

Measurement of medical student communication skills during real patient encounters compared to communication skills measured by OSCE's

MARY LACY, MD

LEONARD NORONHA, MD

YURI LEYVA, MS

RUSH PIERCE, MD



SCHOOL
OF MEDICINE

Objectives

Describe the importance of communication skills for patient care

Describe some of the issues with summative assessment of communication skills using standardized patients

Describe, compare, and contrast the Direct Observation of a Clinical Encounter (DOCE) and the Objective Structured Clinical Examination (OSCE) experiences at UNM

Effective provider-patient communication can improve health outcomes



Review – 21 studies (RCTs, cohort studies)

- 16 showed positive results

Communication in history-taking or discussion of management plans

Emotional health

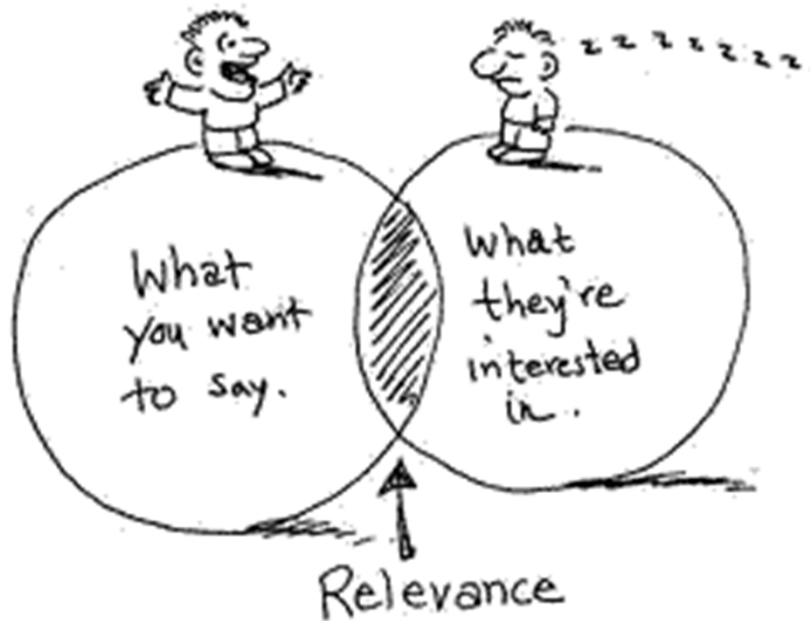
Symptom resolution

Function

Physiologic measures

Stewart, MA 1995. Can Med Assoc J.

Effective communication skills can be taught and are learned



Experiential training

Should be taught *within* clinical clerkships

Feedback

Should be given to all students

BEME Guide #2, 1999. Medical Teacher.

DOCE

- Formative with feedback
- Single Encounter in Longitudinal Relationship
- Inpatient setting
- No time limit (though it is timed)
- Scoring by MD preceptor (1 observation)

OSCEs may not reliably assess communication skills

Meta-analysis: 39 studies, 188 alpha values

Across station scores:

Overall alpha = 0.66 (0.62 – 0.70)

Clinical skills alpha = 0.69 (0.66 – 0.73)

Communication scales = 0.55 (0.45 – 0.63)

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

“It appears to be more difficult to reliably assess communication skills than clinical skills across stations.”

Medical Education 2011; 45: 1181–1189

Study Question: Are communication skills measured by faculty using a modified NM-CCS similar to skills measured in the OSCE?

DOCE MODIFIED NM-CCS

1. Open the discussion
2. Build a relationship
3. Gather information
4. Understand the Patient's Perspective
5. Share Information
7. Provide Closure

Total score: 6 - 30

OSCE NM-CCS

1. Open the discussion
2. Build a relationship
3. Gather information
4. Understand the Patient's Perspective
5. Share Information
- 6. Reach an Agreement*
7. Provide Closure

Total Score: 7 - 35

DOCE

- Formative with feedback
- Single Encounter in Longitudinal Relationship
- Inpatient setting
- No time limit (though it is timed)
- Scoring by MD preceptor (1 observation)

OSCE

- Student observed on communication and examination skills
- NM-CCS*
- Summative
- Standardized patients
- Single encounter
- Typically outpatient setting
- 15 minute time limit
- Scoring by SP (5 cases)

Comparison specific to UNM DOCE and OSCE

measured by faculty using a modified NM-CCS similar to skills measured in the OSCE?

6. REACH AGREEMENT (Planning Evaluation and Treatment)

	1	2	3	4	5
Negotiation	<ul style="list-style-type: none"> ○ No plan or a coercive plan ○ Ignores your ideas/requests without explanation 	<ul style="list-style-type: none"> ○ Presents a plan that addresses your stated concerns ○ Explicitly invites your ideas in constructing the plan ○ Requests feedback on the plan presented 			<ul style="list-style-type: none"> ○ Discusses available options including “no action” ○ Facilitates your involvement in decision making to the extent that you desire ○ Negotiates common goals and builds plan around them ○ Verifies your understanding of the final plan and requests your feedback
Implementation	<ul style="list-style-type: none"> ○ Does not address your ability to implement the plan ○ Ignores your expressed concerns about your ability to implement the plan 	<ul style="list-style-type: none"> ○ Assumes you are capable of implementing the plan ○ Addresses your explicit hesitations, suggestions or questions 			<ul style="list-style-type: none"> ○ Elicits your suggestions, questions and concerns about implementing the plan ○ Engages you in problem-solving around barriers to implementation

Mean OSCE and DOCE scores were similar. Students tended to perform better in Opening on OSCE and Closing on DOCE.

	DOCE %, mean (90% C.I.)	OSCE %, mean (90% C.I.)	Matched p-value*
Total score	60 (59, 61)	60 (59, 61)	0.9431
1. Open the Discussion	54 (52, 56)	60 (59, 61)	<0.0001
2. Build a relationship	63 (62, 65)	61 (59, 62)	0.1051
3. Gather information	60 (58, 62)	60 (59, 61)	1.0000
4. Patient's Perspective	60 (58, 62)	61 (59, 62)	0.5747
5. Share Information	59 (58, 61)	61 (60, 63)	0.1028
6. Reach an Agreement	NA	60 (58, 63)	
7. Provide Closure	65 (62, 67)	58 (55, 60)	0.0010

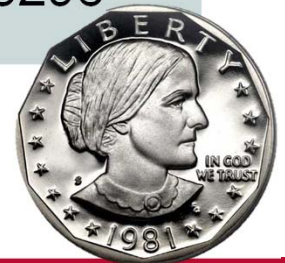
4 observers

83 observations

* Two sample T-test

The mean score on DOCE was not statistically significantly different between groups who passed or failed the OSCE

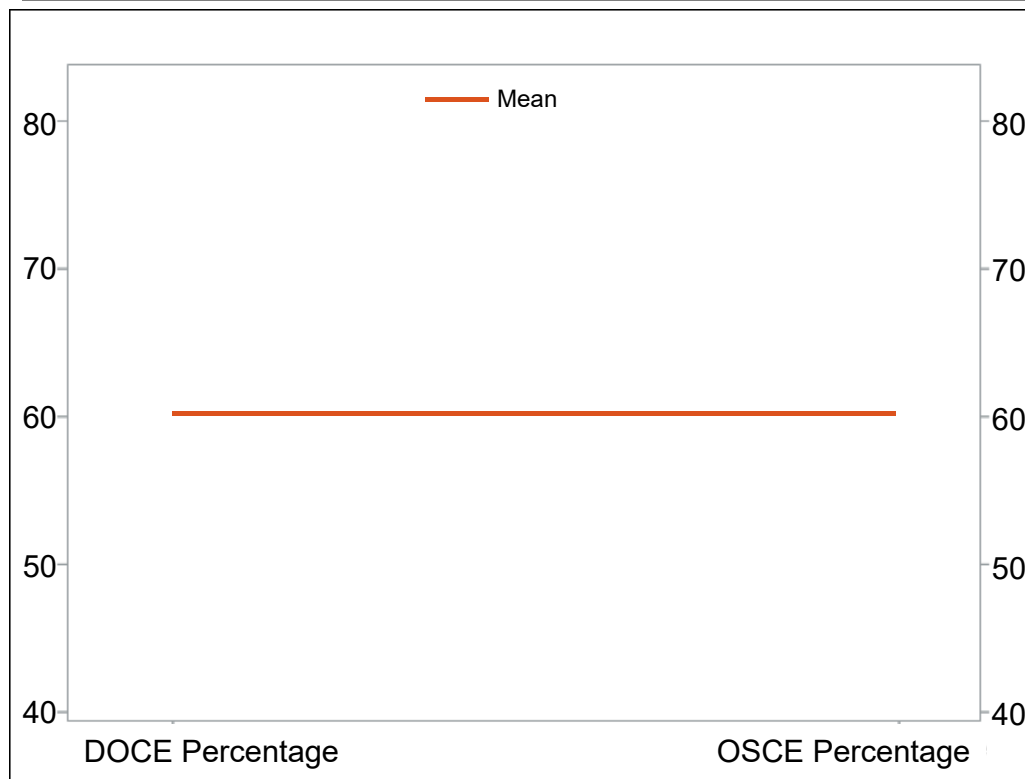
	Students who fail OSCE (n=26)	Students who pass OSCE (n=57)	P-value
Mean DOCE % score [†] (SD)	60.3 (6.4)	59.9 (6.1)	0.8296



OSCE Pass Score \geq 21 (60%)

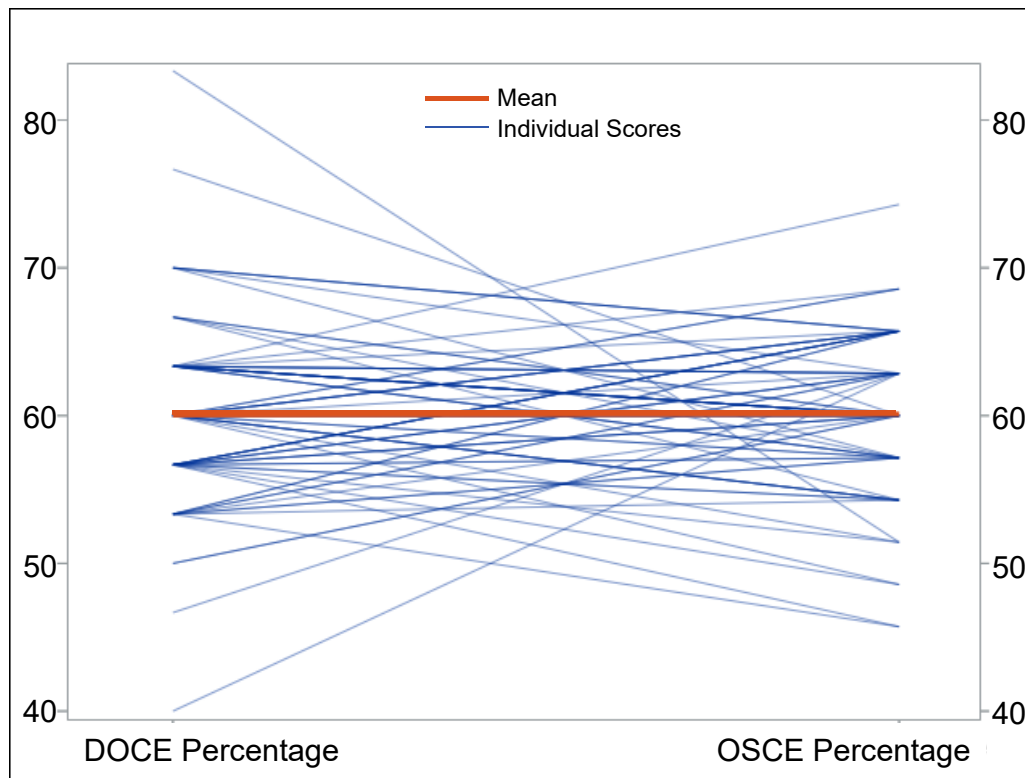
[†] Two-sample independent t-test

While mean total scores were similar, paired profiles are not correlated.



n = 83

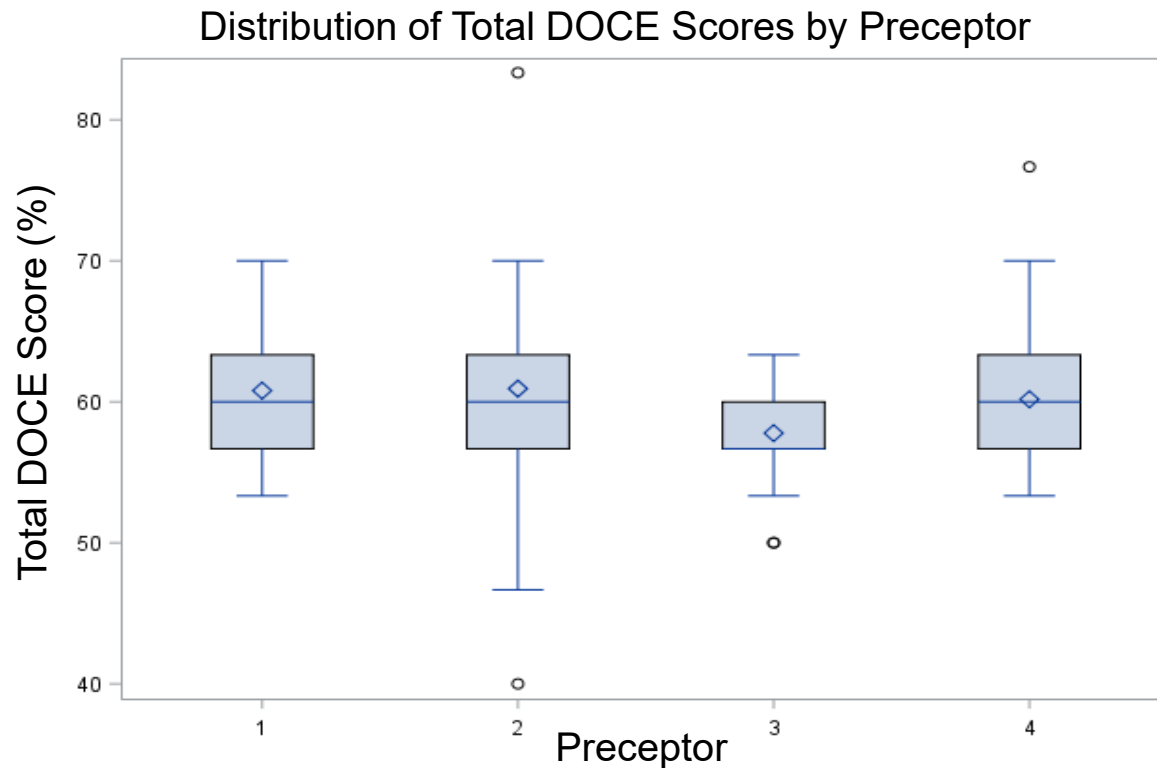
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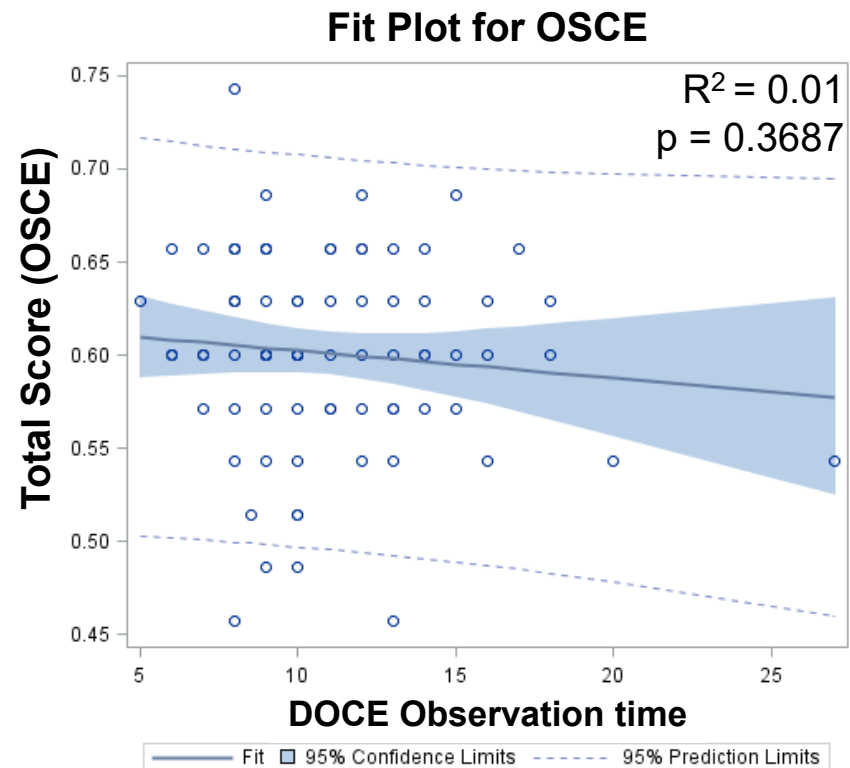
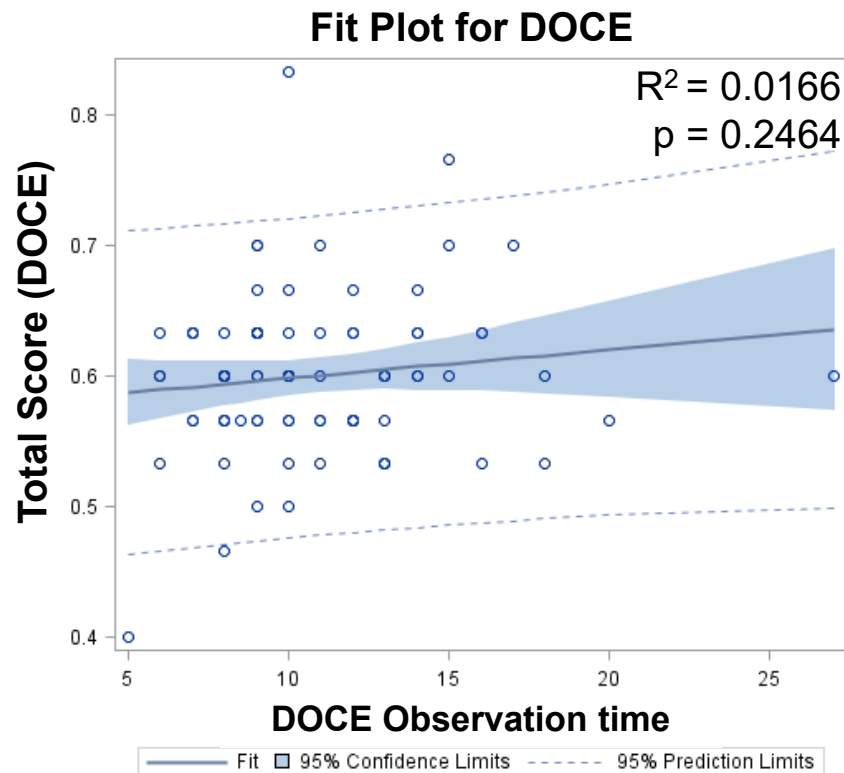
n = 83



Total scores from individual preceptors were not statistically significantly different



Time spent at bedside on DOCE was not a significant predictor for DOCE or OSCE scores



Faculty observing 3rd year students in a standardized bedside observation in the hospital **score communication skills differently** than when the same students are observed by SP's in an OSCE.

Some Questions:

Do the limitations of this study preclude our ability to make any judgement on our study question?

Would students who are discordant in performance on OSCE vs DOCE benefit from additional communication skills training?

Is physician communication style and skillfulness different in different clinical settings?

- If so, should our OSCE's be designed with various clinical settings?

What level of reliability is acceptable for a high-stakes OSCE or Step-2 CS?