

HARC

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# Validation of Patient-centered Communication Tools: PaCT

[www.stlucop.edu/PaCT](http://www.stlucop.edu/PaCT)

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# Background

- Four Habits Model (FHM) by Kaiser Permanente
- Changes needed for applicability for pharmacists

# Objective

- Create, validate and use a communication framework and assessment rubric that incorporates the necessary skills pertinent to a pharmacist-patient interaction, including communication behaviors and health literacy elements crucial for any successful clinician encounter, and more importantly, successful relationships.

# Methods – Instrument Development

- PaCT development
  - Review of the literature (all physician models)
    - Physician Asthma Care Education (PACE)
    - Motivational Interviewing (MI)
    - Common Ground
    - Institute of Medicine (IOM) Patient-Clinician Communication
    - Institute of Clinical Competence (PARS)
    - Kalamazoo Consensus Statement (classroom assessment)
  - Critique of models vs. Four Habits Model

# Methods – Experts

- Solicited nationally recognized expert panel (8)
  - Pharmacist and non-pharmacist
  - Health literacy and/or communication “experts”
- Performed 2 rounds of review
  - 1<sup>st</sup> : via email
  - 2<sup>nd</sup>: round table at AACCP

# Methods – Standardized Patients (SPs)

- Pilot with 12 P<sub>4</sub> student volunteers and SPs
- Wording tweaks: eg. patronizing, awkward, ...
- Respond to patient cues:
  - degree of interest,
  - involving alternate decision makers
- Examples: How to show confidence, set patient at ease..
- Measure communication/relationship building?

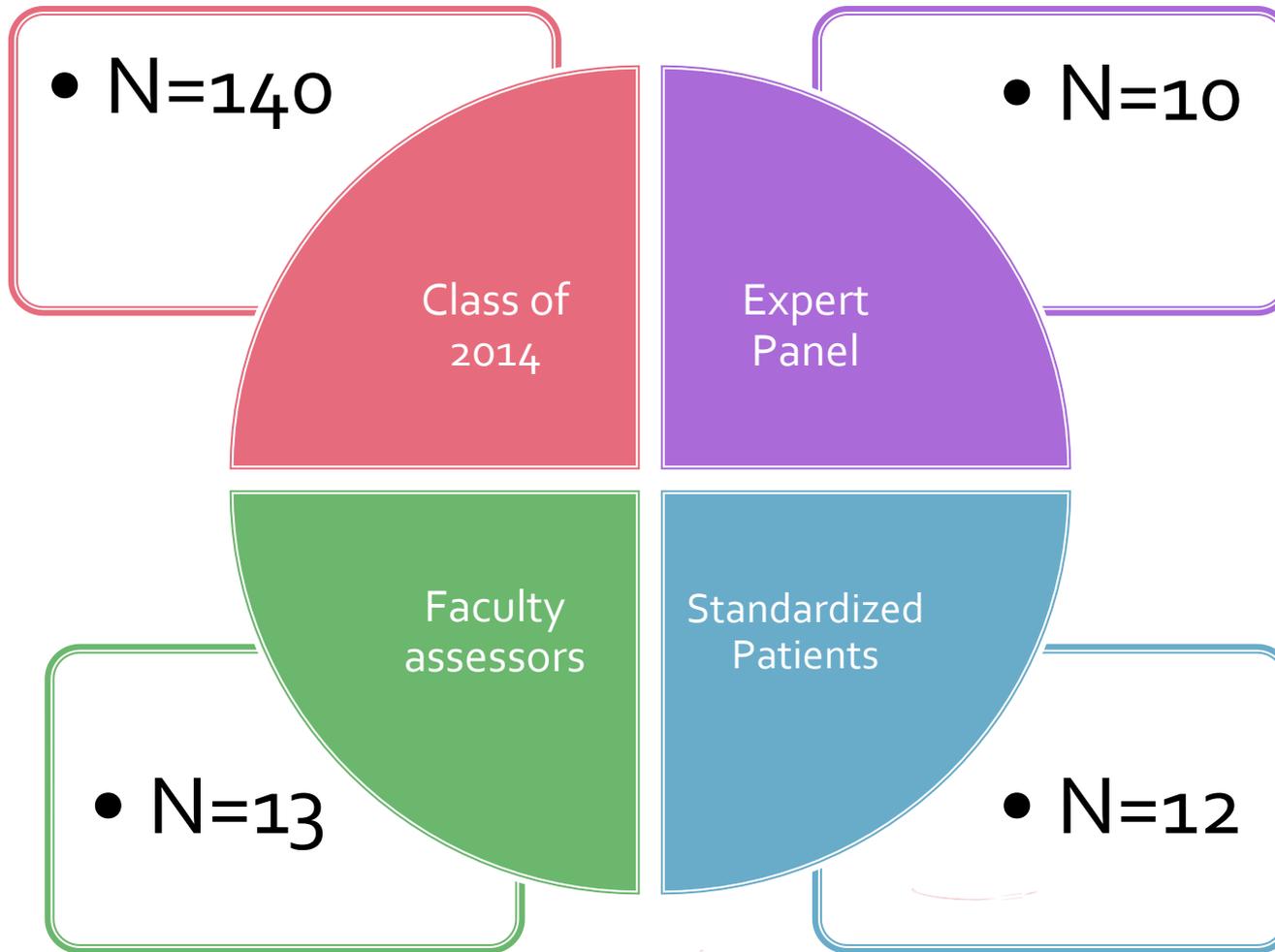
# Methods – Students

- P3 student pharmacists received instruction about patient interviewing, reviewed the PaCT rubric, and practiced in lab prior to the first standardized patient interview.
- Faculty trained in using PaCT assessed student performances via live video-feed and provided formative and summative feedback.

# PaCT Framework

- 23 skills grouped into five tools
  - A – Establish Connection
  - B – Explore and Integrate Patient's Perspective
  - C – Demonstrate Interest & Empathy
  - D – Collaborate & Educate
  - E – Communicate with Finesse

# Subjects Participating in Validation



# Validation Methods

Type	Description/Question to be answered	How/when it will be measured	Quantity
Face	Does the tool appear to measure what we wish to measure?	Expert Panel & Pilot	~10 ~12 SPs
Content	Does the content of the tool actually measure the content that should be measured? AND How effective is the criteria?	Expert Panel & Pilot	~10 expert panel ~12 SPs
Reliability	Is the tool reliable in measuring the same performance each time?	Faculty review session	~13 faculty Students
Inter-Rater Reliability	Is the tool reliable when different people use it to measure the same performance?	Faculty review session	~13 faculty Students
Validity	Does the new tool achieve similar results to another (validated) tool?	Faculty review session	~13 faculty Students
Construct	Is there improved communication as measured by the tool, subsequent to the educational program?	Data analysis phase	Students
Concurrent	Can the tool detect a difference that another assessment detects?	Data analysis phase	~200 students

# Construct Validity Results

	Early-Formative Session	Later-Summative Session
Overall	80.7	90.0***
A – Establish a Connection	11.1	12.8***
B – Explore and Integrate Patient’s Perspective	6.6	8.0***
C – Demonstrate Interest & Empathy	6.7	7.9***
D – Collaborate & Educate	25.9	25.4
E – Communicate with Finesse	33.7	35.7***
		***p<0.001

# Reliability Results

One Student Rated Twice by Same Rater	
Overall Score	$r = 0.75$ ***
A – Establish a Connection	$r = 0.457$ (ns)
B – Explore and Integrate Patient’s Perspective	$r = 0.41$ (ns)
C – Demonstrate Interest & Empathy	$r = 0.70$ **
D – Collaborate & Educate	$r = 0.72$ ***
E – Communicate with Finesse	$r = 0.89$ ***
	ns = not significant ** $p < 0.01$ *** $p < 0.001$

Fifteen of 22 analyzed skills were significantly correlated.

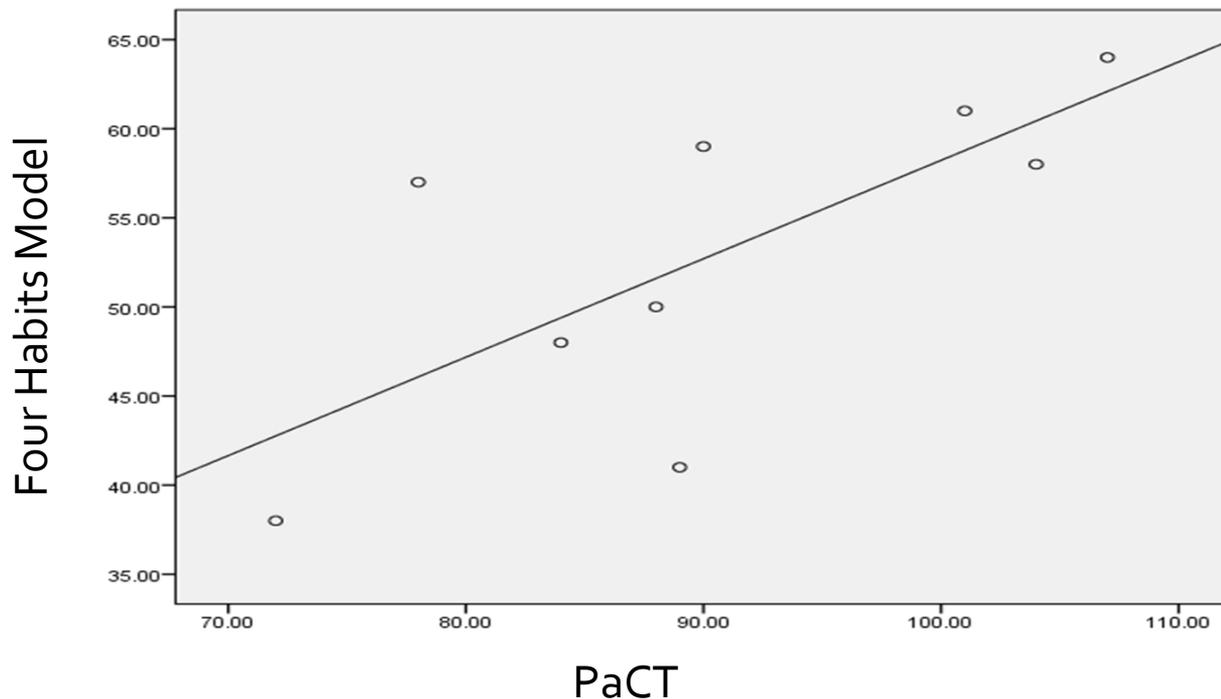
# Inter-rater Reliability Results

## One Student Rated Twice by Different Raters

Overall Score	$r = 0.21$ (ns)
A – Establish a Connection	$r = 0.057$ (ns)
B – Explore and Integrate Patient's Perspective	$r = -0.254$ (ns)
C – Demonstrate Interest & Empathy	$r = 0.59$ **
D – Collaborate & Educate	$r = 0.02$ (ns)
E – Communicate with Finesse	$r = 0.52$ **
	ns = not significant ** $p < 0.01$

# Predictive Validity Results

- Comparing the PaCT score to the Four Habits Model (FHM)



- Correlation  $r = 0.71$ ,  $p < 0.05$

# Conclusion

- PaCT is a valid, reliable instrument to teach and assess communication skills during a student pharmacist-patient encounter.
- PaCT emphasizes the responsibility to communicate in an effective and collaborative manner with patients.
- PaCT could be applicable to other healthcare professionals.

**For more information:**

[www.stlcop.edu/PaCT](http://www.stlcop.edu/PaCT)