

Does concept mapping enhance learning outcomes for teaching evidence-based practice theory?

L. Lafave, M. Yeo, and M. Lafave, *Mount Royal University*

ABSTRACT: Evidence-based practice (EBP) skills are critical to health care professions; most importantly resulting in improved care delivered to patients. Despite its importance, uptake of EBP skills in the athletic therapy profession are not readily pursued, due to barriers of time and lack of skill [1]. One proposed solution is to include clinical research skills and methods of practicing EBP in undergraduate curricula. EBP is an abstract concept for students and in order to internalize the value and importance of these skills, students must understand the link to improved patient care. Meaningful learning opportunities need to be created for students to activate this link in their learning. Reading, and assessment of directed reading activities to motivate students, is a first step, but how can we design learning experiences that help them to make meaning of the information?

According to Von Der Heidt [2], concept mapping can powerfully contribute to deep learning for students. How is student learning and critical analysis influenced by an assigned reading/notetaking activity compared to an in-class concept mapping activity? Is there a relationship between the quality of the concept map produced and the grade achieved in an exam question? The purpose of this study was to assess concept mapping as a teaching method to help students deepen their understanding of EBP in their professional practice. This study used a pre-post design among 16 athletic therapy students. Participants were given instructions, eight learning objectives, and an article on EBP. Participants had one week to complete the assigned reading/notetaking activity and informed that information from the reading would comprise a long answer midterm examination question. Six weeks later, students were given class time (90 minutes) to complete a concept map on EBP. The instructor provided students with instructions on how to complete a concept map and was available to answer questions. The content for the map was based on the previous assigned reading/notetaking activity. Students were informed that information from the concept map would comprise a long answer final examination question. Concept mapping appeared to enhance the connections between concepts that were not evident from the assigned reading alone.

REFERENCES

- [1] Steves, R. and Hootman, J.M. (2004), Evidence-based medicine: What is it and how does it apply to athletic training?, *Journal of Athletic Training*, Vol. 39, No. 1, pp. 83-87.
- [2] von der Heidt, T. (2015), Concept maps for assessing change in learning: a study of undergraduate business students in first-year marketing in China.", *Assessment & Evaluation in Higher Education*, Vol. 40, No. 2, pp. 286-308.