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Why Residents' Perceptions of the Clinical Learning Environment Matter: Correlations between the ACGME Resident Survey, Perceived Organizational Support, and Psychological Safety

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CLER Pathways to Excellence

Expectations for an optimal clinical learning environment to achieve safe and high quality patient care

- The clinical site creates a **supportive clinical care community** that is free of **stigma, safe, and embraces, promotes, and supports well-being**.

- The clinical site **conducts culture of safety surveys** with residents/fellows, and faculty and staff members. The focus will be on the progression from initial conduct of surveys through the **analysis of results and implementation of actions to improve the culture.**

- Residents/fellows and faculty members **perceive that the clinical site provides a supportive culture for reporting patient safety events.**

Hidden Curriculum

- *"…trainees often turn to what is normative within the cultural facets of the clinical learning environment to guide behavior, often described as the hidden curriculum"*

(Hafferty 1998)

Hidden Curriculum

"*The **culture** of medicine is to **suck it up and get through it**. It's like a badge you are earning. **It's always worse when they [attendings] had it**, so it's a sense of not wanting to look **weak**. You assume everyone has gone through it, so maybe that's just the way the **system weeds out the weak and creates jaded doctors**".*

How do we define and assess attributes of the CLE culture?

Culture:

1. Shared values & beliefs
2. What leadership supports
3. How work is done

Perceived Organizational Support

Psychological Safety

Organizational Support Theory

employees form a generalized perception concerning the extent to which the organization values their contributions and cares about their well-being.

(Kurtessis, Eisenberger, Ford, Buffardi, Stewart, Adis, 2015)

Employee-Organization relationship from the employees' viewpoint

Organizational Support Theory

- Individuals personify organizations

"VCU Health values me considering they give chief residents access to the faculty lounge!"

"VCU Health doesn't care about me.. I'm doing all the work as an intern and I don't get access to the free coffee in the faculty lounge!"

- Sense of reciprocity between employee and organization through affective relationships

(Eisenberger et al, 2001)

Employees with high perceived organizational support find their jobs:

*more enjoyable

*are in a better mood at work

*suffer fewer strain symptoms -- e.g., fatigue, burnout, anxiety and headaches

(Rhoades et al 2002)

Antecedents to Perceived Organizational Support

*fairness

*supervisor support

*organizational rewards

*job conditions

(Rhoades & Eisenberger, 2002)

Psychological Safety

- A belief that one can express themselves without negative consequences (Carmeli & Hoffer Gittell, 2009; Kahn, 1990)

- Fearful of being labeled ignorant, incompetent, or disruptive in the workplace by colleagues (Carmeli & Hoffer Gittell, 2009)

Psychological Safety

- Negative consequences (image, status, career)

- Leaders can influence psychological safety based on their actions with followers (Detert & Edmondson, 2011)

Psychological Safety

- Individuals can feel anxiety and fear in situations requiring them to take interpersonal risks (e.g., asking for help/feedback, experimenting, error reporting, and proposing novel ideas (Edmondson, 2002)

- Psychological safety affects learning behavior, but subsequently, team performance (Edmondson, 1999; Hirak et al 2012)

Question

Do departments perceived to be more supportive, with greater psychological safety, have better results on the annual ACGME Resident Survey?

Methods

FY17: internal survey of the residents across nineteen residency programs on perceived organizational support and psychological safety.

DIO downloaded ACGME Resident Survey data reports for each of the nineteen residency training programs' FY17 results to be linked to our internal assessments.

Methods

Two measures with validity evidence:

Short Survey of Perceived Organizational Support (SPOS) (Eisenberger 1986)

- 16 items measured on a five-point agreement Likert scale

Psychological Safety Scale (PSS) (Edmondson 1999)

- 7 items measured on a five-point Likert scale.

Perceived Organizational Support

- My department **takes pride in my accomplishments** at work.
- **Help is available** from my department when I have a problem.
- My department strongly **considers my goals and values**.

Psychological Safety

- If you make a **mistake** in my department, it is often **held against you**.
- Members of my department are **able to bring up problems and tough issues**.
- People in my department sometimes **reject others for being different**. (R)

Methods

The ACGME Resident Survey:

- Faculty
- Evaluation
- Educational Content
- Resources
- Patient Safety/Teamwork
- Overall Program Evaluation score

Holt et al 2010; Holt et al, 2009

FACULTY: Faculty and staff interested in residency education; Faculty and staff create environment of inquiry

EVALUATION: Opportunity to evaluate faculty members; Satisfied that program uses evaluations to improve; Satisfied with feedback after assignments

EDUCATIONAL CONTENT: Provided goals and objectives for assignments; Appropriate balance for education; Education (not) compromised by service obligations

RESOURCES: Provided a way to transition care when fatigued; Satisfied with process to deal with problems and concerns; Residents can raise concerns without fear

SAFETY/TEAMWORK: Culture reinforces patient safety responsibility; Participated in quality improvement; Work in interprofessional teams

Methods

Responses were aggregated to create a department-level score on SPOS and PSS, which was linked to departmental-level ACGME results.

A bivariate correlation was conducted to identify overlap between our internal assessment and the ACGME Resident Survey.

Results

322 residents (63% response rate) completed the FY17 internal assessment survey

496 residents (96% response rate) completed the FY17 ACGME Resident Survey across nineteen programs.

Department	Number of Respondents	Response Rate
Ophthalmology	9	100%
Orthopaedic Surgery	23	92%
Urology	9	90%
Neurology	16	89%
Radiation Oncology	7	88%
Dermatology	5	83%
Pathology	13	81%
General Surgery	28	80%
Otolaryngology- H&N Surgery	7	78%
Neurosurgery	11	73%
Psychiatry	29	73%
Plastic Surgery	7	70%
Physical Medicine & Rehabilitation	12	67%
Emergency Medicine	19	66%
Anesthesiology	27	61%
Pediatrics	23	48%
Obstetrics & Gynecology	11	46%
Internal Medicine	51	44%
Radiology	15	44%

Bivariate Correlation Matrix, Scale Reliabilities, Means, and Standard Deviations

	1	2	3	4	5	6	7	8	Mean	SD
1. Perceived Organizational Support	*.94*								3.58	0.34
2. Psychological Safety	.88**	*.76*							3.51	0.27
3. Overall Program Score	.75**	.57*	-						4.32	0.32
4. Faculty	.72**	.50*	.77**	*.93*					4.26	0.24
5. Evaluation	.73**	.62**	.70**	.83**	*.76*				4.49	0.18
6. Educational Content	.52*	.40	.62**	.85**	.63**	*.72*			4.30	0.23
7. Resources	.55*	.41	.66**	.81**	.79**	.79**	*.67*		4.55	0.16
8. Patient Safety/Teamwork	.26	.05	.48*	.33	.35	.36	.47*	*.35*	4.40	0.16

Note: N=19; Cronbach alpha reliability coefficients italicized on the diagonal
**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

What does this mean?

- Our internal assessment of the CLE showed positive correlational relationships with the domains of the ACGME Resident Survey, as well as the measure for overall program evaluation.

- Both the construct and identified measures of perceived organizational support and psychological safety have **powerful utility for GME and health systems to actively monitor and influence the CLE** before the annual accreditation measures on program performance.

What does this mean?

Idea of building fairness, support and respect into medical education **has often been presumed** to exist by virtue of allowing residents to train at an institution, and when there are attempts to improve, the **hidden curriculum often creeps in to undermine improvement** efforts resulting in cynicism amongst trainees. (Billings et al 2011)

Despite the challenges, it cannot be discounted that research suggests **individuals' motivations** to engage in work and their well-being **relates back to the type of affective relationship they perceive to have with their organization**.

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Limitations

- Self-report, social desirability bias
- Cannot infer causation
- Limited ability to manipulate ACGME data

Future Research

- The cultural facets of the clinical learning environment should further be studied in order to better understand the effectiveness of graduate medical education.

- Link to outcomes

- Assessment of the environment for faculty, staff and students

Conclusions

While medical educators and leadership have a **duty to ensure trainees demonstrate competence in their specialty**, there must also be considerable attention on the environment considering the impact it has on both **work and learning processes**.

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Questions?