Evaluators' Performance Beliefs and Their Impact on Judgments about "Marginal" Learners

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Introduction: Evaluation of learner performance is a key element of all training programs within anesthesiology. The task of making high stakes decisions about trainees is most challenging in relation to learners whose performance is on the margin (Guerrasio et al, 2014). Clinical Competence Committees must quickly review portfolios and make decisions. When reviewing enormous amounts of data quickly, raters can take "short cuts" as they build an impression of each learner's performance (Gingerich et al, 2014). The purpose of this study is to explore how faculty views the relationship of the relative importance of medical knowledge versus interpersonal and communication skills/professionalism to their thinking about trainees with the varying strengths and weaknesses in these areas?

Methods: Initially, 133 faculty rank-ordered by importance, the six ACGME competencies and reviewed 4 portfolios of marginal learners assigning each a single number (50-100). The portfolios were built so that the overall mean was the same for all four, but each had differing strengths /weaknesses (Table 1). This qualitative portion used an exploratory design with 20 faculty volunteers from Departments of Anesthesiology. We used a semi-structured interview process (Dicicco-Bloom and Crabtree, 2006) to gain insight into the reasoning as participants evaluated the four portfolios. The program Dedoose was utilized to support a thematic analysis of interview transcripts. This approach utilizes an iterative process of data coding, data review, and identification of themes. A Pooled Kappa of 0.85 was obtained indicating excellent agreement between two educators across many codes.

Results: Table 2 summarizes the data findings. Overall there were 703 excerpts coded with 318 excerpts coded to Medical Knowledge and 263 excerpts coded to Professionalism or ICS. In relation to faculty evaluation, a pattern of belief in the importance of "warm' versus "smart" began to emerge. Specific excerpts expressing the relative importance of "smart" were evident in raters who favored medical knowledge with an emphasis on achievement. In contrast, those favoring ICS or professionalism, made comments related to "warm," the relative importance of professionalism or elements of ICS like collaboration in providing care and in ensuring high quality care.

Discussion: The results add to our prior quantitative research that showed that faculty who favored medical knowledge rated the portfolio with lower medical knowledge more harshly than the other portfolios. This qualitative study results are consistent with prior research in business and medicine that have indicated different mindsets based on the relative importance of "warm" versus "smart".

Table 1: Comparison of Learner Strengths and Weaknesses in the Four Study Portfolios

Performance indicated in each of the four study portfolios		
#	Competencies relatively higher	Competencies relatively Lower
1	Knowledge, problem solving	Self-assessment, using feedback
2	ICS, professionalism	Technical skills
3	Technical skills	Self-assessment, using feedback
4	ICS, professionalism, SBP	Knowledge, problem solving

Table 2: Qualitative Data – Medical Knowledge (MK) versus Professionalism (Prof) and Interpersonal and Communication Skills (ICS) with Codes, Example Excepts and Schema Importance

Compe-tency	Codes and names	# Excerpts	Example Excerpts Demonstrating differential importance of warm and smart	Schema Importance
MK	MK (2) Medical Knowledge and Demonstrates Medical Knowledge	148	"if don't know anything, you are not going to be able to take care of anyone "one absolutely has to have medical knowledge in order to do patient care" "with medical knowledge, you have to know certain things, there is no in between for medical knowledge." "If struggle with medical knowledge don't know if they're intellectually capable." "the rest you can just take care of later on, but without the knowledge you can't go anywhere"	Smart
Prof or ICS	Professionalism (5): Prof; Compassion, integrity, respect; Responds to patient needs; Accountability; Cultural competence ICS (5) Codes: ICS; Communicate effectively with patient & families; Communication with healthcare professionals; Teamwork; Medical records	Prof-85 ICS-178	"when have issues with personal credibility, honesty and professionalism then that is a big forecaster in how somebody is going to get on with residency" "If you have a person who is professional and easy to work with, you can cram the medical knowledge into them and have the ability to assess and improve in their own situation; but if you have some one that has a social defect it can be more difficult to fix" "Professionalism is the base of the pyramid, if you don't know professionalism, the rest does not matter." "Professionalism above all has an effect on every other competency - it overshadows everything	Warm

Abstract RO-1

References:
Dicicco-Bloom B. & Crabtree, B.F. (2006). The qualitative research interview. Medical Education, 40,314-21.

Gingerich, A., Van der Vleuten, C. P., Eva, K. W., & Regehr, G. (2014). More consensus than idiosyncrasy: Categorizing social judgments to examine variability in Mini-CEX ratings. *Academic Medicine, 89*(11), 1510-1519.

Guerrasio, J., Garrity, M.J., Aagaard E.M. (2014). Learner deficits and academic outcomes of medical students, residents, fellows, and attending physicians referred to a remediation program, 2006–2012. *Academic Medicine, 89*(2), 352–358