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Verifying the Effectiveness of Gamification as a Teaching Modality Compared to Lecture-Based Didactics

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each of the questions in Part A and Part B, as well as the anticipated guidance (AG) and anticipated position on rank list (RL) questions in Part C.

Results: We gathered data from 1775 EM-bound applicants, comprising 3687 SLOEs. Table 1 demonstrates the distribution of scores for each component of the SLOE 2.0. The distributions of scores for each question showed a right-skewed distribution for Part A, Part B, and the AG and RL questions.

Conclusion: To our knowledge, we presented the first preliminary data on distribution of scores using the SLOE 2.0. This data will be useful for EM programs to use when learning how to use and analyze SLOE 2.0 scores. This is preliminary data that requires many further studies.

Table 1. Number and percent of SLOE 2.0 scores with varying responses for each question in the A, B, and C sections (n=3,687)

| Question | Fully Eristable # (%) | Mostly Eristable # (%) | Pre-Eristable # (%) | | |
|---|-----------------------|------------------------|---------------------|------------|------------------|
| A1 Ability to perform a focused history and physical exam | 2744 (74.42%) | 905 (24.55%) | 38 (1.03%) | | |
| A2 Ability to generate a differential diagnosis | 2058 (55.84%) | 1531 (41.52%) | 97 (2.63%) | | |
| A3 Ability to formulate a plan | 1749 (47.44%) | 1818 (49.31%) | 120 (3.25%) | | |
| A4 Ability to perform common ED procedure | 1912 (51.86%) | 1485 (40.55%) | 55 (1.49%) | | |
| A5 Ability to recognize and manage basic emergent situations | 2215 (60.13%) | 1391 (37.73%) | 79 (2.14%) | | |
| Question | 5 # (%) | 4 # (%) | 3 # (%) | 2 # (%) | 1 # (%) |
| B1 Compassion, sensitivity, and respect towards patients and team members | 1710 (46.38%) | 1469 (39.84%) | 483 (13.10%) | 23 (0.62%) | 2 (0.05%) |
| B2 Receptivity to feedback and ability to incorporate feedback | 1597 (43.31%) | 1535 (41.63%) | 504 (16.67%) | 49 (1.33%) | 2 (0.05%) |
| B3 Dependability, responsibility, initiative, and work ethic | 1860 (50.45%) | 1319 (35.77%) | 459 (12.45%) | 45 (1.22%) | 4 (0.11%) |
| B4 Punctuality, attendance, and preparation for duty | 1946 (50.07%) | 1317 (35.72%) | 486 (13.18%) | 34 (0.92%) | 4 (0.11%) |
| B5 Timeliness and responsiveness in completing administrative tasks | 1650 (44.75%) | 1390 (35.70%) | 588 (15.98%) | 55 (1.49%) | 3 (0.08%) |
| B6 Interpersonal and communication skills with patients and family members. | 1699 (46.08%) | 1498 (40.36%) | 471 (12.77%) | 26 (0.71%) | 2 (0.05%) |
| B7 Interpersonal and communication skills with faculty, residents and healthcare professionals. | 1694 (45.95%) | 1382 (37.48%) | 530 (14.97%) | 69 (1.87%) | 12 (0.33%) |
| Question | Minimal | Standard | Moderate | Most | |
| C1 Anticipated Guidance | 1289 (34.96%) | 1884 (51.10%) | 425 (11.53%) | 89 (2.41%) | |
| Question | Top 10% | Top 1/3 | Mid 1/3 | Lower 1/3 | Unlikely to Rank |

5 Verifying the Effectiveness of Gamification as a Teaching Modality Compared to Lecture-Based Didactics

Anthony Sielicki, Chris Riviello, Jessica Parsons, Claire Abramoff, Deborah Pierce

Background: Multiple studies of emergency medicine

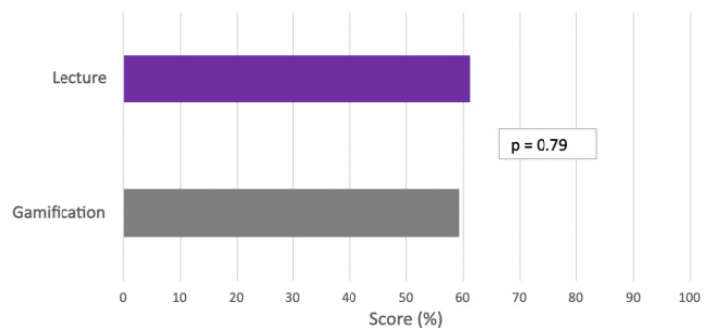
(EM) learners have demonstrated that gamification improves engagement and enjoyment. Few studies have examined its effectiveness compared to traditional lectures past enjoyment.

Objective: We sought to examine gamification versus traditional lecture focused on the diagnosis and management of postpartum hemorrhage (PPH). We hypothesized that learners who underwent gamification would report more enjoyment and have non-inferior performance in a PPH simulation.

Interventions: This is a randomized, prospective trial of EM residents at a single urban, academic program. A pre-test of PPH knowledge was administered. Residents were randomly assigned to learn about PPH in a 60-minute lecture or board game during weekly didactics. A posttest following the educational intervention was conducted, as was a survey about enjoyment of the learning activity. 6-8 weeks later, residents were grouped according to lecture or gamification and participated in a simulation of PPH. Residents were scored using the validated OBS-PPH tool.

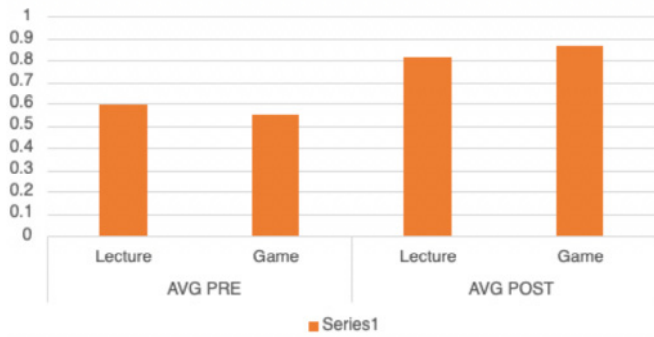
Results: There were no statistically significant differences between pre and post-test knowledge of PPH (p=0.49 and p=0.23, respectively) between groups. Average scores for satisfaction, engagement, enjoyment, and whether they would recommend the session to others was significantly higher for gamification (p<0.05). For the OBS-PPH score, the gamification groups (n=12) had a mean score of 59.43%. Groups who received lecture (n=12) had an average score of 61.40%. A two tailed t-test revealed no statistically significant difference between groups (p=0.78).

Figure 1. OBS PPH score.



Conclusions: In the instruction of clinical management of PPH, gamification was viewed more favorably. There were no differences in knowledge gained, or in simulation performance using the OBS-PPH score. This suggests that gamification may serve as a tool to improve learner satisfaction without sacrificing educational value.

Figure 2. Average pre- and post- test scores.



6 Emergency Medicine Clerkship Director Compensation: A National Survey

Jorge Fernandez, Daniel Suto, Doug Franzen, Nicole Dubosh, David Manthey, Emily Pott, Brenna Hogue, Jaime Jordan

Background: There is a lack of current high quality compensation data for Emergency Medicine (EM) Clerkship Directors (CDs) across the United States (US), despite an expansion of medical schools, EM residency programs and economic inflation.

Objectives: To report US EM CD compensation during the academic year 2022-23.

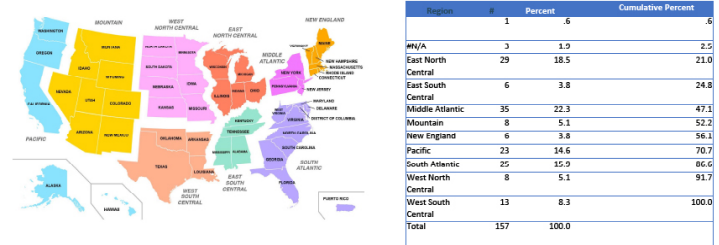
Methods: We performed a cross-sectional study of EM CDs. We identified 355 EM CDs using publicly available data from medical school, residency program, and AAMC websites and invited them to complete a confidential electronic survey, consisting of multiple choice and completion items, after piloting prior to use. Descriptive statistics were reported, and we compared categorical variables with χ -squared tests and continuous variables with t-tests.

Results: 157 CDs (44%), including those from university, county, community, and rural sites, responded from all US regions. For the CD role, 62% receive full time equivalent (FTE) support (mean 21% +/- 17% FTE, 1 SD) and 28% receive a stipend (mean \$31,959 +/- \$29,076). A wide range of total compensation was reported (mean \$257,689 +/- \$123,650). There was no correlation between FTE support, stipend, or total compensation and the number of rotating students, training, experience, site, or region. Total compensation was significantly higher in men (mean \$278,964) than women (mean \$222,140) ($p=0.009$), despite no significant gender difference in CD FTE reduction or stipend.

Conclusions: FTE reduction, stipends and total compensation vary highly amongst EM CDs, without correlation to the number of rotating students, training/experience, type of site (university vs. county vs. community) or US region. Female EM CDs report

significantly lower total compensation nationally than men, despite no significant gender difference in FTE support or stipend for the CD role itself.

Table 1. 157 EM CDs (44% survey response).



• ERAS Geographic regions from Geographic Preferences

Table 2. CD-role specific and total compensation.

• 98 receive FTE reduction (62%)

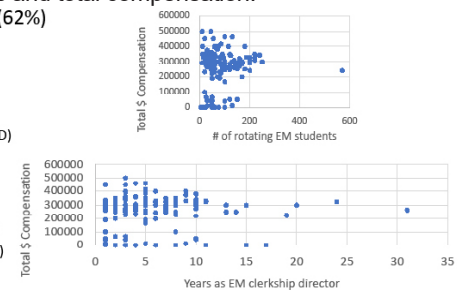
- Mean 21.4% (+/- 17.4 1 SD)
- Median 18% (IQR 20)
- Range 91%

• 44 receive stipend (28%)

- Mean \$31,959 (+/- \$29,076 1 SD)
- Median \$25,000 (IQR 32,500)

• Total \$ compensation

- Mean \$257,689 +/- 123,650 SD
- Median \$300,000 (IQR \$90,000)



7 Generalizability of Consensus Regarding SLOE Competitiveness: A Validity Study in a National Sample of Emergency Medicine Faculty

Morgan Sehdev, Alexis Pelletier-Bui, Al'ai Alvarez, Benjamin Schnapp, Nicole Dubosh, Caitlin Schrepel, Sharon Bord, Yoon Soo Park, Eric Shappell

Background: Work reported at CORD 2023 showed strong consensus regarding competitiveness of mock standard letters of evaluation (SLOEs) and evidence that algorithms could closely predict consensus ratings. However, this group was small ($n=7$) and mostly from academic centers. The generalizability of these findings with real SLOEs and in a larger sample more representative of the national population is unknown.

Objective: Measure consensus regarding the competitiveness of SLOEs in a diverse national cohort and the ability of algorithms to predict consensus ratings.

Methods: 50 SLOEs from the 2023 application cycle were selected to match a blueprint of national ratings. SLOE competitiveness was ranked by 25 faculty with self-identified characteristics including: 56% female, 16% URM, 28% clerkship leaders, 78% residency leaders, AAMC regions: 20% central, 32% northeastern, 24% southern, 24% western, and institutions described as academic (56%), community