

AMERICAN MIDWIFERY CERTIFICATION BOARD

EXECUTIVE SUMMARY REPORT OF THE AMCB CUT SCORE STUDY

The American Midwifery Certification Board (AMCB) uses the Nedelsky Method, a criterion-referenced cut score determination method, to arrive at examination passing scores. When new items are approved they are assigned a Nedelsky rating or minimum pass index (MPI). The MPI is a function of the number of distractors that the minimally qualified candidate could eliminate from consideration when responding to a given test question. The sum of the Nedelsky ratings for the items comprising an examination constitutes the cut score. Nedelsky ratings are reviewed and updated, as necessary, by the examination committee each time an item is selected for use on an examination.

In an effort to validate its use of the Nedelsky method and to investigate the use of an alternative criterion-referenced method for setting cut scores, the AMCB examination committee undertook a cut-score study of Form 052 of the certification examination. The study was conducted on April 12, 2005 as part of a regularly scheduled examination committee meeting at AMCB's previous headquarters in Landover, MD.

The procedure used in this study was the Direct Standard Setting Method (DSSM) (Schoon, Rosen & Jones, 1988). The DSSM differs from some of the other criterion-referenced methodologies in that the process of making DSSM ratings is one of setting actual performance standards as opposed to making some other type of judgment about test questions.

The DSSM requires judges to answer the following question for each set of 10 items on the examination, "How many questions in this 10-item set should a midwifery certification candidate answer correctly to be considered just barely qualified for certification?"

Prior to making these estimates, the SMEs: 1) engaged in a discussion of the characteristics of the "barely qualified" or "just good enough" candidate for certification. The discussion proceeded until the group arrived at a shared notion of "barely qualified for certification"; 2) received an orientation to the use of the DSSM. The orientation focused on the notions of item importance and difficulty as guides to making DSSM estimates; and 3) applied the DSSM to groups of items as practice in using the methodology. Discussion of the estimates made during the practice session allowed the SMEs to further refine the use of and comfort with the methodology.

After the training and orientation session, the SMEs proceeded to make their independent estimates. Form 052 of the AMCB certification examination consists of 125 scored items. Therefore, each SME made 13 estimates, one for each of 12 groups of ten items and one for a final group of five items.

Results

The results of the standard setting exercise are summarized in Table 1. The workshop yielded a DSSM cut score of 90.0 items correct out of 125 or 72.0 %. The Nedelsky cut score based on previously assigned MPI values was 89 correct answers out of 125 or 71.2%.

As a result of this study it was recommended that the AMCB examination committee and board of directors continue to investigate the use of additional criterion-referenced methods for determining passing scores for their certification examinations.

References

Cizek, G..J.(2001). Setting Performance Standards: Concepts, Methods, and Perspectives. Mahwah, NJ: Lawrence Erlbaum Associates.

Schoon, C.G., Rosen, G.A. and Jones, J.P. (1988, April). A critique of difficulty estimation methodologies in the setting of cut points and a discussion of an alternative methodology: The Direct Standard Setting Method. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.