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Physician Assistant Student Perceptions of Evidence-Based Medicine Resources

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Background

- ARC-PA accreditation Standard (B2.13) requires instruction "to prepare students to search, interpret and evaluate the medical literature to include...the use of common databases to access medical literature."
- PA programs and libraries have numerous options available for databases with which to search the medical literature
- This project was designed to answer the following research questions:
(1) which EBM resources do students find most (and least) useful?
(2) how do didactic PA students anticipate using EBM in their clinical rotations and future practice?

Methods

- Students at 3 PA programs completed an anonymous questionnaire at the end of their didactic EBM course
- Questionnaire included preferences of commonly used secondary and tertiary literature (e.g., Pubmed, UpToDate, etc.)
 - Ranking of most preferred (1) EBM resource to least preferred (8);
 - Self-efficacy in searching and appraising the literature (5-pt Likert scale)
 - Outcome expectations of EBM informing future patient care and increasing medical knowledge (5-pt Likert scale)
 - Most important attributes of EBM resources (open-ended item)
- One-way analysis of variance (ANOVA) was used to analyze between-group differences for self-efficacy and outcomes expectations
- Thematic analysis identified major themes of attributes students found most important in EBM resources

Results

- 71 students had usable data (31.3% response rate)
- Students' most preferred EBM resource was UpToDate (mean=1.1) and least preferred was Trip Medical Database (mean=6.7) (Figure 1)
- On average, students reported being moderately to very confident in their ability searching (mean=3.3, SD=0.7) and appraising the literature (mean=3.2, SD=0.8) (Figure 2)
- There were no between-group differences among the 3 programs in self-efficacy of searching the literature, appraising the literature, and outcomes expectations of EBM informing patient care and informing future prescribing decisions (all p>0.05)
- Most important student-identified attributes in an EBM resource was ease of use and reliability/quality of the information presented (Figure 3)

Conclusion

- There is appreciable heterogeneity in the attributes of an EBM resource that PA students find most important
- PA students most valued ease of use compared to other attributes, such as quality of the information
- Despite different training modalities, there were no statistically significant differences in self-efficacy among the 3 groups of PA students
- PA students value the role of EBM in future clinical practice but there is room to improve training to enhance their confidence searching and appraising the literature

References

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3. Stack MA, DeLellis NO, Boeve W, Satonik R. Effects of Teaching Evidence-Based Medicine on Physician Assistant Students' Critical Appraisal, Self-Efficacy, and Clinical Application: A Randomized Controlled Trial. J Physician Assist Educ. 2020;31(3):159-165.

Figure 1: Student-Reported Ranking of Most Preferred EBM Resources

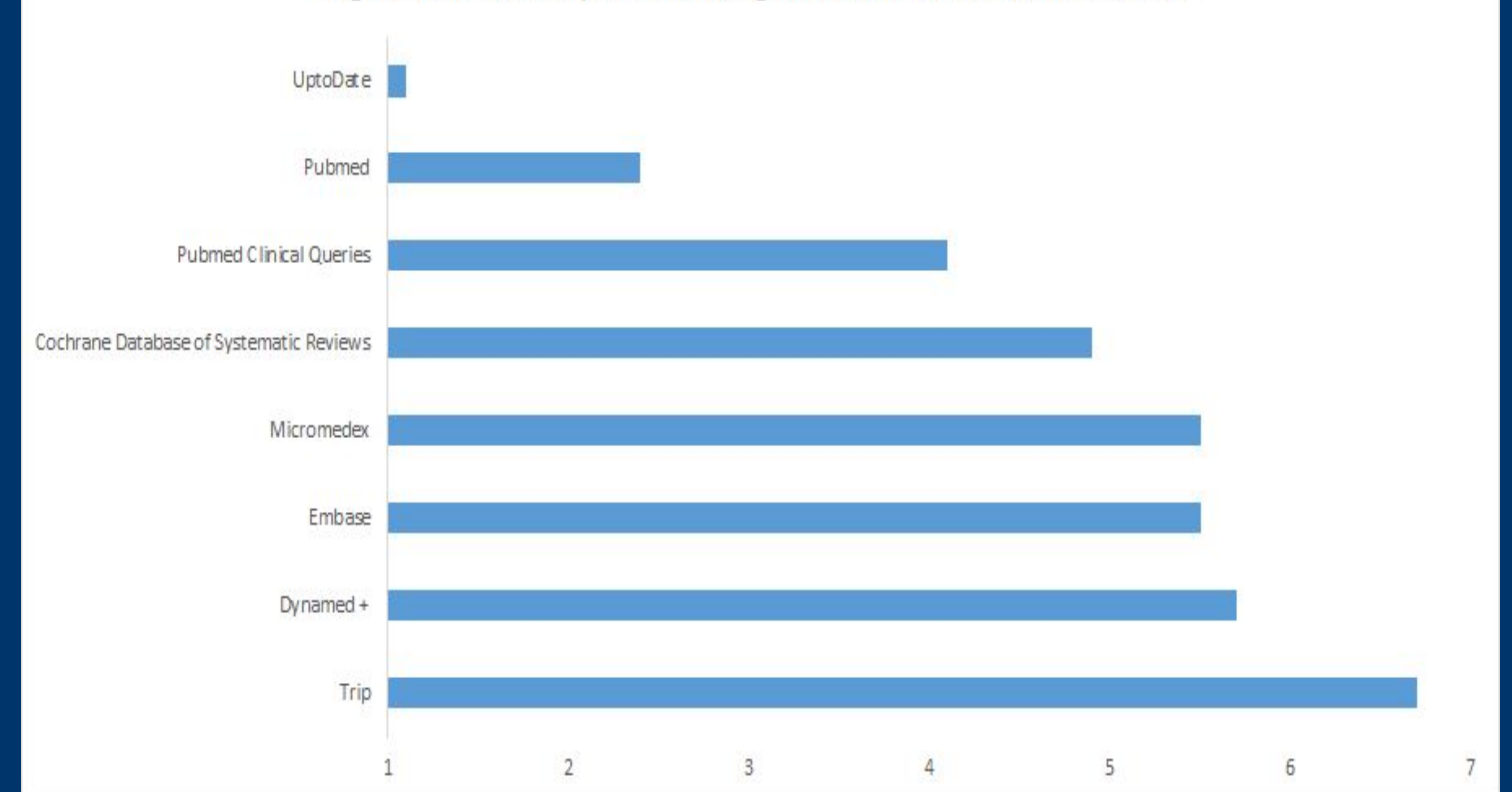


Figure 2: Self-Efficacy and EBM Outcomes Expectations

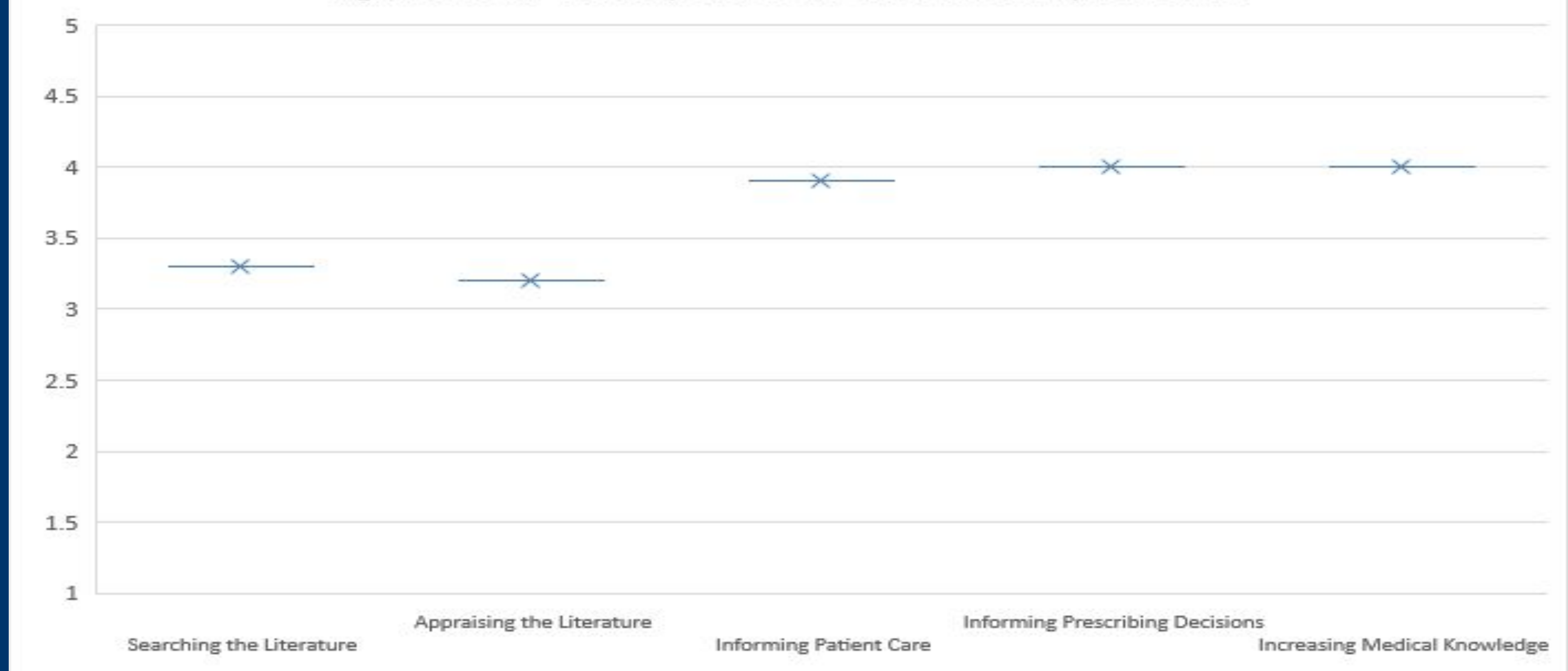


Figure 3: Most Important Attributes of EBM Resources

