Changes in Knowledge, Skills, and Confidence in Fieldwork Educators After an Evidence-Based Practice Short Course

Alison Nichols
University of Indianapolis, anichols@uindy.edu

Follow this and additional works at: https://scholarworks.wmich.edu/ojot
Part of the Occupational Therapy Commons

Recommended Citation

This document has been accepted for inclusion in The Open Journal of Occupational Therapy by the editors. Free, open access is provided by ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.
Changes in Knowledge, Skills, and Confidence in Fieldwork Educators After an Evidence-Based Practice Short Course

Abstract

Background: It is critical that fieldwork educators demonstrate effective use of evidence for clinical decision making so that occupational therapy (OT) students learn to apply concepts from the classroom to everyday practice.

Method: OT fieldwork educators completed a 3-hour short course designed to provide instruction on the first three steps of the evidence-based practice (EBP) process: developing a clinical question, searching the literature, and assessing the evidence. The participants completed a pretest on site and posttest 3 weeks after the course to assess their knowledge, skills, and confidence when using EBP. The Adapted Fresno Test was used to measure knowledge and skills, and the Evidence-Based Practice Confidence Scale measured confidence.

Results: Fourteen OT practitioners completed the short course and pretest; nine returned the posttest, and six answered all of the questions. These six participants improved their knowledge and skills (3.75%) and their confidence (17.99%) from pretest to posttest.

Conclusion: Fieldwork educators showed improvements in their knowledge, skills, and confidence when using EBP after a 3-hour introductory course. This could lead to improved modeling of appropriate EBP behaviors for OT students, promoting the translation of knowledge from classroom to clinic.

Keywords
Fieldwork educators, evidence-based practice

Cover Page Footnote
Thank you to Dr. Tammy Bickmore and Dr. Sally Wasmuth for their assistance in this research.

Credentials Display
Alison M. Nichols, OTR, OTD

Copyright transfer agreements are not obtained by The Open Journal of Occupational Therapy (OJOT). Reprint permission for this Topics in Education should be obtained from the corresponding author(s). Click here to view our open access statement regarding user rights and distribution of this Topics in Education.
DOI: 10.15453/2168-6408.1204
**Literature Review**

Evidence-based medicine (EBM) has been endorsed for more than 300 years, but the term evidence-based practice only began to appear in occupational therapy literature in the mid-to-late 1990s (Egan, Dubouloz, Von Zweck, & Vallerand, 1998; Law & Baum, 1998). Evidence-based practice (EBP) involves the use of research evidence combined with clinical reasoning and experience to make decisions about which interventions would be the most effective for a specific client (Law & Baum, 1998). Most EBM and EBP courses focus on five steps in the EBP process. Clinicians using EBP should: (a) develop a clinical question to narrow the focus for searching the evidence, (b) search and retrieve available evidence, (c) critically appraise the evidence to determine which is best, (d) integrate the evidence into the treatment plan for the client, and (e) evaluate the outcome of the evidence-based intervention and reflect on what could be changed (Straus, Glasziou, Richardson, & Haynes, 2011).

Occupational therapy (OT) programs accredited by the Accreditation Council for Occupational Therapy Education (ACOTE®) currently include EBP in their Accreditation Standards for a Master’s-Degree-Level Educational Program for the Occupational Therapist and for an Associate-Degree-Level Educational Program for the Occupational Therapy Assistant (OTA; ACOTE, 2012). ACOTE first included information related to evidence-based interventions in the standards published in 1999 (ACOTE, 1999). OT and OTA practitioners who graduated prior to 1999, however, may not have received formal education on developing a clinical question, searching for evidence, or analyzing the literature.

The most current version of the Accreditation Standards for Educational Programs for OT and OTA students lists a variety of standards related to fieldwork, as well as the use of evidence. During the didactic portion of coursework, OT students need to be able to select appropriate assessment tools, apply evaluations, and develop intervention plans that are all evidence-based (ACOTE, 2012). In relation to fieldwork, there are standards that require Level I fieldwork to provide students with opportunities to carry out professional responsibilities and experiences that enhance didactic coursework (ACOTE, 2012). Level II fieldwork should help OT students demonstrate clinical reasoning, develop competence in the responsibilities of their future careers, and appropriately role model OT practice (ACOTE, 2012).

The American Occupational Therapy Association (AOTA) reinforces the need for incorporating evidence into practice. The organization developed a Centennial Vision for 2017 to provide a map for the future of OT when the profession turns 100 years old. The Centennial Vision states, “We envision that occupational therapy is a powerful, widely recognized, science-driven, and evidence-based profession with a globally connected and diverse workforce meeting society's occupational needs” (AOTA, 2006, p. 1). It is critical that fieldwork educators demonstrate effective use of evidence for clinical decision making so that OT students learn to apply concepts from the classroom to everyday practice. OT
students are expected to establish treatment plans from the results of their evaluations that integrate EBP, as well as use evidence to inform their intervention choices.

Stronge and Cahill (2012) surveyed OT students in Ireland who were in the last year of their OT program (n = 111) and found that 40% of the students did not observe EBP during fieldwork. Twenty percent of these students reported that they did not view themselves as evidence-based clinicians (Stronge & Cahill, 2012). While there are not currently any published studies in the United States with similar methodologies, there has been research regarding the preparation of OT students for using EBP during fieldwork. Evenson (2013) found that OT students reported increased confidence in their ability to use research to analyze a case study prior to completing Level II fieldwork. In addition, Crabtree, Justiss, and Swinehart (2012) reported that OT students completed a semester-long course on EBP prior to Level II fieldwork. After the completion of the fieldwork experience, the students demonstrated a decline in performance of EBP knowledge and skills when compared to scores at the end of the EBP course (Crabtree et al., 2012). Tying together the academic and clinical settings, Stube and Jedlicka (2007) used focus groups to learn more about OT students’ perceptions of EBP in the classroom and during fieldwork. The students indicated that having positive role models for using EBP was important, and that their relationship with their fieldwork educator helped them learn to apply the principles of EBP (Stube & Jedlicka, 2007). There is a current lack of evidence available to determine if students are observing EBP clinically in the United States. While there are differences in health care systems and educational background, if the results from Stronge and Cahill’s study of Irish OT students are indicative of practice in the United States, then students may not be observing appropriate role modeling of EBP behaviors.

While Stronge and Cahill (2012) and Stube and Jedlicka (2007) examined the relationship of the student and fieldwork educator from the student’s perspective, Thomas and Law (2014) examined the OT practitioner’s perspective. They surveyed 1,800 Canadian occupational therapists working with children or older adults to determine supports for EBP and attitudes toward these supports. Of the 368 participants (n = 368), a large majority agreed or strongly agreed that supervising a student increased their own knowledge (80%), helped them to be more evidence-based (71%), and was an important part of clinical practice (89%) (Thomas & Law, 2014). Graham, Robertson, and Anderson (2013), who surveyed 1,587 New Zealand OT practitioners, also reported these positive attitudes. Greater than 80% of respondents felt that EBP was useful in everyday practice and overall OT practice, as well as improved client-centered care. However, 67% of these OT practitioners used research evidence to support their clinical decisions less than half of the time. Reported common barriers to implementing EBP by these occupational therapists mirrored findings in other allied health professions. Barriers were focused on the process of finding appropriate evidence and implementing it, including difficulty defining a clinical question; limited searching and appraisal skills; lack of
confidence, training, and familiarity with search strategies; difficulties in using databases, difficulty understanding research terminology, statistics, and critical appraisal skills; a perceived lack of evidence to support the use of specific interventions; and uncertainty if the evidence was applicable to clients and practice (Copley & Allen, 2009; Crabtree et al., 2012; Fruth et al., 2010; Graham et al., 2013; Hankemeier & Van Lunen, 2011; Stronge & Cahill, 2012). In addition, there are environmental barriers, such as lack of time or money to pursue EBP, large caseloads, poor organizational support, limited access to published information, and poor patient compliance (Crabtree et al., 2012; Fruth et al., 2010; Stronge & Cahill, 2012). This combination of potential barriers, despite having positive attitudes and believing that EBP is important, formed the foundation for this research. A 3-hour short course on the initial three steps of the EBP process (Strauss et al., 2011) was created and offered to fieldwork educators. The purpose of this research was to answer the following research questions: Do OT fieldwork educators demonstrate improvements in EBP knowledge and skills after an introductory short course in EBP? Do fieldwork educators demonstrate improvements in self-confidence related to using EBP after an introductory short course in EBP?

Methods

Participants

Participants were recruited from a list of 185 active fieldwork sites at a private urban university. All of the individuals on the list were part of an organization in the same state as the university and had accepted Master of Occupational Therapy (MOT) fieldwork students from the university. These individuals had the option to forward the e-mail on to any co-workers or employees who were occupational therapists. All functional e-mail addresses received a description of the short course and two options for participation dates. The participants were allowed to choose the date that best worked for their schedule to allow a greater number of individuals to attend the short course. The participants received a reminder e-mail 2 weeks later. Initially, nine occupational therapists volunteered to participate in Cohort A, and 10 volunteered to participate in Cohort B. All of the OT practitioners in Cohort A (n = 9) and five of the OT practitioners in Cohort B attended and completed the short course. The university’s Institutional Review Board approved this study, and all of the participants provided consent via an online Qualtrics survey prior to completing the pretest and the short course.

Instruments

Salbach and Jaglal (2011) created the Evidence-Based Practice Confidence Scale (EPIC) to evaluate health care providers’ beliefs in their abilities to implement EBP. The authors tested the EPIC with physical therapists and found that it demonstrated a test-retest reliability with an overall intraclass correlation coefficient (ICC) of 0.89 (Salbach, Jaglal, & Williams, 2013) with individual item ICC scores ranging from 0.63 to 0.91 with a 95% confidence interval (CI), which would be sufficient for monitoring changes in confidence over time. Internal consistency measured by Cronbach’s alpha was excellent at 0.89. Brangan, Quinn, and Spirtos (2015) used the EPIC with Irish
occupational therapists and found statistically significant improvements in confidence after a course in EBP. The 11 EPIC items are related to confidence in completing the steps of the EBP process, as well as more specific questions related to critically appraising statistics found in research.

The Fresno Test of competence in EBM is an objective measure of skills and knowledge that is used with medical students (Ramos, Schafer, & Tracz, 2003). McCluskey and Lovarini (2005) developed the Adapted Fresno Test (AFT), which includes six clinical scenarios more relevant to the field of OT, with two scenarios each for pretest, posttest, and follow-up. In addition, some of the more advanced statistical questions were removed from the original Fresno Test. Version 1 of the AFT was used as the pretest, and Version 2 of the AFT was used as the posttest in this study. The AFT demonstrated excellent inter-rater reliability on total AFT scores (Version 1: ICC 0.96 and Version 2: ICC 0.91) with a 95% CI (McCluskey & Bishop, 2009). The tool also demonstrates acceptable internal consistency with a Cronbach’s alpha of 0.74. The AFT is also responsive to change, with an average change of 20.6 points out of a 156-point scale. Novice learners of EBP demonstrated the greatest amount of change (26.8 points) from baseline, which is the targeted population of the AFT.

The EPIC scale, AFT, and demographic questionnaire were administered via a Qualtrics online survey. The pretest took place on site prior to the start of the short course, and the posttest was e-mailed to participants 3 weeks after the short course for completion on their own time. The demographic questions were not included in the posttest.

Procedures

The project took place over 5-weeks, and the participants were divided into two cohorts. Cohort A was in contact with the author during weeks 1, 3, and 4, with the on-site course taking place during week 1. Cohort B was in contact with the author during weeks 2, 4, and 5, with the on-site course taking place during week 2. The time between the on-site course and next contact was intended to allow practitioners to have time to search for evidence.

At the beginning of the 3-hour short course, the participants completed the pretest measures via a Qualtrics online survey. These consisted of the EPIC scale, AFT, and demographic questions. Through the remainder of the course, the participants focused on gaining familiarity with the beginning stages of EBP as described by Straus et al. (2011). The participants were provided with an example of a sample PICO/PIO question, and then developed their own clinical question. They then shared the question in small groups, and finally with the larger group. The next step of the EBP process and short course focused on the most effective ways to search the literature. The participants practiced using free, available resources to find appropriate evidence to answer their clinical questions. Some chose to work in pairs to search, while others worked individually. The participants were assisted in improving their searches by prompts for search terms and suggestions on ways to expand or limit results. After locating a resource, the participants shared their search strategies, as well as any
successes or challenges they faced. The final portion of the course, focused on a discussion regarding the differences between quantitative and qualitative research, as well as the different levels of quantitative evidence as described by Law and MacDermid (2008). The participants were provided with a template that could be used to analyze research and challenged to implement EBP into their clinical practice over the next week.

After 1 week, the participants received an e-mail containing additional information related to critical appraisal of evidence and were invited to join an online message board where they could ask questions to improve their understanding of the material. During the next 2 weeks, the author facilitated discussion related to the final steps of EBP, including the use of evidence in practice. This encouraged the participants to complete the final two steps of the EBP process, specifically related to how they applied EBP to their clinical setting and assess its efficacy. After 3 weeks had passed from the date of the short course, the participants received an e-mail link to complete the posttest, which included the EPIC scale and the AFT.

**Data Analysis**

The quantitative data obtained from the pre and posttests were analyzed using Qualtrics Research Suite and Microsoft Excel to determine average scores and comparisons between the outcome measures and pre and posttests and to determine statistical significance. For qualitative data on the message boards, the author used content analysis to code the responses. Both the author and a blinded expert in qualitative data analysis coded the responses. These researchers compared responses and established coding and sub-coding of the data. The codes identified common themes exhibited throughout the written responses. The data set was minimal, with only three respondents and a total of four responses; it is likely not representative of the larger population. Each qualitative response was coded into two categories matching these themes: limitations of using EBP (3/3 respondents) and feeling encouraged to apply EBP in the workplace (3/3 respondents), with a sub-code of using journal clubs (2/3 respondents).

**Results**

**Demographics**

Two cohorts of occupational therapists participated in the short course, with nine participants in Cohort A and five participants in Cohort B. Originally, 10 occupational therapists indicated interest in participating in Cohort B, but only five attended the course. Information about the participants is reported as a whole to protect the identities of the participants. Twelve participants were female, and two were male. Of the 14 participants, 36% worked in a skilled nursing facility or long-term care, representing the largest practice area. Other participants worked in settings related to school systems, outpatient pediatrics, outpatient adults, inpatient adults, rehabilitation hospitals, and home health for pediatrics. Seventy-one percent of the participants had been employed as an occupational therapist for 10 years or less. All of the participants had at least a Master’s degree. Only one participant had supervised more than two Level II fieldwork students from the University over the past 3 years. The majority of these
participants had graduated in the last 10 years or less, and therefore, they should have received formal education on the use of EBP. However, the participants only averaged a 28.3% when their knowledge was measured during the pretest.

**Pretest**

Quantitative data were gathered from the AFT, the EPIC, and the demographic questions that the participants answered in the pretest. The pretest was completed using Qualtrics Research Suite, and data analysis occurred through Qualtrics and Microsoft Excel to determine average scores and comparisons between tools and testing. All of the participants agreed that they understood the concept of EBP; five reported *neither agree nor disagree* or *disagree* to understanding how to incorporate EBP into their clinical setting. While 71% were comfortable discussing EBP with Level II fieldwork students, only 50% felt comfortable demonstrating the use of EBP to students. All of the participants agreed that EBP is an important part of the OT process.

Prior to answering questions related to the knowledge and skills of EBP, the OT practitioners (n = 14) rated their confidence in using EBP on the EPIC, using a range of scores between 0-100 percent. On average, the participants had a 64.2% confidence level, with a range from 37.3-93.6%. The participants were most confident in their abilities to identify a gap in their knowledge related to a patient or client situation (82.1%), and in asking a patient or client about his/her needs, values, and treatment preferences (89.3%). The participants were least confident in their ability to interpret study results obtained using statistical procedures (36.4%) and statistical tests (42.9%).

The responses to the AFT (n = 14) were individually scored. The average score for the AFT pretest was 44.1 out of a possible 156 points, with scores ranging from 20-82. The average overall percent was 28.3%, and the points converted to a percentage score range between 12.8-52.5%. The participants scored highest on questions related to developing a clinical question (average of 65.5%), specifically at developing a question that included appropriate descriptors of the population and the intervention. The majority of the participants did not provide a strong rationale for using a specific search strategy. The three primary steps of the short course were developing a clinical question, searching the literature, and appraising the evidence found. Specific questions from the AFT and the EPIC addressed these steps, and Figure 1 illustrates the relationship between the participants’ overall average knowledge and skills related to these three concepts, as well as their self-reported confidence. The participants demonstrated good knowledge and skills in formulating a clinical question, but they were not confident in their abilities. In addition, the participants reported average confidence in searching the literature, which matched their knowledge and skills in this activity. Finally, the participants reported high confidence in their ability to critically appraise literature compared to their actual performance.
**Figure 1.** Pretest relationship between knowledge, skills, and confidence in initial steps of EBP process.

Figure 2 illustrates the relationship between each participant’s average pretest confidence and average score of knowledge and skills as measured by the EPIC and AFT respectively. All of the participants rated their confidence at a higher percentage than their achieved score of knowledge and skills.

**Figure 2.** Relationship between pretest knowledge, skills, and confidence of all participants.
Posttest

All of the participants received a link to the posttest 3 weeks after their completion of the short course, as well as a reminder e-mail 1 week later. Only nine participants (64.2%) returned the posttest survey, all completing the demographic questions and the EPIC scale. Only six completed the survey in its entirety. All nine respondents agreed or strongly agreed that they understood the concept of EBP and how to incorporate it into practice. They also felt comfortable discussing and demonstrating use of EBP to fieldwork students, and they all felt EBP was an important part of the OT process.

The nine respondents ranked their confidence on the EPIC an average of 78.9%. The respondents ranked themselves most confident in their ability to identify a gap in their knowledge related to a client situation (93.3%), continually evaluate the effect of their actions on the client’s outcomes (92.2%), and decide on an appropriate course of action based on integrating research evidence (91.1%). The respondents were least confident in their ability to interpret study results using statistical tests (57.8%) and statistical procedures (53.3%).

The average AFT score of the six completed posttests for assessing knowledge and skills was 48.6 out of a possible 156 points. Scores ranged from 25-68 points. The average percentile score from the AFT was 31.2%, with scores ranging from 16.03% to 43.59%. The respondents scored highest on developing a clinical question that included population and intervention components, as well as describing an effective search strategy. The respondents scored lowest on describing a rationale for using a specific search strategy and determining the magnitude and significance of the study’s findings. Figure 3 illustrates the relationship between the respondents’ overall average knowledge and skills related to the concepts of developing a clinical question, searching the literature, and critically appraising the evidence, as well as their self-reported confidence.

![Figure 3](https://scholarworks.wmich.edu/ojot/vol5/iss1/13)

**Figure 3.** Posttest relationship between knowledge, skills, and confidence in initial steps of EBP process.
Figure 4 illustrates the relationship between each respondent’s average posttest confidence and average score of knowledge and skills, as measured by the EPIC and AFT respectively. This figure does not include the confidence scores of the three respondents who left the AFT questions blank. All of the participants rated their confidence at a higher percentage than their average overall achieved score of knowledge and skills, similar to the pretest.

![Figure 4](image.png)

*Figure 4. Relationship between posttest knowledge, skills, and confidence of survey respondents.*

The six participants who completed the AFT at pretest and posttest improved their overall knowledge and skills by 3.75%. This was not statistically significant (.30) with p < .05. The nine participants who completed the EPIC scale at pretest and posttest improved their average overall confidence by 17.99%. This result is statistically significant (.00044) with p < .05.

**Qualitative Outcomes**

The participants received a link to a private message board 1 week after their on-site short course. The message board contained different threads designed to elicit information and discussion. The first thread was a place for participants to ask questions related to the additional statistical information they received. The participants asked no questions in this thread. A separate thread was aimed at gathering information related to the fourth and fifth steps of EBP and applying and assessing the use of evidence.

Only three participants opted to take part in the message boards, with four posts. The author and an expert in qualitative research analysis who was blinded to the remainder of the study used content analysis to code the responses. The qualitative responses were coded into two primary codes. The first was limitations of using EBP (3/3 respondents). One participant stated, “My main limiting factor was the lack of time and my hospital’s requirements for meeting productivity.”
Another participant reported that she was required to log her daily activities for the week to track productivity, leaving her no time to search for evidence. The second code was feeling encouraged to apply EBP in the workplace (3/3 respondents). In this second code, the respondents were sub-coded by 2/3 respondents indicating use of journal clubs. One participant wrote, “My team has discussed more ways to implement EBP and research into our practice and general continuing education with journal clubs.” The second participant commented, “I’m really excited to share what I’ve learned through this workshop with my OT colleagues at the next journal club.” The final message board participant expressed a desire to provide a good example of EBP to an upcoming Level II fieldwork student.

**Discussion**

This study aimed to determine if fieldwork educators demonstrated improvements in EBP knowledge, skills, and confidence after an introductory short course. When comparing the pretest scores to the posttest scores from the AFT and the EPIC scale, the participants who completed both pretest and posttest (n = 6) improved their overall knowledge and skills by 3.75% and improved their average overall confidence (n = 9) by 17.99%. These results are similar to what was found in the literature. McCluskey and Lovarini (2005) provided OT practitioners with a 2-day workshop and additional support for 8 months following the workshop. The participants improved their knowledge and skills from pretest to posttest by 13.5% (McCluskey & Lovarini, 2005). These participants completed the posttest immediately following the EBP workshop, unlike the participants in the current study, who completed the posttest approximately three weeks after the short course. Medical residents demonstrated improvements in a variety of areas related to EBP after a training course consisting of 4 half-days, including formulating a question, determining sources of information, searching literature, and choosing a quality study design (Argimon-Pallás, Flores-Mateo, Jiménez-Villa, & Pujol-Ribera, 2011). The participants in this study demonstrated similar or improved knowledge and skills on all AFT questions but one, which was related to assessing clinical and statistical significance. On this item, the participants demonstrated a 4.17% decrease in score. This may have been due to the smaller number of participants completing the posttest than the pretest. The largest improvement was in identifying the best type of study design, with an average of a 22.9% increase in score on this item.

Just as the participants in this study demonstrated improvements in confidence after the short course, allied health students and medical students demonstrated improvements in confidence after completing EBP workshops (Bennett, Hoffmann, & Arkins, 2011; Ilic, Tepper, & Misso, 2012). The medical students demonstrated improvements in confidence in specific areas, including creating clinical questions, being aware of resources, and identifying gaps in their professional practice (Ilic et al., 2012). The participants in this study demonstrated improvements in confidence as measured by the EPIC on all but one question, which asked about confidence in the ability to ask a
client about his or her needs, values, and treatment preferences. On this item, the participants demonstrated a 3.7% decrease in score. This area was not specifically addressed during the EBP short course and the decrease in score may have been due to the smaller number of participants completing the posttest than the pretest. The greatest improvement in confidence was in the ability to conduct a literature search, with an average increase of 26.9%.

While the improvements in knowledge, skills, and confidence were small, they are critical for fieldwork educators’ ability to model EBP use for students. As the number of OT and OTA programs continue to grow, there is a continued need for additional fieldwork educators who demonstrate the confidence and knowledge in using EBP to OT and OTA students. This EBP short course demonstrates the need for continuing education opportunities for fieldwork educators to improve knowledge, skills, and confidence in using EBP.

Limitations

This study used a convenience sample of fieldwork educators from one private urban university. Despite reaching out to at least 185 fieldwork educators, only 14 completed the short course. The small number of participants could have resulted in a Type II statistical error in which there was a significant change in scores, but there may not have been enough power to find that difference.

While this course was offered to both OTs and OTAs, the 14 participants were all OTs. This may have been because the pool of fieldwork educators came from a MOT program, where OTs are required to supervise Level II fieldwork students. In addition, only 29% of those who completed the pretest had greater than 10 years of clinical experience and were less likely to have received an academic education in the use of EBP. The remaining participants may have had greater confidence or knowledge due to their academic training. Only one of the participants was an experienced fieldwork educator, having supervised more than two Level II fieldwork students in the past 3 years. The survey did not question the participants on their supervision of Level I fieldwork students, which may have provided greater detail on the experience as a fieldwork educator. In addition, as this course was offered for continuing education units, the author allowed any OT or OTA who received this e-mail to participate, whether they had taken a fieldwork student or not.

Another limitation of this study was the length and style of questions included in the AFT. This portion of the survey took 20-30 min to complete and included long, open-ended questions. The participants may not have been willing to complete this survey again during posttest, which may have affected the return rate and ultimately the overall results of the posttest. In addition, the cohorts consisted of different numbers of participants, which led to variance in discussions among the participants and with the facilitator. It is possible that the cohorts received different delivery of the content that may have affected their understanding of the material.

Several of the participants did not complete the posttest, nor did they actively engage in the online message boards. This may have been due to
barriers to implementation of EBP noted in the literature review, including a lack of time or money to pursue EBP, large caseloads, or poor organizational support (Crabtree et al., 2012; Fruth et al., 2010; Stronge & Cahill, 2012). The original purpose of the message boards was to allow the participants to ask questions to improve their understanding of the material and for the author to facilitate discussion related to the final steps of EBP. Due to a lack of participant use of the message boards, the author was unable to gather sufficient qualitative data related to the participants’ use of clinical reasoning and experience in conjunction with searching literature to develop a plan for their clients.

**Recommendations for Future Practice**

Due to the lack of time that OT practitioners have to engage in EBP activities, this short course or ones similar to it could be broken into smaller 1-hour segments and provided at workplaces over lunch hours or other scheduled times. This would allow occupational therapists to be familiar with one another and likely have similar evidence needs, leading to opportunities for brainstorming sessions for how to use evidence in the workplace.

In addition, OT students receive education during their academic preparation on searching for evidence and analyzing it. The students also have access to a variety of resources through university libraries. Fieldwork educators and OT students need to collaborate to enhance the learning of both parties in effectively using the entire EBP process. Students can assist fieldwork educators in learning to effectively search and analyze available literature, while the fieldwork educator can teach the students how to apply the selected evidence clinically with clients and analyze its effects.

**Conclusion**

This study assessed changes in knowledge, skills, and confidence of fieldwork educators after participation in a short course on EBP. The fieldwork educators demonstrated a small improvement in knowledge and skills, and a statistically significant change in confidence from pretest to posttest, which occurred 3 weeks after the completion of the short course. The participants improved the most in their ability to determine which type of study design would best answer their clinical question and in their confidence related to effectively conducting an online search. The improvements may have been small due to only 6 of 14 participants completing the posttest in its entirety. Common barriers to implementing EBP may have also prevented the participants from completing the posttest on their own time. Universities need to continue to reach out to fieldwork educators and offer opportunities for improving EBP behaviors, such as access to databases or short courses to increase education. This could also motivate additional practitioners to become fieldwork educators, knowing that they would have access to additional continuing education courses related to EBP and access to databases. These steps will enable fieldwork educators to model appropriate EBP behavior for students, encouraging their transfer of knowledge from the classroom to the clinic.

**Dr. Alison Nichols** is an Assistant Professor of Occupational Therapy at the University of Indianapolis, where she teaches entry-level students in both the MOT and OTD programs.
References


[http://dx.doi.org/10.3233/WOR-121506](http://dx.doi.org/10.3233/WOR-121506)


Ilic, D., Tepper, K., & Misso, M. (2012). Teaching evidence-based medicine literature searching skills to medical students during the clinical years: A randomized control trial. *Journal of the Medical Library Association, 100*(3), 190-196. [http://dx.doi.org/10.3163/1536-5050.100.3.009](http://dx.doi.org/10.3163/1536-5050.100.3.009)


