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Use of a Journal Club During Level II Fieldwork to Facilitate Confidence and Skills for Evidence-Based Practice

Abstract

Level II fieldwork students should have an opportunity to engage in the process of evidence-based practice (EBP) firsthand; however, ensuring that EBP is visible to students is often a challenge for fieldwork educators. This study investigated if the use of a journal club during a Level II, psychosocial fieldwork placement would increase the students' confidence and perceived abilities in using skills required for EBP. A descriptive study via survey design was used for the study. The participants consisted of two cohorts (n = 10) of occupational therapy graduate students. The results indicate that the students perceived an increase in their ability to search the literature and to comprehend and appraise research studies. These competencies appear to match the component skills associated with an ability to use evidence in practice. This study provides the method to develop a journal club during fieldwork to facilitate EBP skills for occupational therapy students.

Comments

The author reports no conflicts of interest to disclose.

Keywords

journal club, evidence-based practice, level II fieldwork

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The call for occupational therapists to integrate evidence into practice intensifies each year. Evidence-based practice (EBP) is emphasized in the scientific literature, required from third-party payers, and expressed in the vision of our professional body. Therefore, it is imperative that occupational therapy students have an opportunity to experience integrating evidence into practice during their fieldwork education. The American Occupational Therapy Association (AOTA) defines EBP as “the integration of critically appraised research results with the clinical expertise, and the client’s preferences, beliefs and values” (n.d., para. 1).

In 2006, as part of a strategic planning initiative, AOTA (2007) developed a *Centennial Vision* statement for the profession to use as a road map for its future. This statement included the goal that occupational therapy would be an evidence-based profession by the year 2017. To support the proposed vision, AOTA identified “evidence-based decision-making” as a relevant element necessary to achieve this goal and “linking education, research, and practice” as a strategic direction to overcome barriers (AOTA, 2007, p. 614).

Likewise, the 2015 *Occupational Therapy Code of Ethics* states that, to the extent possible, evaluation, planning, interventions, assessments, and equipment should be current and evidence-based (AOTA, 2015). In line with these two documents, *Vision 2025*, which the AOTA board adopted in 2016, includes four guideposts to help communicate its core tenets to its key stakeholders. One of those guideposts is “*Effective*: Occupational therapy is evidence based, client centered, and cost-effective” (AOTA, 2017, p. 1).

AOTA is clearly dedicated to moving the profession toward a day in which EBP is the norm; however, the path for clinicians continues to be challenging. A study conducted by Salls, Dolhi, Silverman, and Hansen (2009) found that the majority of occupational therapists surveyed were not incorporating research evidence into practice. There have been numerous studies aimed at identifying the obstacles that clinicians face in using EBP, and consistent themes have emerged. Decreased confidence, lack of time, productivity demands, lack of support, and limited resources for EBP have all been identified (Dysart & Tomlin, 2002; Salls, Dolhi, Silverman, & Hansen, 2009; Stern, 2005; Stube & Jedlicka, 2007; Sweetland & Craik, 2001; Thomas & Law, 2013).

The above barriers to EBP can become compounded for the fieldwork educator and the fieldwork student. Fieldwork education is instrumental in fostering the habits needed to become an evidence-based practitioner (DeCleene Huber et al., 2015; Stronge & Cahill, 2011; Stube & Jedlicka, 2007; Thomas & Law, 2013). Exposure to EBP during fieldwork fosters the students’ confidence in their ability to use evidence in practice, which may, in turn, influence their use of EBP when they are clinicians (DeCleene Huber et al., 2015; Thomas & Law, 2013). However, students may have difficulty considering themselves as evidence-based practitioners if they do not perceive their fieldwork educator as an evidence-based practitioner (Stronge & Cahill, 2011).

The multidimensional nature of EBP may prevent students from recognizing its application during fieldwork, which may, in turn, limit their ability to apply evidence in practice (DeCleene Huber et al., 2015). These findings are significant; however, the problem may be even more complex. A study conducted by Crabtree, Justiss, and Swinehart (2012) found that although student scores on the Adapted Fresno Test of EBP increased following an EBP graduate course, student scores decreased between post course and post fieldwork experiences. The reasons for the decrease in skills are unclear; however, the authors suggest a lack of opportunity for students to use their EBP skills during fieldwork, a lack of support for EBP by fieldwork sites, and barriers that may be too challenging for students to overcome.

This purpose of this study was to determine if the use of a journal club during a Level II, psychosocial fieldwork placement would increase students' confidence and perceived abilities in using component skills associated with EBP. Journal clubs have been used to discuss and disseminate research findings since the mid 1800s. Stern (2008) found that students who participated in a journal club embedded in an EBP course developed skills and habits related to reading, critiquing, and discussing research. Furthermore, they considered a journal club a viable strategy to promote carryover of EBP in clinical practice. In line with these findings, a systematic review conducted by Deenadayalan, Grimmer-Somers, Prior, and Kumar (2008) found consistent statistical evidence of the effectiveness of journal clubs in improving knowledge. However, studies on the use of a journal club with students in the clinic setting could not be found.

The journal club under investigation was developed to be used with occupational therapy students during their Level II, psychosocial fieldwork placement at a vocational independence program (VIP), which is a residential, college-based, postsecondary transition program for emerging adults with developmental disorders. The author of this study served as the fieldwork educator. A collaborative fieldwork model is used at the facility in which knowledge is constructed jointly between the fieldwork educator and the students. Each student is responsible for his or her own learning. The fieldwork educator assumes the role of facilitator and is not considered the expert (Commission on Education, 2013). In line with this fieldwork model, Malcolm Shepherd Knowles' adult learning theory was used to design the journal club. Knowles' four assumptions of andragogy (adult learning) were emphasized throughout the experience (Knowles, 1970).

- Assumption 1: Self-concept. Normal maturation results in a move from dependency to self-directedness.
- Assumption 2: Learners' experience. As individuals accumulate experiences, these experiences become a resource for future learning.
- Assumption 3: Readiness to learn. Individuals become ready to learn when they see a need for it in real life situations.
- Assumption 4: Orientation to learning. Learners want to apply the knowledge they gain immediately and their learning shifts from subject-centeredness to performance-centeredness.

Method

Research Design

A descriptive study was conducted via survey design to describe the impact of using a journal club during a Level II, psychosocial fieldwork placement in influencing occupational therapy students' perceptions regarding their confidence and abilities in using component skills related to EBP. The study was approved for exemption from Institutional Review Board review under Category 1 and 2 by the Institutional Review Board for the Protection of Human Participants at New York Institute of Technology. All participants provided consent to participate in the study.

Participants

The survey was distributed to two cohorts of occupational therapy students (n = 10) who participated in a journal club during their Level II fieldwork experiences from January 2017 through May 2017.

Instruments

A survey consisting of eight Likert scale questions and one 2-part, open-ended question was developed to measure the study's outcomes. The participants took an average of 10 min to complete the survey.

Procedures

Vocational independence program journal club design. The VIP journal club consisted of 6 to 8 weekly meetings that were approximately 45 min to 1 hr in length. The members of the VIP journal club included all occupational therapy students currently completing fieldwork at the site and the fieldwork educator. The first cohort of students ($n = 4$) participated in eight sessions, and the second cohort of students ($n = 6$) participated in six sessions. Prior to the start of the meetings, the students were provided with the AOTA Journal Club Toolkit and the AOTA Self-Guided Tour for the Journal Club Toolkit to familiarize themselves with the components of a structured journal club. Each student took a turn in assuming the role of journal club facilitator. The facilitator was responsible for finding a current peer-reviewed research article, preferably within 5 years of publication, that was applicable to the facility's stakeholders. The facilitator disseminated the article to all group members prior to the meeting, completed the critical appraisal form from the AOTA Journal Club Toolkit based on the article findings, and led the group in discussion. All members of the group were expected to read the article prior to the meeting and formulate questions for discussion. During the meetings, the students summarized the study and reviewed the critical appraisal form. A discussion focused on the strengths and weaknesses of the study and how the findings related to the students' clients and/or the facility pursued.

Data Analysis

The students completed one online survey via Survey Monkey post participation in the VIP journal club. Eight Likert-scale questions provided ordinal scale data that were analyzed using frequency counts and proportions. One 2-part, open-ended question provided nonnumeric data that were analyzed using thematic analysis and coded by this author. For the thematic analysis, the author coded the data, identified consistent patterns in the responses, noted the prevalence of patterns, reviewed themes, and labeled patterns.

Results

Two groups of occupational therapy students, from different occupational therapy programs, participated in the VIP journal club. The first cohort of students consisted of third-year graduate students ($n = 4$) completing a 10-week, Level II, psychosocial fieldwork placement, and the second cohort of students consisted of first-year graduate students ($n = 6$) completing an 8-week, Level II, psychosocial fieldwork placement. All 10 students were recruited for the study and all agreed to participate. All of the participants completed the study in its entirety.

The Likert questions regarding the students' perceptions of the experience resulted in the following (see Figure 1): All of the students felt that participation in the VIP journal club increased their ability to comprehend research (strongly agreed, $n = 6$; agreed, $n = 4$), increased their ability to critically appraise research (strongly agreed, $n = 4$; agreed, $n = 6$), made them more aware of the importance of using EBP to inform clinical decision-making (strongly agreed, $n = 7$; agreed, $n = 3$), and improved their ability to search the literature for evidence (strongly agreed, $n = 5$; agreed, $n = 5$). The majority of the students felt that participation in the VIP journal club improved their understanding of their clients' needs (strongly agreed, $n = 5$; agreed, $n = 3$; undecided, $n = 2$), improved their self-efficacy using EBP

(strongly agreed, $n = 4$; agreed, $n = 4$; undecided, $n = 2$), helped them to make informed intervention decisions (strongly agreed, $n = 4$; agreed, $n = 4$; undecided, $n = 1$; disagreed, $n = 1$), and served as a means to use an evidence-based approach to problem-solving (strongly agreed, $n = 6$; agreed, $n = 3$; undecided, $n = 0$; disagreed, $n = 1$).

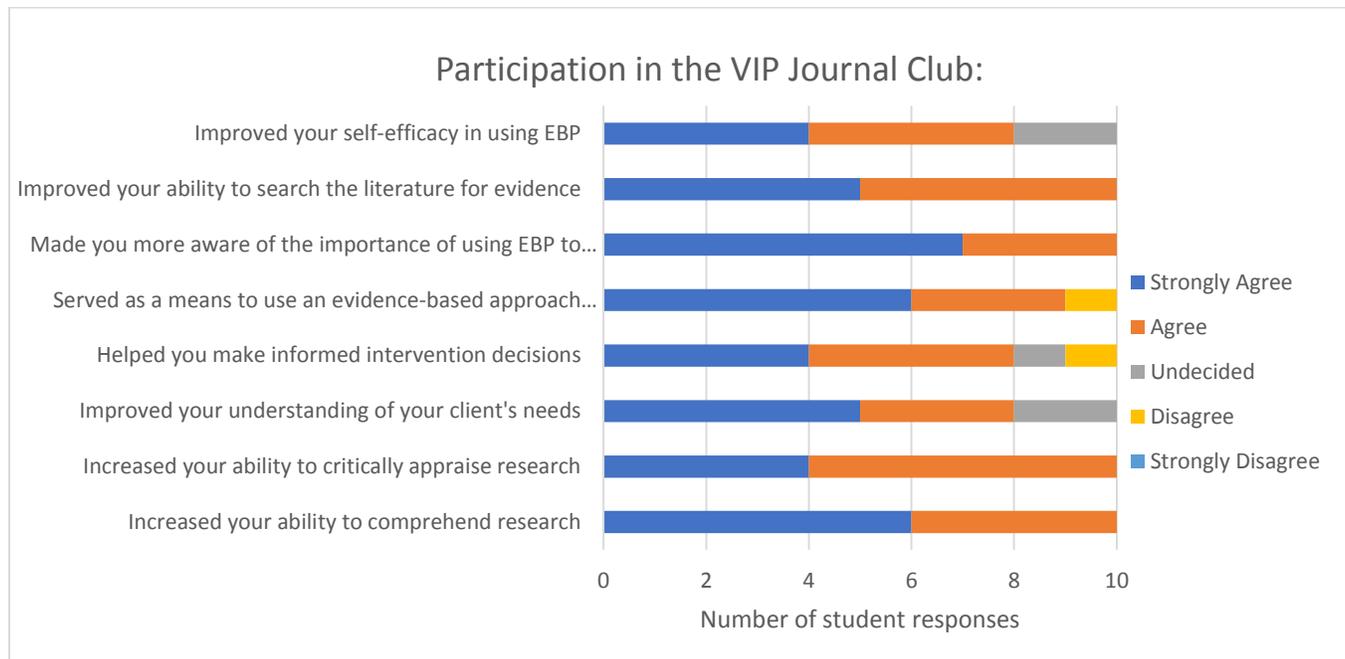


Figure 1. Summary of Likert perception of experience questions.

Three consistent themes emerged following thematic analysis of the first part of the open-ended question, “What was your overall opinion regarding your experience participating in the VIP OT journal club?” These themes were: increased confidence in navigating EBP, valuable experience, and application to practice.

Increased confidence in navigating EBP was noted by seven students. It was coded by statements that included self-perceived improvements in abilities and understanding, such as: (a) “improved my ability to really understand research,” (b) “helped to improve my skills in searching for and understanding evidence-based research,” (c) “improved my self-efficacy in using EBP . . . and helped me improve my researching and critical appraisal skills,” (d) “I believe that this experience prepared me for our research class in the fall semester,” (e) “helped me to understand research articles and how to search for creditable articles,” (f) “helped give meaning to the research I was reviewing,” and (g) “helped me learn how to navigate EBP.”

Valuable experience was noted by six students and was coded by statements that reflected an overall positive experience in participation, such as: (a) “The VIP journal club was an excellent opportunity,” (b) “I enjoyed participating in journal club,” (c) “Having a journal club to participate in during my Level II fieldwork placement at VIP was an enriching experience . . . it was a very valuable part of this fieldwork placement,” (d) “I enjoyed journal club at VIP,” (e) “The VIP journal club was extremely beneficial,” and (f) “Journal club was a great hands-on approach.”

Three students noted application to practice, which was coded by statements that directly discussed application, such as: (a) “learn how to properly research information and apply it to evidence-

based practice,” (b) “the articles that my colleagues and I researched and discussed directly pertained to the population we were treating and thus improved our use of evidence-based practice,” and (c) “Due to being in a fieldwork setting, as opposed to just performing research for a class grade, I was able to clearly see the purpose behind it in order to provide my clients with the best interventions/treatments as possible . . . the clinical discussion we had each week always influenced how I intervened with my clients at their worksite and in their dorms.”

In addition, two specific components of the VIP journal club, completion of the critical appraisal form and the discussion session, were identified as being a beneficial part of the journal club.

Completion of the critical appraisal form was identified by three students as valuable. Their comments included: (a) “I found that doing the critical appraisal forms were helpful in that they allowed us to really dissect the article and understand all aspects,” (b) “I enjoyed dissecting my article,” and (c) “I found that filling out the critical appraisal forms for each article helped to dissect the information and improve understanding of what each article was about. It also provided us with talking points and helped to organize the discussions.”

The discussion sessions were identified by four students as beneficial, with comments such as: (a) “It was very informative and engaging to have discussions with colleagues,” (b) “It was informative and engaging to discuss EBP with colleagues,” (c) “I liked how each week a different student led the discussion,” and (d) “It was great that [the instructor] was involved in the club every week to help piece our clinical understanding of the article together.”

The second part of the open-ended question, “How can the VIP Journal Club be improved?” resulted in two consistent themes: selection of articles and no improvements needed.

The selection of the articles was noted by three students as an area that could be improved, with comments such as: (a) “have the articles pre-approved at the beginning of the fieldwork so that the participants know that the articles meet the criteria,” (b) “articles can be chosen at the beginning of FW in order to allow us more time to read each one and thoroughly understand each one to increase participation from everyone during the discussions . . . it would be beneficial if the articles were approved at the beginning of the FW so that members choose articles that meet the criteria,” and (c) “there was a broad area of research articles I could have chosen, in the future it might help if we pick a certain area of occupation to focus on.”

Three students noted that there were no improvements needed: (a) “I personally don’t think anything needs to change,” (b) “I do not have any recommendations for improvement,” (c) and “I cannot think of any ways journal club can be improved because I think the structuring of it is great.”

Three students did not respond to this part of the question and one student suggested having more people attend the journal club so that different perspectives could be shared.

Discussion

The purpose of this descriptive study was to describe the impact of using a professional journal club during a Level II, psychosocial fieldwork placement in influencing occupational therapy students’ perceptions regarding their confidence and abilities in using evidence in practice. Overall, the VIP journal club was successful and well-received by the participants. All of the students reported perceived improvements in their ability to use component skills associated with EBP, e.g., comprehension of research studies, appraisal of research studies, ability to search the literature for evidence, and understanding the importance of EBP. Although the majority of the students reported improvements, some of the students were either uncertain or disagreed that participation in the VIP journal club was

effective in increasing their ability to synthesize what they learned to inform practice, e.g., using evidence to understand their client's needs, using evidence to make intervention decisions, or using evidence to problem-solve. Although each session included a discussion regarding how the study could be used with the students' clients, formalized follow-up conversations regarding how the studies influenced practice decisions did not occur. As a result, the VIP journal club, in its current format, did not carry the students through the entire process of EBP.

One of the suggestions for improvement was to have each article approved by the fieldwork educator prior to the journal club session to ensure that it was applicable to the clients and/or facility being served. Although the guidelines for selection of the articles was minimal (e.g., a research study published in a peer-reviewed journal within 5 years of publication and that had some relevance to the stakeholders of the facility), a few students struggled in this area. This challenge may have been because of the broad scope of possibilities and the students' lack of experience and confidence in searching the literature; however, this is a skill that they must master. To address this issue, the most recent group of students (not included in this study) were required to discuss briefly the potential applicability of a study with each other prior to its formal selection for the journal club. This appeared to help them organize their thoughts about the relevance of the research prior to presenting it to the group. This modification appears to be a positive addition.

Limitations

There were several limitations to this study. The sample was small ($n = 10$), and the two groups of students differed in their level of education. The first group ($n = 6$) were first-year graduate students who had not yet taken any research courses, and the second group ($n = 4$) were third-year graduate students who had completed two research courses prior to participating in the VIP journal club. The groups also differed in the number of journal club sessions they attended. The first group of students participated in six sessions during their 8-week fieldwork placement and the second group participated in eight sessions during their 10-week fieldwork placement. The two groups were not differentiated in the survey results. As a result, it is unclear if the difference in their levels of education or the number of sessions in which they participated had any effect on their perceptions regarding participation in the VIP journal club.

In addition, the principle investigator also served as the fieldwork educator and was an active member of the VIP journal club. Although the survey was anonymous, this relationship may have altered the students' responses.

Furthermore, the results of this study consist of one-time, post participation, reflective comments from the students. As a result, measurable change in their attitudes, perceptions, or use of EBP cannot be examined. The study also only looked at use of a journal club with Level II fieldwork students in one practice area (i.e., psychosocial). As a result, its applicability to other practice areas is unclear.

While the survey contained two Likert-style questions regarding use of evidence in practice (Did participation in the VIP journal club help you make informed intervention decisions? and Did participation serve as a means to use an EBP approach to problem-solving during FW?), it did not collect examples from the students on how they used practice concepts from the articles they reviewed directly with clients. The addition of this information could have demonstrated active EBP.

Future Research

There have been many studies conducted on the effectiveness of journal clubs; however, to this author's knowledge this was the first study using journal clubs with occupational therapy students

during Level II fieldwork at the fieldwork site. Recommendations for future research in this area include using a pre-posttest research design with a larger sample, using a valid and reliable instrument to measure EBP knowledge and skills, such as the Adapted Fresno Test of Competence in EBP, conducting a study in which the students are at similar academic levels and have similar research experience, and collecting data on specific examples on how practice decisions were influenced based on the research studies reviewed.

Implications for Practice

This study offers one learning activity that can be used during fieldwork to facilitate EBP skills for occupational therapy students. The VIP journal club was easy to implement, did not require a lot of time, and was well-received by the students.

It is imperative that occupational therapy students are exposed to EBP during fieldwork so that they can become evidence-based practitioners. However, exposure is not enough. EBP needs to be visible and hands-on. Students need the opportunity to become self-directed, independent learners. They need to experience EBP in real life situations, and they need to be able to apply their knowledge in real time to real clients. Fieldwork educators must make this a priority for their students; however, they continue to face many barriers. Fieldwork educators need practical, evidence-based learning activities to offer their students.

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References

- American Occupational Therapy Association. (n.d.). Evidence-based practice & research. Retrieved from <https://www.aota.org/Practice/Researchers.aspx>
- American Occupational Therapy Association. (2007). AOTA's centennial vision and executive summary. *American Journal of Occupational Therapy*, 61(6), 613-614. <http://dx.doi.org/DOI:10.5014/ajot.61.6.613>
- American Occupational Therapy Association. (2015). Occupational therapy code of ethics (2015). *American Journal of Occupational Therapy*, 69(Suppl. 3), 1-8. <http://dx.doi.org/10.5014/ajot.2015.69S03>
- American Occupational Therapy Association. (2017). Vision 2025. *American Journal of Occupational Therapy*, 71(3), 7103420010p1. <http://dx.doi.org/doi:10.5014/ajot.2017.713002>
- Commission on Education. (2013). COE guidelines for an occupational therapy fieldwork experience – Level II. Retrieved from <https://www.aota.org/~media/Corporate/Files/EducationCareers/Educators/Fieldwork/LevelII/COE%20Guidelines%20for%20an%20Occupational%20Therapy%20Fieldwork%20Experience%20--%20Level%20II--Final.pdf>
- Crabtree, Jeffrey L., Justiss, M., & Swinehart, S. (2012). Occupational therapy master-level students' evidence-based practice knowledge and skills before and after fieldwork. *Occupational Therapy in Health Care*, 26(2-3), 138-149. <http://doi.org/DOI:10.3109/07380577.2012.694584>
- DeCleene Huber, K. E., Nichols, A., Bowman, K., Hershberger, J., Marquis, J., Murphy, T., ... Sanders, C. (2015). The correlation between confidence and knowledge of evidence-based practice among occupational therapy students. *The Open Journal of Occupational Therapy*, 3(1), Article 5. <https://doi.org/10.15453/2168-6408.1142>
- Deenadayalan, Y., Grimmer-Somers, K., Prior, M., & Kumar, S. (2008). How to run an effective journal club: A systematic review. *Journal of Evaluation in Clinical Practice*, 14(5), 898-911. Retrieved from http://hygiene-school.kums.ac.ir/kums_content/media/image/2014/06/41524_orig.pdf
- Dysart, A. M., & Tomlin, G. S. (2002). Factors related to evidence-based practice among U.S. occupational therapy clinicians. *American Journal of Occupational Therapy*, 56(3), 275-284. <http://doi.org/DOI:10.5014/ajot.56.3.275>
- Knowles, M. S. (1970). *The modern practice of adult education: From pedagogy to andragogy*. New York: New York Association Press.
- Melnyk, B. M., Gallagher-Ford, L., Long, L. E., & Fineout-Overholt, E. (2014). The establishment

of evidence-based practice competencies for practicing registered nurses and advanced practice nurses in real-world clinical settings: Proficiencies to improve healthcare quality, reliability, patient outcomes, and costs. *Worldviews on Evidence-Based Nursing*, 11(1), 5-15. <http://doi.org/10.1111/wvn.12021>

- Salls, J., Dolhi, C., Silverman, L., & Hansen, M. (2009). The use of evidence-based practice by occupational therapists. *Occupational Therapy in Health Care*, 23(2), 134-145. <http://doi.org/10.1080/07380570902773305>
- Stern, P. (2005). A holistic approach to teaching evidence-based practice. *American Journal of Occupational Therapy*, 59(2), 157-164. <http://doi.org/10.5014/ajot.59.2.157>
- Stern, P. (2008). Using journal clubs to promote skills for evidence-based practice. *Occupational Therapy In Health Care*, 22(4), 36-53. <http://dx.doi.org/10.1080/07380570802244381>
- Stronge, M., & Cahill, M. (2012). Self-reported knowledge, attitudes and behavior towards evidence-based practice of occupational therapy students in Ireland. *Occupational Therapy International*, 19(1), 7-16. <http://doi.org/10.1002/oti.328>
- Stube, J. E., & Jedlicka, J. S. (2007). The acquisition and integration of evidence-based practice concepts by occupational therapy students. *American Journal of Occupational Therapy*, 61(1), 53-61. <http://doi.org/10.5014/ajot.61.1.53>
- Sweetland, J., & Craik, C. (2001). The use of evidence-based practice by occupational therapists who treat adult stroke patients. *British Journal of Occupational Therapy*, 64(5), 256-260. <https://doi.org/10.1177/030802260106400509>
- Thomas, A., & Law, M. (2013). Research utilization and evidence-based practice in occupational therapy: A scoping study. *American Journal of Occupational Therapy*, 67(4), e55-e65. <http://dx.doi.org/10.5014/ajot.2013.006395>