



Comparison of Student APPE Professionalism Scores by Rotation Type

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Objectives

- To compare the professionalism scores by rotation type for students in the classes of 2021, 2022, and 2023 at the UBSPPS. The null hypothesis: There are no statistically significant differences in mean professionalism scores between the five rotation types examined.

Methods

- Data were obtained from 3 elective, 1 ambulatory patient care, 1 acute care general medicine, 1 hospital/health system, and 1 community rotation per student.

Table 1: 10 professionalism criteria

Motivation: Displays eagerness to learn and to effectively care for patients.
Compassion & Respect for Others: Displays empathy and sensitivity; respectful of different socioeconomic backgrounds and cultural traditions; avoids promoting gossip and rumor; respects authority.
Independent Learner: Commits to lifelong learning; seeks and applies feedback for self-improvement; sets and achieves realistic goals (S.M.A.R.T.); maintains personal health and well-being; avoids harmful behaviors.
Commitment to Excellence: Actively engaged; demonstrates strong work ethic; strives to exceed minimum requirements; punctual; prepared; conscientious; seeks additional knowledge and skills.
Adaptability: Able to modify behavior accordingly when presented with different situations.
Accountability: Accepts personal responsibility (e.g., for own learning, patient care, etc.); demonstrates preparedness, punctuality, and reliability with commitments in a timely manner; is accountable for their performance, initiates activities when necessary, and contributes overall to the profession; exhibits awareness and adherence to various site policies and procedures.
Time Management & Organization: Constructively uses spare time, able to prioritize and manage multiple tasks, independently manages times and tasks, meets deadlines.
Communication: oral, written, and non-verbal communication is courteous, respectful, and situationally appropriate; listens attentively.
Integrity & Trustworthiness: Demonstrates high degree of integrity, truthfulness, and fairness; adheres to ethical standards; maintains confidentiality.
Professional Demeanor: Displays a positive attitude; nonjudgmental; controls emotions appropriately; carries oneself with professional presence.

- The grading rubric is (1) does not meet expectations, (2) meets expectations, (3) exceeds expectations

Results

Figure 1: Mean Pooled Professionalism Scores by Criterion

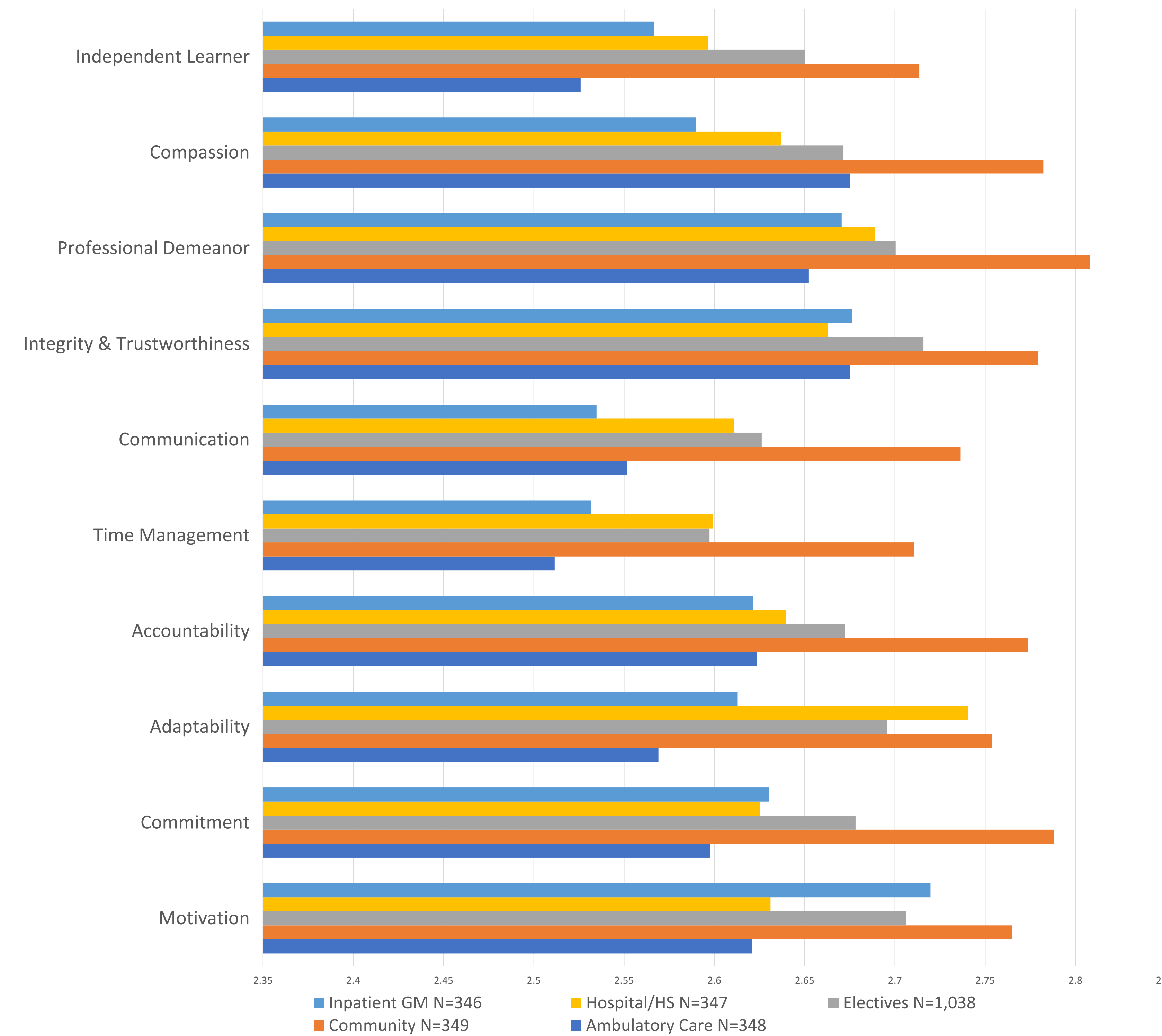


Table 2: P-values based on Mean Professionalism Scores Comparing two Rotation Types and the Criterion Evaluated On
(red=statistical significance at p<.05)

Criterion	Elective/Ambulatory	Community/Elective	Elective/Hospital	Elective/Medicine	Community/Ambulatory	Hospital/Ambulatory	Medicine/Ambulatory	Community/Hospital	Community/Medicine	Hospital/Medicine
Motivation	0.024	0.241	0.068	0.99	0	0.998	0.039	0.001	0.697	0.088
Commitment	0.049	0.002	0.376	0.476	0	0.94	0.898	0	0	1
Adapatability	0	0.261	0.524	0.034	0	0	0.73	0.996	0.001	0.003
Accountability	0.464	0.006	0.805	0.42	0	0.45	1	0.002	0	0.987
Time Management	0.041	0.002	1	0.207	0	0.132	0.983	0.025	0	0.375
Communication	0.101	0.003	0.987	0.022	0	0.501	0.991	0.007	0	0.242
Integrity and Trustworthiness	0.614	0.167	0.341	0.639	0.024	0.997	1	0.007	0.026	0.995
Professional Demeanor	0.451	0.002	0.994	0.838	0	0.839	0.986	0.006	0.001	0.986
Compassion	1	0.001	0.759	0.04	0.022	0.818	0.115	0	0	0.676
Independent Learner	0	0.221	0.385	0.044	0	0.31	0.807	0.013	0.001	0.927

Conclusions

- Based on 3 years of APPE data, we must reject the null hypothesis and state there are statistically significant difference in mean professionalism scores between some of the five rotation types.
- Figure 1 shows that community pharmacy professionalism scores are consistently higher than all other rotations types based on the criteria evaluated on. In addition, Table 2 indicates the community scores are higher with statistical significance (p<.05) for 10/10 criteria when compared to ambulatory care, and 9/10 criteria when compared to hospital and medicine rotations.
- Figure 1 also shows that elective professionalism scores are the second highest scores amongst the 5 rotation types. As Table 2 demonstrates, elective professionalism scores were statistically higher for 4 criterion when compared to ambulatory care and inpatient general medicine.
- It is important to note that community scores were greater than elective professionalism scores (p<.05) in 6 out of 10 criteria.
- Table 2 demonstrates the variability in differences that are statistically significant when comparing just the criterion scores. Nine criteria have between 4-5 statistically significant different scores, whereas the integrity & trustworthiness criterion ended up with only 3.
- The lowest scores for community, general medicine, and the electives occurred with the time management criterion. The lowest scores for ambulatory care and hospital health systems rotations occurred with the independent learner criterion.