

First Year Literature and Medicine Elective

- **Research question:** Does reading literature about patients' experience of illness improve student empathy?
- **Design:** 22 first year self-selected students randomly assigned to two groups (immediate and delayed intervention)
- **Intervention:** Participation in 6 literature and medicine elective small group reading and discussion sessions

Literature and Medicine Elective - Assessment Periods

- **Time 1**

- **Baseline data Groups 1 and 2**
- **Focus group**
- **Two empathy measures (Mehrabian; LaMonica)**
- **1 attitude-toward-humanities measure**

- **Time 2**

- **Post-intervention assessment Group 1**
- **Repeat baseline Group two (quantitative only)**

- **Time 3**

- **Post-intervention assessment Group 2**
- **Follow-up post-intervention Group 1 (quantit only)**

Literature and Medicine

Elective

- **Results**

- **Definitions of empathy unchanged**
- **Understanding of patient's perspective more detailed and complex**
- **Perceived usefulness of humanities to make students better physicians more specific and sophisticated**

Second Year Patient-Doctor Course

- **Research Questions:**

- Do students in a point-of-view (pov) writing group have greater professionalism and communication skills compared to students in a clinical reasoning group?
- Do students in a pov writing group have greater ability to express emotion and empathy vs. students in a clinical reasoning group?

- **Design:** 94 second year students randomly assigned to pov writing or clinical reasoning small group conditions

- **Assessment:**

- Student professionalism and communication ratings by standardized patients
- POV writing assignment coded using
 - Pennebaker's Linguistic Inquiry and Word Count
 - Categories of empathy, meaning, limits of medicine, blaming patient, limits to intervention, prevention, clinical reasoning
 - Overall global score (1-4)

Patient-Doctor Course

	Point of view	Overall affect	Negative emotions	Empathy	Religious /spiritual
POV means Crosstab	Yes-45** No -3	5.6*	3.3*	Yes – 45* No - 3	.23*
Clin reason means Crosstab	Yes - 32 No - 13	4.8	2.6	Yes - 36 No - 9	.15

* p < .05; ** P <.01

Relationship between Themes and Emotional/Cognitive Words in Students' Point of View Writing Assignments

	Pos	Opt	Neg	Ang	Sad	Anx	Ins	Inhib	Cer	Cog
Empathy										
Yes		1.35		0.89	1.34					
No		0.84		0.42	0.87					
Meaning										
Yes							3.22			
No							2.37			
Pt. Blame										
Yes							1.74	1.07	2.36	
No							2.73	0.60	1.26	
Limits										
Yes			2.35							12.20
No			3.17							10.1
Prevent										
Yes	3.18	1.80	1.95							
No	2.06	0.87	3.13							
Clin Reason										
Yes			3.65			0.77				
No			2.83			0.42				

* All values p < .05 pov mean word count 141.49 clinical reasoning group word count 152.51

Relationship between Language and Themes

- **Ability to express negative emotion associated with empathy and clinical reasoning**
- **Expression of positive emotion and use of cognitive language associated with distancing strategies of**
 - **Limit-setting**
 - **Prevention emphasis**
 - **Patient blame**

3rd Year Medicine Clerkship

- **Research Questions**
 - 1. How did students use a required creative project in terms of point of view, empathy, tone, resolution, and theme?
 - 2. What was the effect of the humanities course component on students' attitudes toward the usefulness of humanities in professional development?
- **Design:** Quasi-experimental, pre-test/post-test
- **Intervention:** 88 3rd year students required to complete two humanities sessions
 - Class discussion of literary readings
 - Completion and group sharing of creative project

3rd Year Medicine Clerkship - Assessment

- **Qualitative**

- **Process/content analysis of 74 creative projects**

- **Quantitative**

- **Subset (46/49) of students in last 3 quintiles**
- **Completed 3 administrations of attitudinal measure**
 - **Baseline (Time 1)**
 - **After participation in reading group (Time 2)**
 - **After completion/sharing of project (Time 3)**

3rd Year Medicine Clerkship - Results

- **Qualitative**

- Explored various aspects of “becoming a physician”
- Most likely to use own point of view
- Expressed empathy for patients, but less for self
- Tone varied widely
- About half achieved resolution of issue

- **Quantitative**

- No attitudinal shift between Time 1/Time 2
- Significant shift Time 1/Time 3
- Participation in and group sharing of creative projects positively influence student attitudes toward usefulness of humanities exposure