

For a complete discussion of these results refer to *Reliability and Validity of the Desired Results Developmental Profile access (DRDP access): Results of the 2005–2006 Calibration Study* available on www.draccess.org.

Purpose

This report describes evidence of validity, reliability and scaling of scores from the Desired Results Developmental Profile *access*. The objective is to provide information about the quality of scores obtained from the DRDP *access*. Data for this report was collected during the 2005–2006 calibration of the DRDP *access*. As part of the calibration, 1644 infants, toddlers, and preschoolers throughout the state of California were assessed using the DRDP *access*. For information regarding scoring and interpretation of scores from the DRDP *access*, please see *Understanding the DRDP access Measurement Model* (Desired Results *access* Project, January 2008).

Rationale

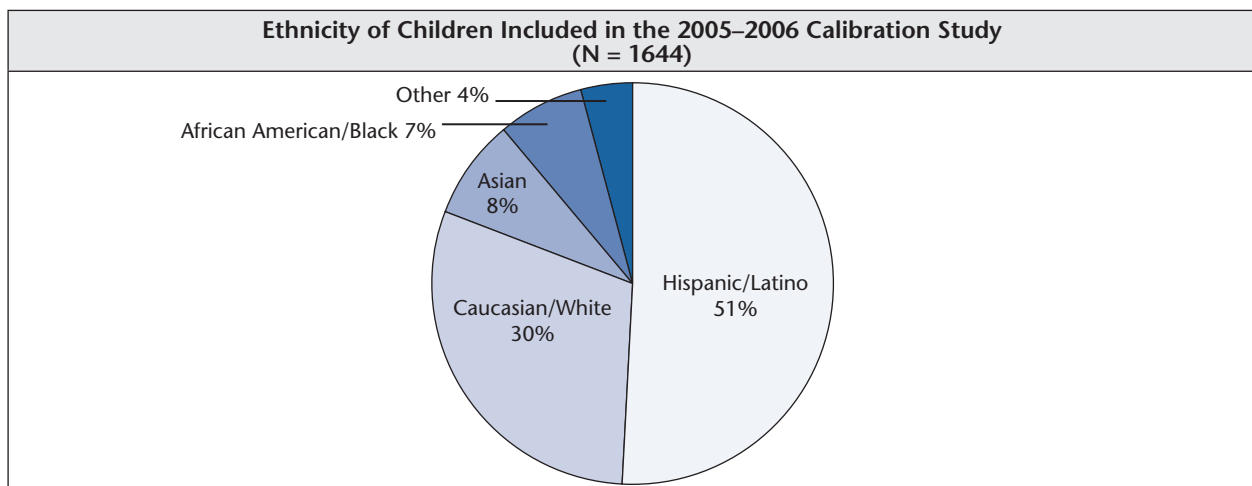
The calibration study was one step in preparing the instrument for use in the Desired Results statewide accountability system. The calibration study was conducted to estimate the statistical properties of the measures, determine if the properties met the expectations of instrument developers, and to evaluate assessors' perceived utility.

Methods

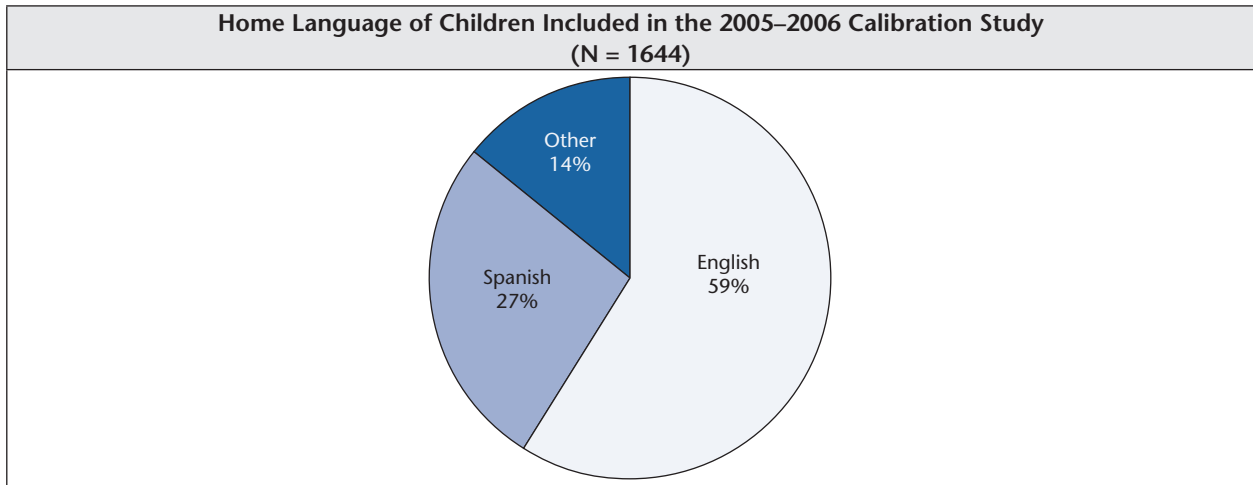
Local Education Agencies (LEAs) were selected throughout the state of California to participate in the study. Participating LEAs represented urban, suburban, and rural settings and included large, small, and moderately sized programs. Early childhood and early childhood special education programs were included. LEAs selected teachers and children who reflected the race and gender of their student populations. Teachers were trained to administer the DRDP *access* by staff of the Desired Results *access* Project. Teachers administered the DRDP *access* to the same set of children in the fall of 2005 and the spring of 2006. The DRDP *access* was administered to 1644 infants, toddlers, and preschoolers. After completing the first administration of the DRDP *access*, teachers completed an evaluation of the instrument.

Participants

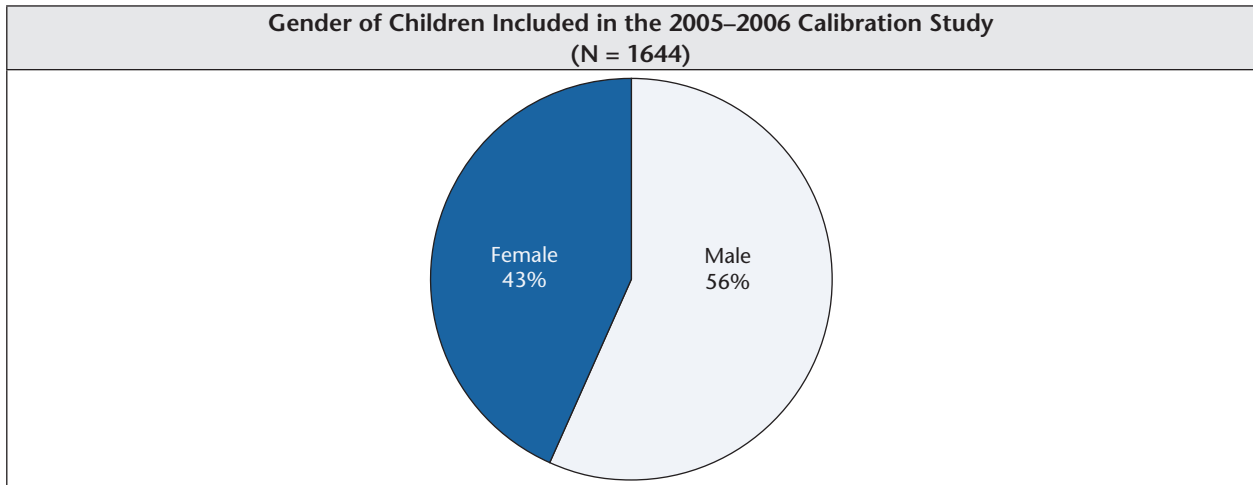
The ethnic representation of the sample matched the ethnic demographics of 3, 4, and 5 year olds in California.



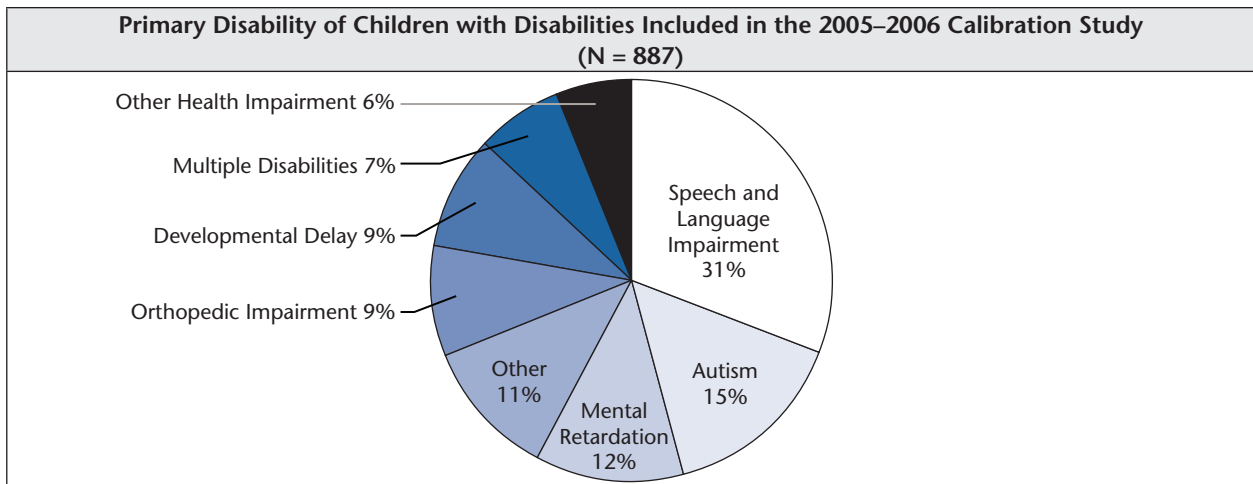
Most of the children in the sample were reported to use English as their home language. The next most frequent language was Spanish.



The sample had a slightly larger proportion of males.



Speech and Language Impairment was the most frequent disability in the sample. The sample is representative of the distribution of disabilities for early childhood special education programs.



Results

Reliability

Measures from the DRDP *access* are combined into Indicator Groups to create meaningful subscales. Scores from all subscales demonstrated sufficient reliability, according to standards in the field of statistics and measurement. The table below shows the range of values for each reliability statistic across Indicator Groups. All values are above the criterion value.

Reliability statistic	Range of values (across the 8 Indicator Groups)	Average (across the 8 Indicator Groups)	Criterion value
Person separability: how well children assessed with the DRDP <i>access</i> are differentiated on each subscale (Bond & Fox, 2001).	.90 - .96	.93	.80
Alpha: the degree to which children are rated in the same way across different Measures within each Indicator Group.	.88 - .97	.94	.80
Test-Retest (Pearson r): the stability of scores across time	.86 - .92	.90	.60

Validity

Scores from all subscales demonstrated sufficient validity, according to standards in the field of statistics and measurement.

Content validity. Content validity is the representativeness and relevance of the measures in an Indicator Group to the construct that the Indicator Group is intended to measure. Experts were convened during all stages of development of the DRDP *access* to ensure that the final instrument related closely to the constructs defined by each Indicator Group.

Discriminative validity. Discriminative validity describes how adequately the DRDP *access* differentiates between groups that theoretically should show differences. Scores from the Indicator Groups from the DRDP *access* were compared to scores from the same children on a measure of severity of disability. The two sets of scores ranked children similarly, supporting the discriminative validity of the instrument.

Construct validity. One aspect of the construct validity of scores is the degree to which the factor structure of the items is representative of and consistent with what is currently known regarding a construct (Riese, Waller, & Comrey, 2000). The construct validity of the DRDP *access* for measuring the eight Indicator Groups was assessed in two ways. The average difference between the scores predicted by the measurement model and the scores that were observed was estimated and showed sufficient support for the construct validity of the instrument. In addition, a factor analysis of scores from each Indicator Group supported the construct validity.

Utility

The utility of the DRDP *access* was assessed by surveying assessors about their experiences with the instrument. The results support that the DRDP *access* is easy to use and relevant to the material taught in preschool classrooms.

References

- Bond, T.G., & Fox, C.M. (2001). *Applying the Rasch model: Fundamental measurement in the human sciences*. Mahwah, New Jersey: Lawrence Erlbaum.
- Desired Results *access* Project (2008, January). *Understanding the DRDP access Measurement Model*. Retrieved March 20, 2008, from <http://www.draccess.org/assessors/UnderstandingDRDPaccessMM.html>
- Reise, S.P., Waller, N.G., & Comrey, A. L. (2000). Factor analysis and scale revision. *Psychological Assessment*, 12, 287–297.

Executive Summary, pullout from *Reliability and Validity of the Desired Results Developmental Profile access (DRDP access): Results of the 2005–2006 Calibration Study* was developed by the Desired Results *access* Project to support the implementation of the Desired Results Developmental Profile Assessment System based on the guidelines and specifications of the Special Education Division.

© 2008 by the California Department of Education, Special Education Division

All rights reserved

Permission to reproduce for instructional purposes

The Desired Results *access* Project – A Special Project of the Napa County Office of Education is funded by the California Department of Education (CDE), Special Education Division (Contract #CN077059) to assist the CDE with developing and putting into place a system to assess the progress of California's preschool children with disabilities.

www.draccess.org

info@www.draccess.org

