



INTERPERSONAL SKILLS AND THE EFFECTS ON STUDENT SCORES IN M-3 OBJECTIVE STRUCTURED CLINICAL EXAMINATIONS

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Introduction

- **PROBLEM:** An end-of M-3 year required OSCE revealed that some students performed satisfactorily on the overall examination but poorly on the following checklist item: *“Based on your interaction with this medical student, would you consider having this student as your future health care provider (FHCP)?”*
- **FRAMEWORK:** Four un-assessed interpersonal skills (IS) were identified : empathy, credibility, logic, and poise based on a review of the literature, standardized patients (SPs) debriefing and an analysis of these students’ videotaped performances.
- This study examined the IS items’ psychometric properties, their relationship to FHCP and OSCE scores and the effects of a physical examination (PE) component in the cases.



Methods

- The four IS items were included in the 2008/09 M-3 clerkship-specific OSCE checklists.
 - SPs were trained on new checklist items with 4-point Likert-scale (4=Yes, Definitely / 1=No, Absolutely Not).
 - SPs assessed student performance on IS items along with other station specific checklist items during required end-of-clerkship OSCEs.
- 212 M-3 students completed at least four clerkship OSCEs during the eight-month study period.
- Reliability, correlations, stepwise linear regression, and descriptive statistics were generated using SPSS 15.0.

INTERPERSONAL (IS) ITEMS

1. The student was **empathic** - cared about me more than the facts.
2. The student’s flow/sequence of questions/interview was **logical** and organized.
3. The student was **credible** - presented information that made sense to me.
4. The student appeared **poised** and self-assured.



Results

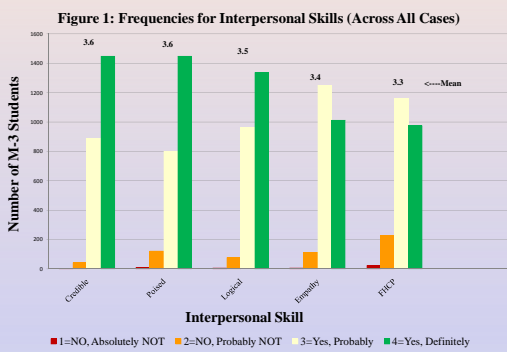


Table 1: Statistically Significant Correlations of Interpersonal Skills across all Cases (all p < .001)

	Empathic	Logical	Credible	Poised	FHCP
Logical	.479	-----	-----	-----	-----
Credible	.481	.718	-----	-----	-----
Poised	.451	.671	.725	-----	-----
FHCP	.635	.603	.598	.619	-----
Overall Score	.340	.390	.399	.384	.495

- Frequency distributions indicated variability for each IS item (Figure 1).
- All IS correlations were statistically significant (Table 1) and prediction of overall scores was case-specific (Figure 2).

Figure 2: Best Interpersonal Skills Predictors of Overall Student OSCE Scores and their Percentage of Overall Cases

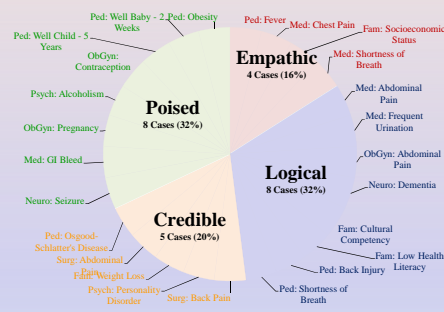


Table 2: Percentage of Cases with Physical Exam Component for Each Best Interpersonal Skills Predictor of Student Scores

Predictor	# of Cases With PE	Total # of Cases	%
Logical	6	8	75
Empathic	2	4	50
Poised	2	8	25
Credible	1	5	20

- Based on % of cases, being logical was the most important IS for score prediction when a PE component was present. Being credible was the most important IS for history (Hx) components only (Table 2).



Summary of Results

- From 2006-2008: 1 in 7 responses to FHCP from the end-of-year, high-stakes Benchmark OSCE was “No.”
- Station reliabilities were alpha = 0.70 - 0.90.
- Five percent of IS station performances received negative ratings (2=no, probably not; 1=no, definitely not).
- IS checklist items were moderately correlated (rho=0.340 - 0.725) with each other, FHCP, and overall student scores.
- Stepwise linear regression modeling revealed that the IS items significantly predicted student scores for OSCE stations.
 - Amount of variability accounted for was case-dependent and ranged from R²=0.16-0.58.
- Logical (32% cases) and Poised (32%) IS were the best student score predictors, followed by Credible (20%) and Empathic (16%).
- Logical IS was the best predictor of overall student scores with PE.
- Credible IS was the best predictor of overall student scores without PE.



Summary/Educational Significance

- Empathy, credibility, logic, and poise helped explain the differences in checklist and FHCP scores and can predict student OSCE scores providing opportunities to shorten checklists.



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