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A Comparison Between In-Person and Video Conference Lectures on Medical Student Ultrasound Education

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### **Authors**

Mitina, Alina  
Auerbach, Alyssa  
Cirilli, Angela  
[et al.](#)

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### 35 A Comparison Between In-Person and Video Conference Lectures on Medical Student Ultrasound Education

Alina Mitina, Alyssa Auerbach, Angela Cirilli, Ellen Kurkowski, Connie Yu, Conor Davenport, David Beckett

**Background:** Increasing priority has been placed on teaching point of care ultrasound (POCUS) while in medical school. Meanwhile, education has generally been shifting to virtual platforms. Despite some return to in-person learning, it is worthwhile to evaluate the efficacy of virtual learning, which may increase access to ultrasound education.

**Objectives:** Evaluate if virtual ultrasound lectures deliver information as effectively and increase learner confidence similarly to in-person lectures.

**Methods:** This cohort study anonymously surveyed medical students from three universities to analyze learner confidence and information retention from both in-person and videoconference lectures about the extended focused assessment of trauma (eFAST) exam. Both 30-minute lectures were given live, with a 10 minute demonstration on a model, and pre- and post-lecture surveys. Neither had hands-on training.

**Results:** 117 learners were included (38 in-person, 79 virtual). A two-tailed T-test assuming unequal variances indicated significant improvement in percentage correct between pre- and post-tests ( $p < .001$ ), (32.2% in-person and 36.9% virtual). There was no significant difference between the intervention groups' pre- or post-test scores ( $p = .23$  and  $p = .40$ , respectively), indicating both interventions had similar knowledge baseline and gain. Both groups showed an improvement in confidence following the sessions (mean improvement of 1.7 points in-person, 1.8 virtual) which was not significantly different between the groups ( $p < .01$ ).

**Conclusions:** There was no demonstrated significant difference in learned information or learner confidence between in-person and virtual didactics, indicating students may attain the same content and confidence through both modalities. This study is limited due to non-paired surveys, making it difficult to analyze individual learners. Future work may include repetition with paired surveys, other ultrasound content, and general medical education.

### 36 A Report on Physician Wellness during the Transition from Community EM Physicians to Faculty in a New Residency Training Program

Robyn Hoelle, Hannah Mishkin, Thomas Bentley, John DiFebo, Joseph Roesch

**Background:** Physician wellness continues to be an important focus, especially in EM. New residency training

sites include community hospitals with new graduate medical education (GME) infrastructure. How does transitioning from a community hospital to a teaching site effect physician wellness? This paper reports demographics and self-perceptions of community physicians who are transitioning to faculty at a new teaching site. We report new faculty member's emotional exhaustion (EE), depersonalization (D) and personal accomplishment (PA) scores throughout the transition.

**Objectives:** EM physicians who transition from community doctors to faculty in a residency training program will show trends toward improved wellness using the Maslach Burnout Inventory™ (MBI).

**Methods:** DESIGN: This study is a retrospective observational study. SETTING: Community hospital where GME programs started three years prior to a new EM program beginning. PARTICIPANTS: EM physicians transitioning from community doctors to faculty in a new residency program took the MBI and a survey about their perceptions of the transitions the month before the residents arrived (Y0), one year later (Y1) and two years later (Y2).

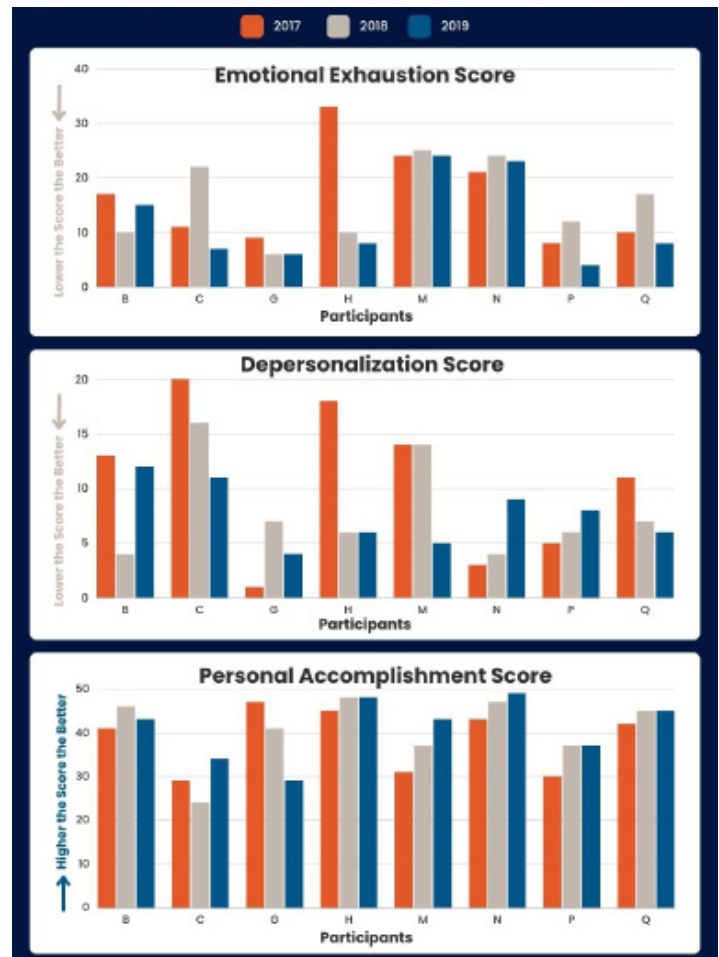


Figure. Maslach Burnout Inventory™ trends for the first three years of transition.