

High-Performing Operating Teams in the Weinberg Operating Room: Internal Validity of the OR Observation Tool

AUTHORS: **BRENDA NACK**, MSN, RN, CNOR, CSSM; **MARY GRACE HENSELL**, MSN, RN, CNOR; **SEJUNG KIM** BSN, RN; AND **EMILY HANGEY**, FULD FELLOW, BSN 2016 CANDIDATE

JOHNS HOPKINS UNIVERSITY SCHOOL OF NURSING, BALTIMORE, MD 21205

1 Background

It is a widely known concept that effective communication enables teams to be more successful. Leach et al. (2011) found that communication problems and human factors, such as fatigue and workload stressors, are also associated with adverse events in the operating room. High performing operating teams (HPOT) are desirable to meet best practices and patient outcomes. HPOT's are considered a small group of providers with complementary skills who are committed to a common purpose, performance goals and an approach for which they hold themselves mutually accountable (Katzenback & Smith, 2007). HPOT's are a valued asset to any operating service however at the Johns Hopkins Weinberg OR, consistent HPOT's are not always available.

For this reason, we propose that once each staff member acquires the qualities of HPOT and learns how to implement the qualities, they will be able to exhibit high-performance regardless of there being a consistent service team.

The Teamwork and Communication OR Observation Tool was designed to evaluate and assess communication and efficiency among Surgical Teams of varying performance levels. Prior to collecting the data for the study, we had to assess internal validity of the newly developed tool. Internal validity of the tool was required to determine if the tool is measuring the qualities correctly, such as preparedness and communication.

2 Objectives

1

Collect Internal Validity data from both NCIII and Tool expert

2

Analyze data by breaking scores down by question

3

Collect pre-intervention data

3 Methods

Research Question:

Does the initiation of nurse-led pre-procedure briefings before each gynecological procedure and weekly structured debriefings for the gynecology staff lead to an increased level of teamwork?

Internal Validity of the OR Tool:

Operating teams of varying performance levels were observed and evaluated by four different NCIII's (OR experts) of varying educational backgrounds and the nursing student (Tool expert) at the same time, separately.

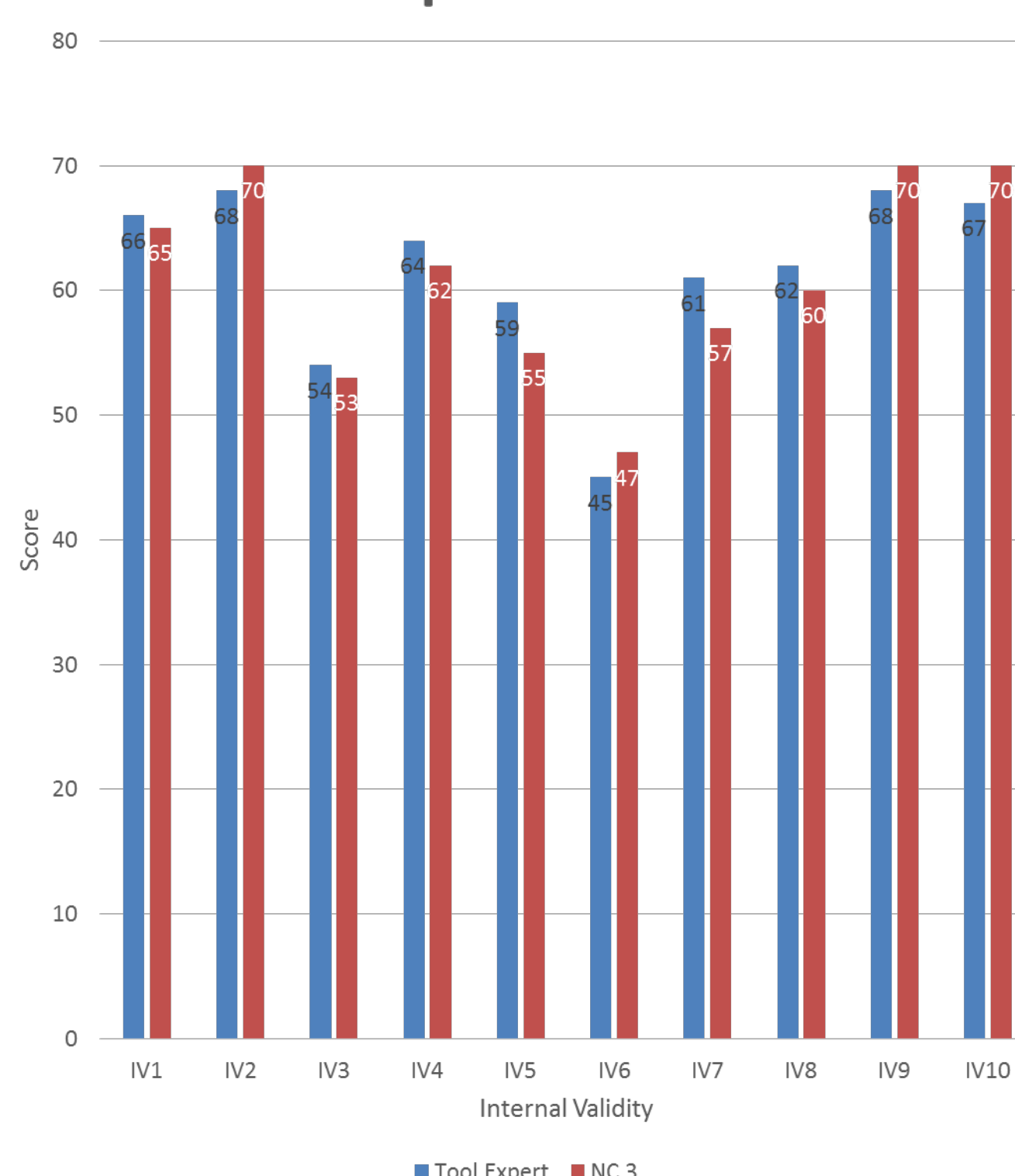
Scores were then compared and analyzed at the end of the procedure. We determined if the tool is measuring the qualities correctly by comparing the two scores from the NCIII and tool expert.

Study Design:

Evaluate current teams using the OR Observation Tool. Surgical teams include Urology, Colorectal, and Gynecology. Once we gather our data, the next step includes implementing weekly structured debriefings and nurse-led pre-procedure briefings. We will then re-evaluate using the same OR Observation Tool to assess the effectiveness of our intervention.

4 Results

Observational Scores Between Tool Expert and NC III



•Out of 10 internal validity observations, the Fuld Fellow and Nurse Clinical III scored the operating room teams in the same performance category all 10 times.

5 Conclusions

Nursing education and clinical experience between the NC III and Tool Expert differ greatly. However, internal validity was achieved by overall scores matching 10/10 times. The results were promising in ensuring internal validity by observers scoring the surgical team within same categories.

In Summary: Internal Validity of the OR Observation Tool was achieved. Future steps include collecting pre-intervention data and intervention implementation.

6 Future Directions

- Compare findings of the study to other services.
- Implement TeamSTEPPS. TeamSTEPPS is an evidence based teamwork system that improves patient safety by increasing communication and teamwork skills among healthcare professionals through ready-to-use materials and a training curriculum.

7 References

1. Agency for Healthcare Research and Quality, Rockville, MD. TeamSTEPPS 2.0. Retrieved from <http://www.ahrq.gov/news/newsroom/pressreleases/2014/teamstepps20.html>
2. Katzenback, J. R., Smith, D. K. (2007). The Wisdom of Teams. *Harvard Business School Press*.
3. Leach, L. S., Myrtle, R. C., Weaver, F., A. (2011). Surgical Teams: Role Perspectives and Role Dynamics In The Operating Room. *Health Services Management Research*(24)2. 81-90. Retrieved from <http://hsm.sagepub.com/content/24/2/81.short>
4. Paige, J. T., Aaron, D. L., Yang, T., Howell, D. S., Hilton, C.W., Cohn, I., and Chauvin, S. (2008). Implementation of a preoperative briefing protocol improves accuracy of teamwork assessment in the operating room. *American Surgeon*, 74(9), 817-23. Retrieved from <http://search.proquest.com.ezp.welch.jhmi.edu/docview/212826231?accounQd=11752>

Funding Source:

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



JOHNS HOPKINS
SCHOOL of NURSING