



Assessment of a Joint Pharmacy and Theater Led Standardized Patient Training Program

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BACKGROUND

- Standardized patients (SPs) are used in healthcare education programs to present cases in a systematic, unvarying manner¹
- Most available literature discusses the value of standardized patients in developing pharmacy student communication skills and comfort level
- There is very little information available about how the SPs are trained and how they were assessed in their role as the patient
- SPs are often used in high stakes assessments, so it is important to ensure that they are portraying the role as intended and providing appropriate and complete information to the pharmacy student.
- Pharmacy instructors at Binghamton University, a large public pharmacy school, partnered with instructors in the theater department to develop a standardized patient training program for undergraduate students.
- These students were employed as SPs for a first-year pharmacy student Skills Lab.
- In order to determine whether SPs were performing in a standardized manner, instructors viewed the recorded interactions and scored each SP using an adapted Technical Skills Checklist.²

OBJECTIVE

- Assess standardized patient (SP) perceptions of a joint pharmacy and theater-led SP training program
- Analyze accuracy and consistency in SPs' verbal and nonverbal portrayal of patients in a first-year pharmacy skills lab.

METHODS

TRAINING

- Prospective SPs attended a 2-part training session:
 - 3-hour live group training session led by pharmacy and theater instructors
 - 30-minute individual sign-off with pharmacy instructors to demonstrate skill and receive feedback
- Individuals who completed both these steps were assigned specific dates to work as an SP in a first-year pharmacy Skills Lab

SP PERCEPTION SURVEY

- SPs were administered an online survey prior to their first SP session (demographics, opinions, confidence)

P1 SKILLS LAB

- SPs were given their case one week prior to their scheduled session
 - Verbal information: specific facts that needed to be memorized
 - Non-verbal and paraverbal: character information and details that increase the realism of the case

ASSESSMENT OF SP PERFORMANCE

- Pharmacy instructors reviewed the recorded SP and pharmacy student interactions
- SPs were scored using a technical skills checklist adapted from Schleger et. Al.²
- 3 pharmacy instructors reviewed each session and rated students on:
 - Verbal communication (accuracy)
 - Nonverbal/paraverbal communication (what they did and how they said things)
 - Global rating
- 3 different pharmacy student interactions were reviewed for each SP
- Pharmacy instructor scores were averaged to determine the score for each interaction
- Results for each SP were compared to themselves and to other SPs to determine the standardization among and between the standardized patients

RESULTS

Table 1: SP Demographics

Category	N (%)
Gender	Female = 9 (81.8%) Male = 2 (18.2%)
Age	18 = 1 (9.1%) 19 = 3 (27.3%) 20 = 3 (27.3%) 21 = 3 (27.3%) Unspecified = 1 (9.1%)
Major or minor in theater	2 (18.2%)
Formal acting experience	3 (27.3%)
Past SP experience	1 (9.1%)
Why did you decide to be involved? (Choose all that apply)	I enjoy acting = 4 (36.4%) I was looking for a paying job = 6 (54.5%) It will be helpful to my future education = 9 (81.8%) I want to be involved on campus = 5 (45.5%)

Table 3: Verbal Accuracy

Correct Provision of Information by Standardized Patients

Category	N	%
Student did not ask, SP gave information	103	3.66%
Student asked for information, SP gave information	2286	81.29%
Student asked for information, SP did not give information	26	0.92%
Student did not ask, SP did not give	397	14.12%
Total	2812	100.00%

Table 4: Overall Nonverbal and Paraverbal Performance
Portrayal of patient-specific characteristics by the SP

Proficiency	Paraverbal	Nonverbal
Did not complete	34.56%	
Completed below expectations	20.34%	
Completed as expected	44.85%	
Completed exceeds expectations	0.25%	

N=408

Table 2: Selected Standardized Patient Survey Responses

	Mean	Range
SP Classroom Training		
The session covered the objectives & importance of the standardized patient role	4.91	4-5
The material presented was clear and useful	5	5
Adequate time was spent on instructor presented material	4.73	3-5
Adequate time was spent on practicing the material taught	4.36	3-5
Adequate time was spent on pharmacy and healthcare information	3.82	2-5
Adequate time was spent on acting skills	3.45	1-5
The training improved my verbal communication skills	4.19	3-5
The training improved my nonverbal communication skills	4	3-5
This was a valuable piece of the SP training experience	4.73	4-5
Final Sign-Off Case		
This was a valuable piece of the SP training experience	4.82	4-5
Current Feelings		
I am comfortable giving feedback to pharmacy students	4.45	4-5
I am comfortable filling out the Interpersonal and Professional Skills checklist	4.54	4-5
I am adequately prepared to serve as an SP	4.64	4-5

5 = strongly agree, 4 = agree, 3 = neither agree or disagree, 2 = disagree, 1 = strongly disagree

Figure 1: Global Performance

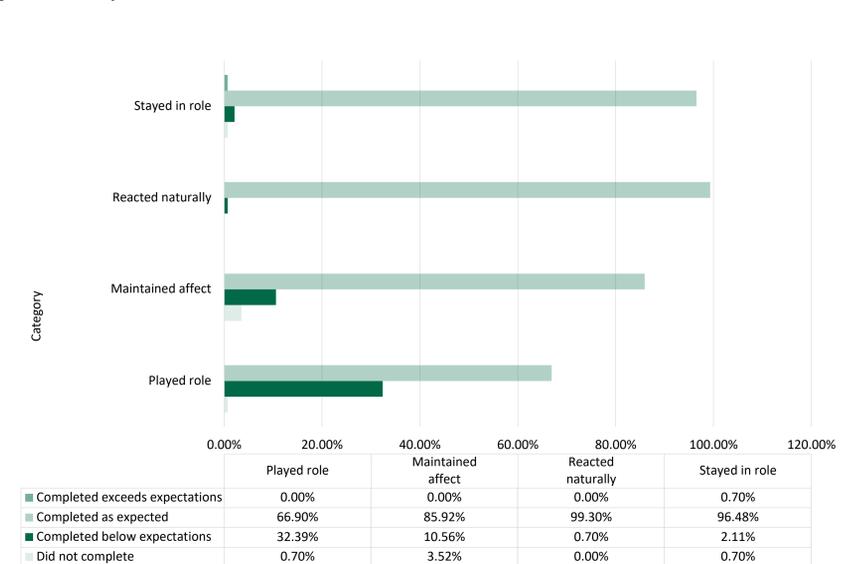


Figure 2: Nonverbal/Paraverbal Performance by SP

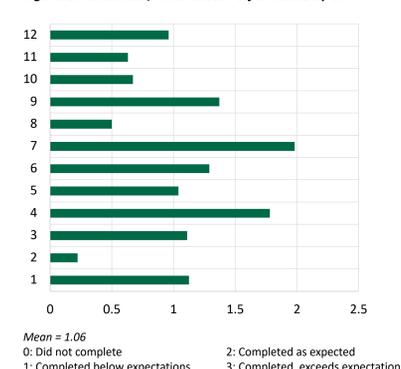


Table 5: Inter-rater reliability using ICC

Average Measures	Intraclass Correlation	95% Confidence Interval		F Test with True Value 0			
		Lower Bound	Upper Bound	Value	df1	df2	Sig
	.904	.843	.944	10.405	45	90	.000

N=12 standardized patients, 3 raters (36 ratings)

TRAINING PROGRAM

Background (30 min)

- Simulation and Standardized Patients
- Types of cases and settings

Orientation to BU SOPPS (30 min)

- Description of Pharmacist Roles
- Students levels of experience/expectations
- Low vs. high stakes activities

SP Toolkit: Playing the Part (1 hour)

- Examples of cases (physical exam, medical counseling, clinical decision making)
- Acting the part (theater faculty)
- Importance of sticking to the objectives
- Activity: Guess the directions

SP Toolkit: Giving Feedback (1 hour)

- Tips for giving feedback
- Interpersonal and Professional Skills Checklist: discussion of elements
- Activity: Feedback practice cases

REFERENCES

- Keiser MM, Turkelson C. Using Students as Standardized Patients: Development, Implementation, and Evaluation of a Standardized Patient Training Program. *Clinical Simulation In Nursing*. 2017 Jul 1;13(7):321-30.
- Schleger C, Bonvin R, Rethans JJ, Van Der Vleuten C. The use of video in standardized patient training to improve portrayal accuracy: A randomized post-test control group study. *Medical teacher*. 2015 Aug 3;37(8):730-7.

LIMITATIONS/DISCUSSION

- Although this program was conceived with the plan to include theater students the majority of SPs utilized during these sessions were not theater majors or minors, supporting the need for theater faculty participating in the training session to provide insight on performance skills.
- SPs demonstrated high verbal accuracy (95.41%). It is important that SPs provide correct information and only release information when asked in order to maintain standardization of scenarios.
- SPs performance of nonverbal/paraverbal directions was "Completed as expected" less than half the time (44.85%). Although not critical to this P1 Skills Lab, not performing specific nonverbal and paraverbal actions in other scenarios may lead to varying interpretations of the scenario by pharmacy students with the potential to compromise the session.
- For the Global SP rating, the majority of interactions were "Completed as expected" (66.90 – 99.30%) however there were still a high percentage that were "Completed Below Expectations" (0.7 – 32.39%).
- Limitations of this study included: small sample size and data from only a single semester.

CONCLUSIONS

- SPs provided highly accurate verbal information during their cases, indicating that they spent time preparing for the session and took their role seriously.
- Additional training on nonverbal and paraverbal performance should be added to the training session to improve SP performance in these areas.
- SP performance should be regularly assessed, particularly in high stakes activities, to ensure that healthcare professions students are receiving the same information in a standardized manner.

Special acknowledgement to Elizabeth Mozer, BA, MFA and the Theatre Department at Binghamton University for their help and support in this program.