



Test Analysis Report

International Board Certified Lactation Consultant® (IBCLC®)

April 2018 Administrations

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PROJECT NAME

International Board Certified Lactation Consultant® (IBCLC®)

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International Board of Lactation Consultant Examiners® (IBLCE®)

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Overview

The IBCLC certification examination 2018 April test form was administered in 457 locations across 48 countries and territories in English. A total of 1,492 candidates sat for the examination in April 2018. All candidates tested via computer-based testing (CBT). All data from CBT administrations were analysed in this Test Analysis Report.

Test Construction

The IBCLC certification examination is based on a 2-dimensional detailed content outline. This document was derived from a practice analysis completed in 2014 by the Board, in conjunction with its Examination Committee members and a Representative Panel of Experts (RPE). On the basis of this study, the Board arranged the examination content according to content areas and chronological periods. The detailed content outline appears in its entirety on the IBLCE website (www.iblce.org).

The examination is scored as a single integrated test. However, it has two multiple-choice item formats: text-based and image-based multiple-choice. The images usually present a photograph depicting an aspect of breastfeeding, or breast anatomy or pathology that the candidates must resolve. These test items have a particularly high degree of clinical relevance. Of the 175 items comprising the test, 85 reference images.

A preliminary item analysis was conducted after test administrations using all candidate score data (n = 1,492). Psychometrics staff at PSI reviewed the preliminary item analysis with members of the Examination Committee to confirm the appropriateness of potentially problematic items (i.e., those with slightly irregular statistics or adverse candidate comments). Appropriate item scoring changes were made as needed.

Test Scoring

These statistics are computed for the first-time candidate population of 1,045 candidates, based on the combined text-based and image-based portions. The statistics are presented for the overall test rather than for the two subtests because the examination was designed and intended to be one comprehensive, integrated test.

The distribution of raw scores for first-time candidates ($n = 1,045$) had a slight negative skew (see *Figure 1*). Reliability (KR20) of scores from first-time candidate responses to the 175-item test was 0.87, the standard error of measurement (SEM) was 4.71, the conditional SEM at the cut score was 5.73¹, and single administration decision consistency index estimates were 0.91² and 0.92³. The mean test score was 141.57 with a standard deviation of 13.32.

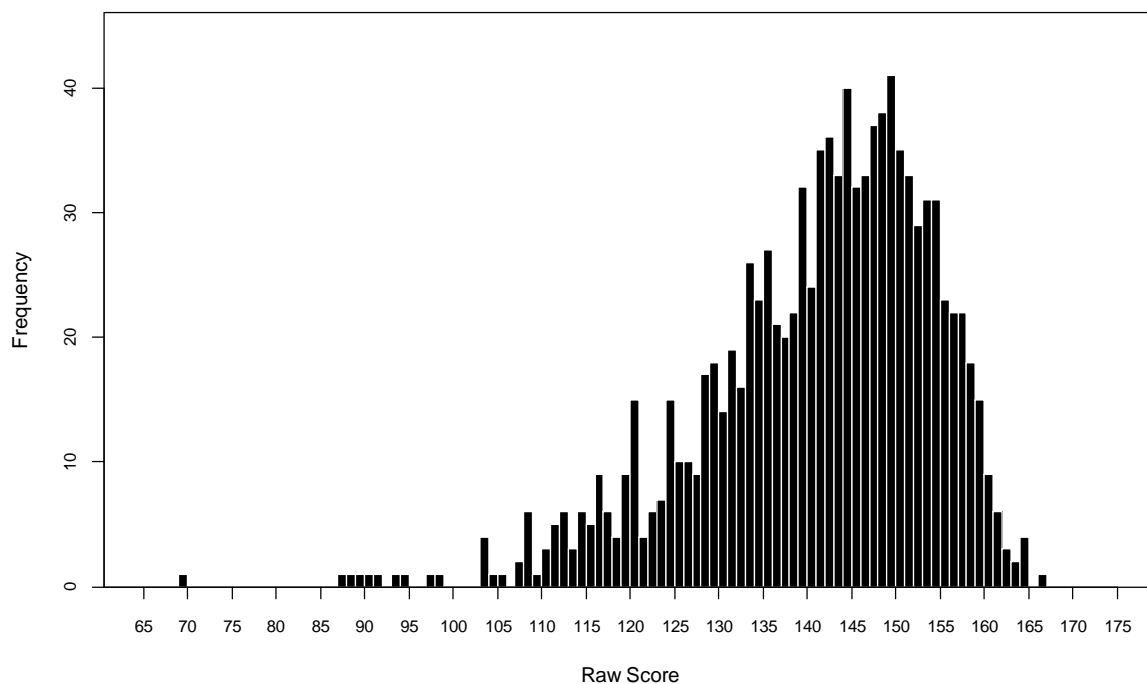


Figure 1. Distribution of Raw Scores for First-Time Candidates

¹ Lord, F. M. (1984). Standard errors of measurement at different ability levels. *Journal of Educational Measurement*, 21(3), 239-243.

² Subkoviak, M. (1976). Estimating reliability from a single administration of a criterion-referenced test. *Journal of Educational Measurement*, 13(4), 7-10.

³ Livingston, S. A., & Lewis, C. (1995). Estimating the consistency and accuracy of classifications based on test scores. *Journal of Educational Measurement*, 32, 179-197.

The performance for each content area and chronological period is shown in Tables 1. Candidates received scores in these seven major content areas, along with guidance on how to interpret these scores for either retesting (for unsuccessful candidates) or future professional development (for passing candidates).

Table 1. Candidate Performance Summary for All Candidates by Content Area (n = 1,492, % passing = 83.18)

Content Area	# Items	Mean
I. Development and Nutrition	26	20.95
II. Physiology and Endocrinology	24	19.55
III. Pathology	31	24.56
IV. Pharmacology and Toxicology	13	10.13
V. Psychology, Sociology, and Anthropology	21	17.29
VI. Techniques	25	20.10
VII. Clinical Skills	35	28.98
Total	175	141.55

Test Results

Established statistical procedures for test equating were conducted to adjust for differences in difficulty across test forms and to maintain the minimum competency standard pre-established by the IBLCE. After adjusting scoring for the items as indicated, the 2018 April form was equated to the 2017 April form using 45 equator items identified at the examination development stage. The IBLCE approved and adopted a final cut score of 129 raw score units (out of 175) for the 2018 April test form.

Final results for the examination forms are shown in Tables 2 and 3, displaying means and pass/fail summary by certification status and eligibility pathway, respectively.

Table 1. Mean Score and Pass/Fail Summary by Certification Status

Status	N	Mean	% Passing
Initial	1,045	141.57	84.98
Lapsed	32	145.75	96.88
Recert - 10	172	147.34	93.60
Recert - 15	10	147.60	90.00
Recert - 20	74	150.62	97.30
Recert - 25	10	147.40	100.00
Recert - 30	11	156.82	100.00
Repeat	138	126.27	42.75
Total	1,492	141.55	83.18

Table 2. Mean Score and Pass/Fail Summary by Eligibility Pathway

Pathway	N	Mean	% Passing
Pathway 1*	1,076	139.79	80.30
Pathway 2**	24	137.88	70.83
Pathway 3***	55	142.98	83.64

* Health professionals and non-health professionals earning clinical hours in an appropriate setting

** Accredited Academic Programs

*** Mentorship for clinical hours with an IBCLC