The Multiple Mini-Interview as an Admission Tool for a PharmD Program Satellite Campus

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INTRODUCTION

• In 2014, there was a total of 44 satellite campuses associated with U.S. schools of pharmacy.1
• Satellite campuses are established for a variety of reasons, most commonly to expand physical space and to serve another geographic region.2
• The UNC Eshelman School of Pharmacy includes two campuses, one in Chapel Hill, North Carolina, and a satellite campus in Asheville, North Carolina.

To best select students for its new curriculum, the multiple mini-interview (MMI) was implemented as part of the 2013-2014 admission process on both campuses.

• The MMI is similar to an Objective Structured Clinical Exam (OSCE), consisting of multiple stations in a circuit, each assessing the candidate based on a case or scenario designed to assess specific noncognitive or professional traits.3,4
• Because performance on MMI stations is rated by interviewers, it is critical to understand how scoring patterns and station difficulty impact candidate scores.

The multifaceted Rasch model (MFRM) is able to quantify and adjust for rater patterns and station difficulty to provide a “fair candidate score.”5

OBJECTIVES

• The purpose of this study was to assess the use and validity of the MMI as an admission tool for a satellite campus using a three-facet multifaceted Rasch measurement (MFRM).

METHODS

• The MMI was held concurrently on both campuses.
• During the 2013-2014 admissions cycle, 39 candidates and 12 interviewers participated in the 7 station MMI on the Asheville campus.
• Stations were based on validated scenarios designed to assess a single construct.
• Interviewers participated in online and in-person training sessions.
• A three-facet MFRM was used to determine the variance in candidate ratings attributable to rater severity, candidate ability, and station difficulty.

RESULTS

• The MFRM included 268 of 273 data points from the MMI.
• Due to high Infit or Outfit MnSq values associated with some candidates, 5 data points were manually removed as they appeared to be outliers.
• Rasch measures accounted for 60% of total variance while 40% of variance was unaccounted for by the model.
• 20.62% of variance in candidate MMI scores was attributable to interviewer variability.
• 35.27% of variance in candidate MMI scores was attributable to candidate ability.
• 4.11% of variance in candidate MMI scores was attributable to station difficulty.
• No interviewers had an Infit or Outfit MnSq value greater than 1.7, which would suggest an unexpected degree of variability in their ratings.
• One interviewer (6.33%) had a MnSq value less than 0.5, suggesting less than expected variability in their ratings of candidates.

IMPLICATIONS

• Single institution study specific to a satellite campus.
• The sample size is relatively small due to analyzing satellite campus data alone.

REFERENCES


*This study was considered exempt from further review by the University of North Carolina at Chapel Hill Institutional Review Board.