

# Assessment of Hospitals Readiness in Implementing a Non-Technical Skills for Surgery Training Program, A Cross-Sectional Study

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## Background

- Non-technical skills for Surgeons (NOTSS) are essential for safe intraoperative patient care.
- A NOTSS training program addressing the resource variability context has been developed and taught to surgical care providers from Rwanda.
- A context-specific intervention is needed to integrate NOTSS training into existing quality improvement and surgical safety initiatives.

## Research Objectives

- To evaluate the perceptions of surgical teams and hospital leadership on the feasibility of implementing a NOTSS training program at their institution.

## Methods

- Surgical care providers completed a paper-based Safe Surgery Organizational Readiness Tool (SSORT).
- SSORT assesses hospital readiness on 56 items that are grouped into 16 domains.
- Domain scores were calculated by averaging the scores of its items
- Score of the domains were dichotomized
  - Yes:** Agree/ strongly agree to all domain questions
  - No:** neutral/ disagree/ strongly disagree to any question of the domain
- Multivariable logistic regression models were used to assess the relationship between participants and hospital characteristics with SSORT domains.

**Table 1: Demographic characteristics**

Total Number = 477	
<b>Sex</b>	N (%)
Male	229 (48.1)
Female	248 (51.9)
<b>Role</b>	
Student	111 (23.8)
Nurse	255 (54.6)
Anesthetist	28 (6.0)
Paraclinical	29 (6.2)
Doctor	44 (9.4)
<b>Work Experience (Months)</b>	
Median [IQR]	36 [5-120]
Mean [SD]	67 (77.6)
<b>Age</b>	
Median [IQR]	33 [27-40]
Mean [SD]	34 (8.1)
<b>Facility Type</b>	
District	4 (36.3)
Provincial	1 (9.1)
Referral	3 (27.3)
Teaching	3 (27.3)

Table 1 displays characteristics of participants and their facilities

**Figure 1: Institutional Readiness**

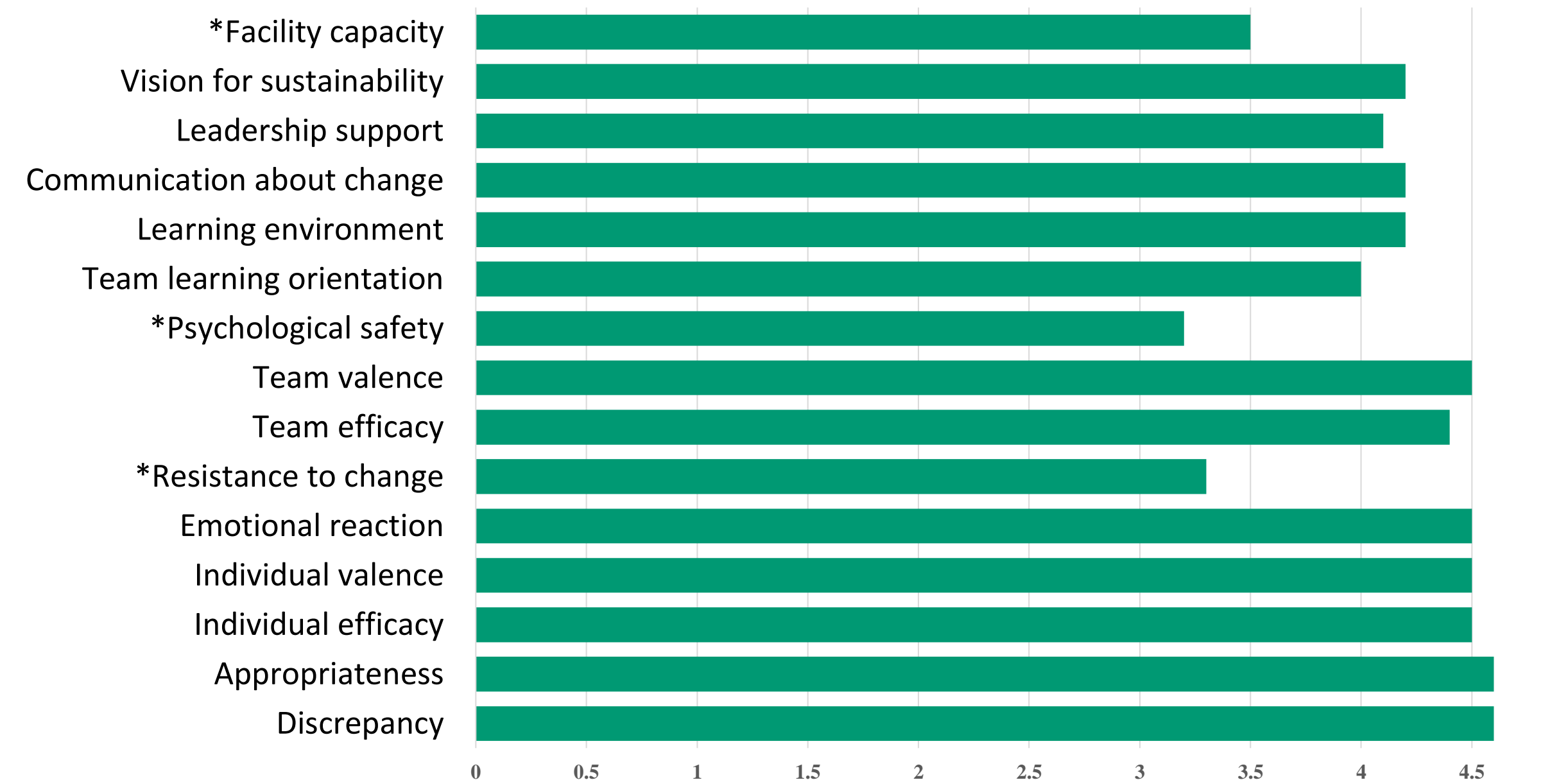


Figure 1 displays participants' perceptions on the institutional readiness in implementing a NOTSS Training Program

## Results

- Participants who had more than 3 years of work experience were less likely to report that the facility needed change (OR 0.4; 95% CI: 0.02 – 0.09).
- Compared to nurses, doctors were more likely to report that they had individual efficacy (OR 3.4; 95% CI: 1.1 – 8.3).
- Compared to nurses, Anesthetists reported that they were more likely to resist to change (OR 5.9; 95% CI: 1.1-33.8).
- Compared to district hospitals, participants from provincial hospitals (OR 0.3; 95 CI: 0.1-0.9), were less likely to report that it was safe to take risks.

## Conclusions

This study revealed that the domains that seem most challenging were psychological safety, and resistance to change.

Hospital leadership should create a safe environment for employees to learn and grow.

Findings from this study will help us design and pilot test the NOTSS training program that will address the hospital-specific problems.