.1
X	L	256455	SR	0.78	0.37	-0.21	0.37	-0.22	-0.18	0.1
X	L	95982	SR	0.73	0.33	-0.12	-0.24	-0.21	0.33	0.1
X	L	95983	SR	0.69	0.42	-0.21	-0.26	-0.17	0.42	0.1
X	L	95984	SR	0.75	0.48	-0.26	-0.29	0.48	-0.18	0.2
X	L	95986	SR	0.79	0.38	-0.16	0.38	-0.28	-0.16	0.1
X	L	130261	SR	0.66	0.31	-0.09	0.31	-0.28	-0.10	0.3
X	L	95989	SR	0.55	0.39	-0.21	0.39	-0.17	-0.19	0.1
X	L	95990	SR	0.44	0.38	-0.10	-0.22	-0.17	0.38	0.3
X	O	251163	SR	0.64	0.59	-0.30	-0.24	-0.32	0.59	0.7
X	O	256303	SR	0.74	0.50	-0.25	-0.26	0.50	-0.25	0.7
X	O	256308	SR	0.59	0.41	0.41	-0.12	-0.26	-0.23	0.7
X	O	96305	SR	0.59	0.21	0.21	-0.28	-0.10	0.03	0.1
X	O	96306	SR	0.58	0.39	-0.19	0.39	-0.21	-0.15	0.1
X	O	96307	SR	0.47	-0.01	0.19	-0.04	-0.20	-0.01	0.2
X	O	96308	SR	0.61	0.27	-0.17	-0.12	0.27	-0.09	0.1
X	O	96309	SR	0.72	0.36	-0.12	-0.25	0.36	-0.22	0.1
X	O	96311	SR	0.54	0.35	-0.05	-0.27	0.35	-0.17	0.2
X	O	130102	SR	0.70	0.53	0.53	-0.20	-0.28	-0.32	0.1
X	O	130103	SR	0.75	0.53	-0.29	-0.23	0.53	-0.31	0.1
X	O	130104	SR	0.77	0.51	-0.23	-0.35	-0.22	0.51	0.1
X	O	130105	SR	0.79	0.37	-0.29	-0.11	0.37	-0.20	0.1
X	O	214702	SR	0.42	0.33	-0.10	0.33	-0.23	-0.10	0.1
X	O	214703	SR	0.73	0.53	0.53	-0.32	-0.28	-0.21	0.1
X	O	214704	SR	0.54	0.37	-0.13	-0.18	0.37	-0.19	0.2
X	L	130230	SR	0.48	0.37	-0.18	0.37	-0.12	-0.26	0.1
X	L	130231	SR	0.85	0.42	-0.24	-0.24	-0.21	0.42	0.1
X	L	130233	SR	0.36	0.36	-0.19	-0.21	-0.17	0.36	0.1
X	L	130232	SR	0.67	0.34	0.34	-0.27	-0.25	-0.03	0.1
X	L	130234	SR	0.84	0.49	0.49	-0.26	-0.29	-0.24	0.1
X	L	256283	SR	0.70	0.40	-0.17	-0.21	-0.23	0.40	0.1
X	O	251171	SR	0.72	0.50	-0.24	0.50	-0.29	-0.23	0.1
X	O	251166	SR	0.77	0.50	-0.27	0.50	-0.28	-0.24	0.1
X	O	96157	SR	0.75	0.50	-0.25	-0.28	0.50	-0.25	0.1
X	L	130142	SR	0.73	0.39	-0.22	-0.22	0.39	-0.16	0.2
X	L	130143	SR	0.73	0.42	-0.12	-0.26	0.42	-0.28	0.2
X	L	130144	SR	0.74	0.48	-0.28	-0.22	-0.26	0.48	0.2
X	L	130145	SR	0.50	0.34	-0.08	-0.27	-0.11	0.34	0.2
X	L	130146	SR	0.86	0.40	-0.16	-0.18	-0.29	0.40	0.2
X	L	130147	SR	0.75	0.52	0.52	-0.25	-0.29	-0.26	0.2
X	L	130148	SR	0.72	0.42	0.42	-0.23	-0.17	-0.25	0.2
X	L	130150	SR	0.89	0.49	-0.23	-0.25	-0.31	0.49	0.2

Table 1.A24 Item Statistics, Operational Items: MDHSA English—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	L	130151	SR	0.54	0.41	0.41	-0.24	-0.23	-0.20	0.2
X	L	130152	SR	0.52	0.46	-0.23	-0.16	-0.26	0.46	0.2
X	O	130248	SR	0.70	0.40	-0.27	0.40	-0.27	-0.06	0.2
X	O	130249	SR	0.29	0.28	0.11	0.28	-0.21	-0.22	0.2
X	L	108795	SR	0.46	0.21	-0.15	-0.03	0.21	-0.14	0.4
X	L	108796	SR	0.53	0.50	-0.24	-0.24	0.50	-0.20	0.2
X	L	108799	SR	0.55	0.38	0.38	-0.16	-0.11	-0.26	0.2
X	L	108798	SR	0.70	0.45	0.45	-0.27	-0.27	-0.15	0.3
X	L	108800	SR	0.87	0.49	-0.23	-0.30	0.49	-0.24	0.3
X	L	108803	SR	0.46	0.40	-0.17	-0.25	-0.13	0.40	0.3
X	L	251394	SR	0.59	0.40	0.40	-0.17	-0.23	-0.21	0.3
Mean				0.65	0.40	-0.04	-0.10	-0.05	-0.01	0.2
SD				0.14	0.10	0.27	0.25	0.29	0.28	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A25 Item Statistics, Operational Items: MDHSA English—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	O	130295	SR	0.83	0.31	-0.17	-0.19	-0.17	0.31	0.0
Y	O	130299	SR	0.45	0.36	-0.02	-0.33	-0.17	0.36	0.0
Y	O	130300	SR	0.92	0.32	-0.17	0.32	-0.19	-0.18	0.0
Y	O	130254	SR	0.65	0.46	-0.32	-0.16	0.46	-0.23	0.1
Y	O	256280	SR	0.51	0.26	0.26	-0.23	0.04	-0.16	0.1
Y	L	256453	SR	0.54	0.33	-0.15	-0.22	0.33	-0.12	0.1
Y	L	256454	SR	0.79	0.32	0.32	-0.13	-0.26	-0.13	0.1
Y	L	256455	SR	0.78	0.37	-0.21	0.37	-0.22	-0.18	0.1
Y	L	95982	SR	0.73	0.33	-0.12	-0.24	-0.21	0.33	0.1
Y	L	95983	SR	0.69	0.42	-0.21	-0.26	-0.17	0.42	0.1
Y	L	95984	SR	0.75	0.48	-0.26	-0.29	0.48	-0.18	0.2
Y	L	95986	SR	0.79	0.38	-0.16	0.38	-0.28	-0.16	0.1
Y	L	130261	SR	0.66	0.31	-0.09	0.31	-0.28	-0.10	0.3
Y	L	95989	SR	0.55	0.39	-0.21	0.39	-0.17	-0.19	0.1
Y	L	95990	SR	0.44	0.38	-0.10	-0.22	-0.17	0.38	0.3
Y	O	251154	SR	0.58	0.38	0.38	-0.14	-0.22	-0.17	0.2
Y	O	251155	SR	0.59	0.46	-0.21	-0.20	-0.24	0.46	0.2
Y	O	251162	SR	0.83	0.47	-0.23	-0.28	-0.25	0.47	0.2
Y	O	108820	SR	0.78	0.39	-0.17	0.39	-0.25	-0.20	0.1
Y	O	109744	SR	0.72	0.42	-0.24	-0.24	-0.15	0.42	0.1
Y	O	108822	SR	0.50	0.49	-0.27	-0.23	-0.26	0.49	0.2
Y	O	108823	SR	0.64	0.46	-0.23	-0.19	0.46	-0.26	0.1

Table 1.A25 Item Statistics, Operational Items: MDHSA English—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	O	108827	SR	0.79	0.35	-0.19	0.35	-0.19	-0.16	0.2
Y	O	108824	SR	0.74	0.43	-0.23	-0.22	-0.25	0.43	0.2
Y	O	180009	SR	0.84	0.43	-0.23	-0.22	-0.24	0.43	0.1
Y	O	179995	SR	0.87	0.35	-0.20	-0.20	-0.18	0.35	0.3
Y	O	169242	SR	0.51	0.24	0.24	0.02	-0.26	-0.03	0.1
Y	O	169245	SR	0.73	0.35	-0.08	0.35	-0.21	-0.25	0.1
Y	O	214665	SR	0.59	0.44	-0.16	-0.28	-0.23	0.44	0.1
Y	O	214666	SR	0.73	0.50	0.50	-0.25	-0.28	-0.26	0.1
Y	O	214667	SR	0.36	0.40	-0.06	-0.10	0.40	-0.30	0.1
Y	L	130230	SR	0.48	0.37	-0.18	0.37	-0.12	-0.26	0.1
Y	L	130231	SR	0.85	0.42	-0.24	-0.24	-0.21	0.42	0.1
Y	L	130233	SR	0.36	0.36	-0.19	-0.21	-0.17	0.36	0.1
Y	L	130232	SR	0.67	0.34	0.34	-0.27	-0.25	-0.03	0.1
Y	L	130234	SR	0.84	0.49	0.49	-0.26	-0.29	-0.24	0.1
Y	L	256283	SR	0.70	0.40	-0.17	-0.21	-0.23	0.40	0.1
Y	O	96220	SR	0.52	0.51	0.51	-0.27	-0.27	-0.15	0.2
Y	O	251164	SR	0.60	0.35	0.35	-0.24	-0.12	-0.24	0.1
Y	O	209821	SR	0.58	0.38	-0.04	0.38	-0.24	-0.28	0.1
Y	L	130142	SR	0.73	0.39	-0.22	-0.22	0.39	-0.16	0.2
Y	L	130143	SR	0.73	0.42	-0.12	-0.26	0.42	-0.28	0.2
Y	L	130144	SR	0.74	0.48	-0.28	-0.22	-0.26	0.48	0.2
Y	L	130145	SR	0.50	0.34	-0.08	-0.27	-0.11	0.34	0.2
Y	L	130146	SR	0.86	0.40	-0.16	-0.18	-0.29	0.40	0.2
Y	L	130147	SR	0.75	0.52	0.52	-0.25	-0.29	-0.26	0.2
Y	L	130148	SR	0.72	0.42	0.42	-0.23	-0.17	-0.25	0.2
Y	L	130150	SR	0.89	0.49	-0.23	-0.25	-0.31	0.49	0.2
Y	L	130151	SR	0.54	0.41	0.41	-0.24	-0.23	-0.20	0.2
Y	L	130152	SR	0.52	0.46	-0.23	-0.16	-0.26	0.46	0.2
Y	O	109099	SR	0.56	0.15	-0.18	0.15	-0.01	0.01	0.2
Y	O	109100	SR	0.78	0.48	-0.24	-0.24	0.48	-0.29	0.2
Y	L	108795	SR	0.46	0.21	-0.15	-0.03	0.21	-0.14	0.4
Y	L	108796	SR	0.53	0.50	-0.24	-0.24	0.50	-0.20	0.2
Y	L	108799	SR	0.55	0.38	0.38	-0.16	-0.11	-0.26	0.2
Y	L	108798	SR	0.70	0.45	0.45	-0.27	-0.27	-0.15	0.3
Y	L	108800	SR	0.87	0.49	-0.23	-0.30	0.49	-0.24	0.3
Y	L	108803	SR	0.46	0.40	-0.17	-0.25	-0.13	0.40	0.3
Y	L	251394	SR	0.59	0.40	0.40	-0.17	-0.23	-0.21	0.3
Mean				0.66	0.40	-0.04	-0.11	-0.09	0.03	0.2
SD				0.14	0.07	0.26	0.23	0.26	0.30	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A26 Item Statistics, Operational Items: MDHSA Government—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	O	79661	SR	0.93	0.28	0.28	-0.23	-0.13	-0.10	0.0
D-N	L	215818	SR	0.65	0.44	-0.21	-0.28	0.44	-0.17	0.0
D-N	O	68541	SR	0.79	0.39	-0.12	-0.21	-0.28	0.39	0.0
D-N	L	55622	SR	0.32	0.25	-0.16	0.25	-0.12	0.05	0.0
D-N	O	58121	SR	0.44	0.24	-0.14	-0.19	0.24	0.02	0.1
D-N	O	68731	SR	0.75	0.39	-0.19	0.39	-0.19	-0.24	0.1
D-N	L	79550	SR	0.52	0.49	-0.31	-0.23	0.49	-0.16	0.0
D-N	L	256407	SR	0.83	0.44	-0.24	-0.24	0.44	-0.23	0.1
D-N	O	79684	SR	0.57	0.41	0.41	-0.28	-0.22	-0.10	0.1
D-N	L	68102	SR	0.35	0.43	0.43	-0.24	0.01	-0.24	0.2
D-N	O	51774	SR	0.62	0.44	-0.26	-0.10	-0.27	0.44	0.1
D-N	L	68608	SR	0.39	0.50	-0.27	-0.25	0.50	-0.14	0.1
D-N	O	79673	SR	0.65	0.52	0.52	-0.20	-0.26	-0.32	0.2
D-N	O	79654	SR	0.37	0.23	-0.14	0.23	-0.17	0.01	0.2
D-N	L	223249	SR	0.46	0.55	-0.35	0.55	-0.26	-0.13	0.1
D-N	L	79742	SR	0.63	0.44	-0.23	-0.23	0.44	-0.20	0.1
D-N	O	214479	SR	0.63	0.47	0.47	-0.25	-0.25	-0.19	0.1
D-N	L	214496	SR	0.55	0.59	0.59	-0.20	-0.20	-0.41	0.2
D-N	L	241960	SR	0.57	0.35	-0.18	-0.13	-0.20	0.35	0.2
D-N	O	68057	SR	0.60	0.49	0.49	-0.32	-0.21	-0.18	0.1
D-N	O	68609	SR	0.74	0.51	-0.24	-0.30	0.51	-0.24	0.1
D-N	O	108427	SR	0.52	0.56	-0.22	-0.38	0.56	-0.17	0.2
D-N	O	68766	SR	0.69	0.55	-0.26	-0.33	-0.25	0.55	0.2
D-N	O	68642	SR	0.85	0.43	-0.19	-0.27	0.43	-0.24	0.1
D-N	O	60429	SR	0.49	0.22	-0.19	-0.19	-0.03	0.22	0.3
D-N	O	79646	SR	0.58	0.47	-0.24	0.47	-0.32	-0.08	0.2
D-N	O	55600	SR	0.52	0.40	-0.26	-0.13	-0.14	0.40	0.3
D-N	L	256347	SR	0.46	0.30	-0.18	0.30	-0.05	-0.22	0.3
D-N	O	256362	SR	0.82	0.46	-0.19	-0.22	-0.32	0.46	0.1
D-N	L	256342	SR	0.56	0.32	0.32	-0.17	-0.22	-0.04	0.1
D-N	L	108405	SR	0.41	0.28	0.28	-0.18	-0.18	0.00	0.2
D-N	O	55686	SR	0.61	0.52	-0.23	-0.23	-0.30	0.52	0.1
D-N	O	68497	SR	0.71	0.34	-0.13	0.34	-0.25	-0.14	0.2
D-N	O	79683	SR	0.56	0.46	-0.33	0.46	-0.30	-0.10	0.1
D-N	O	256339	SR	0.42	0.48	-0.20	-0.17	-0.25	0.48	0.2
D-N	L	79593	SR	0.64	0.56	-0.34	-0.28	-0.21	0.56	0.1
D-N	L	68509	SR	0.46	0.46	-0.15	0.46	-0.24	-0.20	0.2
D-N	O	58410	SR	0.66	0.32	0.32	-0.17	-0.26	-0.17	0.1
D-N	L	79544	SR	0.65	0.48	-0.26	-0.22	0.48	-0.23	0.2
D-N	L	68708	SR	0.59	0.38	-0.14	0.38	-0.27	-0.14	0.1
D-N	L	67970	SR	0.60	0.56	0.56	-0.24	-0.27	-0.31	0.2
D-N	L	68073	SR	0.42	0.40	0.40	-0.30	-0.03	-0.22	0.2
D-N	L	51171	SR	0.65	0.42	-0.23	-0.20	-0.25	0.42	0.1
D-N	L	68520	SR	0.66	0.34	-0.14	-0.22	0.34	-0.16	0.1

Table 1.A26 Item Statistics, Operational Items: MDHSA Government—May Primary

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D-N	O	55519	SR	0.40	0.34	-0.07	-0.16	-0.19	0.34	0.3
D-N	L	51087	SR	0.93	0.35	-0.20	-0.21	0.35	-0.15	0.1
D-N	O	68714	SR	0.79	0.43	0.43	-0.23	-0.26	-0.20	0.1
D-N	O	68778	SR	0.53	0.43	0.43	-0.19	-0.23	-0.18	0.2
D-N	L	223260	SR	0.85	0.50	-0.32	-0.28	0.50	-0.19	0.2
D-N	L	79578	SR	0.66	0.55	0.55	-0.29	-0.26	-0.29	0.2
D-N	L	52270	SR	0.59	0.51	0.51	-0.31	-0.21	-0.22	0.2
D-N	L	79671	SR	0.42	0.41	0.41	-0.24	-0.16	-0.15	0.2
D-N	L	51741	SR	0.40	0.36	-0.04	-0.30	-0.27	0.36	0.3
D-N	L	51258	SR	0.73	0.54	-0.23	-0.28	-0.32	0.54	0.3
D-N	L	68592	SR	0.49	0.44	-0.19	-0.25	0.44	-0.19	0.3
D-N	L	79629	SR	0.49	0.47	0.47	-0.22	-0.32	-0.09	0.1
D-N	O	68535	SR	0.91	0.37	0.37	-0.20	-0.25	-0.15	0.1
D-N	L	65194	SR	0.66	0.47	-0.21	-0.28	0.47	-0.20	0.2
D-N	L	58294	SR	0.41	0.26	0.26	-0.24	-0.06	-0.04	0.3
D-N	L	51243	SR	0.50	0.36	-0.07	-0.14	-0.28	0.36	0.2
D-N	O	55612	SR	0.51	0.42	-0.18	-0.18	0.42	-0.19	0.2
D-N	L	60465	SR	0.82	0.47	-0.26	0.47	-0.27	-0.22	0.2
D-N	L	64989	SR	0.35	0.13	-0.05	0.08	-0.24	0.13	0.2
D-N	L	256388	SR	0.67	0.48	0.48	-0.27	-0.26	-0.19	0.2
D-N	L	132975	SR	0.40	0.41	0.41	-0.19	-0.13	-0.20	0.2
D-N	L	79559	SR	0.52	0.43	-0.15	-0.18	0.43	-0.26	0.2
D-N	O	133463	SR	0.47	0.39	-0.09	0.39	-0.30	-0.20	0.2
D-N	O	52240	SR	0.80	0.44	-0.24	0.44	-0.26	-0.20	0.2
D-N	L	58438	SR	0.69	0.50	-0.20	-0.24	-0.31	0.50	0.2
D-N	L	51202	SR	0.48	0.55	-0.22	-0.26	-0.24	0.55	0.2
D-N	O	52204	SR	0.45	0.38	-0.21	-0.03	0.38	-0.26	0.2
D-N	O	68581	SR	0.79	0.54	-0.30	0.54	-0.30	-0.26	0.2
D-N	O	214504	SR	0.55	0.51	-0.17	0.51	-0.19	-0.34	0.2
D-N	O	64817	SR	0.40	0.41	0.41	-0.12	-0.25	-0.12	0.2
D-N	L	108446	SR	0.76	0.54	-0.23	-0.29	0.54	-0.31	0.2
D-N	L	256353	SR	0.37	0.26	0.26	-0.22	-0.24	-0.03	0.2
D-N	O	215820	SR	0.69	0.56	-0.26	-0.36	-0.23	0.56	0.2
D-N	L	51178	SR	0.50	0.37	0.37	-0.07	-0.22	-0.23	0.2
D-N	L	52230	SR	0.49	0.23	0.23	-0.21	0.00	-0.16	0.3
D-N	L	79586	SR	0.62	0.41	-0.25	-0.22	0.41	-0.18	0.3
D-N	L	108471	SR	0.57	0.36	-0.22	-0.13	0.36	-0.23	0.3
D-N	L	52258	SR	0.52	0.40	-0.14	-0.24	0.40	-0.17	0.3
Mean				0.59	0.42	-0.01	-0.10	-0.04	-0.04	0.2
SD				0.15	0.10	0.30	0.26	0.30	0.27	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A27 Item Statistics, Operational Items: MDHSA Government—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	O	79661	SR	0.93	0.28	0.28	-0.23	-0.13	-0.10	0.0
X	L	215818	SR	0.65	0.44	-0.21	-0.28	0.44	-0.17	0.0
X	O	51134	SR	0.51	0.48	-0.34	-0.16	-0.13	0.48	0.1
X	L	55622	SR	0.32	0.25	-0.16	0.25	-0.12	0.05	0.0
X	O	58121	SR	0.44	0.24	-0.14	-0.19	0.24	0.02	0.1
X	O	68731	SR	0.75	0.39	-0.19	0.39	-0.19	-0.24	0.1
X	L	79550	SR	0.52	0.49	-0.31	-0.23	0.49	-0.16	0.0
X	L	256407	SR	0.83	0.44	-0.24	-0.24	0.44	-0.23	0.1
X	O	79684	SR	0.57	0.41	0.41	-0.28	-0.22	-0.10	0.1
X	L	68102	SR	0.35	0.43	0.43	-0.24	0.01	-0.24	0.2
X	O	51774	SR	0.62	0.44	-0.26	-0.10	-0.27	0.44	0.1
X	L	68608	SR	0.39	0.50	-0.27	-0.25	0.50	-0.14	0.1
X	O	51166	SR	0.55	0.47	0.47	-0.22	-0.23	-0.20	0.1
X	O	79654	SR	0.37	0.23	-0.14	0.23	-0.17	0.01	0.2
X	L	223249	SR	0.46	0.55	-0.35	0.55	-0.26	-0.13	0.1
X	L	79742	SR	0.63	0.44	-0.23	-0.23	0.44	-0.20	0.1
X	O	50859	SR	0.71	0.34	-0.15	0.34	-0.23	-0.15	0.2
X	L	214496	SR	0.55	0.59	0.59	-0.20	-0.20	-0.41	0.2
X	L	241960	SR	0.57	0.35	-0.18	-0.13	-0.20	0.35	0.2
X	O	51102	SR	0.54	0.41	-0.28	0.41	-0.21	-0.04	0.3
X	O	50988	SR	0.55	0.58	-0.17	-0.27	-0.37	0.58	0.4
X	O	108427	SR	0.52	0.56	-0.22	-0.38	0.56	-0.17	0.2
X	O	55656	SR	0.66	0.40	-0.24	0.40	-0.24	-0.13	0.3
X	O	65177	SR	0.38	0.44	-0.14	0.44	-0.16	-0.24	0.5
X	O	60429	SR	0.49	0.22	-0.19	-0.19	-0.03	0.22	0.3
X	O	79646	SR	0.58	0.47	-0.24	0.47	-0.32	-0.08	0.2
X	O	52262	SR	0.58	0.44	-0.19	-0.27	0.44	-0.18	0.7
X	L	256347	SR	0.46	0.30	-0.18	0.30	-0.05	-0.22	0.3
X	O	50896	SR	0.67	0.43	-0.21	-0.26	0.43	-0.19	0.2
X	L	256342	SR	0.56	0.32	0.32	-0.17	-0.22	-0.04	0.1
X	L	108405	SR	0.41	0.28	0.28	-0.18	-0.18	0.00	0.2
X	O	55686	SR	0.61	0.52	-0.23	-0.23	-0.30	0.52	0.1
X	O	132971	SR	0.53	0.42	0.42	-0.15	-0.27	-0.14	0.3
X	O	68639	SR	0.57	0.49	0.49	-0.23	-0.19	-0.26	0.2
X	O	51081	SR	0.63	0.52	-0.29	0.52	-0.26	-0.21	0.3
X	L	79593	SR	0.64	0.56	-0.34	-0.28	-0.21	0.56	0.1
X	L	68509	SR	0.46	0.46	-0.15	0.46	-0.24	-0.20	0.2
X	O	108378	SR	0.78	0.48	-0.25	0.48	-0.30	-0.20	0.2
X	L	79544	SR	0.65	0.48	-0.26	-0.22	0.48	-0.23	0.2
X	L	68708	SR	0.59	0.38	-0.14	0.38	-0.27	-0.14	0.1
X	L	67970	SR	0.60	0.56	0.56	-0.24	-0.27	-0.31	0.2
X	L	68073	SR	0.42	0.40	0.40	-0.30	-0.03	-0.22	0.2
X	L	51171	SR	0.65	0.42	-0.23	-0.20	-0.25	0.42	0.1
X	L	68520	SR	0.66	0.34	-0.14	-0.22	0.34	-0.16	0.1

Table 1.A27 Item Statistics, Operational Items: MDHSA Government—May Makeup 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
X	O	65183	SR	0.58	0.54	0.54	-0.30	-0.26	-0.20	0.3
X	L	51087	SR	0.93	0.35	-0.20	-0.21	0.35	-0.15	0.1
X	O	68714	SR	0.79	0.43	0.43	-0.23	-0.26	-0.20	0.1
X	O	68778	SR	0.53	0.43	0.43	-0.19	-0.23	-0.18	0.2
X	L	223260	SR	0.85	0.50	-0.32	-0.28	0.50	-0.19	0.2
X	L	79578	SR	0.66	0.55	0.55	-0.29	-0.26	-0.29	0.2
X	L	52270	SR	0.59	0.51	0.51	-0.31	-0.21	-0.22	0.2
X	L	79671	SR	0.42	0.41	0.41	-0.24	-0.16	-0.15	0.2
X	L	51741	SR	0.40	0.36	-0.04	-0.30	-0.27	0.36	0.3
X	L	51258	SR	0.73	0.54	-0.23	-0.28	-0.32	0.54	0.3
X	L	68592	SR	0.49	0.44	-0.19	-0.25	0.44	-0.19	0.3
X	L	79629	SR	0.49	0.47	0.47	-0.22	-0.32	-0.09	0.1
X	O	68729	SR	0.47	0.48	-0.17	-0.26	-0.23	0.48	0.4
X	L	65194	SR	0.66	0.47	-0.21	-0.28	0.47	-0.20	0.2
X	L	58294	SR	0.41	0.26	0.26	-0.24	-0.06	-0.04	0.3
X	L	51243	SR	0.50	0.36	-0.07	-0.14	-0.28	0.36	0.2
X	O	55612	SR	0.51	0.42	-0.18	-0.18	0.42	-0.19	0.2
X	L	60465	SR	0.82	0.47	-0.26	0.47	-0.27	-0.22	0.2
X	L	64989	SR	0.35	0.13	-0.05	0.08	-0.24	0.13	0.2
X	L	256388	SR	0.67	0.48	0.48	-0.27	-0.26	-0.19	0.2
X	L	132975	SR	0.40	0.41	0.41	-0.19	-0.13	-0.20	0.2
X	L	79559	SR	0.52	0.43	-0.15	-0.18	0.43	-0.26	0.2
X	O	51750	SR	0.57	0.51	-0.20	-0.25	0.51	-0.27	0.4
X	O	52240	SR	0.80	0.44	-0.24	0.44	-0.26	-0.20	0.2
X	L	58438	SR	0.69	0.50	-0.20	-0.24	-0.31	0.50	0.2
X	L	51202	SR	0.48	0.55	-0.22	-0.26	-0.24	0.55	0.2
X	O	108414	SR	0.58	0.56	-0.26	0.56	-0.31	-0.21	0.5
X	O	68517	SR	0.56	0.59	-0.28	-0.29	0.59	-0.26	0.5
X	O	214504	SR	0.55	0.51	-0.17	0.51	-0.19	-0.34	0.2
X	O	51200	SR	0.60	0.52	-0.28	0.52	-0.25	-0.21	0.5
X	L	108446	SR	0.76	0.54	-0.23	-0.29	0.54	-0.31	0.2
X	L	256353	SR	0.37	0.26	0.26	-0.22	-0.24	-0.03	0.2
X	O	215820	SR	0.69	0.56	-0.26	-0.36	-0.23	0.56	0.2
X	L	51178	SR	0.50	0.37	0.37	-0.07	-0.22	-0.23	0.2
X	L	52230	SR	0.49	0.23	0.23	-0.21	0.00	-0.16	0.3
X	L	79586	SR	0.62	0.41	-0.25	-0.22	0.41	-0.18	0.3
X	L	108471	SR	0.57	0.36	-0.22	-0.13	0.36	-0.23	0.3
X	L	52258	SR	0.52	0.40	-0.14	-0.24	0.40	-0.17	0.3
Mean				0.57	0.43	-0.03	-0.08	-0.03	-0.06	0.2
SD				0.13	0.10	0.30	0.29	0.31	0.26	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A28 Item Statistics, Operational Items: MDHSA Government—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	O	60458	SR	0.69	0.55	0.55	-0.25	-0.27	-0.32	0.0
Y	L	215818	SR	0.65	0.44	-0.21	-0.28	0.44	-0.17	0.0
Y	O	68541	SR	0.79	0.39	-0.12	-0.21	-0.28	0.39	0.0
Y	L	55622	SR	0.32	0.25	-0.16	0.25	-0.12	0.05	0.0
Y	O	58124	SR	0.53	0.63	-0.34	-0.29	0.63	-0.24	0.1
Y	O	51154	SR	0.44	0.33	0.33	-0.25	-0.24	-0.03	0.1
Y	L	79550	SR	0.52	0.49	-0.31	-0.23	0.49	-0.16	0.0
Y	L	256407	SR	0.83	0.44	-0.24	-0.24	0.44	-0.23	0.1
Y	O	214499	SR	0.56	0.43	-0.18	-0.24	0.43	-0.18	0.0
Y	L	68102	SR	0.35	0.43	0.43	-0.24	0.01	-0.24	0.2
Y	O	68100	SR	0.65	0.40	-0.10	-0.22	0.40	-0.29	0.1
Y	L	68608	SR	0.39	0.50	-0.27	-0.25	0.50	-0.14	0.1
Y	O	79673	SR	0.65	0.52	0.52	-0.20	-0.26	-0.32	0.2
Y	O	79604	SR	0.69	0.33	-0.21	-0.12	0.33	-0.18	0.2
Y	L	223249	SR	0.46	0.55	-0.35	0.55	-0.26	-0.13	0.1
Y	L	79742	SR	0.63	0.44	-0.23	-0.23	0.44	-0.20	0.1
Y	O	214479	SR	0.63	0.47	0.47	-0.25	-0.25	-0.19	0.1
Y	L	214496	SR	0.55	0.59	0.59	-0.20	-0.20	-0.41	0.2
Y	L	241960	SR	0.57	0.35	-0.18	-0.13	-0.20	0.35	0.2
Y	O	68057	SR	0.60	0.49	0.49	-0.32	-0.21	-0.18	0.1
Y	O	68609	SR	0.74	0.51	-0.24	-0.30	0.51	-0.24	0.1
Y	O	68552	SR	0.51	0.46	0.46	-0.14	-0.09	-0.36	0.2
Y	O	68766	SR	0.69	0.55	-0.26	-0.33	-0.25	0.55	0.2
Y	O	68642	SR	0.85	0.43	-0.19	-0.27	0.43	-0.24	0.1
Y	O	60461	SR	0.45	0.29	0.29	-0.24	-0.13	-0.06	0.4
Y	O	214482	SR	0.67	0.49	-0.09	-0.34	-0.27	0.49	0.3
Y	O	55600	SR	0.52	0.40	-0.26	-0.13	-0.14	0.40	0.3
Y	L	256347	SR	0.46	0.30	-0.18	0.30	-0.05	-0.22	0.3
Y	O	256362	SR	0.82	0.46	-0.19	-0.22	-0.32	0.46	0.1
Y	L	256342	SR	0.56	0.32	0.32	-0.17	-0.22	-0.04	0.1
Y	L	108405	SR	0.41	0.28	0.28	-0.18	-0.18	0.00	0.2
Y	O	256366	SR	0.82	0.38	-0.16	-0.21	-0.24	0.38	0.2
Y	O	68497	SR	0.71	0.34	-0.13	0.34	-0.25	-0.14	0.2
Y	O	79683	SR	0.56	0.46	-0.33	0.46	-0.30	-0.10	0.1
Y	O	256339	SR	0.42	0.48	-0.20	-0.17	-0.25	0.48	0.2
Y	L	79593	SR	0.64	0.56	-0.34	-0.28	-0.21	0.56	0.1
Y	L	68509	SR	0.46	0.46	-0.15	0.46	-0.24	-0.20	0.2
Y	O	58410	SR	0.66	0.32	0.32	-0.17	-0.26	-0.17	0.1
Y	L	79544	SR	0.65	0.48	-0.26	-0.22	0.48	-0.23	0.2
Y	L	68708	SR	0.59	0.38	-0.14	0.38	-0.27	-0.14	0.1
Y	L	67970	SR	0.60	0.56	0.56	-0.24	-0.27	-0.31	0.2
Y	L	68073	SR	0.42	0.40	0.40	-0.30	-0.03	-0.22	0.2
Y	L	51171	SR	0.65	0.42	-0.23	-0.20	-0.25	0.42	0.1
Y	L	68520	SR	0.66	0.34	-0.14	-0.22	0.34	-0.16	0.1

Table 1.A28 Item Statistics, Operational Items: MDHSA Government—May Makeup 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Y	O	55519	SR	0.40	0.34	-0.07	-0.16	-0.19	0.34	0.3
Y	L	51087	SR	0.93	0.35	-0.20	-0.21	0.35	-0.15	0.1
Y	O	50839	SR	0.57	0.52	-0.20	-0.23	-0.30	0.52	0.4
Y	O	79582	SR	0.70	0.46	-0.26	-0.26	-0.19	0.46	0.3
Y	L	223260	SR	0.85	0.50	-0.32	-0.28	0.50	-0.19	0.2
Y	L	79578	SR	0.66	0.55	0.55	-0.29	-0.26	-0.29	0.2
Y	L	52270	SR	0.59	0.51	0.51	-0.31	-0.21	-0.22	0.2
Y	L	79671	SR	0.42	0.41	0.41	-0.24	-0.16	-0.15	0.2
Y	L	51741	SR	0.40	0.36	-0.04	-0.30	-0.27	0.36	0.3
Y	L	51258	SR	0.73	0.54	-0.23	-0.28	-0.32	0.54	0.3
Y	L	68592	SR	0.49	0.44	-0.19	-0.25	0.44	-0.19	0.3
Y	L	79629	SR	0.49	0.47	0.47	-0.22	-0.32	-0.09	0.1
Y	O	68535	SR	0.91	0.37	0.37	-0.20	-0.25	-0.15	0.1
Y	L	65194	SR	0.66	0.47	-0.21	-0.28	0.47	-0.20	0.2
Y	L	58294	SR	0.41	0.26	0.26	-0.24	-0.06	-0.04	0.3
Y	L	51243	SR	0.50	0.36	-0.07	-0.14	-0.28	0.36	0.2
Y	O	51745	SR	0.31	0.28	-0.13	0.28	-0.05	-0.13	0.2
Y	L	60465	SR	0.82	0.47	-0.26	0.47	-0.27	-0.22	0.2
Y	L	64989	SR	0.35	0.13	-0.05	0.08	-0.24	0.13	0.2
Y	L	256388	SR	0.67	0.48	0.48	-0.27	-0.26	-0.19	0.2
Y	L	132975	SR	0.40	0.41	0.41	-0.19	-0.13	-0.20	0.2
Y	L	79559	SR	0.52	0.43	-0.15	-0.18	0.43	-0.26	0.2
Y	O	133463	SR	0.47	0.39	-0.09	0.39	-0.30	-0.20	0.2
Y	O	214580	SR	0.65	0.50	-0.19	-0.29	0.50	-0.25	0.2
Y	L	58438	SR	0.69	0.50	-0.20	-0.24	-0.31	0.50	0.2
Y	L	51202	SR	0.48	0.55	-0.22	-0.26	-0.24	0.55	0.2
Y	O	52204	SR	0.45	0.38	-0.21	-0.03	0.38	-0.26	0.2
Y	O	68581	SR	0.79	0.54	-0.30	0.54	-0.30	-0.26	0.2
Y	O	79650	SR	0.51	0.48	-0.18	0.48	-0.23	-0.26	0.2
Y	O	64817	SR	0.40	0.41	0.41	-0.12	-0.25	-0.12	0.2
Y	L	108446	SR	0.76	0.54	-0.23	-0.29	0.54	-0.31	0.2
Y	L	256353	SR	0.37	0.26	0.26	-0.22	-0.24	-0.03	0.2
Y	O	52279	SR	0.47	0.46	-0.24	0.46	-0.25	-0.17	0.5
Y	L	51178	SR	0.50	0.37	0.37	-0.07	-0.22	-0.23	0.2
Y	L	52230	SR	0.49	0.23	0.23	-0.21	0.00	-0.16	0.3
Y	L	79586	SR	0.62	0.41	-0.25	-0.22	0.41	-0.18	0.3
Y	L	108471	SR	0.57	0.36	-0.22	-0.13	0.36	-0.23	0.3
Y	L	52258	SR	0.52	0.40	-0.14	-0.24	0.40	-0.17	0.3
Mean				0.58	0.43	-0.01	-0.12	-0.02	-0.04	0.2
SD				0.15	0.09	0.30	0.24	0.31	0.28	0.1

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A29 Item Statistics, Operational Items: MDHSA Algebra—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	54880	SR	0.53	0.31	-0.24	-0.10	-0.13	0.31	0.0
P	L	54730	SR	0.54	0.22	-0.12	-0.18	0.22	-0.08	0.0
P	L	56768	SR	0.31	0.37	-0.18	-0.15	0.37	-0.07	0.2
P	O	54900	SR	0.34	0.17	0.07	0.17	-0.16	-0.19	0.0
P	L	56557	SR	0.32	0.19	0.19	-0.10	-0.06	-0.05	0.0
P	L	106626	SR	0.43	0.30	-0.11	-0.11	0.30	-0.18	0.4
P	L	255081	SPR	0.17	0.38	0.38	-0.24			5.2
P	O	106607	SPR	0.57	0.36	0.36	-0.32			2.8
P	L	52337	SR	0.43	0.23	-0.06	0.23	-0.12	-0.16	0.9
P	O	56740	SR	0.29	0.29	-0.14	-0.15	0.29	0.02	0.7
P	O	56734	SR	0.47	0.34	-0.22	0.34	-0.14	-0.07	1.0
P	L	51553	SR	0.51	0.34	-0.19	-0.14	0.34	-0.13	0.4
P	L	136685	SPR	0.25	0.49	0.49	-0.37			5.4
P	O	64689	SR	0.18	0.27	0.27	0.00	-0.13	-0.11	0.6
P	L	54858	SR	0.37	0.36	-0.14	-0.19	0.36	-0.06	1.4
P	O	67503	SR	0.34	0.27	-0.13	-0.10	-0.05	0.27	1.0
P	L	56577	SR	0.37	0.39	-0.14	-0.16	-0.15	0.39	1.2
P	L	79091	SR	0.52	0.37	0.37	-0.22	-0.19	-0.09	1.3
P	L	56603	SR	0.63	0.40	-0.12	0.40	-0.28	-0.17	0.4
P	L	211005	SR	0.75	0.41	-0.18	-0.30	0.41	-0.09	0.4
P	O	56770	SR	0.28	0.48	-0.22	-0.18	-0.13	0.48	0.7
P	L	79147	SR	0.19	0.22	-0.03	-0.11	-0.06	0.22	0.8
P	O	51413	SR	0.25	0.19	-0.05	0.19	0.00	-0.16	0.4
P	L	255079	SPR	0.04	0.36	0.36	-0.14			8.7
P	O	79086	SPR	0.37	0.46	0.46	-0.35			6.1
P	L	67546	SR	0.42	0.27	-0.04	-0.15	-0.13	0.27	0.3
P	O	132832	SR	0.23	0.10	0.10	0.00	-0.03	-0.06	0.4
P	O	133413	SR	0.46	0.19	-0.06	-0.11	0.19	-0.06	0.3
P	L	133415	SR	0.13	0.08	0.08	-0.07	0.11	-0.09	0.5
P	L	79135	SR	0.14	0.10	-0.05	0.10	-0.16	0.06	0.4
P	L	79151	SR	0.53	0.44	-0.23	-0.13	-0.22	0.44	0.5
P	O	43187	SPR	0.11	0.41	0.41	-0.28			5.2
P	O	67411	SPR	0.10	0.38	0.38	-0.21			10.9
P	O	79100	SR	0.35	0.26	-0.09	-0.13	-0.09	0.26	0.6
P	O	106643	SR	0.47	0.32	-0.26	0.32	-0.07	-0.02	1.1
P	O	67478	SR	0.63	0.34	-0.18	0.34	-0.19	-0.12	0.6
P	L	223433	SR	0.61	0.38	-0.19	-0.18	0.38	-0.17	0.7
P	O	106562	SR	0.54	0.33	-0.08	0.33	-0.18	-0.17	0.7
P	O	56442	SR	0.36	0.18	0.18	-0.08	-0.11	0.00	0.8
P	L	211066	SR	0.49	0.36	-0.10	-0.17	-0.19	0.36	0.7
P	L	215930	SPR	0.11	0.39	0.39	-0.19			9.9
P	O	51497	SR	0.50	0.38	0.38	-0.17	-0.22	-0.13	0.7
P	L	67445	SR	0.82	0.38	-0.15	0.38	-0.20	-0.23	0.5

Table 1.A29 Item Statistics, Operational Items: MDHSA Algebra—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	54904	SR	0.67	0.36	-0.19	-0.15	0.36	-0.18	0.5
P	L	50370	SR	0.27	0.09	-0.15	0.09	-0.02	0.06	0.6
P	O	56766	SR	0.31	0.24	-0.07	-0.14	0.24	-0.04	1.0
P	L	51442	SPR	0.32	0.44	0.44	-0.35			4.5
P	O	67461	SPR	0.66	0.45	0.45	-0.39			4.5
P	L	54587	SR	0.31	0.10	0.01	0.03	-0.14	0.10	0.6
P	L	43160	SR	0.52	0.38	0.38	-0.16	-0.19	-0.14	0.7
P	L	56774	SR	0.48	0.33	-0.13	-0.16	0.33	-0.13	0.7
P	L	54907	SR	0.25	0.32	-0.11	-0.13	-0.09	0.32	0.9
P	O	54773	SR	0.43	0.21	-0.13	-0.04	0.21	-0.07	0.9
Mean				0.39	0.31	0.03	-0.08	0.01	0.01	1.7
SD				0.18	0.11	0.24	0.20	0.21	0.20	2.5

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A30 Item Statistics, Operational Items: MDHSA Algebra—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	54880	SR	0.53	0.31	-0.24	-0.10	-0.13	0.31	0.0
Q	L	54730	SR	0.54	0.22	-0.12	-0.18	0.22	-0.08	0.0
Q	L	56768	SR	0.31	0.37	-0.18	-0.15	0.37	-0.07	0.2
Q	O	56828	SR	0.68	0.35	-0.18	0.35	-0.25	-0.09	0.1
Q	L	56557	SR	0.32	0.19	0.19	-0.10	-0.06	-0.05	0.0
Q	L	106626	SR	0.43	0.30	-0.11	-0.11	0.30	-0.18	0.4
Q	L	255081	SPR	0.17	0.38	0.38	-0.24			5.2
Q	O	79039	SPR	0.22	0.33	0.33	-0.18			12.6
Q	L	52337	SR	0.43	0.23	-0.06	0.23	-0.12	-0.16	0.9
Q	O	106579	SR	0.39	0.35	-0.14	-0.26	0.35	0.00	0.6
Q	O	51358	SR	0.27	0.35	-0.08	-0.05	-0.21	0.35	1.0
Q	L	51553	SR	0.51	0.34	-0.19	-0.14	0.34	-0.13	0.4
Q	L	136685	SPR	0.25	0.49	0.49	-0.37			5.4
Q	O	51425	SR	0.45	0.32	0.32	-0.04	-0.22	-0.16	0.9
Q	L	54858	SR	0.37	0.36	-0.14	-0.19	0.36	-0.06	1.4
Q	O	106585	SR	0.11	0.22	-0.17	0.22	-0.05	0.03	0.7
Q	L	56577	SR	0.37	0.39	-0.14	-0.16	-0.15	0.39	1.2
Q	L	79091	SR	0.52	0.37	0.37	-0.22	-0.19	-0.09	1.3
Q	L	56603	SR	0.63	0.40	-0.12	0.40	-0.28	-0.17	0.4
Q	L	211005	SR	0.75	0.41	-0.18	-0.30	0.41	-0.09	0.4
Q	O	51400	SR	0.68	0.36	-0.12	-0.26	0.36	-0.16	0.3
Q	L	79147	SR	0.19	0.22	-0.03	-0.11	-0.06	0.22	0.8

Table 1.A30 Item Statistics, Operational Items: MDHSA Algebra—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	O	54859	SR	0.45	0.42	-0.26	-0.15	0.42	-0.11	1.0
Q	L	255079	SPR	0.04	0.36	0.36	-0.14			8.7
Q	O	133391	SPR	0.48	0.54	0.54	-0.45			5.2
Q	L	67546	SR	0.42	0.27	-0.04	-0.15	-0.13	0.27	0.3
Q	O	56815	SR	0.28	0.10	-0.06	-0.04	0.10	0.01	0.9
Q	O	79041	SR	0.14	0.16	-0.18	-0.11	0.05	0.16	0.3
Q	L	133415	SR	0.13	0.08	0.08	-0.07	0.11	-0.09	0.5
Q	L	79135	SR	0.14	0.10	-0.05	0.10	-0.16	0.06	0.4
Q	L	79151	SR	0.53	0.44	-0.23	-0.13	-0.22	0.44	0.5
Q	O	215917	SPR	0.34	0.43	0.43	-0.33			5.6
Q	O	106624	SPR	0.13	0.42	0.42	-0.20			7.0
Q	O	54822	SR	0.34	0.27	0.27	-0.15	-0.06	-0.10	0.7
Q	O	135107	SR	0.19	0.10	-0.22	0.10	-0.17	0.23	1.0
Q	O	67465	SR	0.52	0.34	-0.18	-0.19	0.34	-0.07	0.4
Q	L	223433	SR	0.61	0.38	-0.19	-0.18	0.38	-0.17	0.7
Q	O	56760	SR	0.44	0.37	-0.14	0.37	-0.17	-0.16	0.4
Q	O	67434	SR	0.53	0.40	-0.16	-0.21	0.40	-0.18	0.4
Q	L	211066	SR	0.49	0.36	-0.10	-0.17	-0.19	0.36	0.7
Q	L	215930	SPR	0.11	0.39	0.39	-0.19			9.9
Q	O	51494	SR	0.41	0.23	0.04	0.23	-0.24	-0.07	0.6
Q	L	67445	SR	0.82	0.38	-0.15	0.38	-0.20	-0.23	0.5
Q	L	54904	SR	0.67	0.36	-0.19	-0.15	0.36	-0.18	0.5
Q	L	50370	SR	0.27	0.09	-0.15	0.09	-0.02	0.06	0.6
Q	O	56693	SR	0.34	0.26	-0.13	-0.10	0.26	-0.05	1.0
Q	L	51442	SPR	0.32	0.44	0.44	-0.35			4.5
Q	O	56568	SPR	0.31	0.46	0.46	-0.34			6.9
Q	L	54587	SR	0.31	0.10	0.01	0.03	-0.14	0.10	0.6
Q	L	43160	SR	0.52	0.38	0.38	-0.16	-0.19	-0.14	0.7
Q	L	56774	SR	0.48	0.33	-0.13	-0.16	0.33	-0.13	0.7
Q	L	54907	SR	0.25	0.32	-0.11	-0.13	-0.09	0.32	0.9
Q	O	56800	SR	0.41	0.38	0.38	-0.17	-0.15	-0.15	1.0
Mean				0.39	0.32	0.03	-0.10	0.04	0.00	1.8
SD				0.18	0.11	0.25	0.20	0.24	0.19	2.8

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A31 Item Statistics, Operational Items: MDHSA Biology—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	57055	SR	0.42	0.23	-0.11	0.23	-0.12	-0.05	0.1
P	O	223418	SR	0.34	0.13	0.03	0.13	-0.12	-0.08	0.0
P	L	52527	SR	0.36	0.25	-0.09	-0.12	0.25	-0.08	0.2
P	L	52526	SR	0.77	0.22	-0.07	-0.14	0.22	-0.15	0.0
P	O	68271	SR	0.39	0.20	-0.08	-0.06	-0.11	0.20	0.0
P	L	137253	SR	0.45	0.28	-0.10	-0.15	-0.09	0.28	0.4
P	L	137252	SR	0.48	0.28	0.28	-0.17	-0.10	-0.08	0.1
P	L	52673	SR	0.33	0.26	-0.16	0.26	-0.04	-0.13	0.1
P	O	52681	SR	0.31	0.26	-0.08	-0.10	0.26	-0.10	0.2
P	L	67650	SR	0.24	0.24	-0.06	0.24	-0.06	-0.10	0.6
P	L	68266	SR	0.42	0.20	-0.09	-0.03	-0.13	0.20	0.4
P	L	215956	SR	0.32	0.12	-0.11	0.06	0.12	-0.11	0.3
P	L	215943	SR	0.37	0.31	-0.03	0.31	-0.13	-0.20	0.6
P	O	108581	SR	0.20	0.12	0.02	-0.05	-0.08	0.12	0.5
P	O	56995	SR	0.24	0.10	0.00	-0.09	0.10	0.01	0.6
P	L	55195	SR	0.11	0.16	0.01	-0.08	-0.03	0.16	0.3
P	L	55196	SR	0.34	0.27	0.27	-0.17	-0.14	-0.04	0.3
P	L	68223	SR	0.52	0.30	0.30	-0.14	-0.16	-0.09	0.3
P	O	79463	SR	0.13	0.10	-0.02	0.01	-0.05	0.10	0.5
P	O	55004	SR	0.43	0.32	-0.16	0.32	-0.14	-0.07	0.6
P	L	68235	SR	0.30	0.18	-0.03	0.18	-0.07	-0.08	0.5
P	O	55064	SR	0.38	0.22	-0.13	-0.16	0.22	0.03	0.5
P	O	55062	SR	0.41	0.32	-0.14	-0.14	-0.09	0.32	0.8
P	O	108552	SR	0.22	0.26	0.26	-0.06	-0.11	-0.04	1.3
P	O	52481	SR	0.30	0.23	-0.12	-0.02	0.23	-0.09	0.8
P	O	52741	SR	0.27	0.16	-0.08	0.16	-0.07	0.00	0.6
P	L	79305	SR	0.24	0.17	0.17	-0.09	-0.01	-0.06	0.4
P	L	79304	SR	0.37	0.22	0.22	-0.12	-0.10	-0.04	0.3
P	L	79319	SR	0.27	0.05	-0.08	0.03	0.05	0.02	0.7
P	L	133021	SR	0.41	0.33	-0.09	-0.18	-0.11	0.33	0.5
P	L	133024	SR	0.28	0.22	-0.12	-0.08	-0.03	0.22	0.4
P	O	55265	SR	0.25	0.07	0.07	0.00	-0.09	0.04	0.3
P	L	223438	SR	0.36	0.24	0.24	-0.06	-0.17	-0.06	0.7
P	L	223441	SR	0.14	0.20	0.00	-0.11	-0.03	0.20	0.4
P	O	55152	SR	0.45	0.33	-0.06	-0.21	0.33	-0.12	0.3
P	O	56978	SR	0.32	0.22	0.22	-0.16	0.01	-0.09	0.5
P	L	65132	SR	0.11	0.02	-0.01	-0.02	0.03	0.02	0.4
P	O	192092	SR	0.34	0.18	0.08	-0.22	0.18	-0.08	0.5
P	O	133443	SR	0.68	0.24	-0.12	-0.16	0.24	-0.04	0.3
P	L	65151	SR	0.23	0.15	0.08	-0.06	-0.16	0.15	0.4
P	L	136107	SR	0.49	0.17	-0.12	0.17	-0.06	-0.04	0.4
P	L	136108	SR	0.21	0.12	0.12	0.06	-0.06	-0.13	0.3
P	L	67672	SR	0.49	0.39	0.39	-0.18	-0.16	-0.15	0.5
P	O	214530	SR	0.18	0.05	0.05	-0.02	0.08	-0.12	0.3

Table 1.A31 Item Statistics, Operational Items: MDHSA Biology—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	108486	SR	0.51	0.24	0.24	-0.13	-0.13	-0.07	0.4
P	L	68141	SR	0.15	0.15	-0.05	-0.06	0.15	0.01	0.4
P	L	68142	SR	0.36	0.33	0.33	-0.16	-0.08	-0.12	0.4
P	L	79509	SR	0.36	0.18	0.03	-0.12	0.18	-0.11	0.4
P	L	67677	SR	0.45	0.34	-0.08	-0.17	-0.15	0.34	0.5
P	L	67678	SR	0.29	0.23	-0.11	0.02	-0.14	0.23	0.8
P	O	67584	SR	0.16	0.27	-0.07	-0.18	0.27	0.08	0.8
P	O	256479	SR	0.58	0.32	-0.13	0.32	-0.17	-0.14	0.5
P	O	256481	SR	0.40	0.35	-0.07	-0.14	-0.18	0.35	0.6
P	L	65069	SR	0.28	0.17	-0.05	-0.13	0.17	0.03	0.7
P	L	57098	SR	0.39	0.18	-0.12	0.18	-0.07	-0.01	0.7
P	L	60564	SR	0.57	0.22	-0.07	0.22	-0.10	-0.12	0.5
P	L	60526	SR	0.23	0.24	-0.09	-0.10	0.24	-0.01	0.6
P	L	53511	SR	0.30	0.19	-0.06	0.19	-0.08	-0.04	0.6
P	L	52649	SR	0.39	0.29	-0.16	-0.21	-0.01	0.29	0.6
P	L	52781	SR	0.54	0.27	-0.12	0.27	-0.09	-0.14	0.6
P	L	68149	SR	0.23	0.11	0.06	-0.07	0.11	-0.08	0.6
P	O	67569	SR	0.37	0.17	-0.07	0.17	-0.09	-0.01	0.6
P	O	67572	SR	0.29	0.05	-0.11	0.05	0.02	0.07	0.6
P	L	67592	SR	0.37	0.14	-0.12	0.14	-0.13	0.09	0.6
P	L	67617	SR	0.56	0.33	-0.15	-0.15	0.33	-0.14	0.6
P	L	67618	SR	0.31	0.28	0.28	-0.15	-0.13	0.00	0.6
P	O	65049	SR	0.33	0.20	-0.07	-0.10	0.20	-0.01	1.1
P	L	108539	SR	0.30	0.14	-0.06	0.04	0.14	-0.11	0.8
P	O	214531	SR	0.17	0.34	0.01	-0.18	-0.09	0.34	0.8
P	O	65072	SR	0.32	0.17	0.02	0.17	-0.07	-0.11	0.8
P	L	108511	SR	0.33	0.26	-0.15	-0.10	0.26	-0.01	0.8
P	O	53469	SR	0.72	0.24	-0.08	0.24	-0.05	-0.16	1.0
P	O	52586	SR	0.44	0.17	0.17	-0.10	0.00	-0.07	0.8
P	L	52591	SR	0.53	0.28	-0.14	0.28	-0.12	-0.09	0.7
P	L	57088	SR	0.33	0.28	-0.14	0.28	-0.11	-0.05	0.7
P	O	68106	SR	0.48	0.23	0.23	-0.08	-0.11	-0.07	0.8
Mean				0.35	0.22	0.00	-0.01	-0.01	0.00	0.5
SD				0.14	0.08	0.14	0.16	0.14	0.14	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A32 Item Statistics, Operational Items: MDHSA Biology—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	57055	SR	0.42	0.23	-0.11	0.23	-0.12	-0.05	0.1
Q	O	55147	SR	0.24	0.26	-0.13	0.03	0.26	-0.15	0.0
Q	L	52527	SR	0.36	0.25	-0.09	-0.12	0.25	-0.08	0.2
Q	L	52526	SR	0.77	0.22	-0.07	-0.14	0.22	-0.15	0.0
Q	O	55118	SR	0.21	0.14	0.00	-0.03	-0.09	0.14	0.3
Q	L	137253	SR	0.45	0.28	-0.10	-0.15	-0.09	0.28	0.4
Q	L	137252	SR	0.48	0.28	0.28	-0.17	-0.10	-0.08	0.1
Q	L	52673	SR	0.33	0.26	-0.16	0.26	-0.04	-0.13	0.1
Q	O	214537	SR	0.36	0.21	-0.17	0.21	-0.11	0.01	0.3
Q	L	67650	SR	0.24	0.24	-0.06	0.24	-0.06	-0.10	0.6
Q	L	68266	SR	0.42	0.20	-0.09	-0.03	-0.13	0.20	0.4
Q	L	215956	SR	0.32	0.12	-0.11	0.06	0.12	-0.11	0.3
Q	L	215943	SR	0.37	0.31	-0.03	0.31	-0.13	-0.20	0.6
Q	O	251258	SR	0.17	0.20	-0.15	0.08	-0.09	0.20	0.3
Q	O	79430	SR	0.60	0.34	0.34	-0.16	-0.17	-0.13	0.3
Q	L	55195	SR	0.11	0.16	0.01	-0.08	-0.03	0.16	0.3
Q	L	55196	SR	0.34	0.27	0.27	-0.17	-0.14	-0.04	0.3
Q	L	68223	SR	0.52	0.30	0.30	-0.14	-0.16	-0.09	0.3
Q	O	108554	SR	0.18	0.23	0.23	-0.07	-0.02	-0.11	0.3
Q	O	68125	SR	0.44	0.37	-0.17	-0.11	-0.17	0.37	0.3
Q	L	68235	SR	0.30	0.18	-0.03	0.18	-0.07	-0.08	0.5
Q	O	218482	SR	0.25	0.23	-0.04	-0.16	-0.01	0.23	0.3
Q	O	218483	SR	0.41	0.33	-0.11	0.33	-0.19	-0.09	0.3
Q	O	79423	SR	0.11	0.11	-0.17	0.04	0.02	0.11	0.5
Q	O	52599	SR	0.42	0.30	-0.11	0.30	-0.15	-0.08	0.5
Q	O	108645	SR	0.27	0.35	-0.20	0.35	-0.16	-0.01	0.3
Q	L	79305	SR	0.24	0.17	0.17	-0.09	-0.01	-0.06	0.4
Q	L	79304	SR	0.37	0.22	0.22	-0.12	-0.10	-0.04	0.3
Q	L	79319	SR	0.27	0.05	-0.08	0.03	0.05	0.02	0.7
Q	L	133021	SR	0.41	0.33	-0.09	-0.18	-0.11	0.33	0.5
Q	L	133024	SR	0.28	0.22	-0.12	-0.08	-0.03	0.22	0.4
Q	O	54965	SR	0.44	0.14	-0.13	0.14	-0.09	0.04	0.3
Q	L	223438	SR	0.36	0.24	0.24	-0.06	-0.17	-0.06	0.7
Q	L	223441	SR	0.14	0.20	0.00	-0.11	-0.03	0.20	0.4
Q	O	52413	SR	0.55	0.25	0.25	-0.14	-0.06	-0.14	0.5
Q	O	52434	SR	0.46	0.40	0.40	-0.13	-0.15	-0.22	0.5
Q	L	65132	SR	0.11	0.02	-0.01	-0.02	0.03	0.02	0.4
Q	O	215960	SR	0.50	0.22	0.22	-0.10	-0.15	-0.03	0.5
Q	O	215965	SR	0.34	0.37	-0.19	-0.15	-0.08	0.37	0.3
Q	L	65151	SR	0.23	0.15	0.08	-0.06	-0.16	0.15	0.4
Q	L	136107	SR	0.49	0.17	-0.12	0.17	-0.06	-0.04	0.4
Q	L	136108	SR	0.21	0.12	0.12	0.06	-0.06	-0.13	0.3
Q	L	67672	SR	0.49	0.39	0.39	-0.18	-0.16	-0.15	0.5
Q	O	68131	SR	0.29	0.18	0.06	-0.11	0.18	-0.15	0.5

Table 1.A32 Item Statistics, Operational Items: MDHSA Biology—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	108486	SR	0.51	0.24	0.24	-0.13	-0.13	-0.07	0.4
Q	L	68141	SR	0.15	0.15	-0.05	-0.06	0.15	0.01	0.4
Q	L	68142	SR	0.36	0.33	0.33	-0.16	-0.08	-0.12	0.4
Q	L	79509	SR	0.36	0.18	0.03	-0.12	0.18	-0.11	0.4
Q	L	67677	SR	0.45	0.34	-0.08	-0.17	-0.15	0.34	0.5
Q	L	67678	SR	0.29	0.23	-0.11	0.02	-0.14	0.23	0.8
Q	O	65055	SR	0.38	0.35	-0.13	-0.18	0.35	-0.09	0.3
Q	O	256543	SR	0.52	0.41	-0.23	0.41	-0.21	-0.08	0.3
Q	O	256545	SR	0.43	0.24	-0.11	-0.11	0.24	-0.06	0.5
Q	L	65069	SR	0.28	0.17	-0.05	-0.13	0.17	0.03	0.7
Q	L	57098	SR	0.39	0.18	-0.12	0.18	-0.07	-0.01	0.7
Q	L	60564	SR	0.57	0.22	-0.07	0.22	-0.10	-0.12	0.5
Q	L	60526	SR	0.23	0.24	-0.09	-0.10	0.24	-0.01	0.6
Q	O	52771	SR	0.33	0.30	-0.25	0.05	0.30	-0.12	0.3
Q	L	52649	SR	0.39	0.29	-0.16	-0.21	-0.01	0.29	0.6
Q	L	52781	SR	0.54	0.27	-0.12	0.27	-0.09	-0.14	0.6
Q	L	68149	SR	0.23	0.11	0.06	-0.07	0.11	-0.08	0.6
Q	O	68258	SR	0.69	0.35	0.35	-0.15	-0.21	-0.16	0.3
Q	O	68259	SR	0.52	0.21	-0.10	-0.03	-0.15	0.21	0.5
Q	L	67592	SR	0.37	0.14	-0.12	0.14	-0.13	0.09	0.6
Q	L	67617	SR	0.56	0.33	-0.15	-0.15	0.33	-0.14	0.6
Q	L	67618	SR	0.31	0.28	0.28	-0.15	-0.13	0.00	0.6
Q	O	108629	SR	0.49	0.26	-0.11	-0.06	0.26	-0.16	0.5
Q	L	108539	SR	0.30	0.14	-0.06	0.04	0.14	-0.11	0.8
Q	O	60535	SR	0.24	0.26	0.04	0.26	-0.15	-0.13	0.3
Q	O	214523	SR	0.33	0.29	-0.03	0.29	-0.07	-0.22	0.3
Q	L	108511	SR	0.33	0.26	-0.15	-0.10	0.26	-0.01	0.8
Q	O	223404	SR	0.70	0.20	-0.05	-0.14	0.20	-0.10	0.3
Q	O	108548	SR	0.31	0.14	0.05	-0.11	0.14	-0.14	0.3
Q	L	52591	SR	0.53	0.28	-0.14	0.28	-0.12	-0.09	0.7
Q	L	57088	SR	0.33	0.28	-0.14	0.28	-0.11	-0.05	0.7
Q	O	57188	SR	0.43	0.37	0.37	-0.16	-0.14	-0.15	0.3
Mean				0.37	0.24	0.00	0.00	-0.02	-0.01	0.4
SD				0.14	0.08	0.17	0.17	0.15	0.15	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A33 Item Statistics, Operational Items: MDHSA English–Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	130036	SR	0.27	0.05	0.01	0.05	-0.02	-0.04	0.0
P	L	130033	SR	0.66	0.20	0.20	-0.05	-0.16	-0.10	0.0
P	L	130034	SR	0.26	0.21	0.21	-0.18	-0.04	-0.03	0.1
P	L	130037	SR	0.60	0.32	-0.06	-0.23	-0.15	0.32	0.1
P	L	130035	SR	0.51	0.31	-0.17	-0.19	-0.16	0.31	0.0
P	L	256425	SR	0.48	0.35	-0.14	0.35	-0.19	-0.17	0.0
P	L	256426	SR	0.62	0.47	-0.20	-0.23	-0.25	0.47	0.1
P	L	256427	SR	0.57	0.19	-0.22	0.00	0.19	-0.16	0.1
P	L	139348	SR	0.38	0.41	-0.21	-0.25	-0.11	0.41	0.2
P	L	139350	SR	0.30	0.20	0.03	-0.12	0.20	-0.20	0.3
P	L	139349	SR	0.73	0.46	-0.25	0.46	-0.29	-0.15	0.1
P	L	139351	SR	0.40	0.30	0.30	-0.13	-0.11	-0.13	0.1
P	L	139341	SR	0.42	0.23	0.23	-0.06	-0.22	-0.02	0.2
P	L	139343	SR	0.61	0.27	-0.16	0.27	-0.16	-0.07	0.1
P	L	189037	SR	0.44	0.29	0.02	0.29	-0.26	-0.15	0.6
P	L	139344	SR	0.59	0.37	-0.20	-0.18	0.37	-0.17	0.4
P	L	256296	SR	0.43	0.30	0.30	-0.22	-0.14	-0.05	0.4
P	L	251158	SR	0.58	0.36	-0.20	0.36	-0.17	-0.13	0.7
P	L	256302	SR	0.43	0.26	-0.16	-0.07	-0.12	0.26	0.6
P	O	108857	SR	0.39	0.22	-0.17	-0.18	0.22	0.01	0.2
P	O	108862	SR	0.38	0.34	0.34	-0.17	-0.17	-0.06	0.0
P	O	108861	SR	0.33	0.19	-0.07	-0.10	-0.04	0.19	0.1
P	O	108864	SR	0.56	0.44	-0.22	0.44	-0.18	-0.23	0.2
P	O	108863	SR	0.38	0.26	0.26	-0.11	-0.09	-0.12	0.4
P	O	108868	SR	0.50	0.26	-0.06	-0.17	0.26	-0.14	0.0
P	L	130165	SR	0.56	0.39	-0.19	-0.24	0.39	-0.12	0.3
P	L	130166	SR	0.52	0.42	0.42	-0.11	-0.27	-0.20	0.1
P	L	130167	SR	0.58	0.49	-0.22	-0.25	-0.22	0.49	0.3
P	L	130274	SR	0.61	0.44	-0.23	0.44	-0.25	-0.15	0.1
P	O	108739	SR	0.60	0.43	-0.18	-0.21	0.43	-0.22	0.2
P	O	108740	SR	0.23	0.12	0.12	0.05	-0.21	-0.08	0.5
P	O	108738	SR	0.37	0.27	-0.13	0.27	-0.13	-0.06	0.1
P	O	130066	SR	0.60	0.28	-0.15	0.28	-0.23	-0.07	0.2
P	O	130067	SR	0.28	0.09	0.08	-0.22	0.09	0.00	0.2
P	O	130069	SR	0.30	0.21	0.03	-0.14	-0.14	0.21	0.2
P	O	130074	SR	0.48	0.31	-0.18	0.31	-0.25	0.00	0.4
P	O	130199	SR	0.56	0.38	0.38	-0.19	-0.24	-0.10	0.2
P	O	256286	SR	0.57	0.32	-0.12	-0.22	0.32	-0.12	0.2
P	L	130213	SR	0.55	0.40	0.40	-0.25	-0.24	-0.08	0.3
P	L	96103	SR	0.43	0.40	-0.19	-0.09	-0.22	0.40	0.2
P	L	95664	SR	0.58	0.47	0.47	-0.24	-0.20	-0.23	0.2
P	L	130955	SR	0.40	0.25	0.25	-0.05	-0.19	-0.12	0.4
P	L	132497	SR	0.53	0.31	-0.15	-0.10	0.31	-0.23	0.3
P	L	130956	SR	0.22	0.10	0.10	-0.13	-0.14	0.16	0.4

Table 1.A33 Item Statistics, Operational Items: MDHSA English–Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	130971	SR	0.43	0.41	-0.11	-0.25	-0.16	0.41	0.7
P	L	130972	SR	0.48	0.40	-0.24	-0.14	-0.15	0.40	0.5
P	L	130973	SR	0.22	0.10	-0.15	0.10	0.16	-0.19	0.4
P	L	132496	SR	0.43	0.28	0.28	-0.11	-0.18	-0.08	0.6
P	L	130200	SR	0.43	0.24	0.24	-0.02	-0.22	-0.12	0.4
P	L	130974	SR	0.63	0.49	0.49	-0.27	-0.26	-0.18	0.5
P	L	130975	SR	0.38	0.20	-0.07	0.20	-0.12	-0.03	0.6
P	O	130106	SR	0.39	0.29	-0.23	-0.02	0.29	-0.12	0.4
P	O	130107	SR	0.36	0.17	-0.19	0.17	-0.19	0.07	0.4
P	O	130077	SR	0.37	0.24	-0.02	-0.23	0.24	-0.04	1.0
P	O	130078	SR	0.39	0.32	-0.19	-0.05	-0.17	0.32	0.6
P	O	130207	SR	0.52	0.40	0.40	-0.25	-0.12	-0.17	0.7
P	O	130079	SR	0.36	0.35	-0.21	-0.04	-0.17	0.35	0.9
P	O	130208	SR	0.44	0.34	-0.16	-0.24	0.34	-0.03	1.0
P	O	130209	SR	0.39	0.45	-0.14	-0.16	-0.25	0.45	0.7
P	O	130210	SR	0.45	0.31	-0.14	-0.15	0.31	-0.09	0.9
Mean				0.46	0.31	-0.01	-0.05	-0.06	0.00	0.3
SD				0.12	0.11	0.22	0.21	0.21	0.21	0.3

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A34 Item Statistics, Operational Items: MDHSA English–Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	130036	SR	0.27	0.05	0.01	0.05	-0.02	-0.04	0.0
Q	L	130033	SR	0.66	0.20	0.20	-0.05	-0.16	-0.10	0.0
Q	L	130034	SR	0.26	0.21	0.21	-0.18	-0.04	-0.03	0.1
Q	L	130037	SR	0.60	0.32	-0.06	-0.23	-0.15	0.32	0.1
Q	L	130035	SR	0.51	0.31	-0.17	-0.19	-0.16	0.31	0.0
Q	L	256425	SR	0.48	0.35	-0.14	0.35	-0.19	-0.17	0.0
Q	L	256426	SR	0.62	0.47	-0.20	-0.23	-0.25	0.47	0.1
Q	L	256427	SR	0.57	0.19	-0.22	0.00	0.19	-0.16	0.1
Q	L	139348	SR	0.38	0.41	-0.21	-0.25	-0.11	0.41	0.2
Q	L	139350	SR	0.30	0.20	0.03	-0.12	0.20	-0.20	0.3
Q	L	139349	SR	0.73	0.46	-0.25	0.46	-0.29	-0.15	0.1
Q	L	139351	SR	0.40	0.30	0.30	-0.13	-0.11	-0.13	0.1
Q	L	139341	SR	0.42	0.23	0.23	-0.06	-0.22	-0.02	0.2
Q	L	139343	SR	0.61	0.27	-0.16	0.27	-0.16	-0.07	0.1
Q	L	189037	SR	0.44	0.29	0.02	0.29	-0.26	-0.15	0.6
Q	L	139344	SR	0.59	0.37	-0.20	-0.18	0.37	-0.17	0.4

Table 1.A34 Item Statistics, Operational Items: MDHSA English–Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	256296	SR	0.43	0.30	0.30	-0.22	-0.14	-0.05	0.4
Q	L	251158	SR	0.58	0.36	-0.20	0.36	-0.17	-0.13	0.7
Q	L	256302	SR	0.43	0.26	-0.16	-0.07	-0.12	0.26	0.6
Q	O	108700	SR	0.37	0.22	-0.10	-0.14	0.22	0.00	0.5
Q	O	108703	SR	0.42	0.23	-0.16	0.00	0.23	-0.14	0.2
Q	O	108702	SR	0.27	0.11	0.13	0.11	-0.17	-0.14	0.2
Q	O	108704	SR	0.30	0.18	0.18	-0.10	-0.30	0.12	0.4
Q	O	108701	SR	0.51	0.22	-0.14	-0.19	0.22	0.02	0.2
Q	O	130959	SR	0.48	0.28	-0.08	0.28	-0.29	-0.03	0.2
Q	L	130165	SR	0.56	0.39	-0.19	-0.24	0.39	-0.12	0.3
Q	L	130166	SR	0.52	0.42	0.42	-0.11	-0.27	-0.20	0.1
Q	L	130167	SR	0.58	0.49	-0.22	-0.25	-0.22	0.49	0.3
Q	L	130274	SR	0.61	0.44	-0.23	0.44	-0.25	-0.15	0.1
Q	O	95640	SR	0.24	0.15	0.15	-0.10	-0.07	0.02	0.2
Q	O	95641	SR	0.48	0.37	-0.14	-0.19	0.37	-0.14	0.7
Q	O	95642	SR	0.28	0.12	-0.07	0.09	0.12	-0.17	0.4
Q	O	130269	SR	0.45	0.34	-0.23	-0.09	0.34	-0.15	0.2
Q	O	130272	SR	0.20	0.13	-0.02	-0.06	-0.04	0.13	0.2
Q	O	130273	SR	0.45	0.39	-0.13	-0.18	0.39	-0.17	0.5
Q	O	130279	SR	0.47	0.29	-0.21	-0.25	0.29	0.06	0.2
Q	O	130169	SR	0.55	0.35	-0.18	0.35	-0.15	-0.18	0.2
Q	O	256282	SR	0.44	0.34	0.34	-0.08	-0.18	-0.21	0.2
Q	L	130213	SR	0.55	0.40	0.40	-0.25	-0.24	-0.08	0.3
Q	L	96103	SR	0.43	0.40	-0.19	-0.09	-0.22	0.40	0.2
Q	L	95664	SR	0.58	0.47	0.47	-0.24	-0.20	-0.23	0.2
Q	L	130955	SR	0.40	0.25	0.25	-0.05	-0.19	-0.12	0.4
Q	L	132497	SR	0.53	0.31	-0.15	-0.10	0.31	-0.23	0.3
Q	L	130956	SR	0.22	0.10	0.10	-0.13	-0.14	0.16	0.4
Q	L	130971	SR	0.43	0.41	-0.11	-0.25	-0.16	0.41	0.7
Q	L	130972	SR	0.48	0.40	-0.24	-0.14	-0.15	0.40	0.5
Q	L	130973	SR	0.22	0.10	-0.15	0.10	0.16	-0.19	0.4
Q	L	132496	SR	0.43	0.28	0.28	-0.11	-0.18	-0.08	0.6
Q	L	130200	SR	0.43	0.24	0.24	-0.02	-0.22	-0.12	0.4
Q	L	130974	SR	0.63	0.49	0.49	-0.27	-0.26	-0.18	0.5
Q	L	130975	SR	0.38	0.20	-0.07	0.20	-0.12	-0.03	0.6
Q	O	96335	SR	0.34	0.35	-0.20	-0.05	-0.14	0.35	0.5
Q	O	96336	SR	0.56	0.32	-0.18	0.32	-0.11	-0.16	0.4
Q	O	175720	SR	0.47	0.31	-0.18	-0.11	0.31	-0.12	0.7
Q	O	175721	SR	0.51	0.32	-0.22	0.32	-0.13	-0.10	0.7
Q	O	175722	SR	0.67	0.39	0.39	-0.16	-0.26	-0.18	0.4
Q	O	175723	SR	0.48	0.30	0.30	-0.17	-0.12	-0.11	0.4
Q	O	175724	SR	0.40	0.42	-0.27	-0.16	-0.10	0.42	0.7
Q	O	175725	SR	0.33	0.31	-0.25	0.31	-0.08	-0.03	0.7
Q	O	175726	SR	0.59	0.42	-0.24	0.42	-0.19	-0.15	0.4

Table 1.A34 Item Statistics, Operational Items: MDHSA English—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
			Mean	0.46	0.30	-0.02	-0.02	-0.06	-0.01	0.3
			SD	0.12	0.11	0.22	0.21	0.21	0.21	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A35 Item Statistics, Operational Items: MDHSA Government—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	O	68674	SR	0.56	0.31	-0.11	-0.13	-0.20	0.31	0.2
P	L	68033	SR	0.59	0.27	-0.11	0.27	-0.18	-0.10	0.0
P	O	52191	SR	0.62	0.38	-0.19	-0.20	-0.17	0.38	0.0
P	L	256403	SR	0.70	0.26	-0.19	0.26	-0.09	-0.15	0.1
P	L	135581	SR	0.42	0.28	0.28	-0.14	-0.16	-0.05	0.2
P	L	79573	SR	0.24	0.39	-0.13	-0.11	0.39	-0.16	0.1
P	O	55632	SR	0.58	0.31	-0.13	-0.21	0.31	-0.15	0.2
P	L	108482	SR	0.48	0.16	0.16	-0.02	-0.07	-0.13	0.2
P	L	108371	SR	0.31	0.17	0.06	0.17	-0.17	-0.13	0.3
P	L	60431	SR	0.32	0.23	-0.16	-0.16	-0.01	0.23	0.0
P	O	51733	SR	0.53	0.35	0.35	-0.19	-0.13	-0.16	0.0
P	L	58423	SR	0.37	0.29	0.29	-0.08	-0.21	-0.08	0.0
P	O	108433	SR	0.34	0.22	-0.06	0.22	-0.16	-0.05	0.0
P	L	50943	SR	0.50	0.27	-0.08	0.27	-0.17	-0.14	0.1
P	L	79729	SR	0.39	0.36	-0.14	-0.12	-0.17	0.36	0.2
P	O	79713	SR	0.28	0.25	-0.02	0.25	-0.09	-0.15	0.3
P	O	256378	SR	0.58	0.38	-0.13	-0.25	-0.17	0.38	0.2
P	L	223252	SR	0.25	0.21	-0.04	-0.07	-0.10	0.21	0.2
P	O	60555	SR	0.38	0.19	-0.01	-0.16	0.19	-0.05	0.3
P	L	79587	SR	0.50	0.39	0.39	-0.13	-0.23	-0.16	0.1
P	O	79623	SR	0.42	0.03	-0.07	0.03	-0.03	0.07	0.3
P	O	256341	SR	0.50	0.26	-0.21	-0.08	0.26	-0.07	0.7
P	O	79748	SR	0.22	0.22	-0.09	0.22	-0.02	-0.10	0.7
P	O	65184	SR	0.42	0.30	-0.11	-0.23	0.30	-0.05	0.7
P	L	58204	SR	0.17	0.10	0.10	-0.10	0.02	0.02	0.6
P	L	68555	SR	0.57	0.35	0.35	-0.13	-0.18	-0.19	0.6
P	L	137320	SR	0.22	0.27	-0.08	-0.06	-0.11	0.27	0.7
P	L	68686	SR	0.34	0.22	-0.16	-0.26	0.22	0.11	0.6
P	L	223264	SR	0.70	0.36	-0.23	0.36	-0.21	-0.09	0.2
P	O	51094	SR	0.44	0.24	-0.02	-0.05	-0.21	0.24	0.2
P	L	79603	SR	0.25	0.25	-0.02	0.25	-0.13	-0.12	0.2
P	L	79592	SR	0.17	-0.08	0.00	-0.08	-0.19	0.17	0.2

Table 1.A35 Item Statistics, Operational Items: MDHSA Government—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	O	79648	SR	0.29	0.20	-0.01	-0.10	0.20	-0.11	0.5
P	O	68758	SR	0.46	0.44	-0.23	-0.18	-0.15	0.44	0.2
P	L	68759	SR	0.36	0.28	0.00	-0.12	-0.20	0.28	0.1
P	L	108451	SR	0.34	0.27	-0.11	-0.14	0.27	-0.05	0.2
P	O	137308	SR	0.34	0.17	0.05	0.17	-0.15	-0.17	0.2
P	O	68050	SR	0.28	0.30	-0.11	0.30	-0.07	-0.13	0.3
P	O	108394	SR	0.17	0.11	0.11	-0.21	0.15	-0.07	0.2
P	O	55505	SR	0.35	0.21	-0.03	-0.09	0.21	-0.10	0.7
P	L	50894	SR	0.61	0.36	-0.19	-0.14	0.36	-0.18	0.3
P	O	58223	SR	0.36	0.22	0.22	-0.06	-0.13	-0.05	0.3
P	L	50836	SR	0.48	0.49	0.49	-0.27	-0.23	-0.13	0.4
P	L	79753	SR	0.23	0.21	-0.03	-0.12	-0.05	0.21	0.4
P	L	51115	SR	0.42	0.37	-0.14	-0.19	-0.14	0.37	0.4
P	L	241963	SR	0.33	0.19	-0.21	-0.10	0.19	0.05	0.3
P	L	108422	SR	0.34	0.29	-0.11	0.29	-0.19	-0.02	0.3
P	L	68059	SR	0.23	0.26	0.26	-0.04	-0.12	-0.09	0.3
P	L	51764	SR	0.46	0.37	-0.24	0.37	-0.09	-0.19	0.4
P	L	79719	SR	0.37	0.17	0.17	-0.04	-0.16	-0.01	0.4
P	O	108435	SR	0.57	0.32	-0.20	-0.09	-0.17	0.32	0.7
P	O	65208	SR	0.39	0.20	-0.12	-0.09	0.20	-0.02	0.3
P	O	108440	SR	0.49	0.36	-0.08	-0.26	0.36	-0.13	0.5
P	L	79621	SR	0.43	0.38	-0.17	0.38	-0.19	-0.14	0.5
P	L	68529	SR	0.41	0.39	-0.12	-0.18	0.39	-0.18	0.9
P	O	65182	SR	0.54	0.34	-0.17	-0.18	-0.09	0.34	0.3
P	O	68068	SR	0.28	0.24	-0.07	-0.09	0.24	-0.10	0.3
P	L	79710	SR	0.42	0.26	-0.10	-0.13	0.26	-0.08	0.4
P	O	52211	SR	0.26	0.20	-0.03	0.20	-0.07	-0.09	0.5
P	L	68532	SR	0.48	0.34	0.34	-0.12	-0.21	-0.10	0.5
P	L	65205	SR	0.29	0.11	0.01	0.11	-0.01	-0.13	0.6
P	O	64798	SR	0.47	0.26	-0.09	-0.13	0.26	-0.09	0.7
P	L	256343	SR	0.53	0.29	0.29	-0.18	-0.07	-0.15	0.4
P	L	58343	SR	0.54	0.50	0.50	-0.22	-0.27	-0.17	0.7
P	L	58364	SR	0.35	0.19	-0.18	-0.15	0.19	0.09	0.6
P	L	214493	SR	0.21	0.09	-0.15	-0.09	0.09	0.09	0.5
P	O	64793	SR	0.44	0.27	0.27	-0.14	-0.15	-0.02	0.7
P	O	51748	SR	0.37	0.27	-0.19	0.27	-0.02	-0.13	0.5
P	O	64804	SR	0.47	0.28	-0.15	-0.17	0.28	-0.04	0.5
P	O	108421	SR	0.31	0.31	-0.09	0.31	-0.15	-0.08	0.5
P	L	214500	SR	0.39	0.34	-0.14	-0.07	-0.19	0.34	0.4
P	L	68790	SR	0.22	0.10	0.09	-0.07	0.10	-0.17	0.7
P	O	51196	SR	0.36	0.10	-0.07	0.10	-0.15	0.10	0.7
P	O	108348	SR	0.22	0.23	-0.12	-0.16	0.05	0.23	0.7
P	L	50998	SR	0.39	0.26	-0.12	0.26	-0.08	-0.10	0.6
P	L	256505	SR	0.17	0.04	0.17	0.04	-0.14	-0.09	0.4

Table 1.A35 Item Statistics, Operational Items: MDHSA Government—Summer Primary 1

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
P	L	79658	SR	0.28	0.21	-0.02	-0.07	0.21	-0.13	0.6
P	O	256348	SR	0.48	0.28	-0.13	0.28	-0.13	-0.12	0.5
P	L	50985	SR	0.53	0.36	0.36	-0.22	-0.13	-0.14	0.6
P	L	50910	SR	0.30	0.25	0.25	-0.01	-0.18	-0.08	0.7
P	L	214492	SR	0.25	0.17	-0.19	-0.09	0.17	0.10	0.7
P	O	50911	SR	0.24	0.22	0.22	-0.13	0.04	-0.11	0.5
Mean				0.39	0.26	-0.01	-0.03	-0.02	-0.01	0.4
SD				0.13	0.10	0.19	0.18	0.19	0.17	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.A36 Item Statistics, Operational Items: MDHSA Government—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	O	79686	SR	0.39	0.33	0.02	-0.21	0.33	-0.20	0.0
Q	L	68033	SR	0.59	0.27	-0.11	0.27	-0.18	-0.10	0.0
Q	O	79663	SR	0.32	0.31	0.00	0.31	-0.17	-0.21	0.0
Q	L	256403	SR	0.70	0.26	-0.19	0.26	-0.09	-0.15	0.1
Q	L	135581	SR	0.42	0.28	0.28	-0.14	-0.16	-0.05	0.2
Q	L	79573	SR	0.24	0.39	-0.13	-0.11	0.39	-0.16	0.1
Q	O	55632	SR	0.58	0.31	-0.13	-0.21	0.31	-0.15	0.2
Q	L	108482	SR	0.48	0.16	0.16	-0.02	-0.07	-0.13	0.2
Q	L	108371	SR	0.31	0.17	0.06	0.17	-0.17	-0.13	0.3
Q	L	60431	SR	0.32	0.23	-0.16	-0.16	-0.01	0.23	0.0
Q	O	58137	SR	0.40	0.39	-0.17	-0.15	-0.16	0.39	0.0
Q	L	58423	SR	0.37	0.29	0.29	-0.08	-0.21	-0.08	0.0
Q	O	52228	SR	0.56	0.25	-0.15	-0.10	0.25	-0.11	0.0
Q	L	50943	SR	0.50	0.27	-0.08	0.27	-0.17	-0.14	0.1
Q	L	79729	SR	0.39	0.36	-0.14	-0.12	-0.17	0.36	0.2
Q	O	256412	SR	0.45	0.29	-0.05	-0.18	-0.17	0.29	0.2
Q	O	68552	SR	0.38	0.31	0.31	-0.14	-0.12	-0.12	0.0
Q	L	223252	SR	0.25	0.21	-0.04	-0.07	-0.10	0.21	0.2
Q	O	68534	SR	0.49	0.31	-0.13	0.31	-0.18	-0.11	0.2
Q	L	79587	SR	0.50	0.39	0.39	-0.13	-0.23	-0.16	0.1
Q	O	68620	SR	0.48	0.29	-0.12	-0.17	0.29	-0.08	0.2
Q	O	68639	SR	0.39	0.38	0.38	-0.16	-0.13	-0.17	0.2
Q	O	137306	SR	0.46	0.30	-0.20	-0.28	0.30	0.06	0.2
Q	O	51154	SR	0.31	0.25	0.25	-0.17	-0.15	0.05	0.4
Q	L	58204	SR	0.17	0.10	0.10	-0.10	0.02	0.02	0.6
Q	L	68555	SR	0.57	0.35	0.35	-0.13	-0.18	-0.19	0.6
Q	L	137320	SR	0.22	0.27	-0.08	-0.06	-0.11	0.27	0.7

Table 1.A36 Item Statistics, Operational Items: MDHSA Government—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	68686	SR	0.34	0.22	-0.16	-0.26	0.22	0.11	0.6
Q	L	223264	SR	0.70	0.36	-0.23	0.36	-0.21	-0.09	0.2
Q	O	52262	SR	0.53	0.35	-0.20	-0.20	0.35	-0.10	0.0
Q	L	79603	SR	0.25	0.25	-0.02	0.25	-0.13	-0.12	0.2
Q	L	79592	SR	0.17	-0.08	0.00	-0.08	-0.19	0.17	0.2
Q	O	55666	SR	0.42	0.40	-0.18	-0.20	-0.14	0.40	0.0
Q	O	68768	SR	0.36	0.23	-0.08	-0.11	0.23	-0.07	0.2
Q	L	68759	SR	0.36	0.28	0.00	-0.12	-0.20	0.28	0.1
Q	L	108451	SR	0.34	0.27	-0.11	-0.14	0.27	-0.05	0.2
Q	O	68512	SR	0.71	0.39	-0.24	0.39	-0.14	-0.20	0.2
Q	O	68638	SR	0.37	0.12	0.12	-0.16	-0.02	0.04	0.2
Q	O	51240	SR	0.28	0.38	0.38	-0.23	-0.23	0.02	0.4
Q	O	55505	SR	0.35	0.21	-0.03	-0.09	0.21	-0.10	0.7
Q	L	50894	SR	0.61	0.36	-0.19	-0.14	0.36	-0.18	0.3
Q	O	68517	SR	0.36	0.47	-0.25	-0.17	0.47	-0.12	0.4
Q	L	50836	SR	0.48	0.49	0.49	-0.27	-0.23	-0.13	0.4
Q	L	79753	SR	0.23	0.21	-0.03	-0.12	-0.05	0.21	0.4
Q	L	51115	SR	0.42	0.37	-0.14	-0.19	-0.14	0.37	0.4
Q	L	241963	SR	0.33	0.19	-0.21	-0.10	0.19	0.05	0.3
Q	L	108422	SR	0.34	0.29	-0.11	0.29	-0.19	-0.02	0.3
Q	L	68059	SR	0.23	0.26	0.26	-0.04	-0.12	-0.09	0.3
Q	L	51764	SR	0.46	0.37	-0.24	0.37	-0.09	-0.19	0.4
Q	L	79719	SR	0.37	0.17	0.17	-0.04	-0.16	-0.01	0.4
Q	O	68515	SR	0.55	0.33	-0.15	-0.20	0.33	-0.11	0.4
Q	O	65207	SR	0.49	0.28	-0.14	0.28	-0.13	-0.11	0.4
Q	O	68000	SR	0.44	0.40	-0.14	-0.13	0.40	-0.23	0.2
Q	L	79621	SR	0.43	0.38	-0.17	0.38	-0.19	-0.14	0.5
Q	L	68529	SR	0.41	0.39	-0.12	-0.18	0.39	-0.18	0.9
Q	O	68531	SR	0.25	0.41	-0.19	-0.14	-0.08	0.41	0.2
Q	O	68068	SR	0.28	0.24	-0.07	-0.09	0.24	-0.10	0.3
Q	L	79710	SR	0.42	0.26	-0.10	-0.13	0.26	-0.08	0.4
Q	O	79594	SR	0.54	0.43	-0.17	-0.18	-0.25	0.43	0.2
Q	L	68532	SR	0.48	0.34	0.34	-0.12	-0.21	-0.10	0.5
Q	L	65205	SR	0.29	0.11	0.01	0.11	-0.01	-0.13	0.6
Q	O	79624	SR	0.50	0.40	-0.16	-0.16	-0.21	0.40	0.2
Q	L	256343	SR	0.53	0.29	0.29	-0.18	-0.07	-0.15	0.4
Q	L	58343	SR	0.54	0.50	0.50	-0.22	-0.27	-0.17	0.7
Q	L	58364	SR	0.35	0.19	-0.18	-0.15	0.19	0.09	0.6
Q	L	214493	SR	0.21	0.09	-0.15	-0.09	0.09	0.09	0.5
Q	O	52252	SR	0.42	0.37	0.37	-0.17	-0.14	-0.16	0.4
Q	O	79582	SR	0.41	0.36	-0.14	-0.18	-0.12	0.36	0.4
Q	O	108406	SR	0.59	0.30	-0.06	0.30	-0.22	-0.14	0.9
Q	O	214495	SR	0.50	0.50	0.50	-0.26	-0.25	-0.15	0.2
Q	L	214500	SR	0.39	0.34	-0.14	-0.07	-0.19	0.34	0.4

Table 1.A36 Item Statistics, Operational Items: MDHSA Government—Summer Primary 2

Form	Anchor_Status	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
Q	L	68790	SR	0.22	0.10	0.09	-0.07	0.10	-0.17	0.7
Q	O	79570	SR	0.56	0.38	-0.08	-0.21	0.38	-0.23	0.2
Q	O	51118	SR	0.39	0.42	-0.25	-0.19	-0.08	0.42	0.4
Q	L	50998	SR	0.39	0.26	-0.12	0.26	-0.08	-0.10	0.6
Q	L	256505	SR	0.17	0.04	0.17	0.04	-0.14	-0.09	0.4
Q	L	79658	SR	0.28	0.21	-0.02	-0.07	0.21	-0.13	0.6
Q	O	58373	SR	0.24	0.19	0.19	-0.08	-0.03	-0.09	0.4
Q	L	50985	SR	0.53	0.36	0.36	-0.22	-0.13	-0.14	0.6
Q	L	50910	SR	0.30	0.25	0.25	-0.01	-0.18	-0.08	0.7
Q	L	214492	SR	0.25	0.17	-0.19	-0.09	0.17	0.10	0.7
Q	O	51759	SR	0.52	0.33	-0.13	-0.10	0.33	-0.21	0.7
Mean				0.40	0.29	0.00	-0.06	-0.01	-0.01	0.3
SD				0.13	0.11	0.21	0.18	0.21	0.19	0.2

Note: Anchor_Status: L=item is common across all forms in this administration, O=item is in 1 or more but not all forms in this administration; P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Appendix 1B. MD HSA Classical Item Statistics: Field Test Items

Table 1.B1 Item Statistics, Field Test Items: MDHSA Algebra—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A	8488	211013	SR	0.38	0.14	-0.11	-0.13	0.03	0.14	0.3
A	8488	79108	SPR	0.14	0.28	0.28	-0.12			17.3
A	8488	268728	SR	0.21	0.09	0.04	0.09	-0.08	-0.08	0.3
A	8488	211036	SR	0.51	0.26	-0.11	-0.14	0.26	-0.10	0.8
A	8488	275479	SPR	0.22	0.48	0.48	-0.37			9.5
A	8488	79064	SR	0.40	0.32	-0.10	-0.12	-0.17	0.32	1.1
A	8488	106622	SPR	0.57	0.30	0.30	-0.25			4.2
A	8488	257123	SR	0.80	0.28	-0.16	-0.15	0.28	-0.13	0.5
A	8488	255071	SPR	0.32	0.41	0.41	-0.32			7.5
A	8488	211022	SR	0.36	0.33	0.33	-0.12	-0.19	-0.11	1.0
A	8488	268747	SR	0.07	0.08	0.00	0.06	-0.09	0.08	1.4
A	8488	106640	SPR	0.40	0.38	0.38	-0.31			5.4
A	8488	106552	SR	0.48	0.25	-0.08	-0.15	0.25	-0.12	0.7
A	8488	263307	SPR	0.04	0.26	0.26	-0.07			15.4
A	8488	276436	SR	0.49	0.39	0.39	-0.21	-0.16	-0.13	0.9
A	8488	106565	SR	0.51	0.30	0.30	-0.12	-0.15	-0.11	0.9
B	10384	133398	SR	0.45	0.04	-0.04	0.00	0.04	-0.02	0.5
B	10384	282321	SPR	0.06	0.32	0.32	-0.14			13.8
B	10384	211016	SR	0.50	0.18	-0.03	-0.20	0.18	0.06	0.1
B	10384	260771	SR	0.67	0.27	-0.17	0.27	-0.13	-0.11	0.4
B	10384	211037	SPR	0.29	0.41	0.41	-0.33			5.4
B	10384	282362	SR	0.28	0.20	0.06	-0.16	-0.10	0.20	0.5
B	10384	135105	SPR	0.53	0.38	0.38	-0.34			3.5
B	10384	257133	SR	0.65	0.39	-0.19	-0.25	-0.11	0.39	0.5
B	10384	79061	SPR	0.69	0.26	0.26	-0.20			4.0
B	10384	275466	SR	0.66	0.27	0.27	-0.11	-0.17	-0.10	0.8
B	10384	268730	SR	0.33	0.21	-0.08	0.21	-0.10	-0.05	1.0
B	10384	135122	SPR	0.31	0.28	0.28	-0.21			3.8
B	10384	132844	SR	0.66	0.31	-0.15	-0.18	0.31	-0.11	0.7
B	10384	106617	SPR	0.30	0.49	0.49	-0.39			6.3
B	10384	268754	SR	0.31	0.42	-0.16	-0.16	-0.11	0.42	1.1
B	10384	211019	SR	0.48	0.30	0.30	-0.16	-0.12	-0.09	0.9
Mean				0.41	0.29	0.14	-0.15	-0.02	0.02	3.5
SD				0.19	0.11	0.23	0.15	0.17	0.18	4.6

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B2 Item Statistics, Field Test Items: MDHSA Biology—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A	9068	331289	SR	0.47	0.52	0.52	-0.17	-0.30	-0.23	0.0
A	9068	331286	SR	0.50	0.26	-0.10	-0.10	-0.16	0.26	0.1
A	6840	271064	SR	0.65	0.43	-0.22	-0.24	0.43	-0.17	0.2
A	9068	338712	SR	0.35	0.48	-0.07	0.48	-0.30	-0.15	0.2
A	9068	338711	SR	0.49	0.19	-0.02	-0.20	0.19	-0.05	0.2
A	9068	263105	SR	0.49	0.34	0.34	-0.18	-0.18	-0.10	0.2
A	9068	271122	SR	0.34	0.48	-0.18	-0.28	0.48	-0.11	0.3
A	9068	271062	SR	0.43	0.43	0.43	-0.20	-0.16	-0.18	0.2
A	9068	297094	SR	0.20	0.38	-0.20	0.04	-0.18	0.38	0.2
A	9068	331337	SR	0.51	0.41	-0.12	-0.31	0.41	-0.11	0.2
A	9068	331334	SR	0.52	0.34	-0.18	0.34	-0.17	-0.10	0.3
A	9068	271051	SR	0.26	0.40	-0.18	-0.13	0.40	-0.12	0.3
A	9068	264045	SR	0.56	0.30	-0.11	0.30	-0.16	-0.16	0.3
A	9068	264036	SR	0.52	0.45	-0.18	0.45	-0.26	-0.16	0.3
A	9068	264044	SR	0.32	0.30	0.30	0.00	-0.26	-0.09	0.3
A	9068	271068	SR	0.36	0.10	0.15	-0.10	-0.17	0.10	0.2
A	9068	297097	SR	0.29	0.35	0.06	-0.24	0.35	-0.22	0.4
A	9068	331301	SR	0.51	0.46	-0.19	-0.14	0.46	-0.27	0.3
A	9068	332079	SR	0.54	0.48	0.48	-0.20	-0.22	-0.23	0.4
A	9068	331302	SR	0.55	0.42	-0.15	0.42	-0.28	-0.14	0.3
A	9068	279647	SR	0.49	0.43	-0.18	-0.23	-0.15	0.43	0.4
A	9068	331292	SR	0.20	0.20	0.20	-0.15	-0.25	0.22	0.4
A	9068	331295	SR	0.36	0.23	-0.10	-0.11	0.23	-0.04	0.5
B	6418	331285	SR	0.52	0.39	-0.16	0.39	-0.24	-0.13	0.1
B	6418	331287	SR	0.57	0.32	-0.18	-0.17	0.32	-0.09	0.1
B	8646	271056	SR	0.70	0.15	-0.06	-0.21	0.15	0.07	0.2
B	6418	338714	SR	0.58	0.33	0.33	-0.18	-0.17	-0.12	0.3
B	6418	338713	SR	0.35	0.29	-0.25	-0.09	-0.01	0.29	0.4
B	6418	108582	SR	0.66	0.39	-0.21	-0.21	0.39	-0.16	0.1
B	6418	271026	SR	0.18	0.22	-0.17	0.22	-0.04	0.03	0.2
B	6418	260080	SR	0.35	0.37	-0.16	-0.14	-0.15	0.37	0.2
B	6418	297530	SR	0.36	0.38	-0.24	-0.04	-0.20	0.38	0.4
B	6418	331336	SR	0.53	0.36	0.36	-0.25	-0.19	-0.02	0.3
B	6418	331338	SR	0.26	0.19	-0.03	-0.04	-0.13	0.19	0.4
B	6418	271112	SR	0.42	0.52	-0.14	-0.24	-0.26	0.52	0.3
B	6418	264043	SR	0.45	0.31	-0.08	-0.20	0.31	-0.11	0.4
B	6418	264039	SR	0.29	0.31	0.31	-0.20	-0.15	-0.02	0.4
B	6418	264042	SR	0.45	0.49	-0.14	-0.24	-0.24	0.49	0.5
B	6418	108651	SR	0.48	0.47	-0.19	-0.13	-0.28	0.47	0.5
B	6418	279600	SR	0.32	0.42	-0.03	-0.19	-0.24	0.42	0.5
B	6418	331329	SR	0.24	0.09	0.23	0.09	-0.21	-0.11	0.4
B	6418	331330	SR	0.35	0.21	-0.14	-0.17	0.05	0.21	0.6

Table 1.B2 Item Statistics, Field Test Items: MDHSA Biology—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
B	6418	331327	SR	0.36	0.18	-0.09	-0.11	0.18	0.01	0.6
B	6418	133457	SR	0.34	0.45	-0.07	-0.24	-0.22	0.45	0.4
B	6418	331294	SR	0.44	0.35	-0.18	0.35	-0.21	-0.03	0.5
B	6418	331293	SR	0.36	0.57	-0.15	-0.26	-0.24	0.57	0.6
Mean				0.42	0.35	-0.02	-0.07	-0.04	0.05	0.3
SD				0.13	0.12	0.22	0.22	0.25	0.25	0.1

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B3 Item Statistics, Field Test Items: MDHSA English—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	% Omits
A	7613	281415	SR	0.45	0.25	0.01	-0.22	0.25	-0.16	0.3
A	7613	281417	SR	0.40	0.33	0.33	-0.07	-0.19	-0.15	0.2
A	7613	281418	SR	0.38	0.14	0.14	0.07	-0.14	-0.12	0.2
A	7613	281419	SR	0.30	0.28	-0.09	0.28	-0.12	-0.12	0.2
A	7613	281422	SR	0.68	0.34	-0.15	-0.23	-0.16	0.34	0.2
A	7613	281423	SR	0.20	0.08	0.14	0.08	-0.05	-0.22	0.2
A	7613	281424	SR	0.72	0.33	-0.17	-0.24	0.33	-0.10	0.2
A	7613	251143	SR	0.62	0.41	0.41	-0.18	-0.24	-0.19	0.2
A	7613	285541	SR	0.40	0.37	-0.16	-0.23	-0.05	0.37	0.4
A	9746	281315	SR	0.66	0.19	-0.09	-0.10	0.19	-0.12	0.3
A	9746	281316	SR	0.30	0.12	0.09	0.12	-0.22	-0.16	0.4
A	9746	281318	SR	0.33	0.25	0.25	-0.11	-0.21	0.00	0.4
A	9746	281320	SR	0.50	0.39	-0.18	0.39	-0.13	-0.19	0.4
A	9746	281319	SR	0.33	0.17	-0.16	-0.09	0.17	0.00	0.4
A	9746	256981	SR	0.66	0.42	-0.20	-0.24	0.42	-0.19	0.7
A	9746	256982	SR	0.20	0.10	0.01	0.10	-0.19	0.06	0.9
A	9746	288367	SR	0.43	0.37	0.37	-0.10	-0.23	-0.13	0.8
A	7613	256969	SR	0.78	0.33	-0.18	-0.17	-0.16	0.33	0.3
A	7613	256970	SR	0.47	0.37	-0.18	-0.14	0.37	-0.21	0.3
A	7613	261671	SR	0.45	0.25	-0.20	-0.06	0.25	-0.06	0.4
A	7613	261672	SR	0.77	0.38	-0.19	-0.15	-0.25	0.38	0.3
A	7613	261673	SR	0.37	0.38	0.38	-0.18	-0.09	-0.20	0.4
A	7613	261674	SR	0.24	0.02	-0.04	-0.02	0.02	0.08	0.4
A	7613	261676	SR	0.65	0.46	-0.18	-0.23	-0.25	0.46	0.4
A	7613	261675	SR	0.40	0.29	-0.22	0.29	-0.09	-0.10	0.3
A	7613	288687	SR	0.60	0.40	-0.14	-0.25	0.40	-0.19	0.5
A	7613	288688	SR	0.50	0.26	-0.18	-0.19	0.03	0.26	0.4
A	7613	288689	SR	0.36	0.40	-0.12	0.40	-0.17	-0.20	0.4
A	7613	288691	SR	0.51	0.37	0.37	-0.19	-0.20	-0.10	0.4
A	7613	261678	SR	0.57	0.33	-0.11	0.33	-0.23	-0.15	0.4
A	7613	261679	SR	0.66	0.45	0.45	-0.21	-0.24	-0.21	0.4
B	9267	281440	SR	0.57	0.38	-0.16	-0.23	0.38	-0.14	0.3
B	9267	281435	SR	0.80	0.41	0.41	-0.25	-0.24	-0.17	0.2
B	9267	281436	SR	0.63	0.29	-0.18	0.29	-0.22	-0.05	0.2
B	9267	281437	SR	0.65	0.40	-0.21	-0.17	-0.22	0.40	0.2
B	9267	281442	SR	0.29	0.23	0.02	-0.17	-0.19	0.23	0.2
B	9267	281444	SR	0.40	0.36	-0.17	-0.19	0.36	-0.08	0.2
B	9267	281443	SR	0.66	0.31	-0.12	-0.22	0.31	-0.15	0.2
B	7134	281515	SR	0.34	0.16	0.16	-0.24	0.03	0.00	0.2
B	9267	281445	SR	0.42	0.33	-0.08	0.33	-0.19	-0.15	0.3
B	9267	285619	SR	0.70	0.41	-0.20	-0.23	0.41	-0.18	0.6
B	7134	285527	SR	0.43	0.39	-0.12	-0.23	-0.14	0.39	0.2
B	7134	285530	SR	0.25	0.12	-0.02	0.00	-0.09	0.12	0.2

Table 1.B3 Item Statistics, Field Test Items: MDHSA English—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
B	7134	285533	SR	0.40	0.27	-0.10	0.27	-0.17	-0.08	0.3
B	7134	285618	SR	0.60	0.42	-0.19	-0.18	0.42	-0.24	0.1
B	7134	251234	SR	0.67	0.45	-0.23	0.45	-0.28	-0.15	0.5
B	7134	251235	SR	0.50	0.37	-0.16	0.37	-0.19	-0.15	0.6
B	7134	251236	SR	0.43	0.36	-0.19	-0.18	0.36	-0.20	0.6
B	9267	272926	SR	0.37	0.23	-0.09	0.23	-0.03	-0.16	0.3
B	9267	272925	SR	0.60	0.34	-0.08	-0.22	-0.25	0.34	0.3
B	9267	264660	SR	0.27	0.21	0.21	0.00	-0.15	-0.08	0.5
B	9267	264663	SR	0.78	0.32	-0.14	0.32	-0.23	-0.12	0.5
B	9267	264665	SR	0.63	0.22	-0.17	-0.06	0.22	-0.09	0.4
B	9267	264657	SR	0.29	0.37	-0.26	-0.18	-0.01	0.37	0.4
B	9267	264662	SR	0.20	-0.08	-0.19	-0.17	-0.08	0.29	0.5
B	9267	264661	SR	0.33	0.42	0.42	-0.25	-0.14	-0.07	0.4
B	9267	288866	SR	0.46	0.48	-0.17	-0.18	-0.26	0.48	0.4
B	9267	264658	SR	0.61	0.37	-0.14	-0.27	0.37	-0.11	0.5
B	9267	264656	SR	0.39	0.38	0.38	-0.26	-0.11	-0.08	0.5
B	9267	264666	SR	0.47	0.34	-0.17	0.34	-0.18	-0.08	0.5
B	9267	288873	SR	0.55	0.39	-0.21	-0.15	0.39	-0.19	0.5
B	9267	264664	SR	0.46	0.47	-0.19	-0.20	-0.21	0.47	0.5
Mean				0.48	0.31	-0.04	-0.05	-0.02	-0.01	0.4
SD				0.16	0.12	0.21	0.22	0.23	0.22	0.2

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B4 Item Statistics, Field Test Items: MDHSA Government—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
A	7979	283271	SR	0.84	0.36	-0.20	-0.19	-0.20	0.36	0.1
A	7979	321071	SR	0.40	0.30	-0.25	0.30	-0.24	0.13	0.1
A	7979	214501	SR	0.62	0.52	0.52	-0.31	-0.25	-0.19	0.1
A	7979	79751	SR	0.29	0.36	-0.15	-0.19	-0.04	0.36	0.1
A	7979	283116	SR	0.47	0.33	-0.13	0.33	-0.20	-0.16	0.2
A	7979	283277	SR	0.24	0.16	-0.21	0.16	-0.22	0.19	0.3
A	7979	283270	SR	0.45	0.47	-0.22	-0.15	-0.24	0.47	0.3
A	7979	283103	SR	0.77	0.42	-0.21	-0.24	0.42	-0.20	0.3
A	7979	256997	SR	0.54	0.39	0.39	-0.18	-0.19	-0.17	0.2
A	7979	256990	SR	0.55	0.46	-0.19	0.46	-0.18	-0.27	0.2
A	7979	279854	SR	0.28	0.29	0.29	-0.04	-0.19	-0.11	0.4
A	7979	279731	SR	0.36	0.31	-0.12	-0.05	-0.21	0.31	0.3
A	7979	60433	SR	0.25	0.42	-0.24	-0.19	-0.06	0.42	0.2
A	7979	283079	SR	0.66	0.47	-0.20	-0.26	0.47	-0.25	0.2
A	7979	271792	SR	0.84	0.38	-0.21	0.38	-0.20	-0.20	0.3
A	7979	283276	SR	0.68	0.47	0.47	-0.26	-0.24	-0.21	0.3
A	7979	282265	SR	0.67	0.44	-0.20	0.44	-0.27	-0.19	0.3
A	7979	283126	SR	0.52	0.35	-0.18	0.35	-0.20	-0.10	0.2
A	7979	79732	SR	0.82	0.40	-0.22	-0.23	0.40	-0.19	0.2
A	7979	264008	SR	0.54	0.39	-0.25	-0.14	0.39	-0.19	0.2
A	7979	283284	SR	0.31	0.22	-0.01	-0.15	0.22	-0.08	0.2
A	7979	283282	SR	0.56	0.16	-0.10	0.16	-0.05	-0.10	0.2
A	7979	283283	SR	0.64	0.40	-0.14	-0.28	0.40	-0.18	0.2
A	7979	282266	SR	0.81	0.36	-0.20	0.36	-0.18	-0.19	0.3
A	7979	52261	SR	0.56	0.41	-0.21	-0.29	0.41	-0.09	0.3
B	9885	261588	SR	0.82	0.36	-0.19	-0.15	-0.23	0.36	0.2
B	9885	279823	SR	0.79	0.24	-0.17	-0.11	0.24	-0.13	0.2
B	9885	261590	SR	0.33	0.53	-0.15	-0.20	0.53	-0.25	0.3
B	9885	261574	SR	0.42	0.27	-0.17	-0.17	0.27	-0.06	0.2
B	9885	297116	SR	0.10	0.15	0.06	-0.19	0.05	0.15	0.3
B	9885	257027	SR	0.30	0.32	-0.15	-0.12	0.32	-0.08	0.3
B	9885	257167	SR	0.53	0.39	-0.22	-0.22	-0.11	0.39	0.3
B	9885	257175	SR	0.72	0.43	-0.23	-0.22	0.43	-0.21	0.3
B	9885	261604	SR	0.52	0.37	-0.17	0.37	-0.24	-0.09	0.3
B	9885	257010	SR	0.63	0.37	-0.16	-0.24	0.37	-0.17	0.3
B	9885	283106	SR	0.18	0.19	-0.22	-0.31	0.19	0.28	0.3
B	9885	257163	SR	0.52	0.47	-0.20	-0.26	-0.22	0.47	0.3
B	9885	257166	SR	0.24	0.31	-0.04	-0.10	-0.16	0.31	0.4
B	9885	257017	SR	0.33	0.25	-0.15	-0.24	0.09	0.25	0.3
B	9885	271802	SR	0.67	0.44	-0.23	-0.24	0.44	-0.17	0.5
B	9885	261598	SR	0.71	0.44	0.44	-0.24	-0.19	-0.22	0.4

Table 1.B4 Item Statistics, Field Test Items: MDHSA Government—January Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
B	9885	261586	SR	0.41	0.45	-0.11	0.45	-0.30	-0.15	0.3
B	9885	279840	SR	0.20	0.36	-0.20	0.02	-0.26	0.36	0.4
B	9885	261605	SR	0.79	0.35	-0.20	0.35	-0.20	-0.14	0.3
B	9885	279855	SR	0.44	0.37	-0.18	-0.23	0.37	-0.05	0.5
B	9885	279752	SR	0.76	0.40	-0.20	-0.20	0.40	-0.21	0.3
B	9885	279753	SR	0.61	0.37	0.37	-0.22	-0.15	-0.17	0.4
B	9885	279754	SR	0.58	0.47	0.47	-0.20	-0.28	-0.16	0.4
B	9885	261592	SR	0.51	0.38	-0.26	0.38	-0.11	-0.16	0.3
B	9885	257012	SR	0.38	0.13	0.13	0.02	-0.11	-0.07	0.3
Mean				0.52	0.36	-0.09	-0.05	0.01	-0.02	0.3
SD				0.20	0.10	0.22	0.25	0.28	0.23	0.1

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B5 Item Statistics, Field Test Items: MDHSA Algebra—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D	9231	319407	SR	0.62	0.43	-0.31	-0.15	-0.16	0.43	0.1
D	9231	348441	SPR	0.56	0.50	0.50	-0.45			3.2
D	9231	319432	SR	0.29	0.28	0.28	0.07	-0.17	-0.23	0.5
D	9231	319418	SR	0.34	0.53	-0.13	0.53	-0.44	-0.01	0.2
D	9231	319438	SPR	0.61	0.62	0.62	-0.56			3.6
D	9231	348336	SR	0.63	0.37	-0.18	0.37	-0.28	-0.07	0.5
D	9231	322002	SPR	0.17	0.43	0.43	-0.32			4.4
D	9231	348318	SR	0.81	0.35	-0.23	-0.16	0.35	-0.16	0.2
D	9231	328749	SPR	0.59	0.42	0.42	-0.38			3.8
D	9231	319417	SR	0.62	0.51	-0.41	-0.17	-0.11	0.51	0.4
D	9231	338656	SR	0.66	0.47	-0.17	-0.30	-0.23	0.47	0.6
D	9231	338683	SPR	0.27	0.60	0.60	-0.53			2.8
D	9231	322120	SR	0.66	0.40	-0.20	-0.15	-0.27	0.40	0.4
D	9231	319415	SPR	0.25	0.52	0.52	-0.46			2.6
D	9231	319449	SR	0.72	0.39	-0.19	-0.22	0.39	-0.20	0.4
D	9231	328706	SR	0.71	0.36	-0.08	0.36	-0.22	-0.26	0.5
E	7336	328760	SR	0.97	0.13	0.13	-0.08	-0.09	-0.06	0.0
E	7336	338644	SPR	0.18	0.46	0.46	-0.30			10.0
E	7336	338659	SR	0.45	0.37	-0.20	-0.10	-0.21	0.37	0.1
E	7336	348337	SR	0.34	0.16	0.12	-0.22	0.16	-0.15	0.4
E	7336	348328	SPR	0.41	0.54	0.54	-0.45			6.2
E	7336	319446	SR	0.56	0.59	-0.43	-0.22	-0.17	0.59	0.4
E	7336	348444	SPR	0.20	0.45	0.45	-0.29			7.4
E	7336	319405	SR	0.43	0.38	-0.16	-0.15	-0.16	0.38	0.9
E	7336	338647	SPR	0.31	0.63	0.63	-0.53			5.0
E	7336	338653	SR	0.47	0.33	-0.12	-0.23	0.33	-0.09	0.7
E	7336	319430	SR	0.62	0.44	0.44	-0.22	-0.22	-0.19	0.9
E	7336	328723	SPR	0.68	0.62	0.62	-0.55			4.6
E	7336	348347	SR	0.64	0.53	0.53	-0.24	-0.27	-0.26	0.4
E	7336	338663	SPR	0.44	0.63	0.63	-0.56			4.0
E	7336	328772	SR	0.63	0.43	-0.16	-0.27	0.43	-0.17	0.4
E	7336	321991	SR	0.42	0.42	-0.10	-0.22	-0.23	0.42	0.4
F	15881	322114	SR	0.88	0.27	-0.16	-0.11	-0.17	0.27	0.1
F	15881	319447	SPR	0.74	0.52	0.52	-0.49			1.8
F	15881	322003	SR	0.72	0.39	-0.18	0.39	-0.22	-0.20	0.2
F	15881	338675	SR	0.51	0.45	-0.17	-0.31	0.45	-0.12	0.5
F	15881	321988	SPR	0.13	0.45	0.45	-0.25			9.8
F	15881	348348	SR	0.54	0.62	0.62	-0.19	-0.26	-0.39	0.4
F	15881	348331	SPR	0.35	0.61	0.61	-0.49			7.0
F	15881	348436	SR	0.42	0.40	0.40	-0.18	-0.19	-0.12	0.4
F	15881	348442	SPR	0.23	0.52	0.52	-0.42			3.8
F	15881	328761	SR	0.48	0.27	-0.18	0.27	-0.07	-0.13	1.1
F	15881	338670	SR	0.57	0.33	-0.20	0.33	-0.15	-0.10	0.9

Table 1.B5 Item Statistics, Field Test Items: MDHSA Algebra—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
F	15881	338649	SPR	0.79	0.45	0.45	-0.40			2.4
F	15881	348319	SR	0.69	0.43	0.43	-0.18	-0.22	-0.24	0.4
F	15881	338642	SPR	0.60	0.48	0.48	-0.44			2.3
F	15881	338639	SR	0.31	0.15	-0.20	-0.05	0.15	0.09	0.5
F	15881	328707	SR	0.20	0.22	-0.26	-0.20	0.17	0.22	0.5
G	7326	328735	SR	0.42	0.36	-0.02	0.36	-0.20	-0.24	0.2
G	7326	338648	SPR	0.40	0.54	0.54	-0.52			1.6
G	7326	322125	SR	0.29	0.11	0.05	-0.20	0.03	0.11	0.4
G	7326	328781	SR	0.58	0.32	-0.18	-0.22	0.32	-0.11	0.7
G	7326	348341	SPR	0.21	0.52	0.52	-0.36			10.0
G	7326	328776	SR	0.74	0.52	-0.20	0.52	-0.36	-0.24	0.2
G	7326	328719	SPR	0.40	0.41	0.41	-0.35			4.1
G	7326	348358	SR	0.43	0.33	0.33	-0.21	-0.23	-0.01	0.6
G	7326	319457	SPR	0.26	0.47	0.47	-0.35			7.2
G	7326	348322	SR	0.48	0.46	-0.21	-0.23	0.46	-0.16	0.6
G	7326	338678	SR	0.32	0.36	-0.25	-0.10	-0.03	0.36	0.8
G	7326	338665	SPR	0.34	0.60	0.60	-0.53			2.6
G	7326	319441	SR	0.69	0.48	-0.22	-0.23	-0.26	0.48	0.4
G	7326	319451	SPR	0.79	0.39	0.39	-0.35			1.4
G	7326	338676	SR	0.62	0.46	-0.20	0.46	-0.29	-0.16	0.7
G	7326	338671	SR	0.33	0.17	0.17	-0.14	-0.06	0.03	0.4
H	7287	328765	SR	0.59	0.39	-0.21	0.39	-0.31	-0.04	0.1
H	7287	348344	SPR	0.14	0.34	0.34	-0.20			5.1
H	7287	328773	SR	0.71	0.33	-0.17	0.33	-0.05	-0.28	0.1
H	7287	319466	SR	0.53	0.66	-0.32	-0.27	-0.33	0.66	0.3
H	7287	322123	SPR	0.56	0.50	0.50	-0.45			2.5
H	7287	319444	SR	0.65	0.45	-0.27	-0.22	-0.17	0.45	0.2
H	7287	322000	SPR	0.61	0.58	0.58	-0.52			4.5
H	7287	348345	SR	0.26	0.31	0.31	-0.12	-0.20	-0.07	0.6
H	7287	338660	SPR	0.39	0.47	0.47	-0.41			4.9
H	7287	319421	SR	0.69	0.39	-0.13	0.39	-0.26	-0.19	0.5
H	7287	328732	SR	0.43	0.35	-0.07	-0.26	0.35	-0.10	0.8
H	7287	319448	SPR	0.29	0.51	0.51	-0.40			5.8
H	7287	348335	SR	0.29	0.18	0.14	0.18	-0.26	-0.14	0.4
H	7287	322116	SPR	0.70	0.42	0.42	-0.37			2.5
H	7287	338654	SR	0.50	0.46	-0.24	0.46	-0.26	-0.14	0.5
H	7287	319471	SR	0.62	0.49	-0.29	-0.21	-0.18	0.49	0.5
J	7553	328711	SR	0.65	0.33	-0.24	0.33	-0.21	-0.07	0.1
J	7553	319427	SPR	0.62	0.51	0.51	-0.48			2.1
J	7553	319410	SR	0.47	0.44	-0.16	0.44	-0.29	-0.11	0.1
J	7553	338657	SR	0.61	0.11	-0.26	-0.10	0.11	0.19	0.2
J	7553	328757	SPR	0.34	0.49	0.49	-0.42			3.7
J	7553	348357	SR	0.67	0.55	-0.35	-0.26	0.55	-0.22	0.3

Table 1.B5 Item Statistics, Field Test Items: MDHSA Algebra—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
J	7553	322117	SPR	0.17	0.46	0.46	-0.33			10.2
J	7553	328710	SR	0.73	0.43	0.43	-0.20	-0.23	-0.23	0.3
J	7553	322115	SPR	0.35	0.50	0.50	-0.43			3.8
J	7553	328714	SR	0.42	0.41	0.00	-0.33	0.41	-0.17	0.5
J	7553	338655	SR	0.62	0.35	0.35	-0.23	-0.24	-0.04	0.9
J	7553	319437	SPR	0.58	0.54	0.54	-0.49			3.8
J	7553	328716	SR	0.39	0.33	0.02	0.33	-0.26	-0.17	0.5
J	7553	348332	SPR	0.50	0.55	0.55	-0.48			4.1
J	7553	338625	SR	0.66	0.41	-0.22	0.41	-0.25	-0.15	0.3
J	7553	328762	SR	0.44	0.31	0.31	-0.19	-0.06	-0.16	0.3
K	7230	319406	SR	0.55	0.28	0.04	-0.28	-0.17	0.28	0.1
K	7230	322015	SPR	0.44	0.51	0.51	-0.46			4.3
K	7230	348333	SR	0.58	0.44	-0.23	-0.14	-0.26	0.44	0.2
K	7230	348352	SR	0.43	0.38	0.38	-0.31	-0.06	-0.11	0.4
K	7230	328777	SPR	0.38	0.33	0.33	-0.29			1.8
K	7230	348438	SR	0.70	0.33	-0.14	-0.22	0.33	-0.17	0.3
K	7230	348327	SPR	0.51	0.61	0.61	-0.53			4.7
K	7230	348321	SR	0.45	0.24	-0.11	0.24	-0.09	-0.12	0.4
K	7230	322016	SPR	0.23	0.52	0.52	-0.39			10.4
K	7230	319450	SR	0.38	0.34	-0.18	0.34	-0.11	-0.22	0.7
K	7230	338679	SR	0.40	0.21	-0.26	0.21	0.11	-0.18	1.1
K	7230	328754	SPR	0.35	0.42	0.42	-0.35			3.6
K	7230	319442	SR	0.52	0.47	-0.23	-0.27	0.47	-0.13	0.5
K	7230	328724	SPR	0.26	0.48	0.48	-0.38			7.7
K	7230	319433	SR	0.58	0.49	-0.26	-0.26	0.49	-0.17	0.4
K	7230	319465	SR	0.65	0.39	-0.21	-0.19	-0.19	0.39	0.5
L	7311	319467	SR	0.58	0.41	-0.26	-0.23	-0.09	0.41	0.1
L	7311	348443	SPR	0.60	0.47	0.47	-0.45			1.6
L	7311	328747	SR	0.39	0.49	-0.12	-0.22	-0.27	0.49	0.3
L	7311	338630	SR	0.56	0.53	0.53	-0.32	-0.27	-0.15	0.3
L	7311	338669	SPR	0.85	0.34	0.34	-0.31			1.8
L	7311	338628	SR	0.40	0.33	-0.13	-0.16	0.33	-0.15	0.3
L	7311	319422	SPR	0.15	0.40	0.40	-0.31			4.8
L	7311	319434	SR	0.77	0.48	-0.25	0.48	-0.24	-0.25	0.5
L	7311	348329	SPR	0.28	0.55	0.55	-0.47			5.0
L	7311	348434	SR	0.38	0.39	-0.06	0.39	-0.28	-0.16	0.6
L	7311	338658	SR	0.28	0.29	0.29	-0.15	-0.01	-0.17	1.1
L	7311	338645	SPR	0.31	0.51	0.51	-0.40			6.2
L	7311	319455	SR	0.42	0.29	-0.17	-0.08	0.29	-0.12	0.5
L	7311	322014	SPR	0.71	0.54	0.54	-0.48			3.7
L	7311	322008	SR	0.44	0.11	0.10	-0.14	0.11	-0.15	0.2
L	7311	338624	SR	0.37	0.36	0.36	-0.16	-0.13	-0.15	0.4
M	7200	322024	SR	0.65	0.39	0.39	-0.17	-0.26	-0.19	0.1

Table 1.B5 Item Statistics, Field Test Items: MDHSA Algebra—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
M	7200	328750	SPR	0.54	0.61	0.61	-0.53			4.8
M	7200	328712	SR	0.21	0.09	-0.07	0.06	-0.14	0.09	0.4
M	7200	338680	SR	0.45	0.31	-0.12	-0.09	0.31	-0.20	0.7
M	7200	328755	SPR	0.54	0.54	0.54	-0.49			2.6
M	7200	338684	SR	0.41	0.15	0.00	0.15	-0.04	-0.12	0.3
M	7200	321999	SPR	0.47	0.50	0.50	-0.40			6.0
M	7200	328708	SR	0.63	0.28	0.00	-0.21	0.28	-0.22	0.6
M	7200	338664	SPR	0.63	0.51	0.51	-0.45			3.6
M	7200	348353	SR	0.59	0.36	0.36	-0.07	-0.26	-0.17	0.7
M	7200	338677	SR	0.50	0.37	-0.14	0.37	-0.21	-0.13	1.4
M	7200	319460	SPR	0.60	0.56	0.56	-0.49			3.2
M	7200	328718	SR	0.37	0.30	-0.16	-0.10	0.30	-0.10	0.4
M	7200	329079	SPR	0.16	0.44	0.44	-0.31			8.4
M	7200	322011	SR	0.46	0.44	-0.19	-0.23	0.44	-0.13	0.8
M	7200	319453	SR	0.37	0.22	-0.05	0.22	-0.19	-0.02	0.6
N	7171	319409	SR	0.48	0.30	-0.10	0.30	-0.24	-0.07	0.3
N	7171	319462	SPR	0.19	0.53	0.53	-0.35			10.8
N	7171	319419	SR	0.57	0.49	0.49	-0.24	-0.18	-0.27	0.3
N	7171	319473	SR	0.54	0.53	-0.17	-0.26	-0.28	0.53	0.6
N	7171	348315	SPR	0.35	0.40	0.40	-0.33			3.0
N	7171	322119	SR	0.82	0.34	-0.22	-0.19	0.34	-0.13	0.2
N	7171	328720	SPR	0.33	0.52	0.52	-0.39			7.5
N	7171	348340	SR	0.44	0.19	0.12	-0.12	-0.18	0.19	0.5
N	7171	338667	SPR	0.25	0.49	0.49	-0.33			7.4
N	7171	328778	SR	0.75	0.44	-0.20	-0.24	-0.23	0.44	0.6
N	7171	348354	SR	0.24	0.12	0.11	0.12	-0.14	-0.16	0.9
N	7171	321986	SPR	0.11	0.40	0.40	-0.21			11.5
N	7171	328766	SR	0.66	0.46	0.46	-0.18	-0.29	-0.21	0.6
N	7171	328746	SPR	0.80	0.26	0.26	-0.22			1.7
N	7171	348355	SR	0.96	0.23	-0.14	-0.14	0.23	-0.08	0.3
N	7171	348314	SR	0.75	0.37	-0.21	0.37	-0.21	-0.18	0.4
Mean				0.49	0.41	0.16	-0.17	-0.06	-0.01	2.1
SD				0.19	0.12	0.33	0.28	0.25	0.25	2.7

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B6 Item Statistics, Field Test Items: MDHSA Biology—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D	6783	332049	SR	0.68	0.41	-0.15	0.41	-0.24	-0.23	0.1
D	6783	332047	SR	0.47	0.41	-0.19	-0.20	0.41	-0.22	0.0
D	6783	349079	SR	0.73	0.33	-0.12	0.33	-0.24	-0.14	0.0
D	6783	349118	SR	0.62	0.48	-0.16	0.48	-0.23	-0.30	0.0
D	6783	338729	SR	0.35	0.50	-0.02	-0.45	-0.08	0.50	0.0
D	6783	332082	SR	0.49	0.50	0.50	-0.24	-0.24	-0.17	0.2
D	6783	332080	SR	0.31	0.17	-0.09	-0.03	-0.10	0.17	0.2
D	6783	322167	SR	0.47	0.20	0.02	0.20	-0.23	-0.12	0.2
D	6783	322165	SR	0.50	0.44	0.44	-0.27	-0.18	-0.16	0.1
D	6783	322161	SR	0.54	0.30	-0.06	-0.20	0.30	-0.17	0.2
D	6783	352590	SR	0.61	0.31	-0.05	0.31	-0.25	-0.20	0.1
D	6783	349021	SR	0.48	0.53	-0.29	-0.25	-0.21	0.53	0.1
D	6783	349023	SR	0.38	0.07	-0.15	-0.14	0.07	0.15	0.1
D	6783	338780	SR	0.53	0.49	-0.18	0.49	-0.30	-0.22	0.1
D	6783	279665	SR	0.52	0.48	-0.25	0.48	-0.24	-0.17	0.1
D	6783	349110	SR	0.60	0.45	0.45	-0.22	-0.21	-0.21	0.2
D	6783	331350	SR	0.67	0.42	-0.27	0.42	-0.20	-0.14	0.2
D	6783	331299	SR	0.73	0.31	-0.11	-0.22	0.31	-0.18	0.2
D	6783	331297	SR	0.41	0.29	0.29	-0.22	-0.01	-0.16	0.2
D	6783	322194	SR	0.91	0.33	0.33	-0.19	-0.20	-0.14	0.1
D	6783	349146	SR	0.50	0.51	-0.27	0.51	-0.27	-0.13	0.2
D	6783	349143	SR	0.44	0.47	-0.23	-0.21	-0.17	0.47	0.2
D	6783	348994	SR	0.45	0.26	-0.09	-0.12	0.26	-0.13	0.2
E	5541	332051	SR	0.55	0.60	0.60	-0.19	-0.37	-0.27	0.0
E	5541	332048	SR	0.71	0.41	-0.23	-0.20	-0.21	0.41	0.1
E	5541	354962	SR	0.57	0.25	-0.19	-0.20	0.25	0.02	0.2
E	5541	322172	SR	0.72	0.49	0.49	-0.29	-0.27	-0.20	0.1
E	5541	279632	SR	0.95	0.19	-0.06	0.19	-0.16	-0.08	0.1
E	5541	332083	SR	0.63	0.46	-0.25	-0.29	0.46	-0.13	0.2
E	5541	332081	SR	0.59	0.34	-0.08	0.34	-0.16	-0.22	0.2
E	5541	322164	SR	0.45	0.39	-0.20	0.39	-0.20	-0.10	0.2
E	5541	322166	SR	0.30	0.40	-0.20	-0.02	-0.21	0.40	0.3
E	5541	322163	SR	0.54	0.45	-0.17	-0.23	-0.26	0.45	0.2
E	5541	338768	SR	0.75	0.47	-0.26	-0.24	0.47	-0.23	0.1
E	5541	349022	SR	0.75	0.42	-0.16	0.42	-0.27	-0.21	0.3
E	5541	349025	SR	0.82	0.39	0.39	-0.24	-0.20	-0.19	0.1
E	5541	353220	SR	0.55	0.59	-0.18	-0.28	-0.34	0.59	0.2
E	5541	352582	SR	0.73	0.50	-0.30	0.50	-0.24	-0.23	0.2
E	5541	349091	SR	0.32	0.25	0.25	0.05	-0.16	-0.25	0.2
E	5541	282439	SR	0.78	0.31	-0.15	-0.09	-0.24	0.31	0.2
E	5541	331300	SR	0.41	0.53	-0.26	-0.22	-0.17	0.53	0.2
E	5541	331298	SR	0.36	0.24	-0.08	0.24	-0.14	-0.06	0.2
E	5541	332084	SR	0.49	0.48	-0.30	0.48	-0.21	-0.10	0.2
E	5541	348996	SR	0.68	0.30	-0.04	-0.23	0.30	-0.13	0.2

Table 1.B6 Item Statistics, Field Test Items: MDHSA Biology—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
E	5541	348995	SR	0.57	0.46	-0.28	-0.23	0.46	-0.13	0.2
E	5541	354959	SR	0.50	0.50	0.50	-0.32	-0.22	-0.09	0.2
F	5591	332076	SR	0.40	0.25	-0.15	0.25	-0.15	0.00	0.1
F	5591	332077	SR	0.40	0.43	-0.21	-0.17	-0.15	0.43	0.2
F	5591	349107	SR	0.21	0.33	-0.24	-0.13	-0.08	0.33	0.0
F	5591	79494	SR	0.56	0.34	-0.19	-0.18	0.34	-0.14	0.1
F	5591	338739	SR	0.48	0.30	-0.14	-0.13	0.30	-0.17	0.1
F	5591	323328	SR	0.38	0.43	-0.29	-0.27	0.03	0.43	0.4
F	5591	323331	SR	0.58	0.56	0.56	-0.27	-0.31	-0.21	0.3
F	5591	338724	SR	0.69	0.36	0.36	-0.20	-0.18	-0.17	0.1
F	5591	338721	SR	0.33	0.25	0.04	-0.19	-0.13	0.25	0.3
F	5591	338723	SR	0.80	0.40	-0.19	0.40	-0.20	-0.26	0.0
F	5591	271059	SR	0.82	0.41	-0.26	0.41	-0.21	-0.19	0.1
F	5591	331318	SR	0.51	0.24	-0.03	-0.24	-0.10	0.24	0.2
F	5591	331316	SR	0.59	0.48	0.48	-0.19	-0.23	-0.26	0.1
F	5591	338757	SR	0.53	0.49	-0.23	-0.22	-0.25	0.49	0.2
F	5591	338761	SR	0.66	0.50	-0.29	-0.22	-0.25	0.50	0.2
F	5591	338752	SR	0.68	0.43	-0.24	0.43	-0.21	-0.19	0.1
F	5591	331368	SR	0.69	0.52	-0.35	0.52	-0.21	-0.23	0.1
F	5591	338717	SR	0.64	0.54	0.54	-0.16	-0.42	-0.20	0.1
F	5591	338716	SR	0.61	0.61	-0.24	-0.36	-0.27	0.61	0.2
F	5591	279622	SR	0.50	0.47	0.47	-0.24	-0.17	-0.24	0.1
F	5591	349032	SR	0.36	0.36	-0.19	-0.24	-0.02	0.36	0.2
F	5591	349030	SR	0.41	0.26	-0.06	0.26	-0.11	-0.16	0.1
F	5591	349031	SR	0.51	0.43	-0.21	-0.26	0.43	-0.11	0.2
G	5591	332075	SR	0.45	0.23	-0.20	-0.08	0.23	-0.02	0.3
G	5591	332073	SR	0.66	0.41	0.41	-0.31	-0.18	-0.14	0.1
G	5591	338745	SR	0.44	0.36	-0.06	-0.18	-0.30	0.36	0.1
G	5591	323335	SR	0.39	0.37	-0.03	-0.25	-0.15	0.37	0.1
G	5591	322201	SR	0.69	0.32	-0.19	-0.16	0.32	-0.13	0.1
G	5591	323330	SR	0.41	0.30	-0.17	-0.14	0.30	-0.10	0.4
G	5591	323329	SR	0.53	0.45	-0.20	0.45	-0.25	-0.20	0.4
G	5591	338824	SR	0.49	0.43	-0.29	-0.20	-0.08	0.43	0.2
G	5591	338719	SR	0.25	0.11	0.10	0.11	-0.11	-0.04	0.1
G	5591	338722	SR	0.33	0.23	-0.17	0.05	0.23	-0.22	0.2
G	5591	349089	SR	0.66	0.27	0.27	-0.19	-0.10	-0.10	0.2
G	5591	331317	SR	0.51	0.35	-0.13	0.35	-0.14	-0.19	0.1
G	5591	331315	SR	0.53	0.45	-0.18	-0.23	0.45	-0.21	0.2
G	5591	338746	SR	0.66	0.40	-0.27	-0.21	-0.13	0.40	0.2
G	5591	79479	SR	0.71	0.25	0.25	-0.20	-0.09	-0.14	0.2
G	5591	331352	SR	0.74	0.45	-0.31	-0.24	0.45	-0.14	0.2
G	5591	282429	SR	0.57	0.53	-0.21	-0.30	-0.23	0.53	0.2
G	5591	332028	SR	0.66	0.35	-0.17	0.35	-0.20	-0.20	0.2
G	5591	332030	SR	0.67	0.51	0.51	-0.23	-0.35	-0.16	0.2

Table 1.B6 Item Statistics, Field Test Items: MDHSA Biology—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
G	5591	349116	SR	0.70	0.32	-0.21	-0.17	0.32	-0.14	0.2
G	5591	323308	SR	0.63	0.55	-0.19	-0.39	0.55	-0.21	0.2
G	5591	323306	SR	0.42	0.45	-0.18	0.45	-0.05	-0.30	0.2
G	5591	323307	SR	0.87	0.34	-0.22	-0.13	-0.20	0.34	0.2
H	5622	323314	SR	0.28	0.36	-0.26	-0.08	-0.16	0.36	0.0
H	5622	323313	SR	0.24	0.18	0.18	-0.12	-0.03	-0.11	0.1
H	5622	279651	SR	0.77	0.40	-0.19	-0.25	0.40	-0.20	0.1
H	5622	79478	SR	0.62	0.31	-0.26	0.31	-0.10	-0.15	0.0
H	5622	323342	SR	0.68	0.38	-0.17	0.38	-0.14	-0.26	0.1
H	5622	331306	SR	0.52	0.45	-0.22	-0.14	-0.27	0.45	0.2
H	5622	331305	SR	0.54	0.46	0.46	-0.21	-0.21	-0.21	0.3
H	5622	338691	SR	0.83	0.32	-0.18	0.32	-0.20	-0.13	0.1
H	5622	338695	SR	0.58	0.10	0.09	-0.13	0.10	-0.18	0.1
H	5622	338689	SR	0.51	0.41	-0.23	0.41	-0.17	-0.18	0.3
H	5622	79518	SR	0.65	0.45	-0.13	0.45	-0.32	-0.20	0.1
H	5622	338708	SR	0.21	0.34	0.34	-0.16	-0.31	0.04	0.2
H	5622	338709	SR	0.49	0.47	-0.36	-0.14	-0.10	0.47	0.1
H	5622	79470	SR	0.70	0.48	-0.23	-0.16	-0.32	0.48	0.2
H	5622	331365	SR	0.58	0.53	-0.19	0.53	-0.38	-0.15	0.2
H	5622	352586	SR	0.85	0.31	-0.25	0.31	-0.14	-0.10	0.1
H	5622	282422	SR	0.81	0.42	0.42	-0.24	-0.26	-0.17	0.1
H	5622	338718	SR	0.90	0.29	-0.18	0.29	-0.15	-0.15	0.1
H	5622	338715	SR	0.72	0.23	-0.16	-0.09	0.23	-0.14	0.1
H	5622	322198	SR	0.76	0.25	-0.12	0.25	-0.14	-0.16	0.1
H	5622	322146	SR	0.55	0.36	0.36	-0.18	-0.17	-0.16	0.2
H	5622	322144	SR	0.60	0.35	-0.18	-0.23	0.35	-0.10	0.1
H	5622	322145	SR	0.54	0.44	-0.17	0.44	-0.25	-0.20	0.1
J	5837	323310	SR	0.41	0.21	0.21	-0.21	0.08	-0.17	0.1
J	5837	323312	SR	0.35	0.30	-0.08	0.30	-0.06	-0.20	0.1
J	5837	79484	SR	0.50	0.42	-0.22	0.42	-0.15	-0.19	0.1
J	5837	279851	SR	0.58	0.46	-0.18	-0.26	0.46	-0.21	0.1
J	5837	279655	SR	0.58	0.47	-0.27	-0.24	0.47	-0.18	0.1
J	5837	331307	SR	0.66	0.43	-0.20	-0.27	0.43	-0.16	0.3
J	5837	331304	SR	0.75	0.44	-0.20	0.44	-0.26	-0.22	0.3
J	5837	338693	SR	0.64	0.49	-0.22	-0.18	-0.32	0.49	0.1
J	5837	338692	SR	0.66	0.49	0.49	-0.33	-0.22	-0.18	0.1
J	5837	338690	SR	0.36	0.21	-0.07	-0.20	-0.03	0.21	0.1
J	5837	323336	SR	0.62	0.41	-0.16	-0.26	0.41	-0.20	0.1
J	5837	352874	SR	0.33	0.31	-0.21	-0.04	0.31	-0.20	0.1
J	5837	338710	SR	0.74	0.50	-0.23	0.50	-0.31	-0.22	0.1
J	5837	338786	SR	0.63	0.47	-0.27	-0.24	0.47	-0.17	0.2
J	5837	349088	SR	0.95	0.19	0.19	-0.11	-0.10	-0.10	0.1
J	5837	349109	SR	0.67	0.29	-0.26	0.29	-0.10	-0.15	0.1
J	5837	323338	SR	0.62	0.40	-0.28	-0.19	0.40	-0.11	0.1

Table 1.B6 Item Statistics, Field Test Items: MDHSA Biology—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
J	5837	320458	SR	0.74	0.31	-0.16	0.31	-0.22	-0.07	0.2
J	5837	320456	SR	0.50	0.12	-0.19	0.00	0.12	-0.06	0.1
J	5837	338769	SR	0.59	0.51	-0.15	-0.33	-0.25	0.51	0.1
J	5837	323284	SR	0.66	0.42	-0.19	0.42	-0.21	-0.24	0.1
J	5837	323286	SR	0.72	0.39	-0.20	-0.23	0.39	-0.20	0.1
J	5837	323283	SR	0.29	0.24	-0.18	-0.17	0.06	0.24	0.3
K	5517	357661	SR	0.65	0.37	-0.18	0.37	-0.26	-0.14	0.0
K	5517	323324	SR	0.57	0.26	-0.05	0.26	-0.19	-0.15	0.1
K	5517	338742	SR	0.18	0.24	0.18	-0.25	-0.22	0.24	0.1
K	5517	331356	SR	0.45	0.39	0.39	-0.20	-0.29	0.04	0.0
K	5517	338764	SR	0.94	0.22	-0.09	0.22	-0.15	-0.13	0.1
K	5517	349042	SR	0.59	0.42	-0.22	-0.26	0.42	-0.13	0.3
K	5517	349046	SR	0.72	0.30	-0.13	-0.18	-0.19	0.30	0.3
K	5517	279669	SR	0.72	0.35	-0.13	0.35	-0.23	-0.18	0.1
K	5517	279671	SR	0.54	0.48	-0.26	-0.15	0.48	-0.26	0.2
K	5517	279477	SR	0.59	0.47	-0.26	-0.26	-0.14	0.47	0.1
K	5517	331348	SR	0.60	0.30	-0.09	0.30	-0.21	-0.16	0.1
K	5517	323297	SR	0.31	0.31	-0.11	-0.04	0.31	-0.19	0.1
K	5517	323296	SR	0.44	0.22	0.11	-0.20	-0.23	0.22	0.1
K	5517	79481	SR	0.44	0.28	-0.21	-0.12	0.28	-0.06	0.2
K	5517	338784	SR	0.75	0.43	0.43	-0.24	-0.25	-0.18	0.2
K	5517	79462	SR	0.77	0.41	-0.15	-0.31	0.41	-0.15	0.2
K	5517	323344	SR	0.66	0.46	-0.18	-0.25	-0.25	0.46	0.2
K	5517	320457	SR	0.51	0.56	0.56	-0.28	-0.16	-0.31	0.2
K	5517	320455	SR	0.44	0.43	-0.26	-0.06	-0.30	0.43	0.2
K	5517	338826	SR	0.65	0.46	-0.21	-0.28	0.46	-0.19	0.2
K	5517	331322	SR	0.82	0.34	-0.15	-0.24	0.34	-0.14	0.3
K	5517	331321	SR	0.54	0.42	-0.21	-0.21	-0.15	0.42	0.4
K	5517	331323	SR	0.83	0.38	-0.16	0.38	-0.26	-0.18	0.2
L	5430	323326	SR	0.56	0.38	-0.15	-0.21	0.38	-0.22	0.2
L	5430	323323	SR	0.70	0.48	0.48	-0.22	-0.33	-0.16	0.0
L	5430	263108	SR	0.69	0.45	-0.22	-0.29	0.45	-0.18	0.1
L	5430	354960	SR	0.58	0.40	0.40	-0.31	-0.14	-0.11	0.0
L	5430	352583	SR	0.72	0.45	-0.24	-0.25	-0.23	0.45	0.0
L	5430	349047	SR	0.81	0.38	0.38	-0.17	-0.24	-0.19	0.2
L	5430	349043	SR	0.71	0.48	-0.27	0.48	-0.23	-0.24	0.2
L	5430	279514	SR	0.73	0.34	0.34	-0.23	-0.21	-0.08	0.1
L	5430	279668	SR	0.36	0.19	-0.14	0.19	0.01	-0.11	0.1
L	5430	279476	SR	0.56	0.54	0.54	-0.32	-0.23	-0.21	0.0
L	5430	331362	SR	0.40	0.35	0.35	-0.11	-0.21	-0.14	0.1
L	5430	323295	SR	0.48	0.36	-0.17	-0.21	0.36	-0.15	0.2
L	5430	323294	SR	0.74	0.42	-0.25	0.42	-0.22	-0.20	0.1
L	5430	263146	SR	0.60	0.34	-0.12	-0.26	-0.14	0.34	0.1
L	5430	271117	SR	0.42	0.30	-0.11	-0.13	-0.17	0.30	0.2

Table 1.B6 Item Statistics, Field Test Items: MDHSA Biology—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
L	5430	338787	SR	0.53	0.52	-0.30	-0.18	-0.25	0.52	0.1
L	5430	349090	SR	0.50	0.38	-0.15	-0.19	-0.18	0.38	0.1
L	5430	332034	SR	0.61	0.45	0.45	-0.23	-0.25	-0.19	0.1
L	5430	332031	SR	0.72	0.44	-0.20	-0.23	0.44	-0.25	0.1
L	5430	349113	SR	0.78	0.41	-0.27	-0.21	0.41	-0.19	0.1
L	5430	338705	SR	0.38	0.23	0.01	-0.19	-0.08	0.23	0.2
L	5430	338704	SR	0.50	0.43	-0.17	0.43	-0.21	-0.19	0.2
L	5430	338707	SR	0.53	0.45	0.45	-0.12	-0.32	-0.17	0.1
M	5547	323288	SR	0.74	0.40	-0.17	-0.23	-0.23	0.40	0.1
M	5547	323287	SR	0.45	0.29	-0.21	0.29	-0.04	-0.11	0.0
M	5547	349097	SR	0.66	0.49	0.49	-0.19	-0.17	-0.37	0.1
M	5547	322168	SR	0.42	0.29	-0.10	-0.11	0.29	-0.16	0.1
M	5547	288370	SR	0.41	0.18	-0.06	0.05	-0.19	0.18	0.1
M	5547	322138	SR	0.30	0.36	0.36	-0.08	-0.18	-0.14	0.2
M	5547	322135	SR	0.71	0.37	-0.17	-0.20	-0.19	0.37	0.3
M	5547	279478	SR	0.45	0.50	-0.22	0.50	-0.34	-0.07	0.2
M	5547	279516	SR	0.43	0.55	-0.38	-0.20	0.55	-0.10	0.1
M	5547	279583	SR	0.76	0.42	-0.20	-0.18	-0.27	0.42	0.1
M	5547	338731	SR	0.34	0.49	-0.05	-0.41	-0.13	0.49	0.1
M	5547	323300	SR	0.75	0.46	-0.29	-0.25	0.46	-0.17	0.2
M	5547	353462	SR	0.28	0.08	0.07	-0.09	0.08	-0.11	0.1
M	5547	322187	SR	0.50	0.48	-0.23	-0.30	-0.12	0.48	0.1
M	5547	279576	SR	0.52	0.23	-0.17	0.23	0.06	-0.24	0.2
M	5547	338777	SR	0.58	0.32	-0.10	0.32	-0.13	-0.24	0.2
M	5547	279585	SR	0.42	0.55	-0.21	-0.28	-0.22	0.55	0.1
M	5547	349026	SR	0.46	0.36	-0.15	0.36	-0.19	-0.13	0.3
M	5547	349028	SR	0.55	0.51	-0.14	-0.25	-0.29	0.51	0.3
M	5547	263155	SR	0.35	0.36	-0.15	-0.20	0.36	-0.08	0.2
M	5547	338703	SR	0.61	0.41	-0.22	0.41	-0.25	-0.09	0.3
M	5547	338706	SR	0.75	0.38	-0.21	-0.21	0.38	-0.18	0.3
M	5547	338702	SR	0.58	0.41	0.41	-0.25	-0.19	-0.14	0.2
N	10589	323280	SR	0.66	0.25	-0.14	0.25	-0.14	-0.09	0.0
N	10589	323282	SR	0.59	0.47	-0.26	-0.21	0.47	-0.21	0.0
N	10589	349104	SR	0.45	0.38	-0.25	-0.19	-0.07	0.38	0.1
N	10589	322175	SR	0.60	0.47	0.47	-0.33	-0.19	-0.15	0.1
N	10589	271043	SR	0.55	0.40	-0.17	0.40	-0.27	-0.10	0.1
N	10589	322137	SR	0.60	0.46	-0.23	0.46	-0.26	-0.23	0.3
N	10589	322139	SR	0.67	0.31	-0.16	-0.08	0.31	-0.24	0.3
N	10589	279673	SR	0.60	0.25	-0.19	-0.24	0.25	-0.04	0.2
N	10589	279675	SR	0.21	0.24	0.24	-0.31	0.11	-0.02	0.2
N	10589	279672	SR	0.89	0.24	-0.16	0.24	-0.13	-0.09	0.2
N	10589	322176	SR	0.60	0.37	-0.21	0.37	-0.21	-0.12	0.2
N	10589	323299	SR	0.63	0.44	-0.17	0.44	-0.27	-0.20	0.2
N	10589	323298	SR	0.52	0.32	0.32	-0.08	-0.17	-0.18	0.3

Table 1.B6 Item Statistics, Field Test Items: MDHSA Biology—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
N	10589	79473	SR	0.71	0.52	0.52	-0.30	-0.28	-0.19	0.3
N	10589	349094	SR	0.44	0.41	-0.05	-0.20	-0.26	0.41	0.4
N	10589	338762	SR	0.41	0.40	-0.28	0.40	-0.09	-0.19	0.3
N	10589	349084	SR	0.65	0.37	-0.22	-0.19	-0.15	0.37	0.3
N	10589	349027	SR	0.38	0.38	-0.13	-0.25	0.38	-0.05	0.5
N	10589	349029	SR	0.67	0.34	0.34	-0.22	-0.17	-0.12	0.4
N	10589	279582	SR	0.61	0.33	-0.23	0.33	-0.22	-0.09	0.4
N	10589	322141	SR	0.54	0.40	-0.15	0.40	-0.23	-0.17	0.4
N	10589	322143	SR	0.49	0.37	-0.04	-0.23	-0.21	0.37	0.4
N	10589	322142	SR	0.59	0.46	-0.22	-0.20	0.46	-0.23	0.4
Mean				0.57	0.38	-0.06	-0.03	-0.06	-0.02	0.2
SD				0.16	0.10	0.25	0.28	0.26	0.26	0.1

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D	11986	349364	SR	0.58	0.37	0.37	-0.19	-0.17	-0.18	0.1
D	11986	349456	SR	0.50	0.29	-0.08	0.29	-0.21	-0.09	0.1
D	11986	349365	SR	0.79	0.21	-0.04	-0.11	-0.22	0.21	0.1
D	11986	349369	SR	0.63	0.38	-0.14	0.38	-0.29	-0.14	0.1
D	11986	349366	SR	0.17	0.12	-0.08	0.02	0.12	-0.04	0.1
D	11986	349368	SR	0.79	0.36	-0.21	-0.22	-0.16	0.36	0.0
D	11986	349372	SR	0.51	0.28	-0.14	0.28	-0.14	-0.12	0.2
D	11986	349370	SR	0.38	0.16	-0.02	-0.06	-0.13	0.16	0.1
D	11986	285546	SR	0.58	0.36	-0.15	-0.14	-0.25	0.36	0.5
D	11986	332122	SR	0.77	0.42	-0.22	0.42	-0.23	-0.23	0.5
D	11986	332124	SR	0.68	0.51	-0.23	0.51	-0.33	-0.24	0.6
D	11986	332123	SR	0.60	0.49	-0.22	-0.27	0.49	-0.24	0.7
D	11986	332125	SR	0.57	0.50	-0.27	-0.25	0.50	-0.20	0.7
D	11986	349435	SR	0.65	0.27	-0.10	0.27	-0.17	-0.16	0.2
D	11986	349316	SR	0.28	0.27	0.27	-0.20	-0.28	0.14	0.3
D	11986	349307	SR	0.38	0.36	0.36	-0.16	-0.11	-0.16	0.3
D	11986	349311	SR	0.44	0.33	-0.26	-0.20	0.33	-0.02	0.2
D	11986	349313	SR	0.51	0.20	0.20	-0.27	-0.16	0.12	0.3
D	11986	349312	SR	0.49	0.34	-0.22	-0.22	-0.06	0.34	0.3
D	11986	349310	SR	0.59	0.52	-0.23	-0.28	-0.24	0.52	0.3
D	11986	349305	SR	0.58	0.51	-0.26	0.51	-0.19	-0.27	0.3
D	11986	349306	SR	0.63	0.37	0.37	-0.26	-0.13	-0.21	0.3
D	11986	338957	SR	0.83	0.32	-0.16	0.32	-0.16	-0.19	0.2
D	11986	338956	SR	0.76	0.49	-0.17	-0.27	-0.31	0.49	0.2
D	11986	338916	SR	0.42	0.33	0.33	-0.08	-0.17	-0.17	0.2
D	11986	338840	SR	0.78	0.45	0.45	-0.26	-0.28	-0.19	0.2
D	11986	338841	SR	0.49	0.29	-0.06	0.29	-0.23	-0.19	0.2
D	11986	338842	SR	0.79	0.35	0.35	-0.23	-0.18	-0.20	0.2
D	11986	338843	SR	0.75	0.46	-0.26	-0.24	0.46	-0.21	0.2
D	11986	338844	SR	0.54	0.49	-0.19	-0.34	-0.12	0.49	0.2
D	11986	338839	SR	0.40	0.32	0.32	-0.26	-0.14	0.04	0.3
D	11986	251240	SR	0.54	0.45	-0.18	-0.27	-0.24	0.45	0.3
D	11986	251241	SR	0.57	0.40	-0.25	-0.25	0.40	-0.13	0.2
E	5491	349325	SR	0.41	0.19	0.19	-0.09	-0.06	-0.15	0.1
E	5491	349328	SR	0.64	0.32	-0.18	-0.21	-0.17	0.32	0.0
E	5491	349334	SR	0.71	0.51	0.51	-0.21	-0.22	-0.35	0.1
E	5491	349333	SR	0.37	0.08	-0.05	-0.14	0.04	0.08	0.1
E	5491	349324	SR	0.75	0.47	-0.29	-0.19	-0.27	0.47	0.0
E	5491	349335	SR	0.75	0.30	-0.16	-0.20	0.30	-0.13	0.0
E	5491	349330	SR	0.77	0.18	-0.11	-0.07	-0.11	0.18	0.0
E	5491	349329	SR	0.59	0.12	-0.17	0.02	0.12	-0.09	0.0
E	5491	272877	SR	0.71	0.51	-0.23	-0.24	-0.29	0.51	0.3
E	5491	331899	SR	0.41	0.19	-0.08	0.19	-0.09	-0.05	0.4

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
E	5491	331900	SR	0.70	0.25	-0.13	0.25	-0.02	-0.24	0.4
E	5491	331901	SR	0.72	0.42	-0.29	-0.28	0.42	-0.12	0.4
E	5491	331902	SR	0.45	0.21	0.07	0.21	-0.31	-0.17	0.5
E	5491	349415	SR	0.89	0.43	-0.25	-0.26	0.43	-0.21	0.1
E	5491	349384	SR	0.42	0.22	-0.16	0.22	-0.09	-0.02	0.1
E	5491	349380	SR	0.62	0.17	-0.21	-0.04	0.17	-0.12	0.1
E	5491	349382	SR	0.65	0.23	0.23	-0.14	-0.24	-0.03	0.1
E	5491	349383	SR	0.76	0.32	-0.18	-0.21	-0.11	0.32	0.1
E	5491	349391	SR	0.75	0.40	-0.19	-0.24	0.40	-0.22	0.2
E	5491	349390	SR	0.63	0.21	-0.16	0.21	-0.31	0.10	0.2
E	5491	349388	SR	0.57	0.39	-0.07	0.39	-0.24	-0.24	0.2
E	5491	349387	SR	0.37	0.18	0.08	0.18	-0.15	-0.19	0.2
E	5491	338918	SR	0.74	0.31	-0.24	-0.10	0.31	-0.18	0.1
E	5491	338919	SR	0.86	0.45	0.45	-0.27	-0.29	-0.17	0.1
E	5491	338920	SR	0.64	0.26	-0.06	-0.16	0.26	-0.18	0.1
E	5491	338845	SR	0.79	0.42	0.42	-0.29	-0.23	-0.12	0.1
E	5491	338929	SR	0.82	0.46	0.46	-0.23	-0.29	-0.22	0.1
E	5491	338931	SR	0.43	0.37	-0.26	0.37	-0.07	-0.21	0.1
E	5491	338927	SR	0.62	0.39	-0.11	-0.23	-0.24	0.39	0.1
E	5491	338928	SR	0.55	0.24	0.24	-0.23	0.04	-0.25	0.1
E	5491	338926	SR	0.31	0.10	-0.03	-0.12	0.10	0.02	0.1
E	5491	214631	SR	0.52	0.26	-0.13	0.26	-0.05	-0.23	0.1
E	5491	214632	SR	0.46	0.22	-0.28	0.00	0.22	-0.18	0.1
F	5486	349206	SR	0.55	0.21	-0.04	-0.08	0.21	-0.20	0.1
F	5486	349207	SR	0.71	0.35	0.35	-0.13	-0.21	-0.20	0.1
F	5486	349208	SR	0.20	0.10	0.03	-0.09	-0.16	0.10	0.1
F	5486	349210	SR	0.62	0.21	-0.18	0.01	-0.25	0.21	0.2
F	5486	349205	SR	0.50	0.28	-0.15	-0.10	0.28	-0.13	0.0
F	5486	349203	SR	0.79	0.36	-0.17	-0.12	0.36	-0.28	0.0
F	5486	349202	SR	0.18	0.19	0.02	-0.05	-0.20	0.19	0.1
F	5486	349209	SR	0.79	0.30	-0.12	-0.20	0.30	-0.17	0.0
F	5486	256298	SR	0.66	0.41	-0.23	-0.21	0.41	-0.17	0.3
F	5486	323395	SR	0.76	0.49	-0.24	-0.31	0.49	-0.20	0.5
F	5486	323396	SR	0.53	0.41	-0.22	-0.20	-0.15	0.41	0.5
F	5486	323458	SR	0.71	0.49	-0.22	0.49	-0.30	-0.23	0.5
F	5486	323460	SR	0.63	0.51	-0.24	-0.28	0.51	-0.23	0.6
F	5486	349422	SR	0.48	0.30	0.30	-0.09	-0.16	-0.19	0.1
F	5486	349163	SR	0.32	0.15	-0.22	0.07	-0.13	0.15	0.3
F	5486	349164	SR	0.38	0.24	-0.10	0.24	-0.20	0.02	0.3
F	5486	349165	SR	0.52	0.20	0.03	0.20	-0.25	-0.13	0.2
F	5486	349171	SR	0.38	0.19	0.03	-0.15	0.19	-0.21	0.3
F	5486	349166	SR	0.80	0.49	0.49	-0.26	-0.29	-0.22	0.2
F	5486	349170	SR	0.65	0.19	-0.02	0.19	-0.24	-0.05	0.2

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
F	5486	349168	SR	0.83	0.50	-0.24	0.50	-0.33	-0.22	0.3
F	5486	349167	SR	0.48	0.12	0.11	-0.25	0.12	-0.09	0.3
F	5486	338917	SR	0.82	0.40	0.40	-0.25	-0.27	-0.15	0.1
F	5486	338958	SR	0.76	0.45	0.45	-0.27	-0.27	-0.17	0.1
F	5486	338959	SR	0.38	0.36	-0.16	-0.07	-0.22	0.36	0.1
F	5486	338849	SR	0.77	0.44	-0.20	-0.30	-0.26	0.44	0.1
F	5486	338846	SR	0.34	0.16	0.11	-0.25	-0.15	0.16	0.2
F	5486	338847	SR	0.36	0.27	0.27	-0.16	-0.08	-0.07	0.4
F	5486	338848	SR	0.65	0.38	-0.18	-0.22	0.38	-0.15	0.1
F	5486	338851	SR	0.86	0.43	-0.22	-0.26	0.43	-0.22	0.1
F	5486	338850	SR	0.88	0.29	-0.18	0.29	-0.17	-0.16	0.1
F	5486	256987	SR	0.57	0.33	-0.08	0.33	-0.15	-0.23	0.2
F	5486	256988	SR	0.52	0.42	-0.23	-0.21	-0.14	0.42	0.1
G	5544	349158	SR	0.12	0.13	0.11	-0.24	-0.05	0.13	0.1
G	5544	349153	SR	0.35	0.19	0.19	-0.10	-0.10	-0.02	0.0
G	5544	349154	SR	0.65	0.19	0.19	-0.08	-0.12	-0.13	0.0
G	5544	349155	SR	0.61	0.38	-0.19	0.38	-0.16	-0.20	0.0
G	5544	349156	SR	0.49	0.17	-0.07	0.00	-0.21	0.17	0.0
G	5544	349159	SR	0.57	0.24	-0.14	0.24	-0.21	-0.01	0.0
G	5544	349157	SR	0.51	0.40	-0.13	-0.26	-0.18	0.40	0.1
G	5544	349160	SR	0.65	0.47	0.47	-0.16	-0.32	-0.20	0.0
G	5544	272948	SR	0.40	0.25	0.25	-0.17	-0.20	0.02	0.3
G	5544	264654	SR	0.79	0.51	-0.26	-0.29	-0.27	0.51	0.2
G	5544	264652	SR	0.66	0.39	-0.21	-0.20	0.39	-0.16	0.3
G	5544	264653	SR	0.59	0.42	0.42	-0.12	-0.28	-0.25	0.2
G	5544	355150	SR	0.89	0.43	-0.18	-0.28	-0.26	0.43	0.2
G	5544	349424	SR	0.76	0.48	0.48	-0.20	-0.30	-0.25	0.1
G	5544	349172	SR	0.20	0.21	-0.12	0.21	-0.13	0.10	0.2
G	5544	349179	SR	0.56	0.30	-0.19	-0.18	-0.14	0.30	0.2
G	5544	349176	SR	0.58	0.35	-0.11	-0.32	0.35	-0.12	0.2
G	5544	349180	SR	0.71	0.36	-0.21	0.36	-0.27	-0.10	0.2
G	5544	349181	SR	0.85	0.47	-0.25	-0.26	-0.26	0.47	0.2
G	5544	349175	SR	0.62	0.39	-0.15	-0.13	-0.28	0.39	0.2
G	5544	349447	SR	0.47	0.45	-0.21	-0.18	-0.23	0.45	0.2
G	5544	349174	SR	0.77	0.44	-0.23	-0.26	0.44	-0.20	0.1
G	5544	338913	SR	0.71	0.43	-0.22	-0.19	-0.27	0.43	0.3
G	5544	338915	SR	0.72	0.35	-0.21	0.35	-0.18	-0.17	0.2
G	5544	338914	SR	0.41	0.19	-0.06	0.19	-0.06	-0.17	0.2
G	5544	338853	SR	0.43	0.34	-0.20	0.01	-0.30	0.34	0.2
G	5544	338854	SR	0.79	0.42	-0.18	-0.23	0.42	-0.25	0.2
G	5544	338852	SR	0.55	0.38	-0.27	-0.19	0.38	-0.05	0.2
G	5544	338857	SR	0.84	0.50	-0.26	-0.25	-0.30	0.50	0.2
G	5544	338855	SR	0.79	0.46	-0.25	0.46	-0.26	-0.22	0.2

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
G	5544	338856	SR	0.69	0.41	-0.18	-0.28	0.41	-0.17	0.2
G	5544	281768	SR	0.57	0.20	-0.13	-0.25	0.03	0.20	0.3
G	5544	281770	SR	0.87	0.40	-0.21	-0.18	0.40	-0.26	0.2
H	5553	349437	SR	0.63	0.25	-0.22	-0.15	-0.06	0.25	0.1
H	5553	349438	SR	0.54	0.36	0.36	-0.20	-0.24	-0.03	0.1
H	5553	349439	SR	0.65	0.35	-0.17	-0.21	0.35	-0.14	0.1
H	5553	349440	SR	0.49	0.06	0.06	0.10	-0.12	0.00	0.1
H	5553	349444	SR	0.37	0.16	-0.09	-0.13	0.16	0.01	0.0
H	5553	349441	SR	0.42	0.23	-0.15	-0.18	-0.01	0.23	0.1
H	5553	349442	SR	0.39	0.29	-0.11	0.29	-0.12	-0.19	0.1
H	5553	349443	SR	0.70	0.39	0.39	-0.19	-0.27	-0.21	0.0
H	5553	272870	SR	0.56	0.23	-0.02	-0.19	0.23	-0.14	0.5
H	5553	285606	SR	0.67	0.32	-0.14	-0.16	-0.17	0.32	0.6
H	5553	285605	SR	0.67	0.47	-0.21	0.47	-0.25	-0.23	0.7
H	5553	285607	SR	0.56	0.37	0.37	-0.19	-0.20	-0.12	0.7
H	5553	355156	SR	0.61	0.50	-0.15	-0.33	-0.26	0.50	0.8
H	5553	349431	SR	0.84	0.36	-0.20	-0.20	0.36	-0.18	0.2
H	5553	338905	SR	0.33	0.14	-0.15	0.14	-0.13	0.10	0.3
H	5553	338912	SR	0.73	0.53	-0.26	-0.34	0.53	-0.23	0.2
H	5553	338908	SR	0.61	0.24	-0.09	-0.21	0.24	-0.04	0.2
H	5553	338907	SR	0.59	0.38	-0.20	-0.14	-0.28	0.38	0.2
H	5553	338906	SR	0.52	0.06	0.07	0.06	-0.03	-0.10	0.3
H	5553	338909	SR	0.72	0.36	-0.16	-0.22	-0.16	0.36	0.2
H	5553	338910	SR	0.55	0.35	-0.23	0.35	-0.25	-0.10	0.3
H	5553	338911	SR	0.74	0.41	0.41	-0.24	-0.25	-0.19	0.2
H	5553	332093	SR	0.59	0.32	-0.04	-0.24	-0.22	0.32	0.2
H	5553	332095	SR	0.44	0.18	0.18	-0.07	-0.15	-0.07	0.2
H	5553	332094	SR	0.59	0.45	-0.18	-0.26	0.45	-0.23	0.2
H	5553	321010	SR	0.81	0.42	-0.24	-0.30	0.42	-0.12	0.2
H	5553	321011	SR	0.47	0.31	0.05	-0.30	0.31	-0.24	0.2
H	5553	321015	SR	0.48	0.37	-0.21	-0.25	-0.07	0.37	0.2
H	5553	321014	SR	0.55	0.21	-0.19	0.21	-0.19	0.03	0.2
H	5553	321013	SR	0.63	0.45	-0.25	0.45	-0.26	-0.15	0.3
H	5553	321012	SR	0.28	-0.14	-0.14	0.30	0.06	-0.25	0.2
H	5553	256983	SR	0.63	0.15	-0.02	-0.10	0.15	-0.19	0.2
H	5553	256984	SR	0.76	0.38	-0.21	-0.18	-0.24	0.38	0.2
J	5704	338875	SR	0.82	0.28	0.28	-0.19	-0.15	-0.11	0.0
J	5704	338877	SR	0.64	0.26	-0.16	-0.08	-0.23	0.26	0.0
J	5704	338879	SR	0.58	0.22	-0.04	-0.18	-0.18	0.22	0.1
J	5704	338878	SR	0.43	0.07	0.03	0.07	-0.05	-0.07	0.1
J	5704	338873	SR	0.81	0.34	-0.15	0.34	-0.24	-0.18	0.0
J	5704	338872	SR	0.67	0.37	-0.27	-0.17	0.37	-0.11	0.1
J	5704	338876	SR	0.54	0.34	-0.10	-0.15	-0.30	0.34	0.1

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
J	5704	338881	SR	0.72	0.35	-0.12	0.35	-0.27	-0.19	0.1
J	5704	256301	SR	0.58	0.44	0.44	-0.18	-0.18	-0.28	0.3
J	5704	256469	SR	0.56	0.20	-0.21	-0.23	0.02	0.20	0.4
J	5704	256470	SR	0.50	0.44	-0.13	0.44	-0.23	-0.24	0.5
J	5704	256468	SR	0.17	0.25	-0.06	0.01	-0.17	0.25	0.6
J	5704	355151	SR	0.49	0.38	0.38	-0.19	-0.23	-0.19	0.5
J	5704	349417	SR	0.73	0.45	-0.24	-0.22	-0.23	0.45	0.1
J	5704	338886	SR	0.70	0.31	-0.18	0.31	-0.13	-0.20	0.1
J	5704	338891	SR	0.48	0.36	-0.22	-0.13	0.36	-0.13	0.1
J	5704	338888	SR	0.81	0.41	-0.29	0.41	-0.21	-0.16	0.1
J	5704	338889	SR	0.64	0.40	-0.12	-0.29	0.40	-0.24	0.1
J	5704	338890	SR	0.76	0.39	-0.20	-0.16	-0.26	0.39	0.1
J	5704	338885	SR	0.89	0.39	-0.21	-0.26	0.39	-0.17	0.1
J	5704	338887	SR	0.49	0.43	-0.17	-0.23	0.43	-0.20	0.1
J	5704	338883	SR	0.69	0.47	0.47	-0.30	-0.27	-0.23	0.1
J	5704	331884	SR	0.57	0.43	-0.18	0.43	-0.19	-0.26	0.1
J	5704	331885	SR	0.79	0.41	0.41	-0.22	-0.29	-0.18	0.1
J	5704	331883	SR	0.74	0.48	0.48	-0.26	-0.27	-0.23	0.1
J	5704	320972	SR	0.49	0.49	-0.21	-0.28	-0.17	0.49	0.2
J	5704	320976	SR	0.74	0.34	-0.18	-0.19	0.34	-0.18	0.1
J	5704	320977	SR	0.61	0.28	0.28	-0.05	-0.12	-0.25	0.1
J	5704	320973	SR	0.67	0.37	-0.08	-0.28	-0.24	0.37	0.1
J	5704	320975	SR	0.60	0.43	-0.24	0.43	-0.20	-0.24	0.1
J	5704	320974	SR	0.53	0.32	-0.09	0.32	-0.17	-0.19	0.2
J	5704	214635	SR	0.60	0.29	-0.19	0.29	-0.18	-0.08	0.2
J	5704	214636	SR	0.64	0.49	-0.24	-0.24	-0.25	0.49	0.2
K	5501	321008	SR	0.46	0.22	0.22	-0.13	-0.08	-0.17	0.0
K	5501	320968	SR	0.79	0.27	-0.19	0.27	-0.16	-0.07	0.0
K	5501	321007	SR	0.24	0.32	-0.13	0.32	-0.11	-0.12	0.0
K	5501	321005	SR	0.77	0.38	0.38	-0.25	-0.24	-0.14	0.1
K	5501	320970	SR	0.71	0.45	-0.16	0.45	-0.21	-0.31	0.1
K	5501	321006	SR	0.84	0.33	-0.23	-0.18	0.33	-0.13	0.1
K	5501	321009	SR	0.71	0.31	-0.05	0.31	-0.21	-0.21	0.1
K	5501	320971	SR	0.48	0.33	0.33	-0.10	-0.20	-0.13	0.1
K	5501	272879	SR	0.68	0.37	0.37	-0.27	-0.13	-0.19	0.3
K	5501	264649	SR	0.79	0.35	-0.22	0.35	-0.26	-0.09	0.3
K	5501	264650	SR	0.88	0.32	-0.26	-0.21	-0.07	0.32	0.3
K	5501	264651	SR	0.72	0.39	0.39	-0.21	-0.26	-0.12	0.3
K	5501	355152	SR	0.45	0.21	-0.16	-0.24	0.21	0.08	0.4
K	5501	349418	SR	0.82	0.36	-0.15	-0.22	0.36	-0.24	0.1
K	5501	349199	SR	0.78	0.38	-0.17	-0.26	-0.25	0.38	0.1
K	5501	349193	SR	0.69	0.51	-0.26	-0.24	-0.30	0.51	0.1
K	5501	349198	SR	0.65	0.44	0.44	-0.26	-0.26	-0.20	0.1

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
K	5501	349194	SR	0.66	0.42	-0.14	-0.27	-0.22	0.42	0.1
K	5501	349192	SR	0.76	0.47	-0.23	-0.22	-0.29	0.47	0.1
K	5501	349197	SR	0.71	0.35	-0.15	-0.22	0.35	-0.16	0.1
K	5501	349195	SR	0.38	0.39	0.39	-0.16	-0.16	-0.17	0.1
K	5501	349201	SR	0.67	0.32	0.32	-0.15	-0.20	-0.19	0.1
K	5501	331888	SR	0.51	0.24	-0.08	-0.16	0.24	-0.06	0.1
K	5501	332103	SR	0.76	0.16	-0.08	0.16	-0.06	-0.15	0.2
K	5501	332102	SR	0.88	0.41	-0.24	-0.23	0.41	-0.19	0.1
K	5501	321017	SR	0.68	0.49	0.49	-0.30	-0.20	-0.22	0.1
K	5501	321016	SR	0.40	0.25	-0.12	0.25	-0.10	-0.09	0.1
K	5501	321019	SR	0.45	0.32	-0.07	-0.23	0.32	-0.11	0.1
K	5501	321020	SR	0.74	0.45	-0.23	0.45	-0.26	-0.20	0.2
K	5501	321021	SR	0.28	0.30	-0.22	0.01	0.30	-0.15	0.1
K	5501	321018	SR	0.72	0.45	-0.20	0.45	-0.31	-0.17	0.1
K	5501	256977	SR	0.69	0.19	0.03	-0.14	0.19	-0.22	0.1
K	5501	256978	SR	0.58	0.34	-0.20	0.34	-0.17	-0.12	0.1
L	5437	349190	SR	0.67	0.22	-0.12	-0.10	0.22	-0.10	0.1
L	5437	349189	SR	0.74	0.19	-0.21	-0.10	0.19	-0.03	0.0
L	5437	349183	SR	0.39	0.20	-0.12	0.20	-0.03	-0.13	0.0
L	5437	349186	SR	0.54	0.22	-0.06	-0.22	-0.08	0.22	0.1
L	5437	349184	SR	0.40	0.39	0.39	-0.17	-0.18	-0.14	0.1
L	5437	349187	SR	0.34	0.15	-0.04	-0.17	0.03	0.15	0.1
L	5437	349188	SR	0.63	0.21	-0.06	-0.27	0.00	0.21	0.1
L	5437	349182	SR	0.45	0.26	-0.08	0.26	-0.23	-0.11	0.1
L	5437	272867	SR	0.45	0.38	0.38	-0.26	-0.12	-0.19	0.3
L	5437	256444	SR	0.57	0.26	-0.01	0.26	-0.27	-0.21	0.3
L	5437	256445	SR	0.52	0.22	-0.03	-0.24	0.22	-0.09	0.4
L	5437	256446	SR	0.69	0.51	0.51	-0.29	-0.22	-0.27	0.4
L	5437	355155	SR	0.69	0.41	-0.30	0.41	-0.19	-0.16	0.5
L	5437	349430	SR	0.68	0.43	-0.18	0.43	-0.23	-0.24	0.1
L	5437	349212	SR	0.89	0.40	-0.21	0.40	-0.26	-0.18	0.2
L	5437	349220	SR	0.46	0.08	0.08	-0.21	0.03	0.05	0.1
L	5437	349215	SR	0.61	0.44	-0.17	-0.21	-0.31	0.44	0.1
L	5437	349216	SR	0.41	-0.06	0.26	-0.21	-0.06	-0.19	0.2
L	5437	349218	SR	0.56	0.24	0.24	-0.05	-0.14	-0.22	0.1
L	5437	349219	SR	0.81	0.39	-0.17	-0.24	0.39	-0.22	0.2
L	5437	349213	SR	0.71	0.46	0.46	-0.29	-0.23	-0.19	0.2
L	5437	349221	SR	0.56	0.31	0.31	-0.12	-0.09	-0.23	0.1
L	5437	332104	SR	0.41	0.01	0.04	0.01	-0.10	0.06	0.1
L	5437	331891	SR	0.64	0.16	-0.02	0.16	-0.25	0.01	0.1
L	5437	332105	SR	0.47	0.36	-0.21	-0.20	0.36	-0.22	0.1
L	5437	320978	SR	0.57	0.24	-0.17	0.24	-0.04	-0.17	0.1
L	5437	320979	SR	0.65	0.34	-0.19	-0.20	-0.17	0.34	0.1

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
L	5437	320981	SR	0.68	0.39	-0.15	-0.26	0.39	-0.20	0.1
L	5437	320983	SR	0.67	0.45	-0.26	-0.27	0.45	-0.15	0.1
L	5437	320980	SR	0.41	0.27	-0.13	-0.04	-0.17	0.27	0.2
L	5437	320982	SR	0.34	0.14	-0.20	0.14	-0.18	0.10	0.1
L	5437	214700	SR	0.24	0.21	-0.22	0.07	-0.14	0.21	0.1
L	5437	214701	SR	0.76	0.50	0.50	-0.30	-0.27	-0.23	0.1
M	5473	349260	SR	0.88	0.40	-0.28	-0.20	0.40	-0.18	0.1
M	5473	349254	SR	0.43	0.13	-0.18	0.13	0.00	-0.12	0.1
M	5473	349259	SR	0.60	0.12	-0.11	0.12	-0.17	0.03	0.0
M	5473	349253	SR	0.66	0.40	-0.24	0.40	-0.20	-0.16	0.1
M	5473	349257	SR	0.57	0.32	-0.28	-0.13	-0.24	0.32	0.0
M	5473	349261	SR	0.74	0.39	-0.18	-0.17	0.39	-0.30	0.1
M	5473	349255	SR	0.24	0.19	0.14	-0.21	-0.23	0.19	0.1
M	5473	349256	SR	0.55	0.19	-0.08	-0.15	0.19	-0.09	0.0
M	5473	272871	SR	0.80	0.38	-0.14	0.38	-0.31	-0.18	0.2
M	5473	256431	SR	0.60	0.29	-0.03	-0.24	0.29	-0.18	0.4
M	5473	256432	SR	0.70	0.32	-0.19	-0.22	-0.14	0.32	0.3
M	5473	256433	SR	0.55	0.35	-0.10	-0.20	-0.18	0.35	0.5
M	5473	355154	SR	0.48	0.08	0.08	0.03	-0.08	-0.05	0.5
M	5473	349416	SR	0.76	0.34	-0.24	-0.20	0.34	-0.14	0.1
M	5473	349354	SR	0.43	0.32	0.32	-0.26	-0.13	-0.04	0.2
M	5473	349455	SR	0.63	0.31	-0.05	-0.21	-0.23	0.31	0.1
M	5473	349347	SR	0.44	0.34	-0.09	-0.17	-0.19	0.34	0.2
M	5473	349454	SR	0.37	0.15	0.15	-0.12	-0.26	0.10	0.2
M	5473	349351	SR	0.27	0.15	0.15	-0.06	-0.02	-0.08	0.2
M	5473	349346	SR	0.35	0.07	-0.13	0.06	0.07	-0.08	0.1
M	5473	349355	SR	0.63	0.36	-0.21	-0.15	-0.15	0.36	0.2
M	5473	349356	SR	0.55	0.46	0.46	-0.26	-0.18	-0.20	0.2
M	5473	331895	SR	0.40	0.32	-0.04	0.32	-0.31	-0.04	0.1
M	5473	331894	SR	0.79	0.47	-0.21	-0.28	-0.25	0.47	0.1
M	5473	331896	SR	0.80	0.48	-0.24	-0.26	-0.26	0.48	0.1
M	5473	331821	SR	0.56	0.48	-0.20	-0.24	0.48	-0.24	0.1
M	5473	331822	SR	0.57	0.29	0.29	-0.07	-0.23	-0.14	0.1
M	5473	332090	SR	0.37	0.20	-0.06	-0.27	0.20	0.09	0.1
M	5473	331823	SR	0.43	0.34	-0.21	-0.18	-0.04	0.34	0.1
M	5473	331824	SR	0.66	0.36	0.36	-0.23	-0.32	-0.05	0.2
M	5473	331825	SR	0.73	0.40	-0.29	-0.12	-0.26	0.40	0.1
M	5473	256979	SR	0.52	0.21	-0.22	0.02	0.21	-0.09	0.1
M	5473	256980	SR	0.31	0.30	0.30	-0.07	-0.14	-0.13	0.1
N	5348	349292	SR	0.38	0.11	-0.13	0.11	-0.06	0.02	0.1
N	5348	349288	SR	0.56	0.26	-0.21	0.26	-0.01	-0.19	0.1
N	5348	349291	SR	0.62	0.40	-0.13	0.40	-0.20	-0.28	0.1
N	5348	349294	SR	0.68	0.48	-0.23	-0.25	-0.27	0.48	0.1

Table 1.B7 Item Statistics, Field Test Items: MDHSA English—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
N	5348	349289	SR	0.83	0.31	0.31	-0.10	-0.14	-0.24	0.0
N	5348	349293	SR	0.16	0.02	-0.20	0.23	-0.26	0.02	0.1
N	5348	349296	SR	0.69	0.28	-0.05	-0.25	0.28	-0.15	0.0
N	5348	349297	SR	0.64	0.44	0.44	-0.18	-0.25	-0.22	0.1
N	5348	272872	SR	0.53	0.15	0.10	0.15	-0.23	-0.23	0.3
N	5348	285602	SR	0.82	0.30	-0.08	-0.19	0.30	-0.18	0.3
N	5348	285603	SR	0.83	0.25	-0.21	0.25	-0.17	-0.04	0.4
N	5348	285604	SR	0.62	0.29	0.29	-0.09	-0.16	-0.17	0.3
N	5348	355157	SR	0.54	0.35	0.35	-0.23	-0.12	-0.13	0.5
N	5348	349432	SR	0.45	0.29	0.29	-0.14	-0.29	-0.03	0.2
N	5348	349700	SR	0.45	0.30	-0.12	-0.14	0.30	-0.12	0.2
N	5348	349276	SR	0.67	0.33	0.33	-0.18	-0.08	-0.22	0.1
N	5348	349278	SR	0.73	0.39	-0.21	-0.17	-0.23	0.39	0.2
N	5348	349277	SR	0.46	0.29	-0.18	0.01	-0.27	0.29	0.2
N	5348	349275	SR	0.80	0.47	0.47	-0.26	-0.29	-0.20	0.1
N	5348	349280	SR	0.64	0.42	0.42	-0.29	-0.14	-0.18	0.2
N	5348	349279	SR	0.59	0.49	-0.25	0.49	-0.26	-0.18	0.2
N	5348	349281	SR	0.59	0.32	-0.19	0.32	-0.14	-0.14	0.2
N	5348	332107	SR	0.75	0.22	-0.08	0.22	-0.16	-0.16	0.1
N	5348	332106	SR	0.73	0.48	0.48	-0.23	-0.34	-0.17	0.1
N	5348	332108	SR	0.73	0.38	-0.20	-0.19	0.38	-0.20	0.2
N	5348	331839	SR	0.75	0.41	-0.17	-0.23	0.41	-0.24	0.1
N	5348	331840	SR	0.38	0.29	0.29	-0.13	-0.14	-0.07	0.2
N	5348	331835	SR	0.66	0.49	0.49	-0.27	-0.29	-0.23	0.2
N	5348	331834	SR	0.69	0.39	-0.19	0.39	-0.26	-0.14	0.1
N	5348	331836	SR	0.77	0.28	-0.28	-0.24	0.28	0.01	0.1
N	5348	331837	SR	0.46	0.29	-0.17	0.29	-0.16	-0.10	0.1
N	5348	109106	SR	0.87	0.47	-0.26	-0.27	0.47	-0.23	0.3
N	5348	109107	SR	0.57	0.41	-0.25	0.41	-0.18	-0.15	0.2
Mean				0.60	0.33	-0.04	-0.06	-0.06	-0.02	0.2
SD				0.16	0.12	0.23	0.24	0.24	0.23	0.1

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Table 1.B8 Item Statistics, Field Test Items: MDHSA Government—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
D	11932	348470	SR	0.41	0.47	-0.15	-0.31	-0.14	0.47	0.1
D	11932	324392	SR	0.58	0.26	-0.18	0.26	-0.28	0.01	0.1
D	11932	339085	SR	0.58	0.44	-0.12	0.44	-0.28	-0.22	0.1
D	6812	321100	SR	0.52	0.49	-0.21	-0.25	-0.22	0.49	0.1
D	11932	324434	SR	0.29	0.38	0.38	-0.24	-0.13	-0.04	0.2
D	11932	324388	SR	0.68	0.47	-0.26	0.47	-0.22	-0.23	0.3
D	11932	348450	SR	0.39	0.40	-0.17	-0.22	-0.12	0.40	0.3
D	11932	348528	SR	0.83	0.41	-0.19	-0.22	-0.25	0.41	0.2
D	11932	348517	SR	0.61	0.39	0.39	-0.27	-0.10	-0.21	0.2
D	11932	348561	SR	0.48	0.40	-0.20	0.40	-0.17	-0.16	0.1
D	11932	331401	SR	0.60	0.50	-0.23	0.50	-0.33	-0.15	0.2
D	11932	348505	SR	0.64	0.51	-0.31	0.51	-0.28	-0.19	0.2
D	11932	348478	SR	0.58	0.32	-0.19	-0.11	0.32	-0.22	0.2
D	11932	353532	SR	0.41	0.34	-0.23	0.34	-0.26	-0.01	0.2
D	11932	348486	SR	0.81	0.49	-0.27	-0.27	-0.24	0.49	0.2
D	11932	353548	SR	0.44	0.19	-0.08	0.19	-0.09	-0.06	0.3
D	11932	324721	SR	0.40	0.20	0.00	-0.20	-0.07	0.20	0.3
D	11932	324736	SR	0.37	0.11	-0.01	0.11	-0.10	-0.03	0.3
D	11932	324718	SR	0.53	0.36	0.36	-0.17	-0.18	-0.18	0.2
D	11932	348501	SR	0.57	0.44	-0.17	-0.27	0.44	-0.17	0.3
D	11932	324437	SR	0.77	0.51	-0.26	-0.29	-0.25	0.51	0.2
D	11932	339066	SR	0.47	0.37	-0.16	0.37	-0.25	-0.08	0.3
D	11932	348471	SR	0.55	0.44	-0.21	-0.22	0.44	-0.20	0.2
D	11932	339084	SR	0.50	0.37	-0.14	-0.28	0.37	-0.06	0.3
D	11932	339036	SR	0.68	0.49	0.49	-0.27	-0.21	-0.26	0.3
E	5647	353514	SR	0.70	0.25	-0.17	0.25	-0.12	-0.11	0.1
E	5647	348508	SR	0.72	0.47	0.47	-0.26	-0.18	-0.28	0.1
E	5647	339082	SR	0.70	0.43	-0.23	0.43	-0.13	-0.28	0.1
E	5647	324395	SR	0.84	0.35	-0.17	-0.20	0.35	-0.19	0.1
E	5647	339042	SR	0.81	0.46	-0.28	-0.24	-0.21	0.46	0.1
E	5647	348449	SR	0.73	0.38	-0.21	0.38	-0.23	-0.15	0.1
E	5647	324389	SR	0.48	0.48	0.48	-0.23	-0.21	-0.19	0.2
E	5647	331428	SR	0.53	0.27	-0.16	-0.05	-0.24	0.27	0.2
E	5647	331394	SR	0.61	0.50	0.50	-0.23	-0.30	-0.19	0.1
E	5647	324697	SR	0.88	0.39	-0.19	-0.24	0.39	-0.20	0.0
E	5647	324698	SR	0.63	0.26	0.26	-0.31	-0.11	0.03	0.1
E	5647	321127	SR	0.36	0.39	0.39	-0.03	-0.24	-0.20	0.2
E	5647	324391	SR	0.53	0.34	-0.08	-0.18	-0.28	0.34	0.1
E	5647	348460	SR	0.79	0.36	0.36	-0.20	-0.20	-0.16	0.1
E	5647	321084	SR	0.48	0.50	-0.26	-0.18	-0.27	0.50	0.2
E	5647	348502	SR	0.57	0.53	-0.26	-0.25	0.53	-0.23	0.2
E	5647	331432	SR	0.27	0.23	-0.18	-0.11	-0.01	0.23	0.2
E	5647	324396	SR	0.95	0.27	-0.16	0.27	-0.16	-0.12	0.1

Table 1.B8 Item Statistics, Field Test Items: MDHSA Government—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
E	5647	339067	SR	0.77	0.45	-0.23	-0.22	-0.26	0.45	0.2
E	5647	339196	SR	0.50	0.31	-0.06	-0.15	-0.19	0.31	0.2
E	5647	324723	SR	0.25	0.38	-0.16	-0.18	-0.12	0.38	0.2
E	5647	324722	SR	0.48	0.44	0.44	-0.21	-0.23	-0.25	0.2
E	5647	331442	SR	0.40	0.39	-0.19	0.39	-0.27	0.01	0.2
E	5647	348484	SR	0.87	0.44	-0.22	-0.23	-0.27	0.44	0.1
E	5647	348536	SR	0.69	0.43	-0.22	-0.26	0.43	-0.18	0.2
F	5649	348458	SR	0.73	0.50	-0.28	0.50	-0.27	-0.22	0.1
F	5649	348565	SR	0.82	0.36	-0.14	0.36	-0.20	-0.25	0.1
F	5649	324431	SR	0.40	0.22	0.22	-0.03	-0.27	-0.10	0.1
F	5649	324432	SR	0.57	0.08	-0.14	-0.24	0.08	0.20	0.1
F	5649	348540	SR	0.61	0.51	0.51	-0.28	-0.23	-0.23	0.1
F	5649	339201	SR	0.81	0.37	0.37	-0.21	-0.19	-0.20	0.2
F	5649	348506	SR	0.51	0.35	-0.18	-0.20	0.35	-0.08	0.3
F	5649	321080	SR	0.49	0.54	-0.20	-0.31	0.54	-0.20	0.2
F	5649	348455	SR	0.81	0.46	0.46	-0.31	-0.22	-0.20	0.2
F	5649	348559	SR	0.35	0.20	0.03	-0.20	0.20	-0.13	0.1
F	5649	348480	SR	0.60	0.47	-0.23	0.47	-0.22	-0.22	0.2
F	5649	348452	SR	0.79	0.52	-0.24	-0.29	-0.30	0.52	0.1
F	5649	348469	SR	0.50	0.43	-0.24	0.43	-0.25	-0.12	0.1
F	5649	348870	SR	0.56	0.43	-0.17	-0.21	-0.30	0.43	0.1
F	5649	324426	SR	0.44	0.33	-0.21	-0.07	0.33	-0.16	0.1
F	5649	348466	SR	0.77	0.41	-0.27	0.41	-0.22	-0.16	0.2
F	5649	348465	SR	0.74	0.45	0.45	-0.23	-0.33	-0.14	0.2
F	5649	331398	SR	0.74	0.42	-0.22	0.42	-0.24	-0.18	0.2
F	5649	331397	SR	0.55	0.48	0.48	-0.07	-0.37	-0.20	0.1
F	5649	339089	SR	0.35	0.13	0.13	-0.15	0.08	-0.18	0.3
F	5649	339078	SR	0.69	0.49	0.49	-0.28	-0.28	-0.16	0.2
F	5649	348490	SR	0.77	0.44	-0.28	0.44	-0.25	-0.16	0.1
F	5649	348495	SR	0.58	0.51	0.51	-0.35	-0.20	-0.18	0.2
F	5649	321076	SR	0.69	0.38	-0.15	0.38	-0.26	-0.19	0.2
F	5649	348492	SR	0.57	0.39	-0.18	0.39	-0.20	-0.18	0.2
G	5605	348512	SR	0.62	0.42	-0.20	-0.15	-0.27	0.42	0.1
G	5605	348474	SR	0.90	0.32	-0.18	0.32	-0.20	-0.16	0.1
G	5605	339088	SR	0.81	0.26	-0.07	0.26	-0.12	-0.23	0.1
G	5605	331400	SR	0.54	0.36	-0.20	-0.12	0.36	-0.20	0.2
G	5605	324433	SR	0.68	0.36	-0.24	0.36	-0.10	-0.23	0.1
G	5605	339043	SR	0.40	0.36	-0.13	-0.22	0.36	-0.11	0.1
G	5605	348494	SR	0.64	0.40	-0.10	-0.28	-0.19	0.40	0.2
G	5605	331410	SR	0.68	0.32	-0.15	-0.14	0.32	-0.20	0.2
G	5605	339208	SR	0.73	0.49	-0.21	-0.31	-0.28	0.49	0.1
G	5605	348863	SR	0.62	0.39	-0.28	0.39	-0.11	-0.16	0.1
G	5605	348864	SR	0.44	0.53	0.53	-0.26	-0.26	-0.16	0.1

Table 1.B8 Item Statistics, Field Test Items: MDHSA Government—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
G	5605	339081	SR	0.53	0.24	-0.19	0.24	-0.23	-0.02	0.2
G	5605	339034	SR	0.71	0.39	-0.17	-0.24	-0.19	0.39	0.1
G	5605	339071	SR	0.30	0.14	0.14	-0.06	0.03	-0.17	0.3
G	5605	348476	SR	0.73	0.46	-0.24	-0.22	0.46	-0.25	0.2
G	5605	321094	SR	0.85	0.42	-0.23	0.42	-0.24	-0.20	0.3
G	5605	348529	SR	0.50	0.58	0.58	-0.21	-0.33	-0.22	0.4
G	5605	348554	SR	0.74	0.50	-0.27	0.50	-0.29	-0.23	0.1
G	5605	331399	SR	0.76	0.48	0.48	-0.29	-0.27	-0.18	0.2
G	5605	339217	SR	0.56	0.29	-0.13	-0.13	0.29	-0.18	0.3
G	5605	321107	SR	0.67	0.51	-0.24	-0.21	-0.31	0.51	0.2
G	5605	339047	SR	0.56	0.47	-0.24	-0.20	0.47	-0.22	0.2
G	5605	339096	SR	0.67	0.42	-0.22	-0.21	-0.21	0.42	0.2
G	5605	339195	SR	0.08	-0.06	-0.07	0.20	-0.18	-0.06	0.2
G	5605	324409	SR	0.50	0.24	-0.25	0.24	-0.26	0.03	0.2
H	5577	360644	SR	0.74	0.34	0.34	-0.19	-0.22	-0.18	0.1
H	5577	360643	SR	0.68	0.35	-0.24	0.35	-0.15	-0.16	0.1
H	5577	349139	SR	0.65	0.35	-0.14	0.35	-0.26	-0.08	0.1
H	5577	324700	SR	0.64	0.21	-0.19	0.21	-0.14	0.01	0.1
H	5577	324701	SR	0.62	0.35	-0.18	-0.25	-0.05	0.35	0.1
H	5577	331403	SR	0.39	0.27	-0.22	0.27	0.00	-0.26	0.1
H	5577	331423	SR	0.41	0.25	0.25	-0.05	-0.13	-0.20	0.1
H	5577	348483	SR	0.45	0.36	-0.09	-0.18	-0.22	0.36	0.1
H	5577	324435	SR	0.56	0.41	-0.18	-0.19	-0.21	0.41	0.1
H	5577	348898	SR	0.84	0.48	0.48	-0.28	-0.30	-0.19	0.1
H	5577	349150	SR	0.62	0.42	-0.26	-0.18	0.42	-0.19	0.1
H	5577	348499	SR	0.78	0.42	-0.20	-0.25	0.42	-0.22	0.2
H	5577	348533	SR	0.62	0.59	-0.26	-0.39	0.59	-0.20	0.1
H	5577	348892	SR	0.65	0.49	0.49	-0.29	-0.22	-0.22	0.1
H	5577	339063	SR	0.78	0.30	-0.19	-0.24	0.30	-0.06	0.1
H	5577	348519	SR	0.84	0.48	-0.27	0.48	-0.28	-0.24	0.2
H	5577	339059	SR	0.77	0.38	-0.15	0.38	-0.25	-0.22	0.2
H	5577	348867	SR	0.48	-0.01	-0.01	0.18	-0.17	-0.14	0.2
H	5577	339022	SR	0.77	0.51	-0.21	-0.24	-0.33	0.51	0.2
H	5577	321095	SR	0.50	0.39	-0.09	-0.25	-0.21	0.39	0.2
H	5577	331422	SR	0.72	0.47	-0.24	0.47	-0.29	-0.22	0.2
H	5577	321082	SR	0.73	0.49	-0.21	-0.31	-0.26	0.49	0.2
H	5577	348527	SR	0.43	0.17	-0.12	0.17	0.04	-0.25	0.2
H	5577	339080	SR	0.60	0.49	-0.14	-0.18	0.49	-0.35	0.2
H	5577	331414	SR	0.78	0.46	-0.26	-0.29	-0.21	0.46	0.2
J	5726	339057	SR	0.59	0.41	-0.08	-0.24	0.41	-0.26	0.0
J	5726	321079	SR	0.73	0.48	-0.26	-0.31	0.48	-0.15	0.1
J	5726	339205	SR	0.82	0.34	0.34	-0.21	-0.20	-0.14	0.1
J	5726	353533	SR	0.44	0.46	-0.08	-0.18	0.46	-0.31	0.2

Table 1.B8 Item Statistics, Field Test Items: MDHSA Government—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
J	5726	331443	SR	0.75	0.39	-0.17	0.39	-0.21	-0.22	0.1
J	5726	321091	SR	0.33	0.29	0.29	-0.17	-0.04	-0.13	0.1
J	5726	321128	SR	0.39	0.37	-0.16	-0.23	0.37	-0.10	0.2
J	5726	331391	SR	0.59	0.45	-0.21	-0.27	-0.18	0.45	0.2
J	5726	348513	SR	0.74	0.49	0.49	-0.24	-0.33	-0.19	0.1
J	5726	348866	SR	0.77	0.50	-0.24	-0.26	0.50	-0.30	0.2
J	5726	331389	SR	0.82	0.42	-0.21	-0.25	0.42	-0.23	0.1
J	5726	353527	SR	0.18	0.22	-0.18	0.22	-0.21	0.12	0.3
J	5726	331439	SR	0.59	0.27	-0.22	0.27	-0.09	-0.13	0.2
J	5726	324699	SR	0.86	0.38	0.38	-0.19	-0.18	-0.24	0.2
J	5726	339048	SR	0.54	0.44	-0.20	0.44	-0.21	-0.20	0.2
J	5726	339021	SR	0.61	0.41	-0.15	-0.31	0.41	-0.13	0.3
J	5726	339029	SR	0.29	0.11	-0.10	-0.23	0.14	0.11	0.4
J	5726	339058	SR	0.60	0.45	-0.25	-0.29	0.45	-0.18	0.1
J	5726	348560	SR	0.73	0.55	-0.28	-0.32	0.55	-0.25	0.1
J	5726	331419	SR	0.66	0.25	-0.03	-0.24	0.25	-0.22	0.2
J	5726	331420	SR	0.74	0.47	-0.22	-0.27	0.47	-0.24	0.2
J	5726	331441	SR	0.35	0.41	0.41	-0.18	-0.09	-0.22	0.3
J	5726	331435	SR	0.65	0.57	0.57	-0.24	-0.34	-0.25	0.2
J	5726	348472	SR	0.55	0.39	-0.15	-0.25	-0.23	0.39	0.2
J	5726	339054	SR	0.66	0.49	-0.28	0.49	-0.25	-0.24	0.2
K	5501	339086	SR	0.63	0.35	-0.22	-0.18	-0.17	0.35	0.0
K	5501	331402	SR	0.82	0.33	-0.17	-0.20	0.33	-0.18	0.1
K	5501	324408	SR	0.67	0.31	-0.13	-0.23	0.31	-0.09	0.1
K	5501	324705	SR	0.43	0.40	-0.08	-0.35	-0.10	0.40	0.2
K	5501	348515	SR	0.74	0.42	-0.20	-0.21	-0.24	0.42	0.1
K	5501	339038	SR	0.61	0.55	-0.26	-0.25	-0.29	0.55	0.2
K	5501	324417	SR	0.77	0.42	-0.24	-0.20	-0.22	0.42	0.2
K	5501	348509	SR	0.82	0.32	0.32	-0.20	-0.20	-0.18	0.1
K	5501	357722	SR	0.44	0.38	-0.18	-0.23	0.38	-0.11	0.1
K	5501	331408	SR	0.65	0.38	-0.20	0.38	-0.28	-0.09	0.1
K	5501	331440	SR	0.80	0.44	0.44	-0.20	-0.29	-0.21	0.1
K	5501	339212	SR	0.17	0.10	0.10	0.08	-0.15	-0.03	0.2
K	5501	339050	SR	0.42	0.46	-0.22	-0.14	-0.26	0.46	0.1
K	5501	331388	SR	0.76	0.47	0.47	-0.22	-0.38	-0.12	0.1
K	5501	321070	SR	0.75	0.42	-0.26	0.42	-0.21	-0.22	0.2
K	5501	339371	SR	0.82	0.46	0.46	-0.27	-0.22	-0.25	0.2
K	5501	339194	SR	0.58	0.56	-0.24	-0.26	-0.31	0.56	0.2
K	5501	339214	SR	0.73	0.49	-0.24	-0.33	0.49	-0.18	0.1
K	5501	339215	SR	0.30	0.28	-0.11	0.28	-0.12	-0.07	0.2
K	5501	331385	SR	0.50	0.53	0.53	-0.30	-0.27	-0.13	0.3
K	5501	324438	SR	0.58	0.45	-0.15	-0.25	0.45	-0.28	0.1
K	5501	353528	SR	0.62	0.36	0.36	-0.20	-0.18	-0.18	0.2

Table 1.B8 Item Statistics, Field Test Items: MDHSA Government—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
K	5501	339068	SR	0.66	0.53	-0.21	-0.25	-0.33	0.53	0.1
K	5501	339210	SR	0.80	0.44	-0.15	-0.37	0.44	-0.15	0.1
K	5501	339202	SR	0.82	0.47	-0.26	-0.23	-0.28	0.47	0.1
L	5461	353525	SR	0.78	0.38	-0.18	-0.18	-0.25	0.38	0.0
L	5461	321075	SR	0.63	0.49	-0.30	-0.23	0.49	-0.19	0.1
L	5461	339193	SR	0.51	0.36	-0.18	-0.06	-0.31	0.36	0.1
L	5461	331380	SR	0.75	0.34	-0.18	-0.24	0.34	-0.11	0.1
L	5461	331382	SR	0.81	0.45	-0.25	0.45	-0.23	-0.25	0.1
L	5461	339044	SR	0.89	0.41	-0.24	0.41	-0.21	-0.23	0.2
L	5461	339203	SR	0.33	0.29	-0.10	-0.17	0.29	-0.11	0.2
L	5461	331392	SR	0.83	0.39	-0.29	-0.19	0.39	-0.11	0.3
L	5461	348551	SR	0.54	0.28	-0.19	0.28	-0.15	-0.12	0.1
L	5461	353501	SR	0.66	0.23	0.23	-0.10	-0.19	-0.03	0.1
L	5461	339051	SR	0.45	0.03	-0.04	0.03	-0.07	0.05	0.2
L	5461	321097	SR	0.87	0.43	-0.23	0.43	-0.28	-0.19	0.2
L	5461	324428	SR	0.58	0.35	-0.25	0.35	-0.26	-0.10	0.2
L	5461	331424	SR	0.66	0.42	0.42	-0.23	-0.22	-0.16	0.2
L	5461	348879	SR	0.59	0.40	-0.19	-0.18	-0.23	0.40	0.3
L	5461	348897	SR	0.42	0.26	-0.25	-0.09	0.26	-0.18	0.2
L	5461	331413	SR	0.82	0.41	-0.23	-0.24	0.41	-0.19	0.3
L	5461	331415	SR	0.85	0.46	0.46	-0.27	-0.26	-0.20	0.1
L	5461	331429	SR	0.77	0.40	-0.16	-0.27	0.40	-0.20	0.2
L	5461	348542	SR	0.43	0.20	-0.02	-0.13	-0.09	0.20	0.3
L	5461	331406	SR	0.73	0.48	-0.31	-0.26	0.48	-0.15	0.2
L	5461	324404	SR	0.69	0.32	-0.12	-0.17	0.32	-0.20	0.2
L	5461	357723	SR	0.81	0.42	0.42	-0.30	-0.22	-0.16	0.1
L	5461	324709	SR	0.77	0.36	-0.19	0.36	-0.22	-0.16	0.2
L	5461	331390	SR	0.31	0.37	-0.06	0.37	-0.24	-0.22	0.2
M	5532	348453	SR	0.35	0.15	0.15	0.07	-0.27	0.00	0.1
M	5532	321077	SR	0.48	0.35	-0.19	-0.26	-0.04	0.35	0.1
M	5532	348489	SR	0.52	0.43	0.43	-0.30	-0.10	-0.17	0.2
M	5532	324399	SR	0.76	0.45	-0.29	-0.16	-0.24	0.45	0.1
M	5532	353530	SR	0.68	0.44	0.44	-0.19	-0.27	-0.19	0.1
M	5532	324412	SR	0.39	0.39	-0.12	-0.13	-0.24	0.39	0.3
M	5532	324413	SR	0.29	0.01	-0.12	0.01	-0.19	0.27	0.4
M	5532	321118	SR	0.46	0.52	-0.15	-0.23	-0.30	0.52	0.3
M	5532	324387	SR	0.49	0.30	-0.08	0.30	-0.20	-0.11	0.2
M	5532	324707	SR	0.97	0.22	-0.13	-0.13	0.22	-0.09	0.1
M	5532	339075	SR	0.75	0.54	-0.31	-0.26	-0.26	0.54	0.2
M	5532	339094	SR	0.57	0.38	-0.19	-0.13	-0.24	0.38	0.2
M	5532	331387	SR	0.61	0.38	-0.17	-0.23	-0.17	0.38	0.2
M	5532	357721	SR	0.39	0.24	0.24	-0.08	-0.17	0.00	0.3
M	5532	348876	SR	0.75	0.49	-0.21	-0.29	-0.27	0.49	0.2

Table 1.B8 Item Statistics, Field Test Items: MDHSA Government—May Forms

Form	N	ItemID	Item Type	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	P_BIS4	%Omits
M	5532	348877	SR	0.87	0.37	-0.21	-0.25	0.37	-0.15	0.2
M	5532	348518	SR	0.52	0.27	-0.16	-0.21	0.27	-0.03	0.4
M	5532	339197	SR	0.62	0.45	0.45	-0.19	-0.33	-0.15	0.2
M	5532	339199	SR	0.61	0.45	-0.23	-0.23	0.45	-0.24	0.2
M	5532	324410	SR	0.61	0.41	-0.24	0.41	-0.24	-0.18	0.1
M	5532	339374	SR	0.83	0.43	0.43	-0.21	-0.23	-0.26	0.1
M	5532	324436	SR	0.68	0.40	-0.16	0.40	-0.20	-0.23	0.2
M	5532	324393	SR	0.56	0.42	-0.24	-0.32	0.42	-0.05	0.2
M	5532	324394	SR	0.74	0.44	-0.24	0.44	-0.25	-0.19	0.2
M	5532	348537	SR	0.59	0.56	-0.30	-0.33	-0.16	0.56	0.3
N	5522	348556	SR	0.74	0.32	-0.14	-0.15	0.32	-0.22	0.1
N	5522	353535	SR	0.53	0.38	0.38	-0.16	-0.25	-0.13	0.1
N	5522	348541	SR	0.74	0.42	-0.21	-0.24	0.42	-0.20	0.1
N	5522	353526	SR	0.72	0.54	0.54	-0.37	-0.25	-0.21	0.2
N	5522	348557	SR	0.66	0.31	-0.12	0.31	-0.18	-0.18	0.1
N	5522	324385	SR	0.73	0.43	-0.18	0.43	-0.29	-0.23	0.2
N	5522	324401	SR	0.37	0.20	0.20	-0.09	-0.04	-0.11	0.3
N	5522	348463	SR	0.69	0.40	-0.17	0.40	-0.20	-0.22	0.2
N	5522	331434	SR	0.57	0.42	-0.24	-0.20	-0.17	0.42	0.2
N	5522	324442	SR	0.68	0.40	-0.13	0.40	-0.32	-0.17	0.1
N	5522	324443	SR	0.64	0.44	-0.17	-0.26	-0.25	0.44	0.2
N	5522	339045	SR	0.56	0.47	-0.25	-0.28	0.47	-0.11	0.2
N	5522	324403	SR	0.51	0.19	-0.21	0.05	-0.28	0.19	0.2
N	5522	324402	SR	0.76	0.34	-0.22	-0.23	0.34	-0.11	0.2
N	5522	324728	SR	0.70	0.46	-0.26	-0.21	-0.22	0.46	0.2
N	5522	324717	SR	0.52	0.52	-0.26	-0.26	0.52	-0.23	0.2
N	5522	321098	SR	0.42	0.25	0.03	-0.15	0.25	-0.29	0.3
N	5522	348523	SR	0.51	0.51	-0.24	0.51	-0.28	-0.16	0.2
N	5522	357720	SR	0.55	0.46	-0.17	-0.29	0.46	-0.20	0.3
N	5522	324708	SR	0.79	0.39	-0.20	-0.22	-0.20	0.39	0.1
N	5522	348884	SR	0.29	0.15	0.15	-0.17	-0.15	0.12	0.3
N	5522	348885	SR	0.65	0.43	-0.23	-0.24	0.43	-0.15	0.3
N	5522	348503	SR	0.48	0.27	0.27	-0.33	0.00	-0.03	0.2
N	5522	348448	SR	0.77	0.47	0.47	-0.25	-0.29	-0.19	0.2
N	5522	348566	SR	0.64	0.49	-0.37	0.49	-0.16	-0.19	0.2
X	5120	324440	SR	0.43	0.43	-0.20	-0.21	0.43	-0.13	0.3
Mean				0.61	0.39	-0.06	-0.06	-0.06	-0.02	0.2
SD				0.16	0.11	0.26	0.27	0.28	0.26	0.1

Note: Values in bold are outside of the accepted range. Statistics for items on multiple forms are listed under the first form on which the item appeared. P_Val=P-Value, R_ITT=item-total correlation, P_BIS1—P_BIS4 =option-total correlation, %Omits=percent of omitted responses

Appendix 2A. MD Mod-HSA Classical Item Statistics: Operational Forms

Table 2.A1 Item Statistics: MD Mod-HSA Algebra—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
110	258190	0.36	0.28	-0.08	-0.20	0.28	0.0
	258164	0.39	0.33	-0.21	-0.14	0.33	0.0
	258224	0.31	0.29	0.00	0.29	-0.28	0.0
	258107	0.28	0.13	-0.06	-0.07	0.13	0.0
	258126	0.47	0.26	0.26	-0.15	-0.16	0.0
	258239	0.34	0.18	-0.04	0.18	-0.16	0.1
	258123	0.56	0.34	0.34	-0.23	-0.18	0.1
	258124	0.28	0.30	-0.13	-0.14	0.30	0.2
	258168	0.58	0.26	-0.14	0.26	-0.21	0.1
	258200	0.29	0.26	0.26	-0.02	-0.22	0.2
	258179	0.32	0.18	-0.06	-0.11	0.18	0.1
	258235	0.60	0.39	-0.24	0.39	-0.23	0.1
	258105	0.32	0.21	0.21	-0.18	-0.04	0.1
	258236	0.48	0.25	-0.18	0.25	-0.12	0.2
	261559	0.34	0.14	0.14	-0.08	-0.06	0.2
	258211	0.54	0.45	-0.40	0.45	-0.12	0.2
	258209	0.60	0.24	-0.13	-0.19	0.24	0.2
	258182	0.61	0.40	-0.18	-0.29	0.40	0.2
	258238	0.25	0.32	-0.16	-0.12	0.32	0.2
	261561	0.49	0.28	0.28	-0.11	-0.20	0.2
	258132	0.48	0.28	-0.16	0.28	-0.16	0.3
	258158	0.46	0.34	-0.13	-0.24	0.34	0.4
	258145	0.53	0.34	-0.25	0.34	-0.14	0.5
	258117	0.46	0.24	-0.13	-0.13	0.24	0.5
	258229	0.64	0.33	-0.24	0.33	-0.16	0.4
	258197	0.58	0.29	-0.23	0.29	-0.11	0.4
	258097	0.29	0.28	0.28	-0.07	-0.21	0.5
	258310	0.65	0.35	-0.17	-0.25	0.35	0.4
	258109	0.47	0.27	0.27	-0.11	-0.17	0.4
	258110	0.40	0.18	-0.05	0.18	-0.13	0.4
	258103	0.29	0.20	0.20	-0.18	0.02	0.5
	258108	0.48	0.13	-0.04	0.13	-0.10	0.4
	258196	0.58	0.23	-0.10	0.23	-0.17	0.4
	261564	0.49	0.31	0.31	-0.17	-0.17	0.3
	258153	0.34	0.20	0.20	-0.04	-0.14	0.4
	258181	0.73	0.42	-0.24	-0.29	0.42	0.3
	258240	0.60	0.33	-0.20	0.33	-0.19	0.4
	258157	0.18	0.14	0.14	-0.01	-0.09	0.3
	258091	0.27	0.18	-0.06	0.18	-0.09	0.3
	258118	0.50	0.31	0.31	-0.19	-0.16	0.4
	258225	0.53	0.29	-0.18	0.29	-0.14	0.4

Table 2.A1 Item Statistics: MD Mod-HSA Algebra—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
110	261557	0.39	0.18	0.18	-0.17	0.00	0.4
	258152	0.40	0.22	0.22	-0.16	-0.05	0.4
	258133	0.38	0.25	0.25	-0.19	-0.05	0.4
	258311	0.43	0.27	-0.15	0.27	-0.13	0.6
	258178	0.69	0.30	-0.14	-0.22	0.30	0.5
	258100	0.58	0.37	-0.26	0.37	-0.17	0.5
	258171	0.48	0.33	-0.18	0.33	-0.17	0.5
	258142	0.42	0.32	-0.14	-0.21	0.32	0.5
	258150	0.43	0.20	0.20	-0.02	-0.19	0.6
Mean		0.45	0.27	-0.02	0.01	-0.02	0.3
SD		0.13	0.08	0.20	0.23	0.21	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A2 Item Statistics: MD Mod-HSA Biology—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
110	258627	0.77	0.19	-0.08	0.19	-0.18	0.0
	258733	0.56	0.10	0.10	-0.02	-0.12	0.1
	258684	0.49	0.16	0.02	-0.21	0.16	0.1
	258644	0.34	0.26	0.26	-0.11	-0.14	0.0
	258634	0.43	0.22	-0.18	0.22	-0.06	0.2
	261644	0.82	0.24	0.24	-0.15	-0.17	0.1
	261645	0.36	0.21	-0.02	-0.20	0.21	0.1
	258619	0.35	0.21	0.21	-0.10	-0.10	0.1
	258700	0.58	0.30	-0.15	-0.21	0.30	0.2
	258618	0.32	0.19	-0.09	-0.09	0.19	0.1
	261627	0.65	0.26	-0.19	0.26	-0.13	0.1
	258639	0.39	0.23	0.23	-0.10	-0.14	0.1
	258732	0.53	0.17	0.17	-0.13	-0.06	0.1
	258727	0.52	0.29	-0.12	0.29	-0.21	0.1
	258622	0.48	0.27	0.27	-0.21	-0.08	0.1
	258695	0.41	0.19	-0.09	0.19	-0.12	0.1
	258631	0.81	0.27	0.27	-0.18	-0.16	0.2
	258699	0.23	0.01	-0.19	0.01	0.18	0.1
	261607	0.65	0.21	-0.11	0.21	-0.14	0.1
	261624	0.45	0.32	-0.18	-0.16	0.32	0.4
	258612	0.65	0.29	-0.17	0.29	-0.17	0.3
	261610	0.44	0.32	-0.13	-0.20	0.32	0.2
	258714	0.28	0.32	0.32	-0.11	-0.17	0.4
	258725	0.66	0.23	-0.12	0.23	-0.15	0.4
	258664	0.58	0.29	-0.13	0.29	-0.19	0.5
	258638	0.31	0.19	-0.06	-0.12	0.19	0.4
	258650	0.45	0.24	-0.07	-0.18	0.24	0.5
	261614	0.66	0.30	0.30	-0.20	-0.18	0.4
	261622	0.84	0.24	-0.13	0.24	-0.16	0.4
	258705	0.26	0.17	-0.15	0.01	0.17	0.3
	258678	0.66	0.28	-0.16	0.28	-0.18	0.4
	261642	0.45	0.29	0.29	-0.25	-0.03	0.4
	258654	0.62	0.24	-0.27	-0.02	0.24	0.3
	258670	0.32	0.07	0.01	-0.06	0.07	0.4
	258660	0.48	0.27	-0.16	-0.14	0.27	0.4
	258637	0.48	0.30	-0.16	0.30	-0.16	0.4
	258640	0.57	0.19	-0.07	0.19	-0.15	0.4
	258674	0.45	0.17	-0.08	-0.10	0.17	0.4
	258697	0.45	0.24	0.24	-0.15	-0.09	0.4
	258616	0.19	0.02	-0.10	0.02	0.10	0.4
	258630	0.27	0.22	-0.11	-0.07	0.22	0.5
	261617	0.37	0.18	0.18	-0.03	-0.19	0.6
	258726	0.40	0.18	0.18	-0.08	-0.10	0.6

Table 2.A2 Item Statistics: MD Mod-HSA Biology—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
110	258730	0.48	0.28	0.28	-0.16	-0.14	0.6
	258657	0.19	0.05	-0.03	0.00	0.05	0.5
	258651	0.44	0.41	0.41	-0.25	-0.18	0.6
	258712	0.42	0.25	-0.18	-0.11	0.25	0.6
	258731	0.32	0.15	-0.04	-0.09	0.15	0.6
	261608	0.51	0.32	-0.15	-0.19	0.32	0.7
	258693	0.34	0.29	0.29	-0.15	-0.13	0.6
Mean		0.47	0.22	0.01	-0.03	0.00	0.3
SD		0.16	0.08	0.19	0.18	0.18	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A3 Item Statistics: MD Mod-HSA English—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
110	259343	0.62	0.36	-0.20	-0.24	0.36	0.0
	259415	0.60	0.24	0.24	-0.21	-0.10	0.1
	259417	0.49	0.17	0.17	-0.12	-0.08	0.1
	259416	0.75	0.34	-0.17	0.34	-0.26	0.1
	259323	0.43	0.33	0.33	-0.20	-0.15	0.0
	259453	0.42	0.16	-0.05	-0.18	0.16	0.0
	259382	0.64	0.24	-0.20	0.24	-0.11	0.0
	259452	0.40	0.18	-0.13	0.18	-0.08	0.0
	259465	0.38	0.22	0.22	-0.19	-0.06	0.1
	259351	0.42	0.24	-0.16	0.24	-0.11	0.0
	259430	0.72	0.22	-0.21	0.22	-0.08	0.0
	259431	0.69	0.33	0.33	-0.22	-0.20	0.1
	259318	0.62	0.39	0.39	-0.26	-0.21	0.1
	259319	0.33	0.13	0.01	-0.17	0.13	0.0
	259320	0.68	0.31	-0.17	0.31	-0.22	0.2
	259419	0.61	0.28	-0.17	0.28	-0.17	0.1
	259421	0.60	0.25	0.25	-0.20	-0.10	0.3
	259463	0.39	0.23	0.23	-0.17	-0.07	0.1
	259345	0.50	0.34	-0.18	-0.20	0.34	0.1
	259325	0.55	0.35	-0.20	0.35	-0.21	0.2
	259385	0.56	0.35	-0.18	-0.23	0.35	0.3
	259390	0.58	0.28	-0.13	-0.20	0.28	0.1
	259383	0.50	0.27	-0.21	0.27	-0.09	0.2
	259386	0.44	0.33	-0.22	-0.15	0.33	0.1
	259388	0.51	0.31	0.31	-0.10	-0.25	0.1
	259389	0.42	0.25	-0.19	0.25	-0.07	0.2
	259438	0.46	0.17	-0.15	0.17	-0.04	0.5
	259439	0.50	0.24	-0.21	0.24	-0.10	0.4
	259437	0.50	0.28	0.28	-0.09	-0.23	0.4
	259332	0.61	0.24	-0.18	0.24	-0.09	0.5
	259403	0.39	0.26	-0.08	-0.19	0.26	0.5
	259401	0.44	0.25	0.25	-0.12	-0.14	0.6
	259402	0.40	0.36	-0.25	-0.12	0.36	0.5
	259399	0.73	0.36	-0.21	-0.24	0.36	0.5
	259400	0.53	0.37	-0.22	-0.22	0.37	0.6
	259404	0.60	0.28	0.28	-0.17	-0.16	0.6
	259461	0.70	0.32	-0.23	-0.17	0.32	0.6
	259446	0.54	0.38	-0.19	-0.24	0.38	0.6
	259447	0.53	0.30	-0.19	0.30	-0.17	0.5
	259448	0.58	0.33	-0.16	-0.22	0.33	0.6
	259358	0.54	0.37	-0.18	-0.24	0.37	0.6

Table 2.A3 Item Statistics: MD Mod-HSA English—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
110	259434	0.41	0.14	-0.06	0.14	-0.11	0.6
	259391	0.55	0.34	-0.16	0.34	-0.23	0.6
	259454	0.34	0.22	0.22	-0.18	-0.02	0.7
	259455	0.49	0.31	-0.19	-0.15	0.31	0.7
	259392	0.45	0.38	-0.19	-0.22	0.38	0.7
	259394	0.70	0.41	0.41	-0.27	-0.23	0.7
	259393	0.48	0.41	0.41	-0.22	-0.22	0.8
	259444	0.64	0.26	-0.13	0.26	-0.17	0.8
	259356	0.53	0.28	-0.22	-0.11	0.28	0.8
Mean		0.53	0.29	-0.03	-0.04	0.02	0.3
SD		0.11	0.07	0.22	0.22	0.23	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A4 Item Statistics: MD Mod-HSA Government—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
110	258401	0.58	0.32	-0.17	-0.21	0.32	0.0
	258459	0.75	0.30	-0.20	0.30	-0.20	0.1
	258402	0.42	0.24	-0.17	-0.13	0.24	0.0
	258406	0.65	0.28	-0.16	0.28	-0.19	0.0
	258347	0.47	0.22	0.22	-0.25	-0.07	0.0
	258328	0.52	0.39	0.39	-0.29	-0.17	0.0
	258422	0.46	0.22	-0.12	-0.13	0.22	0.1
	258357	0.30	0.29	-0.14	0.29	-0.15	0.0
	258452	0.41	0.31	0.31	-0.22	-0.15	0.1
	258330	0.47	0.33	0.33	-0.17	-0.20	0.3
	258454	0.42	0.25	-0.19	-0.11	0.25	0.1
	258364	0.65	0.34	-0.21	0.34	-0.22	0.1
	258361	0.55	0.29	0.29	-0.24	-0.11	0.2
	258336	0.44	0.25	-0.11	-0.17	0.25	0.1
	258376	0.48	0.31	0.31	-0.19	-0.16	0.3
	258419	0.23	0.10	-0.02	0.10	-0.06	0.1
	258425	0.55	0.25	-0.11	0.25	-0.19	0.1
	258715	0.73	0.24	-0.19	0.24	-0.12	0.1
	258473	0.45	0.22	-0.07	-0.17	0.22	0.1
	258478	0.28	0.06	0.08	0.06	-0.14	0.1
	258501	0.51	0.29	-0.15	-0.18	0.29	0.1
	258450	0.46	0.29	0.29	-0.17	-0.17	0.2
	258498	0.42	0.32	0.32	-0.14	-0.21	0.1
	258388	0.33	0.22	-0.17	0.22	-0.05	0.2
	258351	0.36	0.30	0.30	-0.30	0.00	0.1
	258488	0.70	0.33	0.33	-0.26	-0.16	0.1
	258479	0.43	0.27	-0.10	0.27	-0.19	0.1
	258375	0.52	0.39	0.39	-0.27	-0.18	0.2
	258414	0.41	0.28	-0.11	0.28	-0.18	0.2
	258495	0.24	0.19	0.19	-0.08	-0.08	0.2
	258321	0.54	0.30	0.30	-0.14	-0.21	0.1
	258426	0.24	0.25	0.25	-0.13	-0.08	0.1
	258722	0.51	0.23	-0.19	0.23	-0.07	0.2
	258407	0.31	0.10	0.10	0.00	-0.12	0.2
	258412	0.59	0.42	0.42	-0.22	-0.29	0.2
	258369	0.49	0.33	-0.24	-0.14	0.33	0.1
	258483	0.50	0.33	0.33	-0.21	-0.18	0.2
	258719	0.61	0.36	0.36	-0.23	-0.20	0.2
	258345	0.23	0.02	0.09	0.02	-0.12	0.1
	258390	0.56	0.30	-0.20	0.30	-0.16	0.1
	258329	0.29	0.22	0.22	-0.02	-0.20	0.1
	258409	0.62	0.12	-0.05	0.12	-0.10	0.1
	258434	0.39	0.22	-0.10	-0.13	0.22	0.1

Table 2.A4 Item Statistics: MD Mod-HSA Government—October 2009

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
110	258391	0.59	0.35	0.35	-0.18	-0.23	0.2
	258316	0.41	0.16	-0.07	0.16	-0.10	0.3
	258404	0.45	0.34	0.34	-0.17	-0.21	0.3
	258468	0.50	0.31	0.31	-0.19	-0.15	0.2
	258491	0.39	0.29	-0.10	0.29	-0.20	0.3
	258341	0.50	0.24	0.24	-0.16	-0.12	0.3
	258502	0.30	0.23	0.23	-0.12	-0.09	0.2
Mean		0.46	0.26	0.08	-0.04	-0.08	0.1
SD		0.13	0.08	0.22	0.20	0.17	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A5 Item Statistics: MD Mod-HSA Algebra—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
210	258090	0.59	0.33	-0.18	-0.23	0.33	0.0
	258095	0.71	0.38	0.38	-0.23	-0.26	0.0
	258166	0.73	0.33	-0.32	0.33	-0.11	0.1
	258312	0.49	0.36	0.36	-0.25	-0.19	0.1
	258173	0.52	0.31	-0.15	0.31	-0.21	0.1
	258115	0.42	0.33	0.33	-0.21	-0.15	0.2
	258223	0.30	0.11	-0.09	0.11	-0.03	0.1
	258230	0.48	0.21	0.21	-0.23	-0.03	0.2
	258147	0.48	0.28	0.28	-0.14	-0.19	0.2
	261560	0.65	0.30	-0.20	0.30	-0.17	0.2
	258227	0.61	0.30	0.30	-0.15	-0.22	0.2
	258308	0.43	0.31	0.31	-0.16	-0.18	0.2
	258101	0.54	0.28	-0.22	0.28	-0.10	0.2
	258210	0.78	0.37	-0.27	0.37	-0.20	0.2
	258116	0.44	0.14	0.14	-0.13	-0.04	0.2
	258089	0.27	0.22	-0.11	0.22	-0.09	0.3
	261556	0.41	0.28	0.28	-0.27	-0.03	0.3
	258309	0.83	0.38	-0.23	-0.27	0.38	0.2
	258098	0.60	0.41	-0.22	-0.28	0.41	0.2
	258208	0.42	0.13	0.00	-0.13	0.13	0.3
	258161	0.58	0.46	0.46	-0.38	-0.14	0.2
	258159	0.41	0.30	-0.12	-0.19	0.30	0.2
	258184	0.55	0.31	-0.12	0.31	-0.23	0.2
	258136	0.55	0.33	-0.18	0.33	-0.20	0.3
	258102	0.48	0.28	-0.17	0.28	-0.14	0.3
	258226	0.40	0.26	-0.11	-0.16	0.26	0.4
	258188	0.67	0.26	-0.14	0.26	-0.17	0.3
	258174	0.44	0.24	-0.10	-0.15	0.24	0.4
	258154	0.39	0.45	-0.26	-0.20	0.45	0.3
	258113	0.57	0.37	-0.24	0.37	-0.19	0.2
	258198	0.39	0.25	-0.12	-0.13	0.25	0.2
	258169	0.46	0.25	-0.08	-0.18	0.25	0.3
	258119	0.46	0.32	0.32	-0.14	-0.23	0.3
	258160	0.41	0.24	0.24	-0.14	-0.10	0.2
	258241	0.55	0.33	-0.16	0.33	-0.22	0.4
	258130	0.51	0.32	0.32	-0.21	-0.15	0.4
	258131	0.23	-0.03	-0.03	0.07	-0.04	0.4
	258128	0.63	0.36	-0.22	0.36	-0.21	0.4
	258509	0.38	0.22	0.22	-0.20	-0.03	0.4
	258231	0.59	0.46	-0.23	-0.31	0.46	0.3
	258111	0.59	0.36	-0.22	0.36	-0.24	0.3
	258096	0.25	0.12	0.12	0.07	-0.20	0.4
	258125	0.40	0.14	-0.19	0.14	0.02	0.5

Table 2.A5 Item Statistics: MD Mod-HSA Algebra—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
210	258144	0.31	0.16	0.16	0.01	-0.15	0.4
	261558	0.38	0.24	-0.12	0.24	-0.12	0.3
	261562	0.41	0.24	0.24	-0.16	-0.09	0.3
	258220	0.36	0.17	-0.08	-0.08	0.17	0.4
	258135	0.54	0.24	-0.15	0.24	-0.11	0.5
Mean		0.49	0.28	-0.01	0.00	-0.03	0.3
SD		0.13	0.10	0.23	0.24	0.21	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A6 Item Statistics: MD Mod-HSA Biology—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
210	258636	0.61	0.30	-0.17	0.30	-0.20	0.1
	258653	0.36	0.21	0.21	-0.08	-0.15	0.1
	258690	0.40	0.14	0.05	-0.18	0.14	0.2
	258702	0.58	0.32	-0.23	0.32	-0.16	0.0
	258662	0.34	0.23	-0.09	-0.14	0.23	0.1
	258659	0.30	0.11	0.11	-0.14	0.05	0.1
	258673	0.63	0.17	-0.05	-0.17	0.17	0.1
	258701	0.43	0.25	-0.18	0.25	-0.10	0.0
	258628	0.59	0.26	0.26	-0.21	-0.11	0.1
	258685	0.30	0.21	0.21	-0.10	-0.14	0.1
	261611	0.13	0.00	0.03	-0.03	0.00	0.1
	258615	0.48	0.16	-0.13	0.16	-0.06	0.2
	258683	0.66	0.37	-0.26	0.37	-0.20	0.1
	258641	0.49	0.17	-0.11	0.17	-0.09	0.0
	258676	0.41	0.13	-0.07	0.13	-0.07	0.1
	258607	0.62	0.26	-0.16	0.26	-0.20	0.0
	258645	0.57	0.37	-0.19	-0.26	0.37	0.0
	258666	0.56	0.15	-0.07	0.15	-0.12	0.0
	258675	0.45	0.21	-0.12	0.21	-0.13	0.0
	261609	0.58	0.20	-0.07	-0.22	0.20	0.1
	258665	0.28	0.21	0.21	-0.06	-0.13	0.2
	258682	0.47	0.11	-0.04	0.11	-0.08	0.2
	258648	0.39	0.24	-0.13	0.24	-0.13	0.2
	258614	0.38	0.34	-0.15	-0.19	0.34	0.3
	258680	0.44	0.30	-0.16	-0.17	0.30	0.2
	258681	0.40	0.13	-0.09	-0.05	0.13	0.3
	258642	0.53	0.16	-0.10	0.16	-0.08	0.5
	261623	0.67	0.27	-0.13	-0.23	0.27	0.4
	258649	0.28	0.15	0.15	-0.25	0.09	0.4
	258687	0.44	0.23	-0.11	0.23	-0.13	0.5
	258646	0.37	0.24	0.24	-0.20	-0.04	0.4
	261626	0.68	0.31	-0.20	-0.19	0.31	0.4
	258707	0.50	0.31	0.31	-0.21	-0.13	0.4
	258643	0.55	0.23	0.23	-0.15	-0.10	0.5
	258698	0.32	0.15	-0.10	-0.04	0.15	0.6
	258728	0.28	0.28	-0.12	-0.18	0.28	0.4
	258734	0.56	0.37	-0.22	-0.20	0.37	0.4
	258735	0.51	0.29	-0.21	0.29	-0.12	0.6
	258704	0.53	0.25	-0.13	0.25	-0.15	0.4
	258624	0.57	0.31	0.31	-0.24	-0.11	0.4
	258697	0.42	0.18	0.18	-0.12	-0.06	0.4
	258616	0.22	0.08	-0.11	0.08	0.06	0.5
	258617	0.45	0.12	0.12	-0.15	0.02	0.4

Table 2.A6 Item Statistics: MD Mod-HSA Biology—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
210	258688	0.37	0.15	-0.08	-0.05	0.15	0.5
	258669	0.63	0.33	-0.17	-0.22	0.33	0.5
	261621	0.68	0.35	0.35	-0.23	-0.21	0.4
	258692	0.51	0.20	-0.07	-0.13	0.20	0.6
	258635	0.52	0.34	-0.24	-0.15	0.34	0.4
	261616	0.51	0.32	-0.17	-0.18	0.32	0.6
Mean		0.47	0.23	-0.03	-0.03	0.03	0.3
SD		0.13	0.09	0.17	0.19	0.19	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A7 Item Statistics: MD Mod-HSA English—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
210	259429	0.50	0.24	0.24	-0.17	-0.11	0.0
	259426	0.62	0.28	0.28	-0.15	-0.19	0.0
	259349	0.65	0.33	-0.20	0.33	-0.22	0.1
	259427	0.48	0.25	-0.10	0.25	-0.18	0.1
	259312	0.66	0.36	0.36	-0.25	-0.19	0.1
	259368	0.38	0.22	0.22	-0.17	-0.06	0.3
	259371	0.72	0.40	-0.25	-0.25	0.40	0.1
	259367	0.70	0.30	-0.24	0.30	-0.16	0.1
	259370	0.49	0.17	-0.20	0.17	-0.03	0.2
	259432	0.66	0.25	0.25	-0.16	-0.15	0.1
	259433	0.55	0.33	0.33	-0.18	-0.22	0.2
	259354	0.44	0.23	-0.19	-0.06	0.23	0.1
	259407	0.18	0.03	-0.16	0.03	0.15	0.3
	259335	0.37	0.21	-0.15	-0.09	0.21	0.4
	259410	0.70	0.37	-0.28	0.37	-0.17	0.3
	259413	0.51	0.26	-0.12	0.26	-0.21	0.3
	259411	0.43	0.27	-0.14	-0.14	0.27	0.3
	259414	0.39	0.24	-0.15	-0.08	0.24	0.3
	259338	0.39	0.15	0.15	-0.02	-0.13	0.3
	259339	0.64	0.35	-0.20	0.35	-0.24	0.4
	259340	0.77	0.39	-0.24	-0.26	0.39	0.4
	259362	0.62	0.40	0.40	-0.24	-0.24	0.3
	259436	0.33	0.18	0.18	-0.04	-0.16	0.4
	259347	0.43	0.30	0.30	-0.17	-0.15	0.4
	259424	0.61	0.32	-0.14	-0.23	0.32	0.4
	259423	0.49	0.26	-0.13	-0.15	0.26	0.5
	259425	0.51	0.23	-0.16	0.23	-0.09	0.4
	259422	0.40	0.25	-0.08	0.25	-0.17	0.5
	259445	0.65	0.28	-0.27	0.28	-0.04	0.4
	259374	0.40	0.28	-0.15	-0.17	0.28	0.4
	259450	0.39	0.35	-0.21	-0.16	0.35	0.4
	259376	0.61	0.40	-0.18	-0.31	0.40	0.4
	259310	0.60	0.34	-0.18	0.34	-0.22	0.5
	259365	0.60	0.36	-0.15	0.36	-0.28	0.4
	259449	0.63	0.29	0.29	-0.15	-0.21	0.4
	259441	0.29	0.15	0.15	-0.12	0.00	0.5
	259443	0.56	0.23	-0.15	0.23	-0.10	0.4
	259437	0.47	0.29	0.29	-0.10	-0.21	0.4
	259457	0.45	0.25	0.25	-0.19	-0.05	0.7
	259330	0.69	0.38	-0.19	0.38	-0.26	0.4
	259458	0.36	0.23	0.23	-0.24	0.02	0.4
	259466	0.62	0.46	-0.26	-0.30	0.46	0.4
	259395	0.47	0.28	-0.04	0.28	-0.25	0.4

Table 2.A7 Item Statistics: MD Mod-HSA English—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
210	259459	0.50	0.29	-0.17	-0.14	0.29	0.4
	259396	0.36	0.21	-0.14	-0.07	0.21	0.5
	259460	0.67	0.38	0.38	-0.30	-0.15	0.5
	259398	0.59	0.29	-0.18	0.29	-0.15	0.5
	259397	0.46	0.26	-0.21	-0.07	0.26	0.4
	259360	0.48	0.31	0.31	-0.22	-0.11	0.5
	259435	0.22	0.13	-0.02	-0.09	0.13	0.4
Mean		0.51	0.28	-0.02	-0.01	0.00	0.3
SD		0.13	0.08	0.22	0.23	0.23	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A8 Item Statistics: MD Mod-HSA Government—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
210	258363	0.40	0.35	-0.25	-0.13	0.35	0.0
	258500	0.24	0.25	0.25	-0.08	-0.16	0.1
	258338	0.41	0.24	-0.09	0.24	-0.18	0.1
	258327	0.47	0.21	0.21	-0.08	-0.19	0.0
	258408	0.44	0.28	0.28	-0.20	-0.11	0.0
	258355	0.43	0.22	0.22	-0.18	-0.07	0.1
	258458	0.47	0.33	0.33	-0.15	-0.23	0.0
	258505	0.44	0.25	0.25	-0.12	-0.17	0.0
	258506	0.64	0.24	-0.12	-0.17	0.24	0.1
	258349	0.53	0.36	0.36	-0.28	-0.14	0.0
	258429	0.48	0.19	-0.08	-0.14	0.19	0.0
	258353	0.33	0.16	-0.07	0.16	-0.10	0.0
	258396	0.51	0.23	0.23	-0.12	-0.15	0.0
	258410	0.47	0.28	-0.15	-0.17	0.28	0.1
	258386	0.43	0.46	0.46	-0.25	-0.26	0.0
	258350	0.32	0.18	0.18	-0.11	-0.07	0.0
	258378	0.55	0.18	-0.07	-0.15	0.18	0.0
	258503	0.34	0.20	-0.12	-0.09	0.20	0.0
	258440	0.61	0.32	-0.21	0.32	-0.19	0.1
	258400	0.48	0.37	-0.24	-0.20	0.37	0.0
	258421	0.32	0.24	0.24	-0.13	-0.12	0.0
	258446	0.38	0.25	-0.20	0.25	-0.06	0.0
	258344	0.36	0.28	0.28	-0.14	-0.15	0.1
	258432	0.50	0.23	-0.12	-0.15	0.23	0.1
	258428	0.47	0.28	-0.14	-0.18	0.28	0.1
	258360	0.49	0.22	-0.11	0.22	-0.14	0.2
	258343	0.51	0.31	-0.19	0.31	-0.16	0.1
	258438	0.64	0.36	0.36	-0.23	-0.21	0.1
	258718	0.68	0.38	0.38	-0.25	-0.23	0.1
	258424	0.33	0.11	0.02	0.11	-0.14	0.1
	258323	0.38	0.24	-0.10	0.24	-0.15	0.2
	258324	0.64	0.42	-0.26	-0.26	0.42	0.1
	258437	0.43	0.26	-0.12	-0.16	0.26	0.1
	258319	0.33	0.19	-0.12	0.19	-0.06	0.1
	258389	0.58	0.26	-0.12	0.26	-0.20	0.1
	258379	0.56	0.23	-0.05	-0.21	0.23	0.2
	258413	0.46	0.22	-0.12	0.22	-0.12	0.1
	258448	0.45	0.36	0.36	-0.24	-0.16	0.1
	258721	0.35	0.19	0.19	-0.10	-0.10	0.1
	258439	0.50	0.27	-0.16	0.27	-0.16	0.1
	258368	0.44	0.28	0.28	-0.23	-0.06	0.1
	258320	0.29	0.18	-0.04	0.18	-0.13	0.1
	258436	0.57	0.40	0.40	-0.28	-0.19	0.1

Table 2.A8 Item Statistics: MD Mod-HSA Government—January 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
210	258384	0.60	0.32	-0.23	0.32	-0.16	0.2
	258486	0.49	0.21	-0.09	0.21	-0.15	0.1
	258411	0.33	0.18	-0.15	-0.03	0.18	0.2
	258313	0.63	0.27	-0.16	0.27	-0.19	0.1
	258716	0.49	0.31	0.31	-0.15	-0.21	0.1
	258335	0.53	0.39	-0.19	-0.27	0.39	0.2
	258377	0.60	0.35	0.35	-0.18	-0.24	0.2
Mean		0.47	0.27	0.04	-0.04	-0.03	0.1
SD		0.11	0.08	0.22	0.20	0.20	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A9 Item Statistics: MD Mod-HSA Algebra—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
310	258090	0.62	0.36	-0.19	-0.25	0.36	0.2
	258095	0.70	0.38	0.38	-0.24	-0.24	0.0
	258166	0.74	0.40	-0.32	0.40	-0.20	0.0
	258312	0.47	0.30	0.30	-0.21	-0.15	0.0
	258173	0.51	0.28	-0.10	0.28	-0.22	0.0
	258115	0.39	0.31	0.31	-0.19	-0.14	0.0
	258223	0.31	0.20	-0.14	0.20	-0.07	0.0
	258230	0.56	0.23	0.23	-0.21	-0.08	0.2
	258147	0.52	0.33	0.33	-0.21	-0.20	0.0
	261560	0.66	0.34	-0.21	0.34	-0.21	0.0
	258227	0.62	0.36	0.36	-0.18	-0.28	0.0
	258308	0.46	0.36	0.36	-0.15	-0.25	0.0
	258101	0.56	0.31	-0.20	0.31	-0.17	0.2
	258210	0.81	0.35	-0.23	0.35	-0.24	0.0
	258116	0.44	0.26	0.26	-0.20	-0.12	0.0
	258089	0.26	0.31	-0.17	0.31	-0.11	0.0
	261556	0.39	0.30	0.30	-0.27	-0.05	0.0
	258309	0.82	0.35	-0.23	-0.24	0.35	0.0
	258098	0.66	0.36	-0.23	-0.24	0.36	0.0
	258208	0.39	0.10	0.01	-0.12	0.10	0.0
	258161	0.62	0.39	0.39	-0.35	-0.11	0.0
	258159	0.39	0.33	-0.14	-0.21	0.33	0.0
	258184	0.56	0.33	-0.16	0.33	-0.23	0.0
	258136	0.57	0.31	-0.17	0.31	-0.20	0.2
	258102	0.52	0.27	-0.14	0.27	-0.17	0.0
	258226	0.38	0.31	-0.13	-0.20	0.31	0.0
	258188	0.66	0.31	-0.16	0.31	-0.24	0.2
	258174	0.43	0.26	-0.11	-0.18	0.26	0.6
	258154	0.41	0.45	-0.29	-0.19	0.45	0.2
	258113	0.59	0.36	-0.21	0.36	-0.22	0.0
	258198	0.40	0.28	-0.16	-0.14	0.28	0.2
	258169	0.48	0.34	-0.16	-0.24	0.34	0.0
	258119	0.43	0.33	0.33	-0.16	-0.22	0.0
	258160	0.46	0.28	0.28	-0.14	-0.18	0.3
	258241	0.57	0.35	-0.23	0.35	-0.20	0.0
	258130	0.52	0.22	0.22	-0.15	-0.11	0.2
	258131	0.22	0.10	0.10	-0.02	-0.08	0.2
	258128	0.66	0.39	-0.22	0.39	-0.27	0.0
	258509	0.36	0.33	0.33	-0.26	-0.09	0.0
	258231	0.56	0.33	-0.14	-0.25	0.33	0.5
	258111	0.60	0.35	-0.21	0.35	-0.24	0.0
	258096	0.25	0.24	0.24	-0.03	-0.23	0.0
	258125	0.41	0.18	-0.22	0.18	-0.01	0.2

Table 2.A9 Item Statistics: MD Mod-HSA Algebra—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
310	258144	0.33	0.16	0.16	0.05	-0.22	0.0
	261558	0.40	0.28	-0.16	0.28	-0.13	0.0
	261562	0.38	0.25	0.25	-0.16	-0.11	0.2
	258220	0.32	0.01	-0.03	0.02	0.01	0.0
	258135	0.53	0.23	-0.15	0.23	-0.14	0.2
Mean		0.50	0.30	0.00	0.00	-0.06	0.1
SD		0.14	0.08	0.24	0.25	0.22	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A10 Item Statistics: MD Mod-HSA Biology—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
310	258636	0.68	0.23	-0.19	0.23	-0.09	0.0
	258653	0.36	0.27	0.27	-0.08	-0.19	0.0
	258690	0.37	0.14	0.02	-0.16	0.14	0.0
	258702	0.61	0.37	-0.30	0.37	-0.15	0.0
	258662	0.32	0.24	-0.09	-0.14	0.24	0.0
	258659	0.33	0.17	0.17	-0.17	0.00	0.0
	258673	0.64	0.26	-0.10	-0.23	0.26	0.0
	258701	0.47	0.16	-0.14	0.16	-0.06	0.0
	258628	0.57	0.25	0.25	-0.18	-0.13	0.0
	258685	0.32	0.15	0.15	-0.06	-0.10	0.0
	261611	0.16	0.14	-0.09	-0.02	0.14	0.0
	258615	0.44	0.20	-0.11	0.20	-0.12	0.2
	258683	0.62	0.31	-0.20	0.31	-0.19	0.0
	258641	0.47	0.11	-0.08	0.11	-0.04	0.0
	258676	0.45	0.11	-0.10	0.11	-0.02	0.0
	258607	0.67	0.29	-0.12	0.29	-0.24	0.0
	258645	0.59	0.36	-0.26	-0.18	0.36	0.2
	258666	0.54	0.19	-0.17	0.19	-0.05	0.2
	258675	0.48	0.28	-0.11	0.28	-0.21	0.0
	261609	0.60	0.28	-0.17	-0.21	0.28	0.3
	258665	0.26	0.32	0.32	-0.19	-0.10	0.3
	258682	0.49	0.17	-0.10	0.17	-0.09	0.3
	258648	0.40	0.30	-0.15	0.30	-0.17	0.3
	258614	0.44	0.31	-0.12	-0.22	0.31	0.3
	258680	0.45	0.30	-0.17	-0.16	0.30	0.5
	258681	0.40	0.19	-0.09	-0.10	0.19	0.3
	258642	0.58	0.14	-0.01	0.14	-0.15	0.0
	261623	0.69	0.28	-0.17	-0.21	0.28	0.0
	258649	0.24	0.13	0.13	-0.31	0.15	0.0
	258687	0.47	0.30	-0.13	0.30	-0.21	0.0
	258646	0.38	0.24	0.24	-0.22	-0.04	0.2
	261626	0.65	0.31	-0.24	-0.18	0.31	0.0
	258707	0.52	0.38	0.38	-0.24	-0.21	0.0
	258643	0.56	0.24	0.24	-0.14	-0.18	0.0
	258698	0.28	0.13	-0.09	-0.04	0.13	0.0
	258728	0.30	0.35	-0.10	-0.28	0.35	0.0
	258734	0.55	0.37	-0.24	-0.20	0.37	0.0
	258735	0.47	0.28	-0.17	0.28	-0.16	0.5
	258704	0.55	0.29	-0.19	0.29	-0.15	0.0
	258624	0.61	0.28	0.28	-0.20	-0.14	0.0
	258697	0.43	0.29	0.29	-0.18	-0.14	0.2
	258616	0.24	0.02	-0.15	0.02	0.13	0.3
	258617	0.44	0.17	0.17	-0.19	-0.01	0.0

Table 2.A10 Item Statistics: MD Mod-HSA Biology—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
310	258688	0.38	0.16	-0.06	-0.11	0.16	0.0
	258669	0.60	0.31	-0.17	-0.22	0.31	0.0
	261621	0.66	0.34	0.34	-0.23	-0.21	0.0
	258692	0.50	0.24	-0.09	-0.18	0.24	0.2
	258635	0.53	0.36	-0.23	-0.19	0.36	0.2
	261616	0.51	0.28	-0.18	-0.14	0.28	0.2
Mean		0.47	0.25	-0.04	-0.04	0.04	0.1
SD		0.13	0.08	0.19	0.20	0.20	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A11 Item Statistics: MD Mod-HSA English—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
310	259429	0.48	0.21	0.21	-0.14	-0.10	0.0
	259426	0.59	0.32	0.32	-0.19	-0.20	0.0
	259349	0.60	0.32	-0.17	0.32	-0.22	0.0
	259427	0.46	0.20	-0.12	0.20	-0.10	0.0
	259312	0.62	0.30	0.30	-0.23	-0.14	0.2
	259368	0.40	0.21	0.21	-0.20	-0.03	0.0
	259371	0.68	0.41	-0.29	-0.23	0.41	0.0
	259367	0.71	0.33	-0.23	0.33	-0.20	0.2
	259370	0.50	0.19	-0.16	0.19	-0.07	0.0
	259432	0.68	0.29	0.29	-0.22	-0.16	0.2
	259433	0.55	0.34	0.34	-0.20	-0.25	0.0
	259354	0.47	0.24	-0.23	-0.06	0.24	0.0
	259407	0.26	0.07	-0.18	0.07	0.11	0.0
	259335	0.34	0.23	-0.17	-0.09	0.23	0.0
	259410	0.72	0.36	-0.27	0.36	-0.19	0.0
	259413	0.47	0.33	-0.19	0.33	-0.24	0.0
	259411	0.48	0.32	-0.15	-0.22	0.32	0.0
	259414	0.41	0.19	-0.13	-0.08	0.19	0.0
	259338	0.38	0.15	0.15	-0.02	-0.15	0.0
	259339	0.66	0.35	-0.23	0.35	-0.24	0.0
	259340	0.75	0.43	-0.26	-0.30	0.43	0.2
	259362	0.63	0.41	0.41	-0.26	-0.24	0.0
	259436	0.33	0.23	0.23	-0.05	-0.24	0.0
	259347	0.50	0.38	0.38	-0.24	-0.21	0.2
	259424	0.61	0.37	-0.18	-0.29	0.37	0.2
	259423	0.53	0.32	-0.23	-0.15	0.32	0.0
	259425	0.52	0.35	-0.21	0.35	-0.20	0.2
	259422	0.45	0.27	-0.05	0.27	-0.26	0.0
	259445	0.64	0.28	-0.27	0.28	-0.07	0.0
	259374	0.44	0.41	-0.24	-0.23	0.41	0.2
	259450	0.42	0.33	-0.21	-0.16	0.33	0.0
	259376	0.58	0.42	-0.21	-0.31	0.42	0.5
	259310	0.64	0.35	-0.26	0.35	-0.17	0.0
	259365	0.63	0.34	-0.16	0.34	-0.27	0.0
	259449	0.58	0.30	0.30	-0.15	-0.23	0.0
	259441	0.32	0.15	0.15	-0.16	-0.01	0.0
	259443	0.55	0.18	-0.10	0.18	-0.11	0.0
	259437	0.50	0.31	0.31	-0.14	-0.25	0.6
	259457	0.47	0.33	0.33	-0.32	-0.04	0.0
	259330	0.66	0.40	-0.25	0.40	-0.26	0.0
	259458	0.41	0.26	0.26	-0.21	-0.08	0.0
	259466	0.63	0.49	-0.26	-0.36	0.49	0.0
	259395	0.49	0.35	-0.13	0.35	-0.28	0.0

Table 2.A11 Item Statistics: MD Mod-HSA English—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
310	259459	0.52	0.36	-0.23	-0.20	0.36	0.2
	259396	0.39	0.28	-0.18	-0.12	0.28	0.0
	259460	0.67	0.38	0.38	-0.34	-0.14	0.0
	259398	0.60	0.39	-0.24	0.39	-0.23	0.0
	259397	0.52	0.30	-0.22	-0.14	0.30	0.0
	259360	0.47	0.28	0.28	-0.22	-0.10	0.0
	259435	0.28	0.15	-0.03	-0.17	0.15	0.2
Mean		0.52	0.30	-0.03	-0.03	-0.01	0.1
SD		0.12	0.09	0.24	0.25	0.25	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A12 Item Statistics: MD Mod-HSA Government—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
310	258363	0.41	0.37	-0.32	-0.07	0.37	0.0
	258500	0.24	0.23	0.23	-0.09	-0.12	0.0
	258338	0.43	0.23	-0.09	0.23	-0.17	0.0
	258327	0.47	0.32	0.32	-0.16	-0.22	0.0
	258408	0.41	0.26	0.26	-0.19	-0.09	0.0
	258355	0.41	0.24	0.24	-0.14	-0.12	0.0
	258458	0.48	0.37	0.37	-0.20	-0.23	0.0
	258505	0.42	0.24	0.24	-0.15	-0.10	0.2
	258506	0.63	0.25	-0.14	-0.18	0.25	0.0
	258349	0.52	0.36	0.36	-0.28	-0.14	0.0
	258429	0.51	0.21	-0.07	-0.18	0.21	0.0
	258353	0.38	0.19	-0.10	0.19	-0.10	0.0
	258396	0.52	0.22	0.22	-0.07	-0.19	0.0
	258410	0.52	0.38	-0.19	-0.25	0.38	0.0
	258386	0.41	0.41	0.41	-0.25	-0.20	0.0
	258350	0.36	0.16	0.16	-0.12	-0.04	0.0
	258378	0.49	0.15	-0.12	-0.05	0.15	0.0
	258503	0.39	0.23	-0.17	-0.07	0.23	0.2
	258440	0.58	0.33	-0.21	0.33	-0.18	0.0
	258400	0.55	0.40	-0.29	-0.20	0.40	0.0
	258421	0.33	0.37	0.37	-0.22	-0.14	0.0
	258446	0.36	0.29	-0.20	0.29	-0.10	0.0
	258344	0.34	0.27	0.27	-0.11	-0.18	0.0
	258432	0.50	0.33	-0.22	-0.15	0.33	0.0
	258428	0.48	0.23	-0.08	-0.18	0.23	0.0
	258360	0.47	0.15	-0.09	0.15	-0.08	0.0
	258343	0.49	0.33	-0.23	0.33	-0.14	0.0
	258438	0.59	0.34	0.34	-0.14	-0.28	0.0
	258718	0.65	0.39	0.39	-0.24	-0.25	0.0
	258424	0.36	0.11	0.02	0.11	-0.14	0.0
	258323	0.36	0.23	-0.17	0.23	-0.07	0.0
	258324	0.62	0.38	-0.24	-0.24	0.38	0.0
	258437	0.44	0.15	-0.03	-0.14	0.15	0.0
	258319	0.37	0.21	-0.16	0.21	-0.05	0.0
	258389	0.59	0.23	-0.10	0.23	-0.19	0.0
	258379	0.61	0.24	-0.12	-0.18	0.24	0.2
	258413	0.51	0.24	-0.15	0.24	-0.14	0.0
	258448	0.44	0.35	0.35	-0.23	-0.17	0.0
	258721	0.37	0.32	0.32	-0.22	-0.12	0.0
	258439	0.52	0.30	-0.18	0.30	-0.18	0.0
	258368	0.40	0.22	0.22	-0.22	0.00	0.0
	258320	0.30	0.20	-0.04	0.20	-0.16	0.0
	258436	0.56	0.38	0.38	-0.30	-0.15	0.2

Table 2.A12 Item Statistics: MD Mod-HSA Government—April 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
310	258384	0.62	0.37	-0.20	0.37	-0.26	0.2
	258486	0.45	0.30	-0.14	0.30	-0.20	0.2
	258411	0.31	0.23	-0.13	-0.10	0.23	0.2
	258313	0.62	0.35	-0.28	0.35	-0.14	0.2
	258716	0.49	0.26	0.26	-0.10	-0.20	0.2
	258335	0.53	0.30	-0.09	-0.26	0.30	0.2
	258377	0.58	0.36	0.36	-0.21	-0.23	0.6
Mean		0.47	0.28	0.03	-0.04	-0.03	0.1
SD		0.10	0.08	0.24	0.21	0.21	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A13 Item Statistics: MD Mod-HSA Algebra—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
410	258190	0.37	0.31	-0.14	-0.18	0.31	0.0
	258164	0.41	0.25	-0.17	-0.11	0.25	0.1
	258224	0.34	0.29	0.01	0.29	-0.30	0.1
	258107	0.30	0.19	-0.09	-0.11	0.19	0.1
	258126	0.51	0.28	0.28	-0.16	-0.17	0.1
	258239	0.34	0.20	-0.05	0.20	-0.17	0.0
	258123	0.57	0.37	0.37	-0.25	-0.20	0.1
	258124	0.31	0.32	-0.14	-0.17	0.32	0.0
	258200	0.31	0.25	0.25	-0.03	-0.21	0.3
	258179	0.32	0.21	-0.13	-0.08	0.21	0.2
	258235	0.58	0.39	-0.26	0.39	-0.21	0.1
	258105	0.34	0.23	0.23	-0.21	-0.03	0.3
	258236	0.52	0.29	-0.19	0.29	-0.16	0.2
	261559	0.35	0.16	0.16	-0.09	-0.08	0.1
	258211	0.56	0.46	-0.41	0.46	-0.12	0.1
	258209	0.63	0.25	-0.14	-0.18	0.25	0.1
	258182	0.62	0.40	-0.20	-0.29	0.40	0.0
	258238	0.29	0.33	-0.21	-0.10	0.33	0.1
	261561	0.51	0.30	0.30	-0.13	-0.21	0.1
	258132	0.49	0.27	-0.15	0.27	-0.17	0.1
	258158	0.50	0.34	-0.15	-0.24	0.34	0.1
	258145	0.58	0.34	-0.26	0.34	-0.16	0.2
	258117	0.47	0.24	-0.13	-0.14	0.24	0.2
	258229	0.67	0.30	-0.22	0.30	-0.16	0.1
	258197	0.57	0.30	-0.23	0.30	-0.11	0.3
	258097	0.30	0.34	0.34	-0.10	-0.25	0.3
	258310	0.66	0.37	-0.20	-0.26	0.37	0.3
	258109	0.49	0.29	0.29	-0.15	-0.18	0.3
	258110	0.39	0.21	-0.07	0.21	-0.15	0.3
	258103	0.30	0.18	0.18	-0.18	0.02	0.5
	258108	0.47	0.19	-0.09	0.19	-0.11	0.3
	258196	0.57	0.21	-0.09	0.21	-0.16	0.3
	261564	0.53	0.30	0.30	-0.18	-0.17	0.4
	258153	0.38	0.26	0.26	-0.07	-0.19	0.4
	258240	0.62	0.33	-0.21	0.33	-0.19	0.4
	258157	0.22	0.20	0.20	-0.05	-0.11	0.4
	258091	0.29	0.27	-0.12	0.27	-0.13	0.3
	258118	0.50	0.31	0.31	-0.19	-0.16	0.3
	258225	0.55	0.30	-0.19	0.30	-0.16	0.3
	261557	0.40	0.25	0.25	-0.19	-0.06	0.3
	258152	0.44	0.19	0.19	-0.15	-0.04	0.3
	258133	0.39	0.26	0.26	-0.20	-0.06	0.3
	258311	0.48	0.29	-0.20	0.29	-0.12	0.4

Table 2.A13 Item Statistics: MD Mod-HSA Algebra—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
410	258178	0.68	0.33	-0.18	-0.23	0.33	0.4
	258100	0.58	0.36	-0.27	0.36	-0.15	0.3
	258171	0.49	0.36	-0.19	0.36	-0.22	0.4
	258142	0.43	0.36	-0.17	-0.23	0.36	0.5
	258150	0.42	0.20	0.20	-0.01	-0.20	0.5
Mean		0.46	0.28	-0.02	0.02	-0.03	0.2
SD		0.12	0.07	0.22	0.23	0.21	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A14 Item Statistics: MD Mod-HSA Biology—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
410	258627	0.79	0.23	-0.16	0.23	-0.15	0.0
	258733	0.51	0.09	0.09	-0.01	-0.11	0.1
	258684	0.51	0.06	0.06	-0.13	0.06	0.1
	258644	0.35	0.27	0.27	-0.13	-0.14	0.1
	258634	0.44	0.28	-0.21	0.28	-0.10	0.2
	261644	0.79	0.26	0.26	-0.14	-0.20	0.2
	261645	0.36	0.23	-0.05	-0.18	0.23	0.4
	258619	0.37	0.29	0.29	-0.16	-0.12	0.3
	258700	0.61	0.36	-0.21	-0.22	0.36	0.3
	258618	0.36	0.20	-0.08	-0.11	0.20	0.3
	261627	0.66	0.22	-0.16	0.22	-0.10	0.2
	258639	0.39	0.25	0.25	-0.09	-0.16	0.3
	258732	0.55	0.18	0.18	-0.14	-0.06	0.2
	258727	0.50	0.28	-0.18	0.28	-0.14	0.2
	258622	0.55	0.36	0.36	-0.26	-0.15	0.3
	258695	0.45	0.22	-0.10	0.22	-0.13	0.3
	258631	0.80	0.33	0.33	-0.22	-0.20	0.3
	258699	0.26	0.04	-0.21	0.04	0.18	0.5
	261607	0.67	0.21	-0.13	0.21	-0.12	0.5
	261624	0.48	0.35	-0.17	-0.21	0.35	0.3
	258612	0.66	0.31	-0.19	0.31	-0.18	0.4
	261610	0.47	0.38	-0.16	-0.25	0.38	0.5
	258714	0.32	0.33	0.33	-0.13	-0.18	0.5
	258725	0.68	0.32	-0.19	0.32	-0.20	0.4
	258664	0.64	0.31	-0.16	0.31	-0.20	0.6
	258638	0.33	0.22	-0.04	-0.17	0.22	0.6
	258650	0.51	0.33	-0.12	-0.23	0.33	0.6
	261614	0.66	0.37	0.37	-0.22	-0.23	0.5
	261622	0.83	0.27	-0.14	0.27	-0.18	0.5
	258705	0.29	0.25	-0.18	-0.03	0.25	0.5
	258678	0.67	0.34	-0.15	0.34	-0.24	0.5
	261642	0.44	0.27	0.27	-0.24	-0.01	0.5
	258654	0.63	0.23	-0.22	-0.06	0.23	0.5
	258670	0.37	0.16	-0.01	-0.13	0.16	0.5
	258660	0.47	0.32	-0.17	-0.17	0.32	0.6
	258637	0.53	0.36	-0.20	0.36	-0.19	0.6
	258640	0.59	0.24	-0.12	0.24	-0.15	0.7
	258674	0.48	0.27	-0.12	-0.16	0.27	0.8
	258697	0.43	0.22	0.22	-0.13	-0.08	0.5
	258616	0.22	0.03	-0.13	0.03	0.13	0.6
	258630	0.29	0.30	-0.12	-0.13	0.30	0.7
	261617	0.38	0.20	0.20	-0.07	-0.16	0.6
	258726	0.46	0.26	0.26	-0.11	-0.15	0.6

Table 2.A14 Item Statistics: MD Mod-HSA Biology—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
410	258730	0.53	0.30	0.30	-0.16	-0.17	0.6
	258657	0.23	0.23	-0.10	-0.08	0.23	0.7
	258651	0.48	0.45	0.45	-0.26	-0.21	0.7
	258712	0.45	0.34	-0.20	-0.16	0.34	0.7
	258731	0.37	0.28	-0.09	-0.17	0.28	0.8
	261608	0.55	0.39	-0.18	-0.25	0.39	0.8
	258693	0.38	0.38	0.38	-0.24	-0.13	0.8
Mean		0.49	0.27	0.00	-0.04	0.01	0.5
SD		0.15	0.09	0.21	0.20	0.22	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A15 Item Statistics: MD Mod-HSA English—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
410	259343	0.62	0.35	-0.19	-0.25	0.35	0.1
	259415	0.63	0.23	0.23	-0.18	-0.11	0.1
	259417	0.48	0.18	0.18	-0.11	-0.10	0.2
	259416	0.77	0.34	-0.17	0.34	-0.26	0.2
	259323	0.43	0.29	0.29	-0.16	-0.15	0.1
	259453	0.43	0.18	-0.04	-0.20	0.18	0.2
	259382	0.63	0.29	-0.21	0.29	-0.15	0.1
	259452	0.38	0.19	-0.14	0.19	-0.08	0.2
	259465	0.37	0.17	0.17	-0.13	-0.05	0.2
	259351	0.43	0.27	-0.18	0.27	-0.13	0.2
	259430	0.72	0.19	-0.19	0.19	-0.04	0.1
	259431	0.69	0.37	0.37	-0.22	-0.24	0.2
	259318	0.59	0.39	0.39	-0.26	-0.21	0.2
	259319	0.33	0.14	0.01	-0.18	0.14	0.1
	259320	0.70	0.33	-0.19	0.33	-0.23	0.1
	259419	0.60	0.27	-0.16	0.27	-0.17	0.1
	259421	0.59	0.24	0.24	-0.19	-0.10	0.1
	259463	0.35	0.19	0.19	-0.16	-0.04	0.2
	259345	0.53	0.36	-0.15	-0.27	0.36	0.1
	259325	0.58	0.38	-0.24	0.38	-0.21	0.2
	259385	0.59	0.35	-0.15	-0.26	0.35	0.2
	259390	0.59	0.33	-0.17	-0.23	0.33	0.1
	259383	0.51	0.29	-0.22	0.29	-0.11	0.1
	259386	0.44	0.38	-0.24	-0.17	0.38	0.3
	259388	0.51	0.31	0.31	-0.14	-0.21	0.2
	259389	0.40	0.27	-0.16	0.27	-0.12	0.2
	259438	0.46	0.16	-0.13	0.16	-0.06	0.2
	259439	0.50	0.23	-0.21	0.23	-0.09	0.2
	259437	0.47	0.26	0.26	-0.11	-0.19	0.3
	259332	0.62	0.24	-0.17	0.24	-0.12	0.2
	259403	0.38	0.24	-0.07	-0.19	0.24	0.2
	259401	0.43	0.20	0.20	-0.05	-0.17	0.2
	259402	0.42	0.33	-0.26	-0.08	0.33	0.3
	259399	0.73	0.40	-0.23	-0.28	0.40	0.2
	259400	0.54	0.39	-0.23	-0.26	0.39	0.2
	259404	0.58	0.26	0.26	-0.16	-0.14	0.2
	259461	0.69	0.40	-0.27	-0.23	0.40	0.3
	259446	0.59	0.39	-0.19	-0.27	0.39	0.3
	259447	0.52	0.30	-0.18	0.30	-0.18	0.3
	259448	0.57	0.36	-0.21	-0.21	0.36	0.2
	259358	0.55	0.36	-0.17	-0.24	0.36	0.3

Table 2.A15 Item Statistics: MD Mod-HSA English—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
410	259434	0.40	0.15	-0.07	0.15	-0.11	0.2
	259391	0.56	0.33	-0.15	0.33	-0.24	0.4
	259454	0.36	0.22	0.22	-0.17	-0.04	0.2
	259455	0.50	0.37	-0.27	-0.14	0.37	0.3
	259392	0.47	0.39	-0.22	-0.21	0.39	0.3
	259394	0.70	0.43	0.43	-0.27	-0.27	0.3
	259393	0.50	0.38	0.38	-0.20	-0.22	0.3
	259444	0.62	0.22	-0.10	0.22	-0.16	0.3
	259356	0.53	0.26	-0.23	-0.10	0.26	0.3
Mean		0.53	0.29	-0.04	-0.04	0.03	0.2
SD		0.11	0.08	0.22	0.23	0.24	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A16 Item Statistics: MD Mod-HSA Government—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
410	258401	0.57	0.40	-0.21	-0.27	0.40	0.0
	258459	0.75	0.30	-0.18	0.30	-0.22	0.0
	258402	0.48	0.27	-0.18	-0.15	0.27	0.0
	258406	0.67	0.34	-0.18	0.34	-0.25	0.1
	258347	0.50	0.31	0.31	-0.25	-0.15	0.1
	258328	0.56	0.41	0.41	-0.29	-0.21	0.1
	258422	0.48	0.32	-0.21	-0.15	0.32	0.0
	258357	0.37	0.31	-0.13	0.31	-0.19	0.1
	258452	0.44	0.36	0.36	-0.23	-0.21	0.1
	258330	0.50	0.33	0.33	-0.19	-0.18	0.1
	258454	0.46	0.32	-0.21	-0.17	0.32	0.2
	258364	0.69	0.39	-0.25	0.39	-0.25	0.2
	258361	0.55	0.37	0.37	-0.25	-0.19	0.2
	258336	0.49	0.29	-0.13	-0.19	0.29	0.2
	258376	0.50	0.34	0.34	-0.25	-0.13	0.2
	258419	0.29	0.13	-0.10	0.13	-0.01	0.4
	258425	0.58	0.29	-0.16	0.29	-0.20	0.3
	258715	0.72	0.25	-0.18	0.25	-0.15	0.3
	258473	0.51	0.29	-0.13	-0.20	0.29	0.3
	258478	0.28	0.10	0.04	0.10	-0.12	0.3
	258501	0.53	0.30	-0.17	-0.17	0.30	0.3
	258450	0.50	0.33	0.33	-0.21	-0.15	0.4
	258498	0.50	0.38	0.38	-0.21	-0.22	0.3
	258388	0.33	0.26	-0.17	0.26	-0.07	0.3
	258351	0.42	0.36	0.36	-0.33	-0.05	0.3
	258488	0.72	0.35	0.35	-0.28	-0.16	0.2
	258479	0.49	0.38	-0.16	0.38	-0.27	0.2
	258375	0.56	0.42	0.42	-0.28	-0.22	0.1
	258414	0.46	0.31	-0.14	0.31	-0.19	0.1
	258495	0.29	0.19	0.19	-0.06	-0.11	0.2
	258321	0.52	0.34	0.34	-0.17	-0.22	0.2
	258426	0.29	0.23	0.23	-0.15	-0.06	0.3
	258722	0.53	0.25	-0.17	0.25	-0.11	0.2
	258407	0.31	0.09	0.09	0.04	-0.14	0.2
	258412	0.61	0.37	0.37	-0.19	-0.27	0.3
	258369	0.50	0.38	-0.27	-0.17	0.38	0.2
	258483	0.52	0.34	0.34	-0.24	-0.17	0.3
	258719	0.65	0.38	0.38	-0.26	-0.21	0.5
	258345	0.25	0.05	0.05	0.05	-0.11	0.3
	258390	0.58	0.36	-0.22	0.36	-0.21	0.3
	258329	0.34	0.24	0.24	-0.03	-0.22	0.3
	258409	0.64	0.15	-0.07	0.15	-0.12	0.2
	258434	0.39	0.19	-0.03	-0.15	0.19	0.3

Table 2.A16 Item Statistics: MD Mod-HSA Government—May 2010

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
410	258391	0.60	0.36	0.36	-0.24	-0.19	0.3
	258316	0.45	0.19	-0.07	0.19	-0.13	0.3
	258404	0.50	0.33	0.33	-0.17	-0.21	0.3
	258468	0.55	0.33	0.33	-0.24	-0.14	0.3
	258491	0.38	0.24	-0.01	0.24	-0.24	0.3
	258341	0.58	0.30	0.30	-0.22	-0.15	0.2
	258502	0.32	0.24	0.24	-0.13	-0.10	0.4
Mean		0.49	0.30	0.08	-0.04	-0.08	0.2
SD		0.12	0.09	0.25	0.23	0.19	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A17 Item Statistics: MD Mod-HSA Algebra—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
510	258090	0.57	0.42	-0.20	-0.31	0.42	0.0
	258095	0.72	0.37	0.37	-0.22	-0.26	0.0
	258166	0.71	0.42	-0.35	0.42	-0.18	0.0
	258312	0.43	0.23	0.23	-0.13	-0.15	0.6
	258173	0.52	0.38	-0.17	0.38	-0.27	0.0
	258115	0.34	0.29	0.29	-0.13	-0.16	0.0
	258223	0.31	0.04	-0.06	0.04	0.01	0.0
	258230	0.49	0.16	0.16	-0.18	-0.02	0.0
	258147	0.46	0.05	0.05	0.05	-0.15	0.0
	261560	0.66	0.16	-0.02	0.16	-0.19	0.0
	258227	0.70	0.31	0.31	-0.21	-0.17	0.6
	258308	0.38	0.40	0.40	-0.13	-0.29	0.0
	258101	0.59	0.27	-0.19	0.27	-0.15	0.0
	258210	0.80	0.29	-0.22	0.29	-0.16	0.0
	258116	0.43	0.18	0.18	-0.08	-0.13	0.0
	258089	0.18	0.25	-0.12	0.25	-0.08	0.0
	261556	0.45	0.29	0.29	-0.33	-0.04	0.0
	258309	0.84	0.28	-0.17	-0.21	0.28	0.0
	258098	0.61	0.32	-0.15	-0.24	0.32	0.0
	258208	0.40	0.19	0.07	-0.28	0.19	0.0
	258161	0.55	0.36	0.36	-0.25	-0.18	0.0
	258159	0.38	0.33	-0.28	-0.06	0.33	0.0
	258184	0.57	0.26	-0.14	0.26	-0.17	0.0
	258136	0.48	0.32	-0.23	0.32	-0.15	0.0
	258102	0.46	0.20	-0.14	0.20	-0.09	0.0
	258226	0.41	0.34	-0.15	-0.22	0.34	0.0
	258188	0.68	0.25	-0.18	0.25	-0.13	0.0
	258174	0.43	0.38	-0.21	-0.19	0.38	0.6
	258154	0.37	0.34	-0.22	-0.14	0.34	0.0
	258113	0.56	0.27	-0.32	0.27	0.00	0.0
	258198	0.32	0.31	-0.22	-0.11	0.31	0.6
	258169	0.40	0.18	0.00	-0.17	0.18	0.0
	258119	0.40	0.23	0.23	-0.19	-0.06	0.0
	258160	0.46	0.33	0.33	-0.19	-0.18	0.0
	258241	0.57	0.33	-0.19	0.33	-0.21	0.0
	258130	0.53	0.19	0.19	-0.07	-0.17	0.0
	258131	0.23	-0.04	-0.04	0.15	-0.15	0.0
	258128	0.59	0.37	-0.22	0.37	-0.24	0.0
	258509	0.43	0.18	0.18	-0.18	-0.02	0.0
	258231	0.51	0.38	-0.18	-0.26	0.38	0.0
	258111	0.52	0.32	-0.19	0.32	-0.23	0.0
	258096	0.27	0.13	0.13	-0.01	-0.12	0.0
	258125	0.40	0.15	-0.11	0.15	-0.06	0.0

Table 2.A17 Item Statistics: MD Mod-HSA Algebra—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
510	258144	0.35	0.04	0.04	0.10	-0.15	0.0
	261558	0.34	0.21	-0.12	0.21	-0.09	0.0
	261562	0.35	0.23	0.23	-0.23	0.00	0.0
	258220	0.30	0.07	-0.12	0.05	0.07	0.0
	258135	0.49	0.17	-0.18	0.17	0.00	0.0
Mean		0.48	0.25	-0.02	0.01	-0.03	0.1
SD		0.14	0.11	0.21	0.23	0.20	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A18 Item Statistics: MD Mod-HSA Algebra—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
610	258190	0.29	0.45	-0.31	-0.10	0.45	0.0
	258164	0.30	0.25	-0.07	-0.18	0.25	1.2
	258224	0.38	0.28	0.05	0.28	-0.29	1.2
	258107	0.36	0.06	0.20	-0.22	0.06	0.0
	258126	0.45	0.42	0.42	-0.16	-0.31	0.0
	258239	0.23	0.02	-0.06	0.02	0.04	0.0
	258123	0.55	0.40	0.40	-0.28	-0.19	0.0
	258124	0.33	0.31	-0.04	-0.27	0.31	0.0
	258200	0.29	0.34	0.34	-0.05	-0.27	1.2
	258179	0.35	0.36	-0.18	-0.19	0.36	0.0
	258235	0.60	0.30	-0.21	0.30	-0.16	0.0
	258105	0.33	0.25	0.25	-0.21	-0.06	0.0
	258236	0.43	0.29	-0.25	0.29	-0.08	0.0
	261559	0.37	0.13	0.13	0.02	-0.14	0.0
	258211	0.52	0.51	-0.41	0.51	-0.18	0.0
	258209	0.62	0.38	-0.26	-0.21	0.38	0.0
	258182	0.58	0.45	-0.24	-0.31	0.45	0.0
	258238	0.33	0.31	-0.22	-0.08	0.31	0.0
	261561	0.61	0.35	0.35	-0.08	-0.37	0.0
	258132	0.44	0.26	-0.25	0.26	-0.04	0.0
	258158	0.50	0.40	0.03	-0.48	0.40	0.0
	258145	0.46	0.47	-0.20	0.47	-0.33	0.0
	258117	0.39	0.28	-0.22	-0.07	0.28	0.0
	258229	0.55	0.31	-0.11	0.31	-0.26	0.0
	258197	0.55	0.34	-0.27	0.34	-0.12	0.0
	258097	0.25	0.26	0.26	-0.03	-0.20	0.0
	258310	0.64	0.42	-0.21	-0.32	0.42	0.0
	258109	0.57	0.27	0.27	-0.24	-0.08	0.0
	258110	0.31	0.39	-0.20	0.39	-0.18	0.0
	258103	0.35	0.32	0.32	-0.21	-0.11	0.0
	258108	0.45	0.41	-0.18	0.41	-0.28	0.0
	258196	0.54	0.28	-0.11	0.28	-0.25	0.0
	261564	0.46	0.27	0.27	-0.19	-0.11	0.0
	258153	0.45	0.37	0.37	-0.05	-0.35	0.0
	258240	0.54	0.29	-0.28	0.29	-0.04	0.0
	258157	0.25	0.16	0.16	-0.03	-0.11	0.0
	258091	0.33	0.14	-0.06	0.14	-0.07	0.0
	258118	0.46	0.43	0.43	-0.31	-0.18	0.0
	258225	0.39	0.34	-0.13	0.34	-0.26	0.0
	261557	0.30	0.14	0.14	-0.22	0.08	0.0
	258152	0.39	0.11	0.11	0.04	-0.16	0.0
	258133	0.36	0.45	0.45	-0.29	-0.18	0.0
	258311	0.40	0.35	-0.18	0.35	-0.21	0.0

Table 2.A18 Item Statistics: MD Mod-HSA Algebra—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
610	258178	0.68	0.17	-0.01	-0.20	0.17	0.0
	258100	0.57	0.47	-0.36	0.47	-0.20	0.0
	258171	0.40	0.27	-0.14	0.27	-0.15	0.0
	258142	0.39	0.34	-0.10	-0.26	0.34	0.0
	258150	0.32	0.17	0.17	-0.09	-0.06	1.2
Mean		0.43	0.31	0.00	0.01	-0.04	0.1
SD		0.12	0.11	0.25	0.27	0.24	0.3

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A19 Item Statistics: MD Mod-HSA Biology—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
510	258636	0.64	0.30	-0.15	0.30	-0.22	0.0
	258653	0.39	0.33	0.33	-0.03	-0.31	0.0
	258690	0.46	0.29	0.09	-0.39	0.29	0.0
	258702	0.57	0.23	-0.24	0.23	-0.06	0.0
	258662	0.31	0.25	-0.23	-0.02	0.25	0.0
	258659	0.32	0.14	0.14	-0.18	0.01	0.7
	258673	0.70	0.27	-0.19	-0.16	0.27	0.0
	258701	0.49	0.17	-0.17	0.17	-0.04	0.0
	258628	0.63	0.16	0.16	-0.17	-0.04	0.0
	258685	0.30	0.25	0.25	-0.19	-0.14	0.0
	261611	0.21	0.23	0.02	-0.23	0.23	0.0
	258615	0.43	0.13	-0.07	0.13	-0.07	0.0
	258683	0.68	0.38	-0.32	0.38	-0.16	0.0
	258641	0.48	0.09	0.02	0.09	-0.13	0.0
	258676	0.34	0.24	-0.21	0.24	-0.03	0.0
	258607	0.65	0.15	0.15	0.15	-0.19	0.0
	258645	0.43	0.37	-0.19	-0.22	0.37	0.0
	258666	0.58	0.20	-0.11	0.20	-0.14	0.0
	258675	0.46	0.02	-0.11	0.02	0.04	0.0
	261609	0.66	0.15	-0.14	-0.04	0.15	0.0
	258665	0.15	0.21	0.21	-0.22	0.07	0.0
	258682	0.54	0.14	-0.03	0.14	-0.14	0.0
	258648	0.36	0.31	-0.25	0.31	-0.09	0.0
	258614	0.46	0.26	-0.06	-0.23	0.26	0.0
	258680	0.39	0.27	-0.08	-0.20	0.27	0.0
	258681	0.39	0.17	-0.10	-0.08	0.17	0.0
	258642	0.60	0.20	-0.03	0.20	-0.20	0.0
	261623	0.69	0.34	-0.28	-0.15	0.34	0.0
	258649	0.29	0.14	0.14	-0.20	0.04	0.0
	258687	0.39	0.18	-0.01	0.18	-0.17	0.0
	258646	0.34	0.25	0.25	-0.18	-0.08	0.0
	261626	0.61	0.13	-0.20	-0.02	0.13	0.7
	258707	0.51	0.39	0.39	-0.23	-0.23	0.0
	258643	0.57	0.21	0.21	-0.19	-0.05	0.7
	258698	0.31	0.34	-0.23	-0.11	0.34	0.0
	258728	0.26	0.30	-0.09	-0.23	0.30	0.0
	258734	0.59	0.12	-0.05	-0.10	0.12	0.0
	258735	0.49	0.25	-0.11	0.25	-0.18	0.0
	258704	0.50	0.16	-0.05	0.16	-0.15	0.0
	258624	0.66	0.01	0.01	-0.04	0.03	0.0
	258697	0.43	0.12	0.12	-0.04	-0.09	0.0
	258616	0.20	0.07	-0.11	0.07	0.05	0.0
	258617	0.39	0.27	0.27	-0.15	-0.14	0.0

Table 2.A19 Item Statistics: MD Mod-HSA Biology—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
510	258688	0.34	0.11	-0.11	0.00	0.11	0.0
	258669	0.63	0.30	-0.12	-0.21	0.30	0.7
	261621	0.67	0.34	0.34	-0.16	-0.27	0.0
	258692	0.48	0.27	-0.04	-0.26	0.27	0.0
	258635	0.44	0.32	-0.20	-0.17	0.32	0.0
	261616	0.51	0.36	-0.28	-0.12	0.36	0.0
Mean		0.47	0.22	-0.03	-0.03	0.04	0.1
SD		0.14	0.09	0.18	0.19	0.20	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A20 Item Statistics: MD Mod-HSA Biology—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
610	258627	0.80	0.23	-0.23	0.23	-0.05	0.0
	258733	0.58	0.20	0.20	-0.08	-0.22	0.0
	258684	0.49	0.20	-0.05	-0.20	0.20	0.0
	258644	0.30	0.39	0.39	-0.17	-0.21	0.0
	258634	0.39	0.36	-0.32	0.36	-0.05	0.0
	261644	0.76	0.24	0.24	-0.16	-0.17	0.0
	261645	0.44	0.28	0.10	-0.40	0.28	0.0
	258619	0.51	-0.01	-0.01	0.02	-0.01	0.0
	258700	0.63	0.35	-0.16	-0.27	0.35	0.0
	258618	0.32	0.24	0.08	-0.31	0.24	0.0
	261627	0.58	0.25	-0.22	0.25	-0.06	0.0
	258639	0.39	0.30	0.30	-0.20	-0.12	0.0
	258732	0.49	0.33	0.33	-0.19	-0.20	0.0
	258727	0.54	0.39	-0.09	0.39	-0.35	0.0
	258622	0.51	0.11	0.11	-0.17	0.04	0.0
	258695	0.51	0.21	0.06	0.21	-0.27	0.0
	258631	0.87	0.34	0.34	-0.19	-0.27	0.0
	258699	0.25	0.06	-0.32	0.06	0.28	0.0
	261607	0.73	0.11	-0.05	0.11	-0.09	0.0
	261624	0.42	0.13	-0.03	-0.11	0.13	0.0
	258612	0.68	0.26	-0.13	0.26	-0.21	0.0
	261610	0.45	0.40	-0.11	-0.34	0.40	0.0
	258714	0.28	0.38	0.38	-0.22	-0.14	0.0
	258725	0.69	0.20	-0.15	0.20	-0.11	0.0
	258664	0.63	0.13	-0.09	0.13	-0.07	0.0
	258638	0.39	0.03	0.02	-0.07	0.03	0.0
	258650	0.51	0.27	-0.13	-0.19	0.27	0.0
	261614	0.62	0.32	0.32	-0.31	-0.18	0.0
	261622	0.77	0.40	-0.11	0.40	-0.38	0.0
	258705	0.38	0.21	-0.01	-0.20	0.21	0.0
	258678	0.73	0.16	-0.28	0.16	0.04	0.0
	261642	0.45	0.22	0.22	-0.21	-0.01	0.0
	258654	0.62	0.06	-0.14	0.00	0.06	0.0
	258670	0.34	-0.05	0.35	-0.27	-0.05	0.0
	258660	0.49	0.37	-0.30	-0.14	0.37	0.0
	258637	0.55	0.26	-0.26	0.26	-0.05	0.0
	258640	0.54	0.31	-0.14	0.31	-0.27	1.4
	258674	0.42	0.24	-0.03	-0.24	0.24	0.0
	258697	0.43	0.12	0.12	-0.04	-0.09	0.0
	258616	0.20	0.07	-0.11	0.07	0.05	0.0
	258630	0.23	0.28	-0.17	-0.07	0.28	0.0
	261617	0.34	0.30	0.30	-0.17	-0.19	0.0
	258726	0.51	0.33	0.33	-0.22	-0.19	0.0

Table 2.A20 Item Statistics: MD Mod-HSA Biology—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
610	258730	0.54	0.36	0.36	-0.33	-0.08	0.0
	258657	0.21	0.25	0.02	-0.22	0.25	0.0
	258651	0.58	0.36	0.36	-0.26	-0.18	0.0
	258712	0.55	0.21	-0.07	-0.17	0.21	0.0
	258731	0.32	0.43	-0.08	-0.33	0.43	0.0
	261608	0.66	0.30	-0.18	-0.21	0.30	0.0
	258693	0.37	0.38	0.38	-0.20	-0.22	0.0
Mean		0.50	0.25	0.03	-0.07	0.00	0.0
SD		0.16	0.12	0.22	0.22	0.22	0.2

* Statistics not reported for sample size less than 50 ($N < 50$).

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, % Omits = percent of omitted responses.

Table 2.A21 Item Statistics: MD Mod-HSA English—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
510	259429	0.51	0.34	0.34	-0.23	-0.16	0.0
	259426	0.60	0.22	0.22	-0.15	-0.11	0.0
	259349	0.61	0.26	-0.08	0.26	-0.24	0.0
	259427	0.48	0.26	-0.08	0.26	-0.22	0.0
	259312	0.65	0.32	0.32	-0.30	-0.11	0.0
	259368	0.29	0.14	0.14	-0.30	0.16	0.6
	259371	0.69	0.34	-0.17	-0.27	0.34	0.0
	259367	0.67	0.45	-0.34	0.45	-0.25	0.0
	259370	0.46	0.17	-0.15	0.17	-0.07	0.0
	259432	0.61	0.37	0.37	-0.31	-0.12	0.0
	259433	0.53	0.10	0.10	-0.12	0.00	0.0
	259354	0.38	0.14	-0.24	0.09	0.14	0.0
	259407	0.18	0.01	-0.08	0.01	0.08	0.6
	259335	0.34	0.17	-0.23	0.02	0.17	0.0
	259410	0.67	0.39	-0.29	0.39	-0.20	0.0
	259413	0.38	0.12	-0.14	0.12	0.04	0.0
	259411	0.43	0.20	-0.13	-0.11	0.20	0.0
	259414	0.45	0.33	-0.11	-0.26	0.33	0.0
	259338	0.41	0.27	0.27	-0.14	-0.15	0.0
	259339	0.55	0.49	-0.32	0.49	-0.29	0.0
	259340	0.68	0.42	-0.17	-0.35	0.42	0.0
	259362	0.53	0.35	0.35	-0.16	-0.27	0.0
	259436	0.33	0.03	0.03	0.12	-0.20	0.0
	259347	0.44	0.23	0.23	-0.16	-0.11	0.0
	259424	0.55	0.34	-0.19	-0.22	0.34	0.0
	259423	0.54	0.21	-0.08	-0.16	0.21	0.0
	259425	0.47	0.25	-0.18	0.25	-0.09	0.0
	259422	0.41	0.18	-0.02	0.18	-0.16	0.6
	259445	0.61	0.26	-0.25	0.26	-0.06	0.0
	259374	0.33	0.21	-0.06	-0.19	0.21	0.0
	259450	0.33	0.29	-0.30	-0.03	0.29	0.6
	259376	0.55	0.38	-0.13	-0.34	0.38	0.0
	259310	0.54	0.39	-0.19	0.39	-0.27	0.0
	259365	0.59	0.25	-0.05	0.25	-0.29	0.0
	259449	0.61	0.12	0.12	0.04	-0.23	0.0
	259441	0.31	0.21	0.21	-0.26	0.04	0.0
	259443	0.52	0.22	-0.11	0.22	-0.14	0.0
	259437	0.45	0.22	0.22	-0.06	-0.19	0.0
	259457	0.35	0.20	0.20	-0.13	-0.08	0.6
	259330	0.67	0.35	-0.24	0.35	-0.21	0.0
	259458	0.28	0.11	0.11	-0.14	0.04	0.0
	259466	0.55	0.34	-0.07	-0.32	0.34	0.0
	259395	0.36	0.09	0.03	0.09	-0.14	0.0

Table 2.A21 Item Statistics: MD Mod-HSA English—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
510	259459	0.54	0.20	-0.10	-0.14	0.20	0.0
	259396	0.26	0.20	-0.22	0.04	0.20	0.0
	259460	0.64	0.39	0.39	-0.31	-0.18	0.0
	259398	0.51	0.41	-0.19	0.41	-0.30	0.0
	259397	0.39	0.23	-0.14	-0.10	0.23	0.0
	259360	0.46	0.30	0.30	-0.24	-0.09	0.0
	259435	0.21	-0.03	-0.06	0.12	-0.03	0.0
Mean		0.48	0.25	-0.02	-0.01	-0.01	0.1
SD		0.13	0.12	0.21	0.24	0.21	0.2

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A22 Item Statistics: MD Mod-HSA English—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
610	259343	0.56	0.28	-0.19	-0.14	0.28	0.0
	259415	0.67	0.02	0.02	-0.24	0.14	0.0
	259417	0.36	0.03	0.03	0.12	-0.21	0.0
	259416	0.77	0.02	0.07	0.02	-0.08	0.0
	259323	0.54	0.40	0.40	-0.14	-0.35	0.0
	259453	0.52	0.25	-0.16	-0.17	0.25	0.0
	259382	0.64	0.15	-0.15	0.15	-0.05	0.0
	259452	0.26	0.20	-0.18	0.20	-0.08	0.0
	259465	0.43	0.19	0.19	0.02	-0.22	0.0
	259351	0.52	0.32	-0.24	0.32	-0.16	0.0
	259430	0.72	0.20	-0.19	0.20	-0.08	0.0
	259431	0.64	0.19	0.19	-0.28	0.03	0.0
	259318	0.69	0.28	0.28	-0.13	-0.24	0.0
	259319	0.46	0.14	0.05	-0.27	0.14	0.0
	259320	0.72	0.48	-0.31	0.48	-0.31	0.0
	259419	0.70	0.09	-0.08	0.09	-0.03	0.0
	259421	0.64	0.12	0.12	-0.09	-0.06	0.0
	259463	0.48	0.20	0.20	-0.11	-0.12	0.0
	259345	0.54	0.24	-0.11	-0.18	0.24	0.0
	259325	0.56	0.43	-0.08	0.43	-0.42	0.0
	259385	0.51	0.46	-0.32	-0.22	0.46	0.0
	259390	0.56	0.19	-0.13	-0.10	0.19	0.0
	259383	0.52	0.18	-0.04	0.18	-0.16	0.0
	259386	0.57	0.54	-0.43	-0.21	0.54	0.0
	259388	0.54	0.20	0.20	-0.18	-0.07	0.0
	259389	0.46	0.28	-0.08	0.28	-0.24	0.0
	259438	0.49	0.12	-0.02	0.12	-0.11	0.0
	259439	0.52	-0.10	-0.23	-0.10	0.30	0.0
	259437	0.45	0.22	0.22	-0.06	-0.19	0.0
	259332	0.61	0.32	-0.30	0.32	-0.08	0.0
	259403	0.30	0.08	0.06	-0.17	0.08	0.0
	259401	0.44	0.38	0.38	-0.23	-0.21	0.0
	259402	0.54	0.35	-0.36	-0.02	0.35	0.0
	259399	0.79	0.29	-0.27	-0.09	0.29	0.0
	259400	0.49	0.54	-0.39	-0.25	0.54	0.0
	259404	0.66	0.03	0.03	-0.22	0.16	0.0
	259461	0.64	0.15	-0.02	-0.16	0.15	0.0
	259446	0.64	0.14	-0.28	0.13	0.14	0.0
	259447	0.67	0.40	-0.28	0.40	-0.24	0.0
	259448	0.61	0.26	-0.18	-0.14	0.26	0.0
	259358	0.59	0.22	-0.07	-0.20	0.22	0.0
	259434	0.38	0.15	-0.12	0.15	-0.04	0.0
	259391	0.59	0.53	-0.44	0.53	-0.14	1.6

Table 2.A22 Item Statistics: MD Mod-HSA English—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	% Omits
610	259454	0.49	0.20	0.20	-0.28	0.07	0.0
	259455	0.59	0.04	-0.25	0.23	0.04	0.0
	259392	0.67	0.55	-0.06	-0.56	0.55	0.0
	259394	0.74	0.38	0.38	-0.10	-0.40	0.0
	259393	0.59	0.25	0.25	-0.15	-0.16	0.0
	259444	0.61	0.30	-0.29	0.30	-0.09	0.0
	259356	0.56	0.21	-0.02	-0.21	0.21	0.0
Mean		0.56	0.24	-0.06	-0.01	0.02	0.0
SD		0.11	0.15	0.22	0.24	0.25	0.2

* Statistics not reported for sample size less than 50 (N < 50).

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A23 Item Statistics: MD Mod-HSA Government—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
510	258363	0.38	0.27	-0.16	-0.13	0.27	0.0
	258500	0.23	0.29	0.29	-0.20	-0.06	0.0
	258338	0.32	0.34	-0.05	0.34	-0.30	0.0
	258327	0.45	0.18	0.18	0.06	-0.31	0.0
	258408	0.41	0.39	0.39	-0.25	-0.18	0.0
	258458	0.38	0.33	0.33	-0.18	-0.19	0.0
	258505	0.51	0.28	0.28	-0.15	-0.18	0.0
	258506	0.63	0.39	-0.24	-0.24	0.39	0.0
	258349	0.47	0.24	0.24	-0.10	-0.16	0.0
	258429	0.56	0.21	-0.15	-0.10	0.21	0.0
	258353	0.30	0.10	-0.08	0.10	-0.01	0.0
	258396	0.43	0.15	0.15	-0.04	-0.12	0.0
	258410	0.40	0.43	-0.28	-0.18	0.43	0.0
	258386	0.37	0.53	0.53	-0.31	-0.24	0.0
	258350	0.35	0.42	0.42	-0.18	-0.25	0.0
	258378	0.48	0.29	-0.16	-0.17	0.29	0.0
	258503	0.37	0.47	-0.15	-0.33	0.47	0.0
	258440	0.59	0.34	-0.17	0.34	-0.24	0.0
	258400	0.48	0.37	-0.32	-0.12	0.37	0.0
	258421	0.33	0.43	0.43	-0.25	-0.19	0.0
	258446	0.36	0.13	-0.08	0.13	-0.05	0.0
	258344	0.37	0.29	0.29	-0.04	-0.26	0.0
	258432	0.50	0.21	-0.07	-0.17	0.21	0.0
	258428	0.38	0.10	-0.09	-0.02	0.10	0.0
	258360	0.41	0.30	-0.04	0.30	-0.28	0.0
	258343	0.45	0.41	-0.25	0.41	-0.21	0.0
	258438	0.59	0.37	0.37	-0.24	-0.23	0.0
	258718	0.70	0.41	0.41	-0.25	-0.28	0.7
	258424	0.23	0.20	-0.26	0.20	0.09	0.0
	258323	0.37	0.31	-0.08	0.31	-0.25	0.0
	258324	0.57	0.44	-0.26	-0.29	0.44	0.0
	258437	0.45	0.16	-0.08	-0.09	0.16	0.0
	258319	0.35	0.23	-0.06	0.23	-0.18	0.0
	258389	0.53	0.13	0.01	0.13	-0.17	0.0
	258379	0.65	0.20	-0.18	-0.08	0.20	0.0
	258413	0.42	0.12	0.10	0.12	-0.24	0.0
	258448	0.35	0.44	0.44	-0.33	-0.14	0.0
	258721	0.31	0.14	0.14	-0.13	0.00	0.0
	258439	0.56	0.38	-0.22	0.38	-0.24	0.0
	258368	0.42	0.16	0.16	-0.10	-0.08	0.0
	258320	0.33	0.28	-0.20	0.28	-0.10	0.0
	258436	0.57	0.19	0.19	-0.18	-0.04	0.0
	258384	0.60	0.40	-0.21	0.40	-0.29	0.0

Table 2.A23 Item Statistics: MD Mod-HSA Government—Summer 2010 Primary 1

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
510	258486	0.47	0.18	-0.08	0.18	-0.13	0.0
	258411	0.36	0.32	-0.17	-0.14	0.32	0.7
	258313	0.65	0.26	-0.25	0.26	-0.06	0.0
	258716	0.43	0.41	0.41	-0.19	-0.26	0.0
	258335	0.50	0.34	-0.17	-0.23	0.34	0.0
	258377	0.63	0.42	0.42	-0.23	-0.29	0.0
Mean		0.45	0.29	0.03	-0.03	-0.04	0.0
SD		0.11	0.11	0.25	0.22	0.24	0.1

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.

Table 2.A24 Item Statistics: MD Mod-HSA Government—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
610	258401	0.55	0.43	-0.22	-0.30	0.43	0.0
	258459	0.69	0.33	-0.13	0.33	-0.29	0.0
	258402	0.54	0.23	-0.05	-0.31	0.23	0.0
	258406	0.71	0.31	-0.19	0.31	-0.21	0.0
	258347	0.47	0.27	0.27	-0.24	-0.12	0.0
	258328	0.49	0.35	0.35	-0.29	-0.12	0.0
	258422	0.55	0.43	-0.34	-0.19	0.43	0.0
	258357	0.28	0.30	-0.07	0.30	-0.20	1.2
	258452	0.42	0.19	0.19	-0.06	-0.20	0.0
	258330	0.55	0.37	0.37	-0.28	-0.18	0.0
	258454	0.48	0.39	-0.30	-0.21	0.39	0.0
	258364	0.71	0.38	-0.33	0.38	-0.15	0.0
	258361	0.55	0.39	0.39	-0.23	-0.24	0.0
	258336	0.42	0.42	-0.12	-0.34	0.42	0.0
	258376	0.47	0.28	0.28	-0.24	-0.10	0.0
	258419	0.19	0.31	-0.19	0.31	-0.06	0.0
	258425	0.51	0.27	-0.20	0.27	-0.11	0.0
	258715	0.75	0.07	-0.01	0.07	-0.17	0.0
	258473	0.57	0.25	-0.27	0.02	0.25	0.0
	258478	0.36	0.03	0.05	0.03	-0.10	0.0
	258501	0.54	0.17	-0.06	-0.12	0.17	1.2
	258450	0.39	0.44	0.44	-0.41	-0.03	0.0
	258498	0.45	0.39	0.39	-0.19	-0.25	0.0
	258388	0.22	0.10	-0.24	0.10	0.14	0.0
	258351	0.46	0.38	0.38	-0.37	-0.05	0.0
	258488	0.75	0.13	0.13	-0.23	0.06	0.0
	258479	0.49	0.14	-0.05	0.14	-0.11	0.0
	258375	0.57	0.20	0.20	-0.21	-0.05	0.0
	258414	0.59	0.12	0.01	0.12	-0.17	0.0
	258495	0.28	0.20	0.20	-0.18	-0.01	0.0
	258321	0.42	0.32	0.32	-0.31	-0.04	0.0
	258426	0.18	-0.01	-0.01	-0.14	0.16	0.0
	258722	0.48	0.20	-0.01	0.20	-0.24	0.0
	258407	0.16	-0.03	-0.03	0.18	-0.21	0.0
	258412	0.58	0.38	0.38	-0.27	-0.20	0.0
	258369	0.53	0.27	-0.13	-0.19	0.27	0.0
	258483	0.49	0.24	0.24	-0.24	-0.09	0.0
	258719	0.63	0.49	0.49	-0.23	-0.37	0.0
	258345	0.17	-0.02	0.01	-0.02	0.01	0.0
	258390	0.57	0.29	-0.18	0.29	-0.17	0.0
	258329	0.36	0.41	0.41	-0.14	-0.30	0.0
	258409	0.55	0.07	-0.06	0.07	-0.02	0.0
	258434	0.35	0.26	-0.13	-0.14	0.26	0.0

Table 2.A24 Item Statistics: MD Mod-HSA Government—Summer 2010 Primary 2

Form	ItemID	P_Val	R_ITT	P_BIS1	P_BIS2	P_BIS3	%Omits
610	258391	0.65	0.31	0.31	-0.17	-0.22	0.0
	258316	0.43	0.12	-0.13	0.12	-0.01	0.0
	258404	0.47	0.42	0.42	-0.14	-0.34	0.0
	258468	0.49	0.40	0.40	-0.17	-0.28	0.0
	258491	0.45	0.15	0.02	0.15	-0.22	0.0
	258341	0.52	0.43	0.43	-0.09	-0.39	0.0
	258502	0.35	0.05	0.05	-0.05	0.00	0.0
Mean		0.48	0.26	0.07	-0.07	-0.06	0.0
SD		0.15	0.14	0.25	0.22	0.21	0.2

* Statistics not reported for sample size less than 50 (N < 50).

Note: P_Val = P-Value, R_ITT = item-total correlation, P_BIS1 to P_BIS3 = option-total correlation, %Omits = percent of omitted responses.