

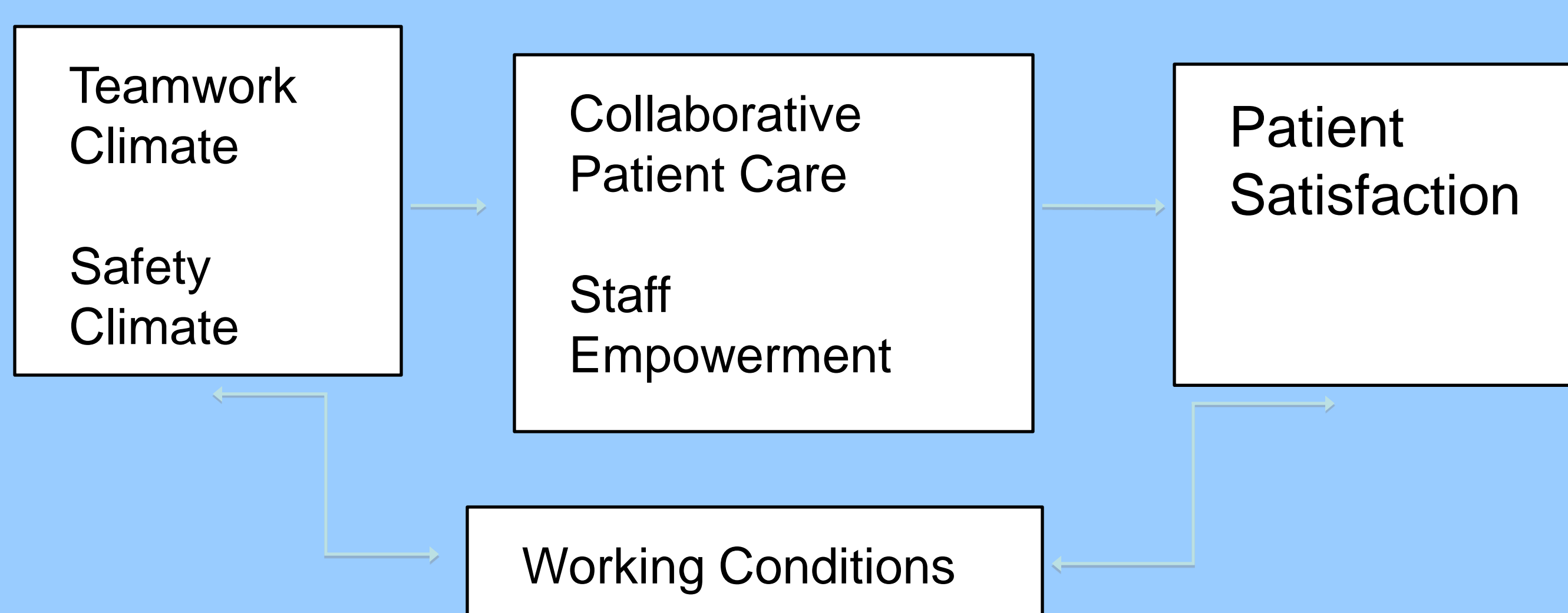
An Exploratory Study of Variability in Safety Culture among Clinician types and Patient Care Experience

Elizabeth Campbell, The Johns Hopkins School of Nursing

Sallie Weaver, The Armstrong Institute for Patient Safety & Quality

1 Background

- Safety and quality have become increasingly important in health care due to critical examination of preventable error (IOM, 1999), and prioritization of patient centered care as a potential predictor of improved health outcomes, reduced costs, and retention of patients as health care consumers.
- Patient satisfaction as a potential safety and quality outcome has not been extensively explored. The purpose of the current study was to (a) examine how different types of care providers viewed the safety culture of their unit, and (b) examine the relationship between hospital safety culture and patient satisfaction.



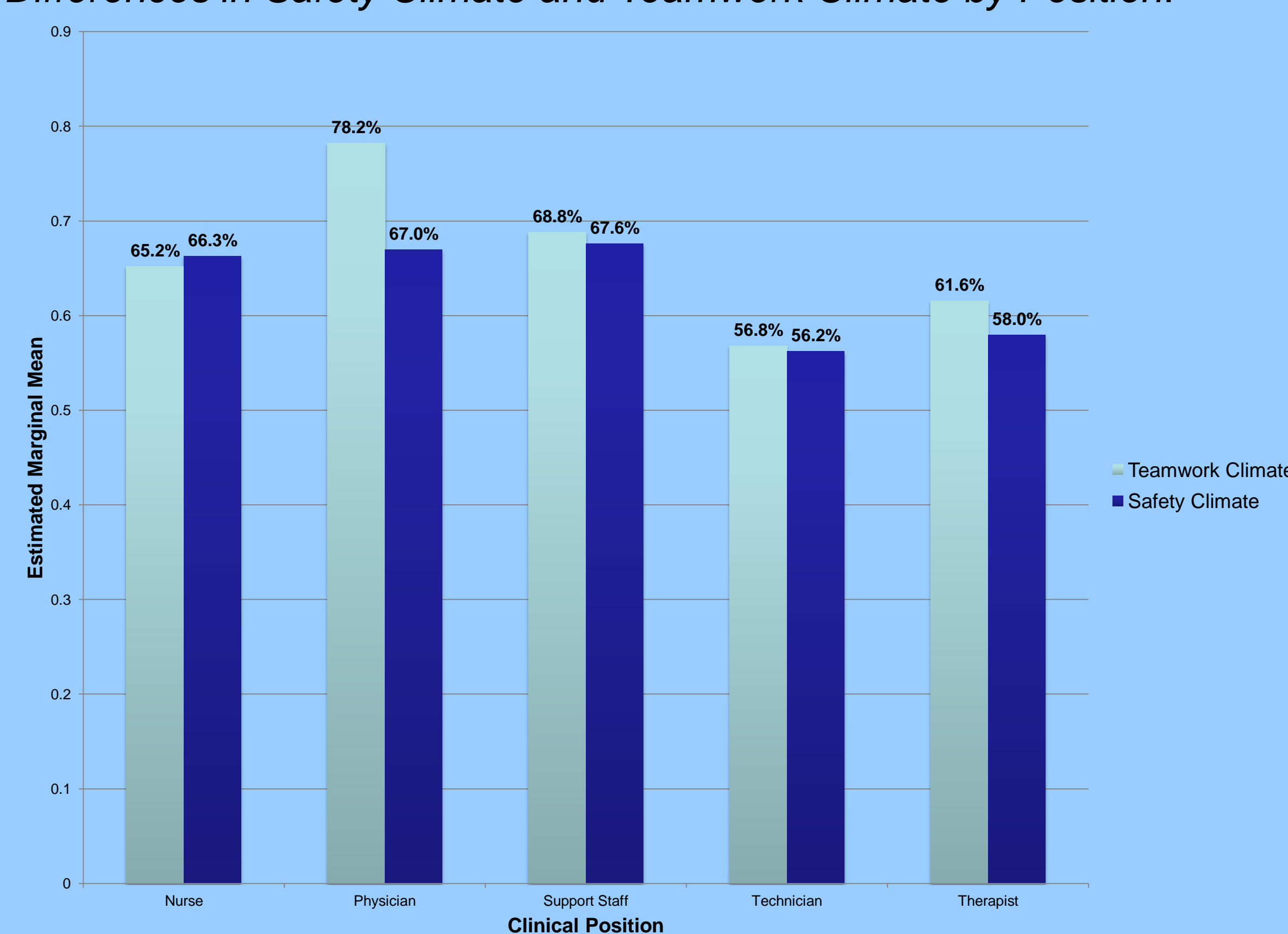
Conceptual model for hypothesized relationships between Safety Culture and Patient Satisfaction.

2 Methods

- Secondary analysis of data from 2011 Safety Attitudes Questionnaire (SAQ) data and Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).
- SAQ domains of primary interest: Safety Climate and Teamwork Climate.
- HCAHPS domains of primary interest: Patient satisfaction measures of communication with Nurses, communication with Physicians, and overall responsiveness of hospital staff.

3 Results

Differences in Safety Climate and Teamwork Climate by Position:



Safety Culture → Patient Perceptions of Nurse and Physician Communication.

- No significant correlations.
- Given the small sample size results were in the hypothesized positive direction for physician communication (i.e. as perceptions of climate increased, so did the percentage of patients who indicated their physician always communicated well).
- Results were in the opposite direction however for nurse communication (i.e. as clinician perceptions of climate increased, the percentage of patients who indicated that their nurse communicated well decreased).

Table 1. Correlations among study variables.

	1	2	3	4	5	6	7	8
1. Nurse Communication								
2. Physician Communication	.136							
3. Teamwork Climate	-.173	.063						
4. Safety Climate	-.595	.434	.661					
5. Job Satisfaction	-.686	.272	.750	.964**				
6. Stress Recognition	.242	-.228	.003	.054	-.090			
7. Working Conditions	-.397	.647	.601	.962**	.873	.062		
8. Perceptions of Senior Management	-.050	.981**	.119	.543	.408	-.323	.719	
9. Perceptions of Local Management	.241	-.423	.685	.137	.192	.555	.069	-.470

** Correlation is significant at the 0.01 level (2-tailed).

Safety Culture → Patient Perceptions Staff Responsiveness.

- Results suggested a trend such that as clinician and staff perceptions of working conditions became more positive, so did patient perceptions of staff responsiveness.

Other findings from exploratory regression analysis of relationships.

- After controlling for perceptions of local management, results indicated that clinician perceptions of senior management was significantly related to patient perceptions of physician communication.

4 Conclusions

- Physicians perceive higher teamwork and safety climate than other clinicians and staff.
- As perceptions of climate increased, so did the percentage of patients who indicated their physician always communicated well; as perceptions of climate increased, the percentage of patients who indicated that their nurse communicated well decreased.
- Safety climate nor teamwork climate were significantly related to perceptions of nurse communication.
- Clinician perceptions of senior management was significantly related to patient perceptions of physician communication.
- As clinician and staff perceptions of working conditions in their work area became more positive, so too did patient perceptions of staff responsiveness.

5 Limitations

- Extremely small sample size.
- Representative nature of HCAHPS data and relevance to generalized experiences or only those most notable.

6 Future Directions

- Further investigation into the relationship between clinician perceptions of leadership engagement and support for patient safety and patient care experience.
- Directionality of the findings encourage further research examining the impact of interdisciplinary care and patient safety outcomes.

7 References

1. Brewer, B. (2006). Relationships Among Teams, Culture, Safety, and Cost Outcomes. *Western Journal of Nursing Research*, 28 (6) 641-653
2. Manser, T. (2009). Teamwork and Patient Safety in Dynamic Domains of Healthcare: A Review of the Literature. *The Acta Anaesthesiologica Scandinavica Foundation*, 53: 143-151
3. Sexton, J., Berenholtz, S., Goeschel, C., Watson, S., Holzmuller, C., Thompson, D.,...Pronovost, P. (2011). Assessing and improving safety climate in a large cohort of intensive care units. *Critical Care Medicine*, 39(5), 934.
4. Sexton JB, Helmreich RL, Neilands TB, Rowan K, Vella K, Boyden J, Roberts PR, Thomas EJ. (2006) The Safety Attitudes Questionnaire: psychometric properties, benchmarking data, and emerging research. *BMC Health Serv Res*. Apr 3;6:44.
5. United States Department of Health and Human Services (2012) About Hospital Compare Data. Retrieved from <http://www.hospitalcompare.hhs.gov/Data/AboutData/Measures-Displayed.aspx#>

Funding Source:
The Helene Fuld Leadership Program for the Advancement of Patient Care Quality and Safety

