## Surgical Études: Applying the Experience of Artistic Training to Surgical Training

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#### **Abstract:**

**Background**: A challenge to education is offering adequate hands-on learning opportunities to residents without compromising safety. Surgical residents may be able to apply artistic training habits to their residency training.

**Purpose:** The first goal is to determine the opinion of surgery residents regarding the degree of attending involvement in difficult procedures. The second goal is to describe the artistic inclinations residents and how this may relate to training techniques in acquiring manual skills.

**Methods**: An anonymous survey was distributed to 691 UHCMC residents questioning learning preferences, efficacious teaching, and artistic skills. Survey questions were adjusted dependent upon previous answers.

Results: 152 residents attempted the survey, of which 22.4% were surgery, 26.3% were some surgical/some medical, and 51.3% were medicine. Of surgery residents, 85.3% agreed that allowing a resident to struggle through a procedure was effective teaching and 75.8% preferred being allowed to struggle. 61.3% of surgery residents felt struggle was effective teaching most or all of the time and 74.2% found struggle to be preferable most or all of the time (Figure 1). 45.2% of residents reported that attendings perform procedures too often for residents, and 45.2% reported that their opinion depended upon the attending. The remaining 9.7% felt attendings perform procedures with appropriate frequency (Figure 2). When asked about artistic inclination, 61.3% of surgical residents agreed that they were artistic. Of these, 89.5% were musical and 73.7% visual; 94.7% felt their artistic training could be of help in residency (Figure 3). A targeted sub-study of plastic surgery residents revealed that 90.9% of residents were artistic, with 72.7% being musical and 72.7% visual; 80% reported this training could be of help in residency. 59.1% of strictly medical residents reported being artistic, of which 76.9% felt this training could be of help in residency.

# **Surgery Residents: Learning By Doing**

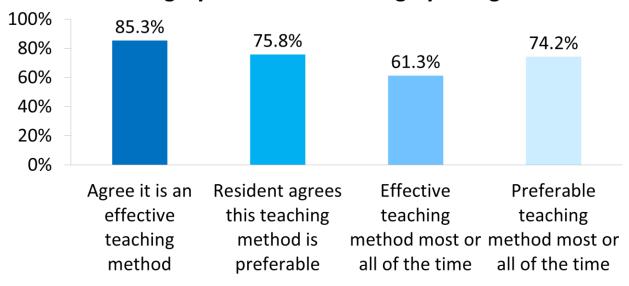


Figure 1. Response of surgery residents regarding educational struggle

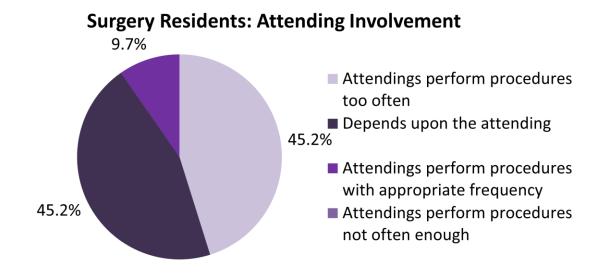


Figure 2. Resident opinion regarding attending involvement

## **Prevalence of Artistic Skills and Usefulness**

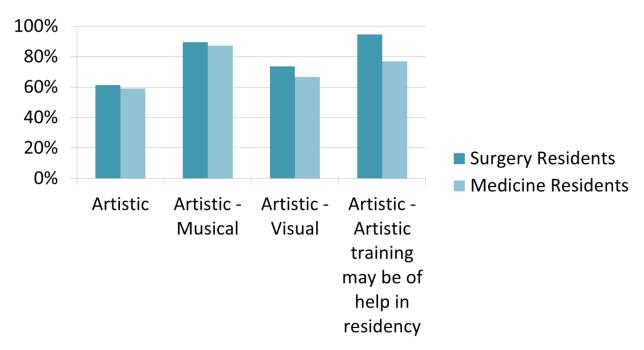


Figure 3. Interest in arts and application to residency

**Conclusions**: Allowing a resident to struggle through a difficult procedure is both an efficacious and preferable teaching method from the resident perspective. A majority of surgery residents felt that attendings performed procedures too often. Most residents identify as artistic and believe that their artistic training may help them in their residency training.

### **References:**

Darosa DA, Zwischenberger JB, Meyerson SL, George BC, Teitelbaum EN, Soper NJ, Fryer JP. A theory-based model for teaching and assessing residents in the operating room. J Surg Educ. 2013 Jan;70(1):24-30

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