

Surgical études: Applying the experience of artistic training to surgical training

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The authors have nothing to disclose



SCHOOL OF MEDICINE
CASE WESTERN RESERVE
UNIVERSITY



University Hospitals
Case Medical Center

Background

- ▶ Resident duty hours have been cut
- ▶ Residents gain the trust of attending surgeons through shared cases
- ▶ Surgical residents are anecdotally believed to be creative with an arts background
- ▶ Creative arts require learning-by-doing



Objectives

- ▶ Determine the opinions of residents regarding
 - ▶ Struggle as a teaching method
 - ▶ Attending involvement
 - ▶ Role of artistic training in their residency
- ▶ Determine artistic interests of residents



Materials & Methods

- ▶ IRB approval obtained
- ▶ Questionnaire created using Qualtrics Survey Software
- ▶ Sent to residents of Case Western Reserve University via email twice fall 2013

Materials & Methods

- ▶ Residents were grouped into three cohorts: Surgery, Medicine, and Mixed (some surgery, some medicine)
- ▶ Data analysis completed using Chi Square and Odds Ratio with Confidence Interval (Surgery vs Medicine) in SPSS Version 13.0



Results – Response

691

- Residents emailed survey

193

- Residents opened survey

152

- Residents began survey

134

- Residents completed survey



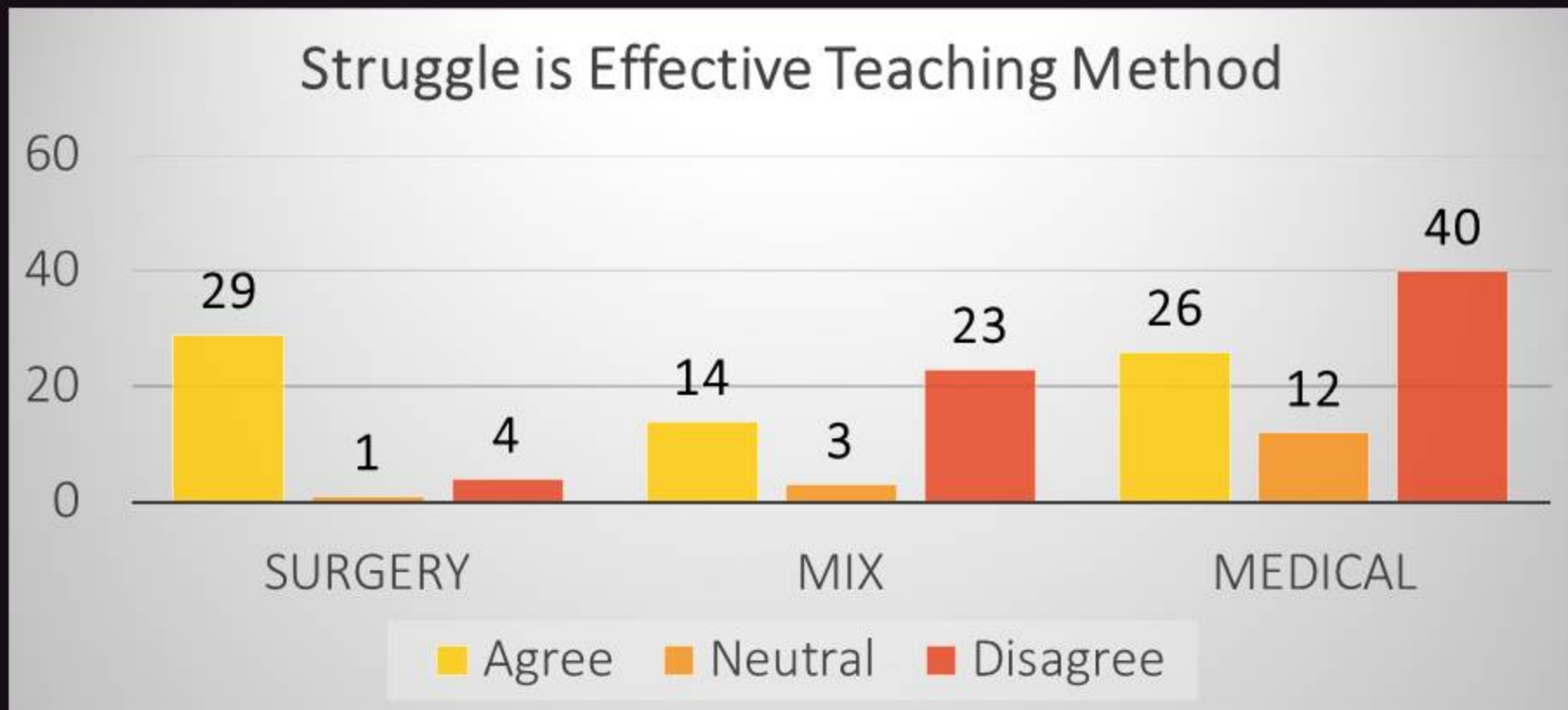
Results – Response

Resident cohort	Respondents (n)
Surgery	22.4% (34)
Mixed	26.3% (40)
Medicine	51.3 (78)



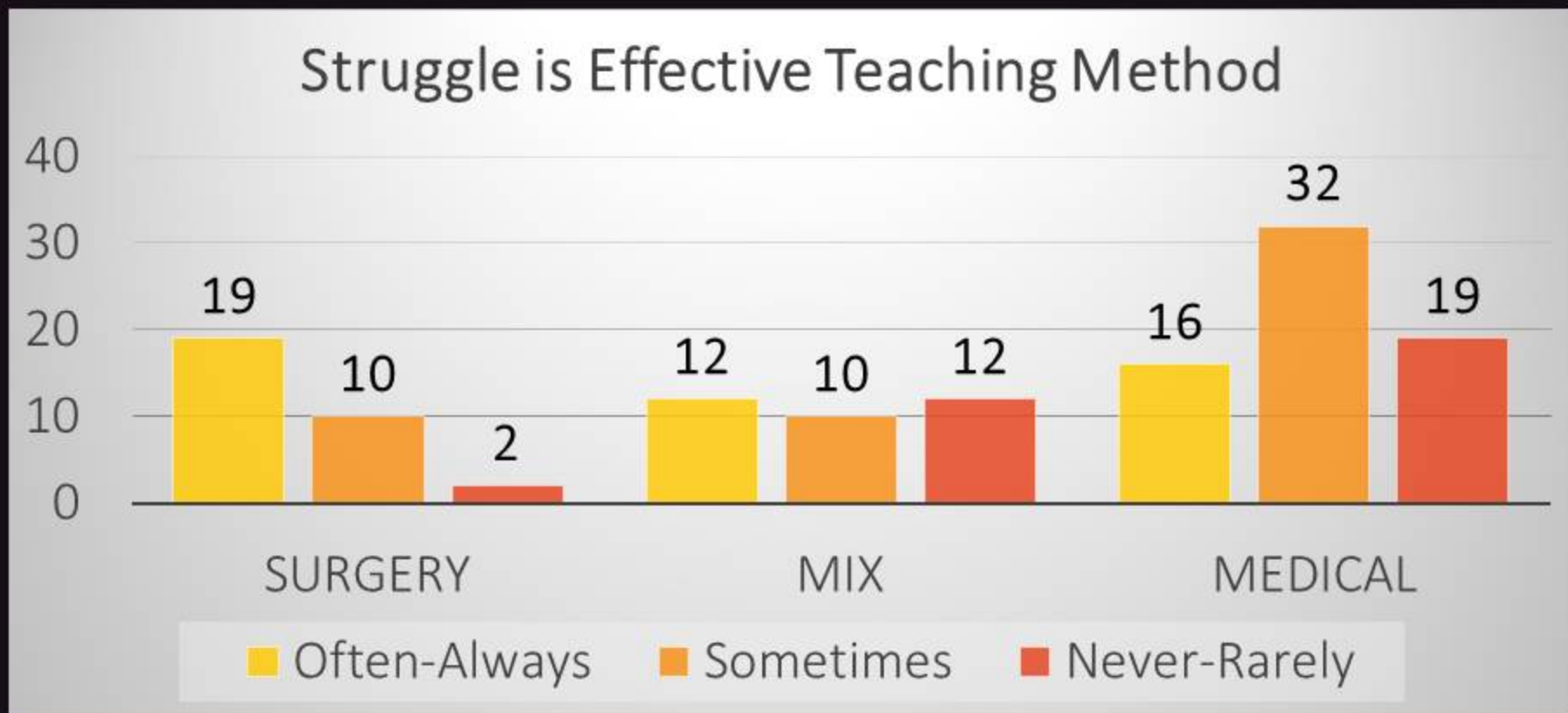
Is struggle an effective teaching method?

$p < 0.0001$, OR 11.2 (CI 3.5-35.4)



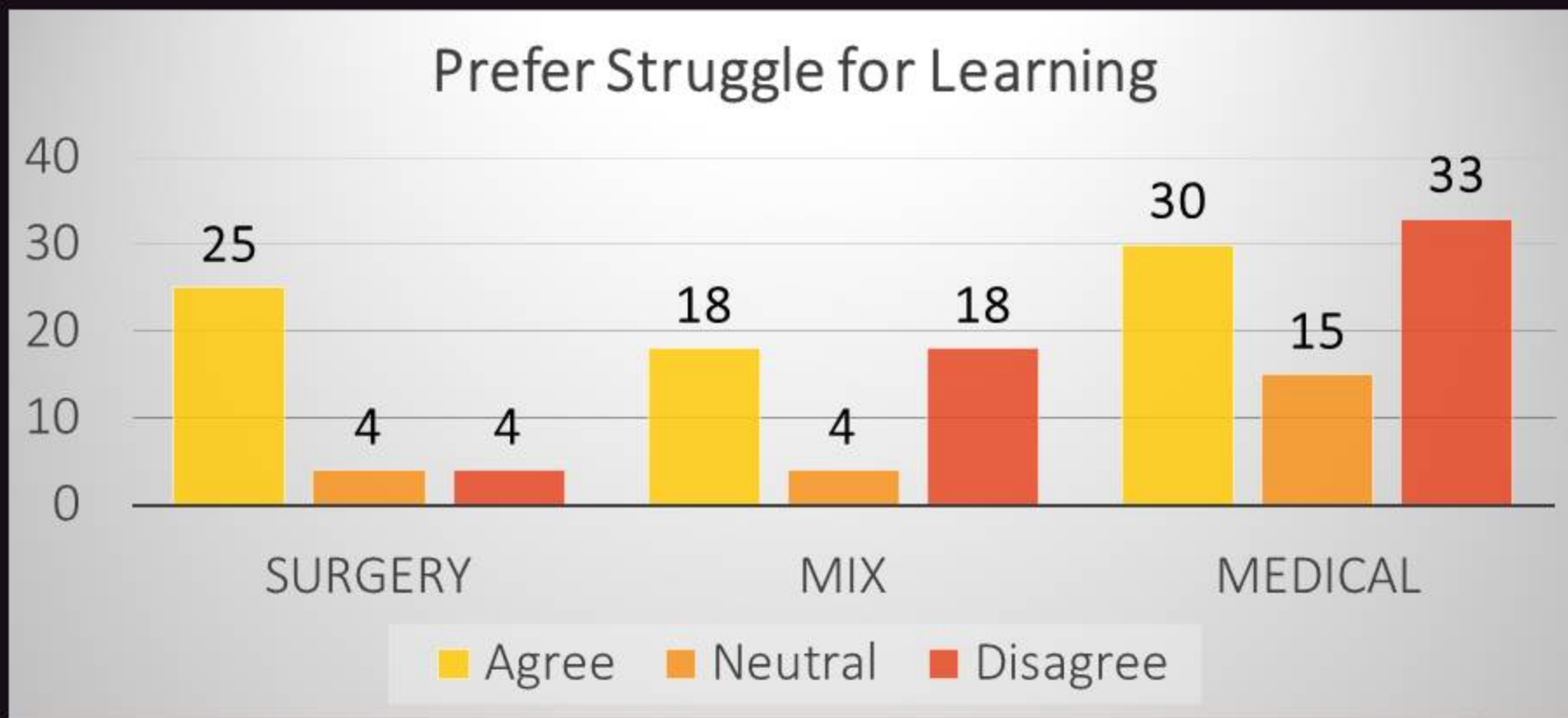
Is struggle an effective teaching method?

$p=0.0021$, OR 11.3 (CI 2.2-56.0)



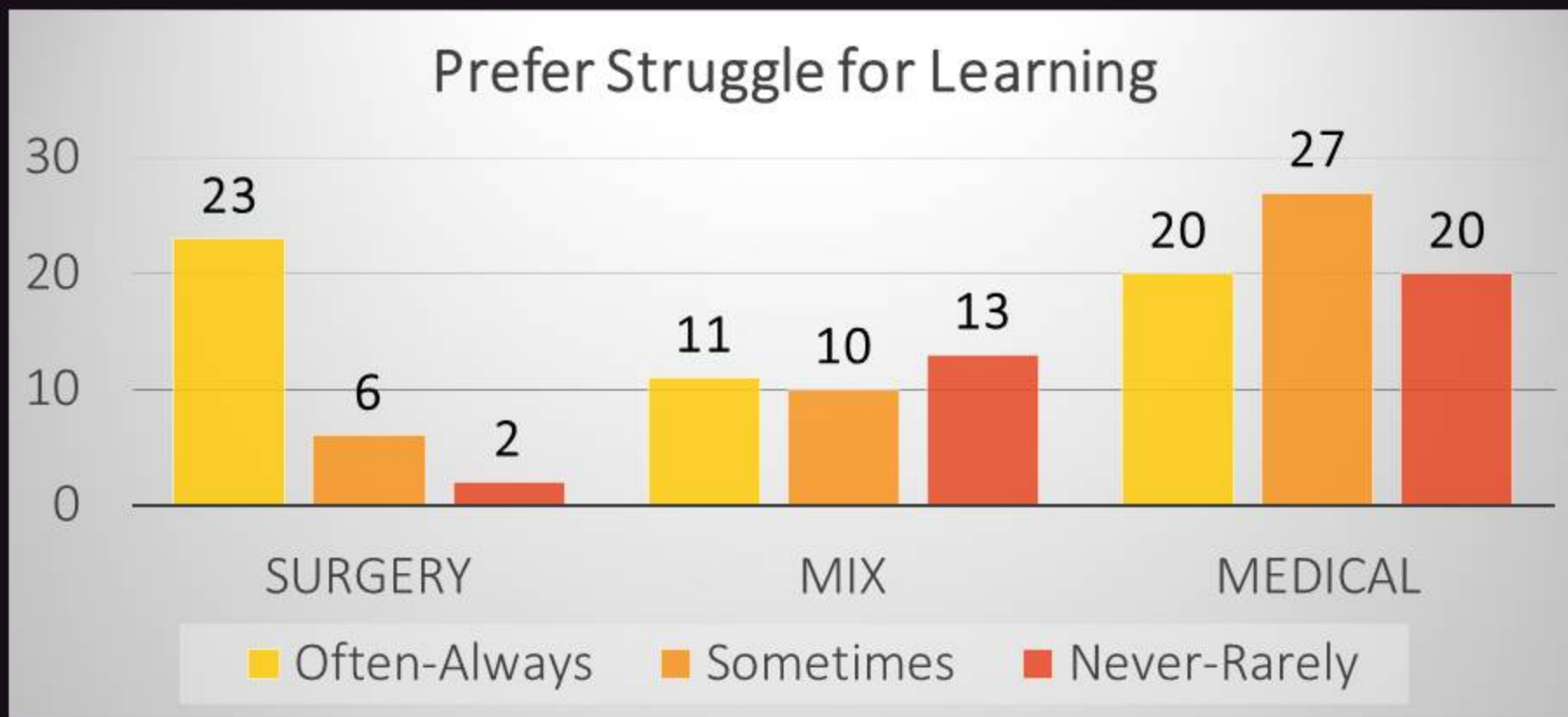
I prefer being allowed to struggle through a difficult procedure

$p=0.0039$, OR 6.9 (CI 2.1-22.1)

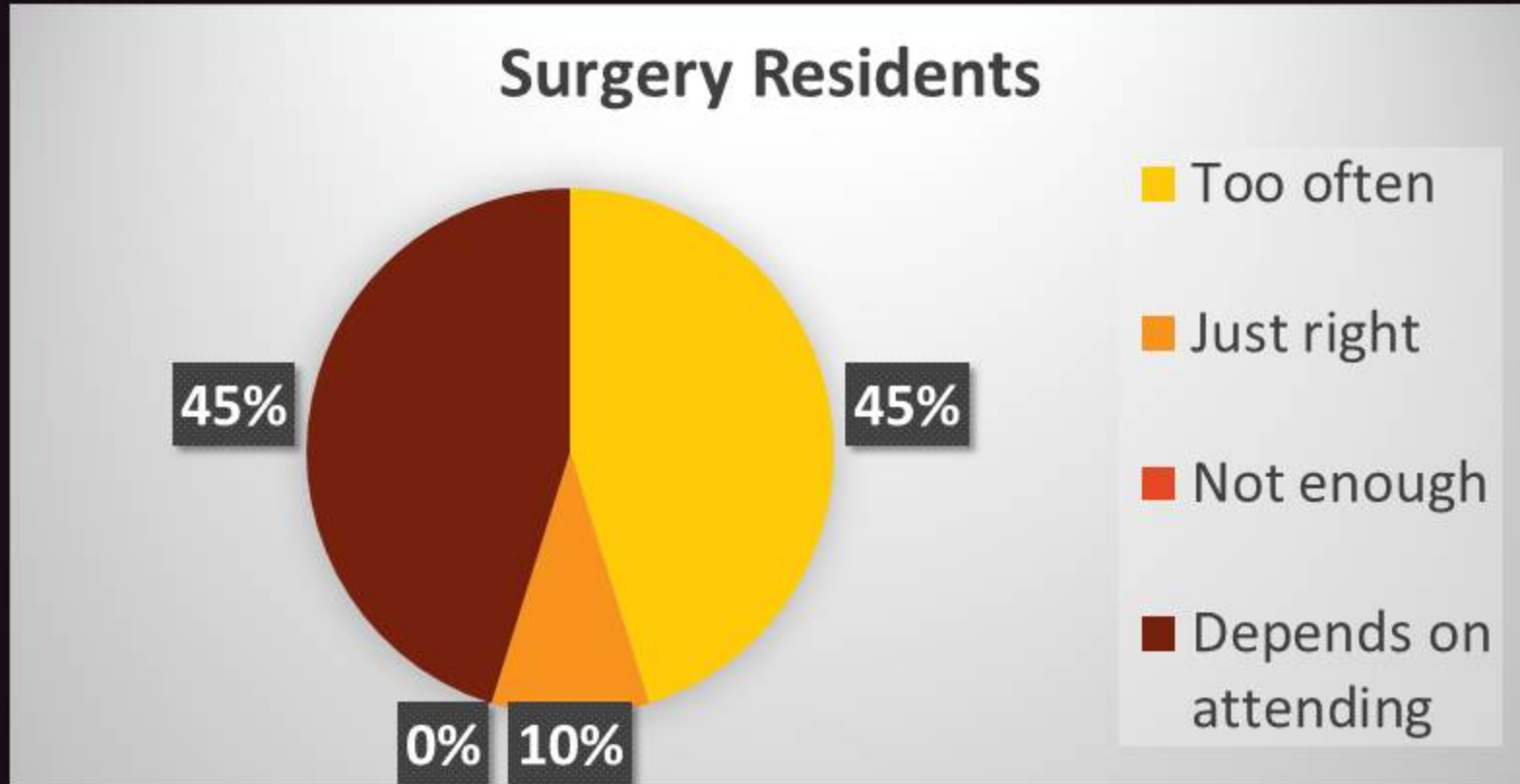


I prefer being allowed to struggle through a difficult procedure

$p=0.0004$, OR 11.5 (CI 2.4-55.4)



How often do attendings perform difficult procedures? (p=0.0013)



Results – Arts ($p>0.05$)

19

- Surgery residents who are artistic (61.3%)

17

- Surgery residents who are musical

14

- Surgery residents who are interested in visual arts

11

- Artistic surgery residents who feel their artistic training probably or definitely helps in residency

7

- Artistic surgery residents who feel their artistic training may help in residency



Conclusions

- ▶ Surgery residents are significantly more likely to prefer struggle and find it to be an effective learning method
- ▶ Almost half of surgery residents report attendings perform procedures too often
- ▶ More than half of surgery residents are artistic, but not significantly more so



Significance

- ▶ Surgery residents believe they learn well through struggle
- ▶ Teaching may be more efficient long-term by allowing a resident to struggle short-term
- ▶ Surgery residents are familiar with struggle as teaching and most apply their artistic training to surgical training

