ABSTRACT

Tommianne Haithcock, INNOVATIONS IN HIGHER EDUCATION CLINICAL INSTRUCTOR TRAINING FOR OCCUPATIONAL THERAPY: A PROGRAM EVALUATION (Under the direction of Dr. William Rouse, Jr.). Department of Educational Leadership, December 2019.

The purpose of this study is to evaluate a clinical instructor program model by using a program evaluation research design to determine best practices for an open access clinical instructor training program. Evaluating the clinical instructor training model will provide valuable information to help make judgements regarding the merit of the program. The literature review provides additional evidence supporting the need to evaluate a clinical instructor training model including: attributes of clinical instructors, clinical instructor performance, mastering the instructor role, key elements to develop a clinical instructor program, instruments to measure educator perceived confidence, adult learning theory, communication, evidence based practice, clinical judgment, demonstrating collegiality, teaching strategies for instructors, and fostering a positive environment for learning. An online survey format will be implemented with closed and open ended questions to collect responses incorporating a census of 100 with a randomized sample of 40 clinical instructors. Questions on the survey support the innovative strategies for clinical instructor training. User analytics will be collected from the Clinical Instructor Resource Website as a secondary data source to assist with identifying links that are of high priority to users. Data will be collected in an aggregate format with an analysis confirming the sufficiency of the Clinical Instructor Resource Website and best practice for clinical instructor training. Based on the results of this study, there is excellent potential to develop a clinical instructor training module in an open access online format. The results of this study can be shared with stakeholders in all health care fields.

INNOVATIONS IN HIGHER EDUCATION CLINICAL INSTRUCTOR TRAINING FOR OCCUPATIONAL THERAPY: A PROGRAM EVALUATION

A Dissertation

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by

Tommianne Haithcock

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INNOVATIONS IN HIGHER EDUCATION CLINICAL INSTRUCTOR TRAINING FOR OCCUPATIONAL THERAPY: A PROGRAM EVALUATION

by

Tommianne Haithcock

APPROVED BY:

DIRECTOR OF DISSERTATION:_____
William Rouse, Jr., EdD

COMMITTEE MEMBER:_____
Kermit Buckner, EdD

COMMITTEE MEMBER:_____
Jim McDowelle, EdD

COMMITTEE MEMBER:_____
Brian Miller, EdD

CHAIR OF THE DEPARTMENT OF EDUCATIONAL LEADERSHIP:

_____
Marjorie Ringler, EdD

DEAN OF THE GRADUATE SCHOOL:

_____
Paul Gemperline, PhD

DEDICATION

This dissertation is dedicated in loving memory of my father who always encouraged the pursuit of excellence. I also dedicate this dissertation with gratitude and love to my mother, my husband, my children, my friends, and my church family. They have been beacons of light providing unwavering love, prayers, encouragement, and inspiration while pursuing and completing a Doctor of Education, EdD degree. With God, all things are possible. To God be the glory!

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CHAPTER 1: INTRODUCTION

Clinical instructor training in all areas of health care is a perplexing topic in higher education due to the responsibilities of the clinical instructor. The role of the clinical instructor is to educate health care students in their practice setting by facilitating successful learning outcomes. Thus, clinical instructors play a vital role in the education of students; however, they often do not receive the training to support student learning (Rye & Boone, 2009). Therefore, concerns related to clinical instructor training have been prevalent in health professions including advanced practice registered nurses, physicians and physician assistants (Witt, Colbert, & Kelly, 2013). Issues regarding clinical instructor qualifications are prevalent in the field as many active clinical instructors have not received any formal training for their role (Rye & Boone, 2009). Additionally, the majority of clinical instructor training models that are available only address the field of nursing and exclude many other health care fields (Walker & Grosjean, 2010).

Regardless of the health care specialty area, students and instructors share similar concerns about the need for formal instructor training for health care internships (Walker & Grosjean, 2010). Students have identified specific attributes that clinical instructors should demonstrate including clinical knowledge, positive role modeling, objective evaluation, honest feedback, and respect for students' experiences to name a few (Walker & Grosjean, 2010). The concerns presented by students regarding instructor training are similar to those presented by clinical practitioners. Concerns presented by respiratory therapists regarding clinical instructor training included the need for training related to assessment, providing effective feedback, understanding instructor roles, demonstrating good communication skills as well as inter-rater reliability with educational methods (Walker & Grosjean, 2010). Students and instructors share similarities in several of the desired attributes of clinical instructors suggesting a need for further

investigation of training models available to help with the success of all involved (Walker & Grosjean, 2010).

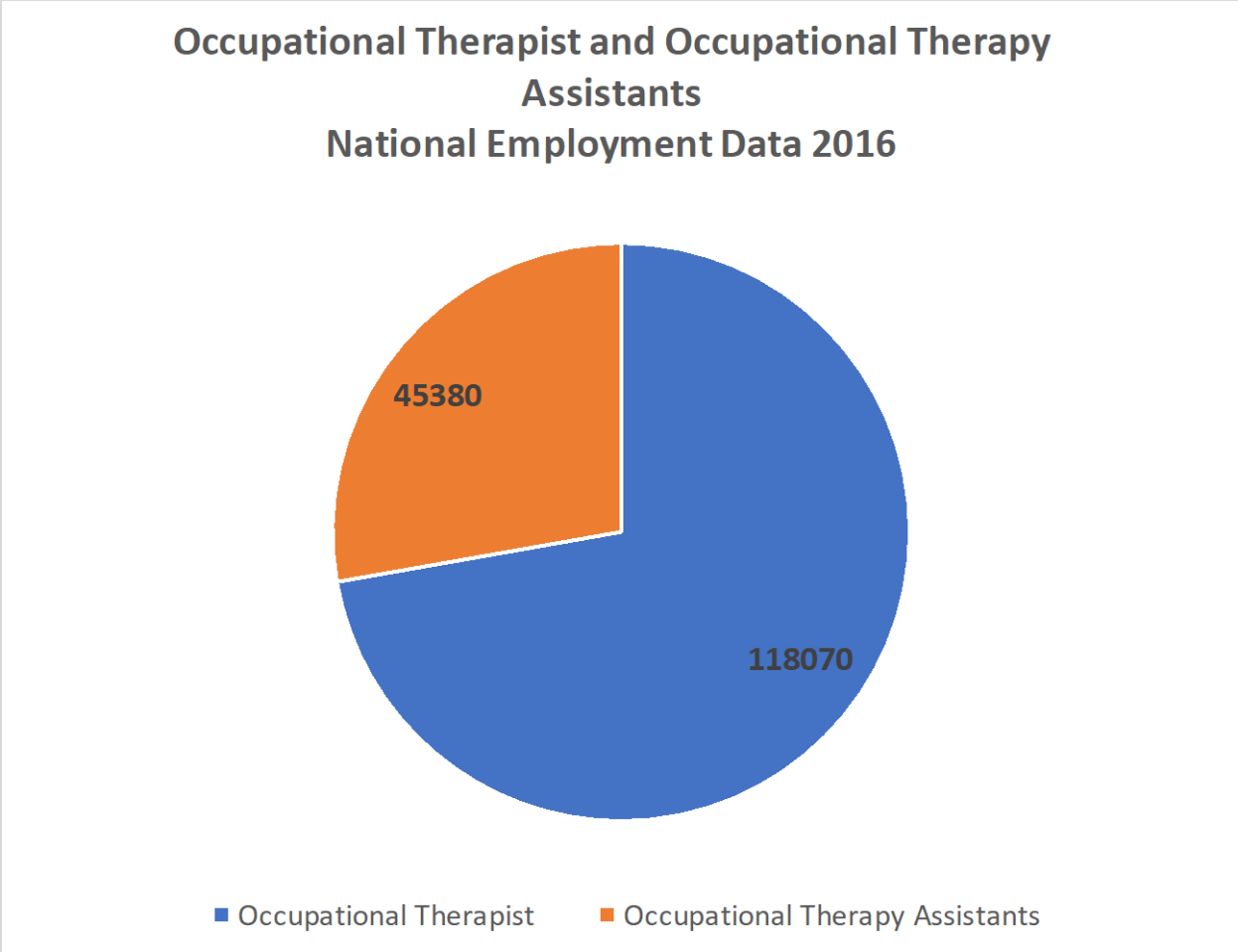
Clinical instructor training is essential for the success of all students and instructors. One study suggested a three prong approach to train instructors: an online clinical instructor course, a web page for instructors and a database for students to query information about clinical sites (Burns & Northcutt, 2009). Students and clinical instructors are more likely to experience the benefits of positive educational outcomes with high quality training programs. Without focused training, students and instructors are not able to fully experience the benefits of positive educational outcomes (Burns & Northcutt, 2009). Nursing instructor program goals at the University of Pittsburgh requires students to collaborate with their clinical instructors regarding their goals for the internship (Burns & Northcutt, 2009). Encouraging students to collaborate with their clinical instructor helps to facilitate engagement in the process of active learning. Investigating training models available to help with clinical instruction is necessary to provide high quality health care services and successful student outcomes (Walker & Grosjean, 2010).

Without clinical instructor training, health care practitioners are not fully equipped to respond to the changing educational needs of their students, which ultimately affects the quality of health care provided and the success of students. Hence, to rectify the problem, an online open access training program for clinical instructors may help to improve the quality of health care and positively impact student outcomes. It is in the interest of many stakeholders, including consumers, to provide training for clinical instructors (Fraher, Spero, Ricketts, Galloway, & Gaul, 2018). In North Carolina, health care workface challenges including the training of current providers is being researched by the Cecil G. Sheps Center for Health Services Research. The mission of the Sheps Center is to improve the health of individuals and populations by

understanding problems and issues related to the delivery of health care services through research (Fraher et al., 2018). Some of the goals of the Sheps Center includes increasing affordability, access, economic impact, and student outcomes (Fraher et al., 2018). Research specifies that the growth in health care jobs will impact providers confronting challenges related to the delivery of services and changes in payment methods which is not being addressed through clinical instructor training (Fraher et al., 2018).

According to the U.S. Department of Labor, Bureau of Labor Statistics (2018), the employment of occupational therapists is projected to grow at 24% and occupational therapy assistants projected to grow 28% from 2016 to 2026. The rate of growth for occupational therapists and occupational therapy assistants is much faster than the average for all occupations. In North Carolina total health care employment from 2000 – 2016 grew by 70%; the job growth rate for nursing at 74%; and allied health jobs have grown rapidly at a pace of 83% respectively (Fraher et al., 2018). Allied health and nursing jobs are indicated as 2 of every 3 health care positions (see Figure 1).

Those working in health care fields will interact with the predicted changes in health care including penalties for poor quality services, patient readmissions to hospitals, and shifts from expensive inpatient settings to outpatient and ambulatory settings (Fraher et al., 2018). Closer connections are needed between educational systems and health care organizations as changes in health care are reverberating backward into education (Fraher el al., 2018). The changes in health care requires a greater focus from higher education systems to be responsive to the needs of clinical instructors providing modules for training. This training may help students to better integrate into the health care teams (Fraher et al., 2018).



Note. Created by Tommianne Haithcock. United States Department of Labor, Bureau of Labor Statistics (2018).

Figure 1. Occupational Therapist and Occupational Therapy Assistant national employment data 2016.

Most health care practitioners place their priorities on attending professional development that pertains to their areas of expertise to maintain their credentials in their specialty area. For example, in one study only 56% of clinical instructors in the respiratory therapy field identified that they had received some type of training leaving a large percentage of clinical instructors receiving no training (Rye & Boone, 2009). Of those that received training, 63% indicated that their training was focused more on orientation to the school's educational program. Additionally, 81% of those in the study believed that there is a need for a standardized instructor-training program (Rye & Boone, 2009). Understanding the diverse nature of health care environments and student learning needs is necessary to provide the evidence needed for the development of clinical instructor training program. The focus of practice indicates the need to explore the potential for online open access training that will contribute to the field of higher education through the integration of theory to guide quality learning outcomes and meet changing needs of clinical instructors. The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training.

Purpose Statement

This study may help to bring to the foreground perceptions of clinical instructors' future training needs. The North Carolina Sheps Center indicates that health care is changing in both the delivery and payment models which will shift health care providers from inpatient settings to community settings and produce areas of growth in professional roles (Fraher et al., 2018). The Sheps Center acknowledges the need for career laddering opportunities that would be beneficial for professional growth opportunities including a formal clinical instructor training module to better prepare students for the workforce and to develop high value health workforce (Fraher et al., 2018). Developing an open access online clinical instructor training program is essential to

meet the health care workforce needs and improve the quality of higher education clinical learning outcomes (Fraher et al., 2018). The Sheps Center indicates a need to retrain 500,000 health care workers that are currently practicing in North Carolina to meet the changing health care needs of residents (Fraher et al., 2018). Training needs to be convenient to meet the needs of current health care practitioners including timing, location and financial considerations (Fraher et al., 2018).

The rationale for developing an open access online clinical instructor resource came from many years of working with clinicians who were frustrated from the disparities with access to evidence based literature to assist with their role confidence as a clinical instructor. Students in clinical education are placed in a variety of settings including rural and urban areas of health care. The demographics include a variety of practice areas in local settings, areas across the state, and areas outside of the state. Clinical environments can be very complex, representing diverse populations, practitioners, and cultural nuances. The various clinical settings present challenges to clinical instructors as there are often disparities in the types of training received in preparation for the clinical instructor role as well as limited access to educational resources to assist with successful student learning outcomes.

Once a thorough and formal literature review is completed, implementing appropriate survey methods will help to validate the urgency of this problem as well as the essential elements to develop an inclusive training program. When the problem has been thoroughly investigated and validated, the formal process of creating a robust health care clinical instructor training program could be initiated. The development of clinical instructor resources benefits both the students and the clinical instructors alike by improving educational experiences thus improving retention rates and professional growth of those involved (Singer, 2006). The clinical instructor

training resource will also help to support the learning outcomes of students and role confidence of the clinical instructor as well as quality health care services (Burns & Northcutt, 2009). The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training.

This Study

Pitt Community College is located in Eastern North Carolina with an enrollment of nearly 10,000 students. The Occupational Therapy Assistant (OTA) program enrolls 24 students annually with the potential for 48 students enrolled at any given time to complete the two-year Associate in Applied Science degree. Currently, the Pitt Community College OTA Program, has a platform that allows the students to access an electronic database for onboarding information related to over 50 clinical sites. The electronic database is considered one prong of a three prong training approach (Burns & Northcutt, 2009).

Initial training of clinical instructors that work with the OTA students included developing the clinical instructor web based resource in collaboration with Pitt Community College library staff. The resource will assist over 100 clinical instructors affiliated with the OTA program to have access to evidenced based practice information to help improve the quality of clinical instruction. The instructors represent practice areas across North Carolina and South Carolina. The web based resource will serve as the platform for the future open access clinical instructor training module.

The development of the “Clinical Instructor Resource” website project required a great amount of coordination of resources including meetings with the librarian, department leadership, and adjunct clinical faculty. Pitt Community College Occupational Therapy Assistant clinical instructors now have 24-hour access to the “Clinical Instructor Resource” database

(Available at http://libguides.pittcc.edu/clinical). Initially, the concept for development of the clinical instructor web based resource included creating tabs for each of the health sciences programs at Pitt Community College to help direct clinical adjunct faculty to their specific department page. Departments were surveyed by email to determine specific interest in content. However, the occupational therapy assistant department would serve as the pilot program to initiate development and utilization of the resource. The "Clinical Instructor Resource" project could offer resources to all clinical instructors of a Health Sciences Division (see Figure 2).

Before venturing into the specific resources to include on the web page, it would be important to determine if other web based clinical instructor resources already existed. Researching available resources would prove to be a positive venture. The Instructorship Framework, developed in London, provides an overview of goals, design and implementation of an instructorship program. Although several web based resources were located, access was blocked by passwords. Many of the sites located included resources that assist with point of care for patients as well as clinical instruction guidelines. Web based clinical instruction resources identified included: UMASS Medical School, Tulane University, University of Utah, University of Calgary, Austin Community College, and Concordia University.

After completing a thorough review of available resources, the Pitt Community College Occupational Therapy Assistant Program web based "Clinical Instructor Resource" was created with subject matter tabs including: Welcome, Teaching & Learning, Databases, Evidence Based Practice, Continuing Education, Mobile Apps and Contact information. The "Clinical Instructor Resource" website tabs will provide easy access to relevant clinical instructor information (see Figure 3).

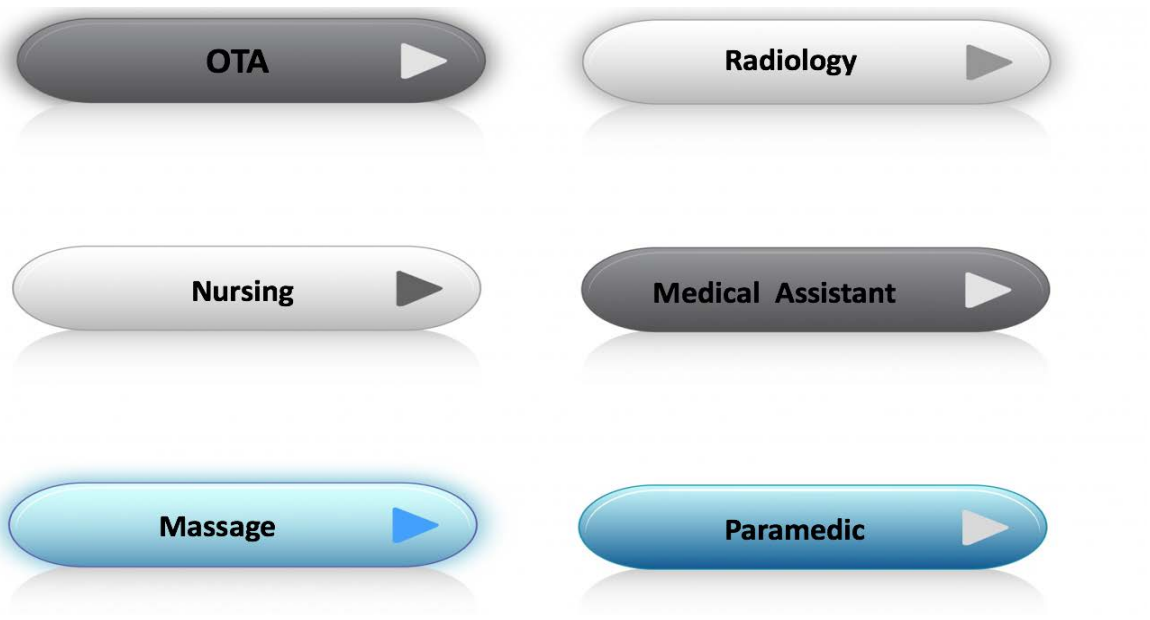


Figure 2. Initial concept of a clinical instructor resource for an Allied Health Division.

Figure 3. Pitt Community College clinical instructor resource website tab.

The Teaching and Learning Resources tab includes a variety of peer review articles to support Student Behavior, Instructors/Clinical Instruction, and Student/Professional Relationships. The Databases/Search Tools tab incorporates many peer reviewed references including: Medscape, PubMed Clinical Queries, PubMed Health, MedCalc, Clinical Trials. gov, NIH (Clinical Research & Trials), The Orange Book (FDA). The Evidence-Based Practice tab offers pertinent resources to assist clinicians with point of service research to help provide effective treatment options for patients. The Cochrane Summaries are additional resources available as a part of PubMed Health. The Continuing Education tab includes important resources for professional development such as Eastern AHEC, North Carolina AHEC Digital as well access to MOOCs (massive open online courses). The Mobile Apps tab provides free Apps for clinical instructors to access on their mobile devices. The apps include: mobilePDR, calculate, SHOTS Immunizations Mobile App, STAT!Ref Mobile App Access, and Ebsco databases. The contact information tab will allow us to continually monitor the effectiveness of the web based resource. The next step for quality management of the page will be to add a Google Document for instructors to provide suggestions for the web page.

The Pitt Community College Library Database usage data from July – October 2016 indicates the health databases as being popular resources referenced in the library database. It is my expectation that this dissertation will assess the importance of these resources to clinical instructors (see Figure 4).

While only five people were given preliminary access to the "Clinical Instructor Resource," the most critical resources viewed included the Teaching and Learning Tab, Evidence Based Practice, and Database/Search Tools. The goal of this resource is to help improve the quality of resources available to clinical instructors which will help to improve student outcomes.

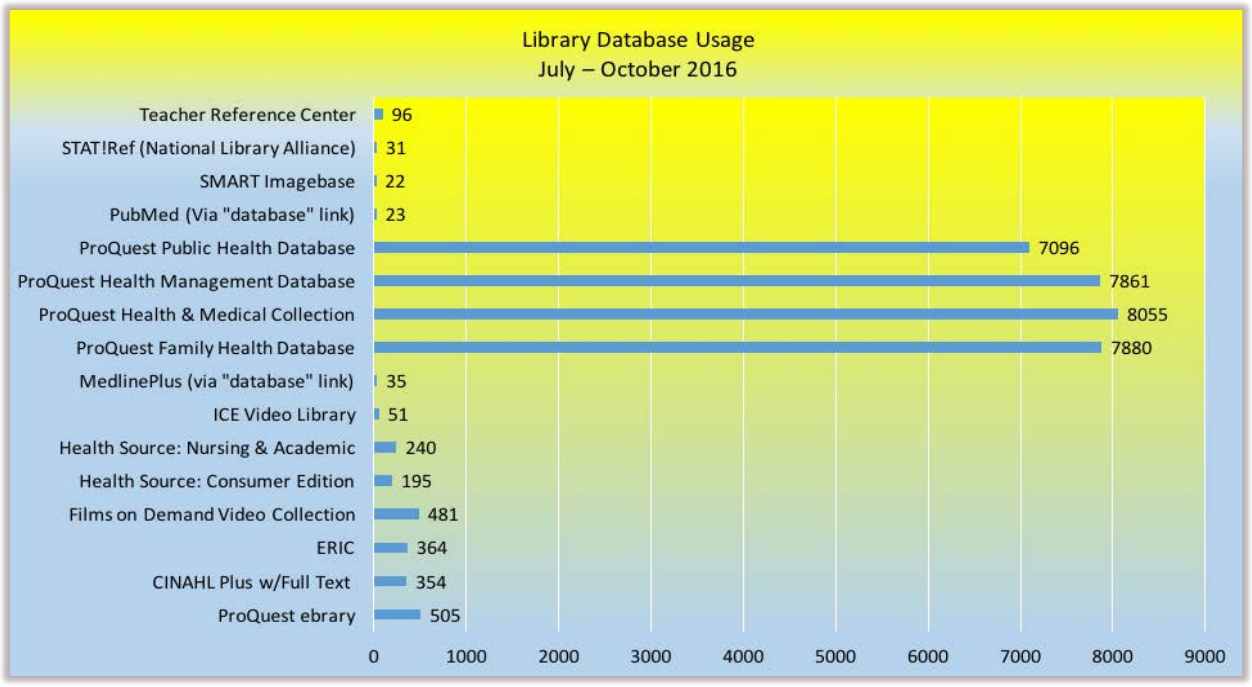


Figure 4. Pitt Community College library database usage.

The clinical instructor resource website project development guidelines were set in an organized manner with accountability to those involved. Initial and follow up reporting were essential in the development of this project including weekly meetings with the librarian during the Fall semester of 2016 and 2017. During the meetings, quality matters were discussed including improving the formatting of the website focusing on principles of instructional design. Additional resources were added to the website including links to professional development, professional associations and regulatory boards. Database Usage was accessed to provide a better understanding of the clinical instructor resources available September 2016 – November 2016 and September 2016 – July 2017 (see Figure 5 and Figure 6).

The results of the initial research and development of the "Clinical Instructor Resource" will have a positive impact on all of those involved in the clinical education process. Resources will be monitored and improved each year to help improve clinical instructor effectiveness. Further investigation of this topic will provide additional evidence to help guide the development of future training programs for clinical instructors. The first two prongs suggested for clinical instructor training are active and functioning including a web page for clinical instructors to access information about the educational program and a database for students to query information about clinical sites. The online clinical instructor training program being considered in this dissertation will be the third prong for development (Burns & Northcutt, 2009).

This study is justified with respect to an established conceptual framework, review of literature, and the positive utilization of the developing "Clinical Instructor Resource" website. Evaluating the current content of the clinical instructor resource website and identifying the essential elements to include an open access clinical instructor training module will help to improve the quality of student outcomes. In an evidence based world, it is necessary to train

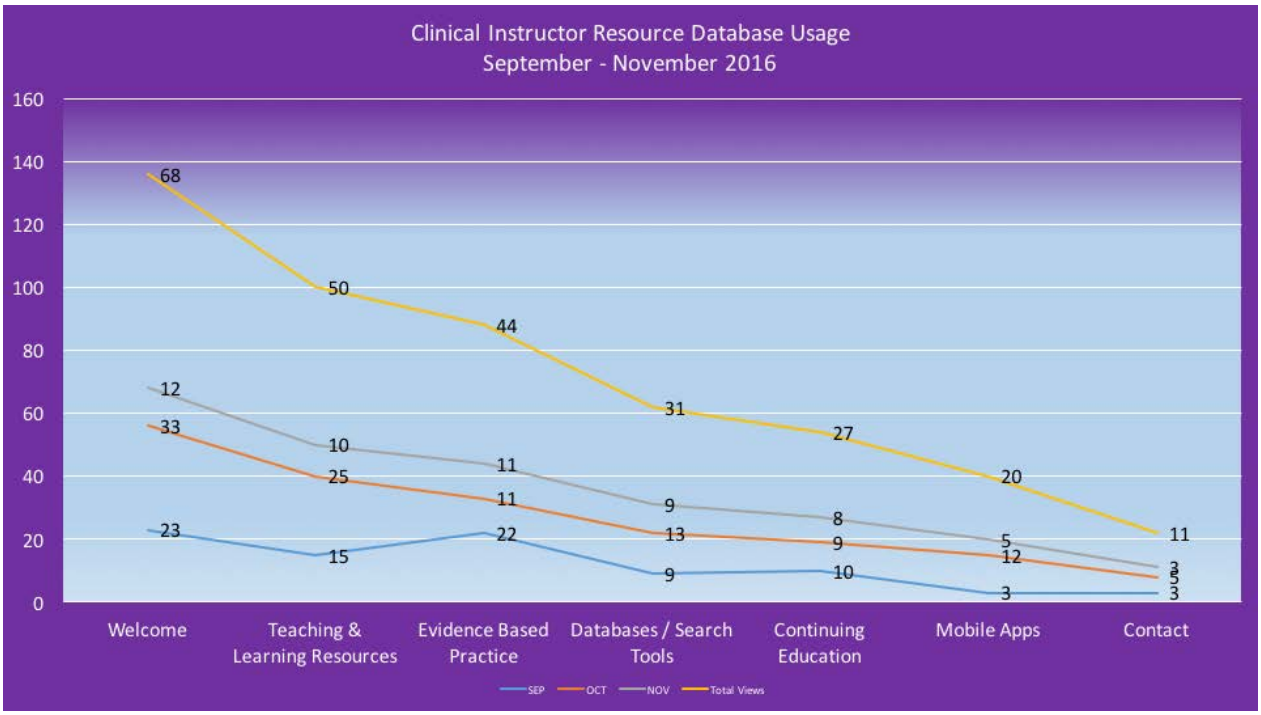


Figure 5. Clinical instructor resource website database usage September 2016 – November 2016.

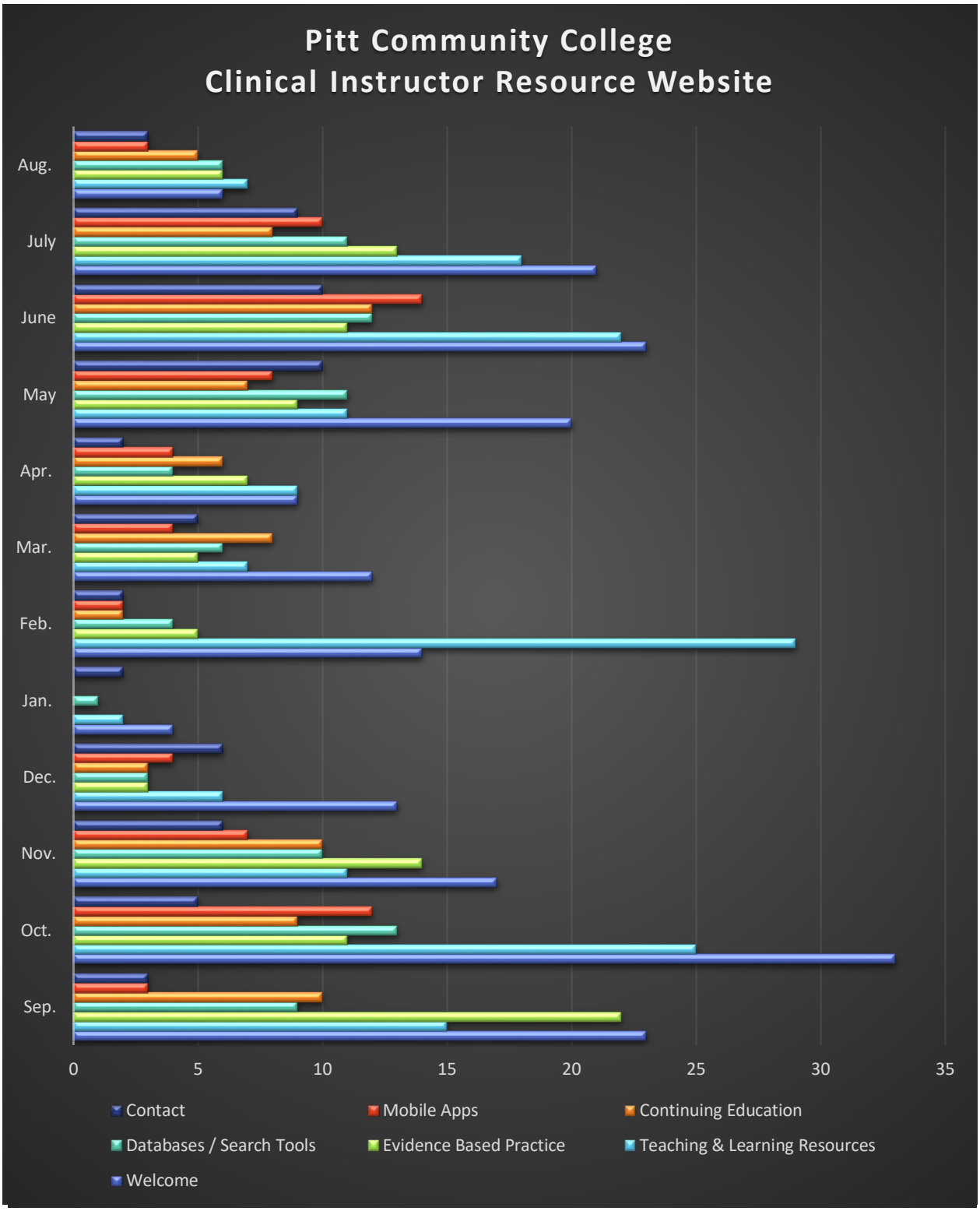


Figure 6. Clinical instructor resource website database usage September 2016 – July 2017.

clinical instructors to achieve high quality clinical education experiences. There is a perception regarding the importance of excellent clinical instructors as well as a high quality clinical training programs to improve learning outcomes.

The program evaluation method was incorporated to help evaluate further development of future training programs for clinical instructors. The literature review provides additional evidence to highlight attributes of clinical instructors, clinical instructor performance, adult learning theory, clinical preceptor confidence, elements of a preceptor program, mastering the preceptor roles, and teaching strategies for preceptors. Clinical instructors need educational training programs to help them provide excellent clinical instruction for health care students. This program evaluation contributes to the higher education body of knowledge by providing the framework for the development of an online clinical training program for health care practitioners that supervise students.

Study Overview

The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training. The exploration of an open access clinical instructor training program will be conducted by using a program evaluation research design (Creswell, 2015). Evaluating the clinical instructor training program will provide valuable information to help make judgements regarding the worth and merit of the program (Joyner, Rouse, & Glatthorn, 2018). Program evaluation as the method for this study will assist with answering questions regarding the "Clinical Instructor Resource" as well as best practices for clinical instructor training (Worthen, Sanders, & Fitzpatrick, 1997).

An online survey format will be implemented with closed and open ended questions to collect responses of the participants selected for this program evaluation. Questions on the

survey will support the innovative strategies of clinical instructors regarding training. Data will be collected in an aggregate format with an analysis confirming the sufficiency of the "Clinical Instructor Resource" website and the needs related to clinical instructor training. The results of this study can be shared with stakeholders in all health care fields (Worthen et al., 1997).

Study Question

The study question for this study will focus on "What additional traning strategies are needed in an open access online clinical instructor training module?" The goal of this program evaluation is to implement an online survey to evaluate and create innovative solutions for clinical instructor training needs to help practitioners prepare for clinical education experiences. Implementing the program evaluation of clinical instructor training will allow for inquiry and discovery. Therefore, there are two study questions for this study. The study questions are follows:

1. How do Clinical instructors value the current content of the "Clinical Instructor Resource" website during the Spring 2019 semester?
2. What are the essential elements for an open access online clinical instructor training module during the Summer 2019 semester?

The population in this study incorporates a census or 100% current clinical instructors of the Pitt Community College Occupational Therapy Assistant Program. The Pitt Community College Occupational Therapy Assistant Program has successfully conferred degrees for occupational therapy assistant students since 1992. This population would offer diversity in backgrounds including clinical work experience, values, culture, age, gender, personalities, communication styles, health status, financial well-being, educational status, leadership, management and supervision experience. The identity of the participants would be protected

when incorporating a program evaluation research design. There are broad implications of this study in many health care clinical education programs. The criteria selection for this research project is reasonable in the assessment of the problem as the issue and the solution can be measured through data collection and analysis over the years to come.

The benefits of evaluating and recommending the essential elements for an open access clinical instructor training module include the potential to improve the quality of health care and professional growth of those professionals involved (Singer, 2006). A clinical training program for instructors would also help to support the learning outcomes of students (Burns & Northcutt, 2009). Open access clinical instructor training will assist health care practitioners in responding to the educational needs of future health care providers and address the concerns associated with the lack of clinical instructorship training. This research study contributes to the higher education body of knowledge by providing the framework for the development of an open access online clinical instruction training program for health care practitioners that supervise students.

CHAPTER 2: LITERATURE REVIEW

This literature review provides additional evidence to highlight attributes of clinical instructors, clinical instructor performance, adult learning theory, clinical instructor confidence, elements of an instructor program, and mastering the instructor role to help guide the study for further development of future training programs for clinical instructors. The need for high quality clinical education experiences will continue to increase as the number of students that enter the medical field increases (Brown, Williams, & Lynch, 2013). After many years of academic training, health care students are placed in clinical settings to complete their educational experiences for several months and in some medical fields for several years. Students have to relocate in areas that could be hundreds of miles from their home and they are often stressed and anxious about their clinical internships as they are typically entering into an entirely different culture (Goode, 2012).

Attributes of Clinical Instructors

The literature review of clinical instructor attributes revealed perceptions of the students as well as the clinical instructors. Although the literature provided a range of attributes, there are many complexities that impact the definition of excellent clinical instructors. One study specifically focused on the evaluation of clinical instructors by students to help determine the attributes of excellent instructors (Young, Vos, Cantrell, & Shaw, 2014). Although medical personnel typically perform in an educational mode with their clients, these skills may or may not naturally transfer into the clinical instructor role. Medical personnel do not typically receive education on training future practitioners in health care settings (Young et al., 2014). The literature suggests that there are key traits of clinical supervisors that help to promote positive learning experiences (Young et al., 2014). In one study, students identified the following five

attributes of effective instructors: engaging students, demonstrating collegiality, fostering a positive environment for learning, and discussing concerns with students (Young et al., 2014). Additional positive instructor attributes included providing feedback, being enthusiastic, allowing questions, delegating responsibilities and reviewing the different diagnoses (Young et al., 2014).

Students often prefer clinical environments in which they receive encouragement through nurturing and supportive instructors. Several instructors in this study believed that they offered students feedback as well as opportunities for asking questions. The student ratings were contrary to the clinical instructors with only 70% of students indicating that their instructors offered feedback and opportunities to ask questions (Young et al., 2014). Although 78.4% of the clinical instructors had instructor training, 73.5% shared that they would like to have more training. Overall, student ratings of excellent clinical instructors were strongly linked with the soft skills of teaching such as being able to relate to the student and showing interest in teaching (Young et al., 2014).

Likewise, students in this study preferred to have good direction and feedback, instructors being readily available, encouragement, and spending time with their clinical instructor (Young et al., 2014). This study emphasized the importance of personal attributes of clinical instructors versus the credentials of the clinical instructor (Young et al., 2014). Personality characteristics are attributed to a great medical practitioner as well as clinical instructors. Instructor attributes that were indicated to be positive from the perspectives of students includes the ability to review diagnosis, ask questions, and receive feedback (Young et al., 2014). Additionally, the methods incorporated to assess the students' knowledge such as the "just right" time for feedback surfaced as being valuable to the students (Young et al., 2014).

Effective instructional methods were recognized by students as attributes or traits that identify excellent clinical instructors (Ramaekers, van Keulen, Kremer, Pilot, & van Beukelen, 2011). One study identified three central areas of focus that impact student's learning in clinical environments including supportive instructional design, the use of high quality case studies as well as competent teachers (Ramaekers et al., 2011). Clinical instructors focusing on directive learning activities provide opportunities for group as well as self-directed activities. Instructors providing directive learning experiences offer guidance on how to approach tasks and objectives related to the learning experience (Ramaekers et al., 2011). The proficiency of competent teachers with case-based learning encourages the development of clinical reasoning skills. Clinical instructors that are proficient with case study discussions help students to develop higher level clinical reasoning skills (Ramaekers et al., 2011).

This study shares the importance of the "just-in-time" offering of information for case studies which is contrary to the traditional review of case studies. Case studies presented in this manner are being shared through the scaffolding of students during the process of determining the solutions for the case studies (Ramaekers et al., 2011). Delayed scaffolding methods of clinical instruction have helped students to develop competence in clinical settings by helping them to reflect and receive feedback to improve their ability to solve problems. This method has proven to be effective in clinical settings in which the clinical instructor gradually fades with the support they offer the student (Ramaekers et al., 2011). The findings from this study revealed the importance of delayed scaffolding opposed to immediate scaffolding which encourages the student to determine the optimal approach versus the teacher determining the approach (Ramaekers et al., 2011).

The value of effective mentoring relationships is critical to the success of students in the medical field. Clinical internships are often more successful when students feel that they are supported by their instructor (Goode, 2012). Many times students in the medical field are coping with the anxiety of integrating knowledge into practice. Additionally, there may be internal stress related to the need for students to connect and work with the inter-professional team (Goode, 2012). Nursing students indicated the importance of working with their mentor or clinical instructor to help integrate in the clinical setting (Goode, 2012). Initially, it is important for students to identify objectives for the learning experience, any special needs related to medical or learning issues as well as reviewing assessments of the student's ability (Goode, 2012).

Although the role of the clinical instructor is similar to a mentor, the student must also recognize the importance of their role in the partnership to self-initiate and take responsibility for their learning (Goode, 2012). Many times instructors may offer time for students to work within their discipline with different instructors. With the continuous health care changes and cutbacks, clinical instructors are often supervising educational experiences in very stressful conditions which can have a direct impact on the quality of education offered (Goode, 2012). The lack of continuity with mentors or clinical instructors was noted as an issue for students when they are working on a team with different instructors (Goode, 2012). A lack of continuity between instructors also accounts for issues with inter-rater reliability in clinical education. It would be advantageous to work together to offer learning experiences that provide a supportive learning environment that provides quality time with their instructor while also promoting healthy integration as a valued team member. Ultimately, the wellbeing of the student will be enhanced when they feel empowered to contribute to the learning process (Goode, 2012).

Many health care education programs require their students to collaborate with their clinical instructors regarding their goals for the internship (Burns & Northcutt, 2009). Students can better prepare for their clinical experiences by setting learning goals. Collaborating with their clinical instructor on their learning needs will foster engagement in active learning. Students and instructors will understand the value of establishing educational and professional goals when experiencing a successful instructorship (Burns & Northcutt, 2009).

The literature review of clinical instructor attributes revealed similarities in the perceived attributes of an excellent clinical instructors and provided broader insight into the personal perspectives of clinical instructor excellence (Walker & Grosjean, 2010). Further assessment of the attributes of clinical instructors will be necessary to determine the possible contextual factors associated student perceptions in healthcare education programs. There is a need for continued analysis of available training models to help improve the quality clinical instruction necessary to provide high quality health care services (Walker & Grosjean, 2010).

Clinical Instructor Performance

Brown et al. (2013) indicated that the clinical learning environment could be predictive of the effectiveness of the students learning experience. It is understood that clinical instructors have a pronounced impact on students in clinical learning environments and can nurture positive learning experiences (Brown et al., 2013). The clinical instructor helps to develop and facilitate learning in the clinical environment for students by providing constructive feedback, listening to the student, facilitating questions, and motivating students (Brown et al., 2013). Likewise, a supportive clinical learning environment contributes to the student feeling confident capable, engaged, supported and feeling comfortable (Brown et al., 2013).

The Clinical Teaching Effectiveness Instrument (CTEI) and Clinical Learning Environment Inventory (CLEI) are used to provide medical and clinical educator performance predictors for teaching effectiveness. In this study, evaluations were completed with a 54% response rate from 548 undergraduate students. The participants were from undergraduate programs in physiotherapy (33), midwifery (37), dietetics (31), paramedics (60), occupational therapy (76), pharmacy (116), medical imaging (114), and social work (78) (Brown et al., 2013). Some of the areas measured in a multiple regression analysis of (CTEI) scores included perception of learning, perception of teachers, academic self-perception, perception of atmosphere, social self-perception, personalization, student involvement, satisfaction, task orientation, innovation and individualization (Brown et al., 2013). Additional subscale areas measured included the ability of the clinical instructor to be innovative with planning new, interesting and productive ward experiences, teaching techniques and learning activities as well as patient allocation (Brown et al., 2013). Positive learning environments in clinical settings is critical for students to experience optimal learning to become future health care providers. The results of this study indicate that students are impacted by clinical instructor performance in the learning environment.

Ross, Wallis, Huggins, and Williams (2013) examined the views of clinical instructors by students incorporating the Clinical Teaching Effectiveness Inventory (CTEI). This study focused on the integration of paramedic clinical instructors working with students who are in many situations more academically qualified than their clinical instructors but they are in need of clinical training (Ross et al., 2013). Quality clinical education can be supported and enhanced by measuring clinical teaching effectiveness with the (CTEI) tool. The (CTEI) has been tested for

reliability and validity across an entire medical center (Ross et al., 2013). Specific areas measured on the (CTEI) include:

1. Establishes a good learning environment (e.g. approachable, enthusiastic)
2. Stimulates me to learn independently
3. Allows me autonomy appropriate to my level/experience/competence
4. Organizes time to allow for both teaching and providing care to clients
5. Offers regular feedback (positive and negative)
6. Clearly specifies what I am expected to know and do during this training period
7. Adjusts teaching to my needs (experience, competence, interest)
8. Asks questions that promote learning (clarifications, probes, open-ended questions, reflective questions)
9. Gives clear explanations/reasons for opinions, advice, actions
10. Adjusts teaching to diverse settings (bedside, view box or exam room, clinic)
11. Coaches me on my clinical/technical skills (interview, diagnostic, examination, procedural, lab, practical)
12. Incorporates research data and/or family communication skills
13. Teaches diagnostic skill (clinical reasoning, selection/interpretation of tests)
14. Teaches effective patient and/or family communication skills
15. Teaches principles of cost-appropriate care (resource utilization) (Ross et al., 2013).

The results of the study indicated that that students gave higher ratings for subscale 1 "Learner-centered instruction skills" versus subscale 2, "teacher directed instruction" (Ross et al., 2013). Students also rated their clinical instructors poorly in the subscale area 12, "Incorporates research data and/or practice guidelines into teaching" and subscale area 15,

"teaches principles of cost-appropriate care" (Ross et al., 2013). These two areas are concerning regarding the potential barriers in the health care environment that may impact the quality of clinical learning experiences. Some health care environments have been functioning more as a market-driven setting which may be a possible barrier to some of the negative ratings in this study (Ross et al., 2013). The findings of this study indicates the importance of clinical instructors integrating theory into practice to help students to be successful (Ross et al., 2013).

Adult Learning Theory

After reviewing literature regarding the attributes and performance of clinical instructors, questions began to surface related to the best approaches to effectively train clinical instructors to provide excellent educational opportunities for students. Concerns were revealed regarding the awareness of the learning styles of adult learners which impacts the effectiveness of educational outcomes in clinical settings (Burns & Northcutt, 2009). The Kolb's Learning Cycle was incorporated as the theoretical framework guiding this research study as it offers a systematic view of the teaching and learning process for the clinical instructors. The learning cycle approaches four areas that are significant to experiential learning as follows including: concrete experience (doing), reflective observation (observation), abstract conceptualization (thinking), and active experimentation (planning) (Burns & Northcutt, 2009). This cycle of learning allows the teacher to progress the learner through a cycle of learning that incorporates teaching actions and the assessment process throughout the cycle.

The cycle of learning incorporates active engagement which helps adults to transform their experiences into learning (Burns & Northcutt, 2009). The first stage of the learning cycle helps learners by offering hands on experiences which could be similar to a clinical placement. Phase two of the cycle focuses on observation skills incorporating the ability to reflect and assess

what the student has learned. The third phase incorporates abstract conceptualization which helps individuals to begin to think and make generalizations about their observations or possibly begin to conceptualize a model. Finally, in stage four, the learner incorporates active experimentation by evaluating their knowledge in which they could possibly test the the model or what they have learned for future experiences (Witt et al., 2013). As the learner progresses through the cycle, there are learning checkpoints at each of the four stages incorporating all of one's senses in the learning process. Although adult learners may decide where they should begin their learning process, the stages all flow in sequence and are circular (Witt et al., 2013).

Within the four stage learning cycle there is a second layer of variables that are on a continuum. This second layer presents as lines of axis with conflicting modes at opposite ends (Witt et al., 2013). The learner actually struggles with doing or watching which would translate into the grasping/processing experience axis. Likewise, the learner struggles with feeling or thinking which would translate into the transforming/emotional experience experience axis (Witt et al., 2013). Clinical instructors will be more effective in their instructional processes when incorporating adult learning concepts by incorporating the four stage process (Witt et al., 2013).

In 2006, the Clinical Training Center for Family Planning (CTCFP) was created to help increase the number of trained clinical instructors for physicians and physician assistants to improve educational outcomes (Witt et al., 2013). This project was funded by the United States Department of Health and Human Services' Office of Population Affairs. The purpose of the training program prepares clinicians to serve as instructors by helping them to better understand adult learning theory and including a teaching-learning framework (Witt et al., 2013). Several adult learning theories were considered in the competency-based training program including self-regulated, constructivist, transformational, and experiential learning. The Kolb's theory best

represented the backgrounds of program participants (Witt et al., 2013). The practice implications for the CTCFP instructor training model indicated potential improvements in the quality of clinical education by practitioners by having an understanding in adult learning models (Witt et al., 2013).

Another adult learning model that may be helpful to clinical instructors incorporates five types of characteristics of adult learners. This model may be an additional reference for the clinical instructors to incorporate training programs to improve the teaching and learning process in the clinical setting.

The "The Adult Learner: Five types" is adapted from Endorf and McNeff (1991), Types and Characteristics of Adult Learners

1. Confident (Pragmatic, Goal oriented, Introspective) Prefers to be consulted rather than directed, able to meet own learning needs
2. Affective (Eager, Responsible, Cooperative) Takes pride in achieving expectations, does not volunteer or own ideas
3. Transitional (Ambitious, Interactive) Enjoys sense of equality with instructor, apprehensive about starting new learning goals
4. Integrative (Self-directed, Independent) Inspired by learning, prefers less involvement from instructor
5. Risk Taker (Adaptive, hard working) Achieves learning goals through changing schedule and routine, thrives to learn something new (Singer, 2006).

Effectively incorporating adult learning theory during clinical instructor experiences will help students and practitioners to more effectively navigate the teaching and learning process. Active engagement in the learning process is more effectively integrated and helps adults to

transform their experiences into learning when incorporating adult learning theory during (Burns & Northcutt, 2009). Clinical instructors will be more effective in their role as an educator when framing the progress of the learner within the lenses of an adult learning theory to effectively progress the learner towards successful educational outcomes in the clinical setting (Burns & Northcutt, 2009).

Clinical Instructor Confidence

Transitioning from a clinician to a clinical instructor role can be very stressful to those without training to assist with the development of role competence (Nguyen, Forbes, Mohebbi, & Duke, 2017). In such a fast paced and complex environment, health care settings can make it difficult for new clinical instructors to master the ability to care for their patients and facilitate learning with students that are new to clinical settings (Nguyen et al., 2017). Clinical instructors provide opportunities for their students to integrate theoretical knowledge from their academic settings by helping them to integrate into the clinical environment with their health care team in which they incorporate communication skills and professionalism in their daily learning activities (Nguyen et al., 2017). Although the value of the clinical instructor has been clearly recognized, it is concerning that guidance and training are not preparatory factors in most settings for instructors in their important role instructing students in clinical environments (Nguyen et al., 2017). Unfortunately, students receiving instruction from clinical instructors without training will be negatively impacted due to poor teaching quality, anxiety and stress related to role confidence as a clinical instructor (Nguyen et al., 2017).

This study focused on the importance of the validation of perceived confidence in clinical teaching. Although there are many classroom teaching assessment tools, there is not currently a valid clinical instructor assessment tool that could potentially assist with the development of role

confidence of clinical instructors (Nguyen et al., 2017). The Clinical Nurse Educator Skill Acquisition Assessment instrument (CNESAA) used in this study was adapted from the Nurse Education Skill Acquisition Assessment (NESAA) tool which measures the confidence of nursing teachers in the classroom (Nguyen et al., 2017). The NESAA tool was adapted from the Dreyfus Model of Skill Acquisition framework which includes 40 items and eight domains. Although the NESAA tool has high statistical reliability, the instrument has not been validated (Nguyen et al., 2017). This CNESAA instrument in this study omitted two items from the original 40 items on the NESAA tool. The third version of the CNESAA instrument included the following items:

1. Enhancing Student Learning
    - Designing new teaching strategies to improve clinical nursing education
    - Designing learning opportunities to facilitate student socialization to clinical settings
    - Selecting appropriate teaching strategies to facilitate effective student learning
    - Developing a plan to assist students who have clinical learning difficulties
    - Selecting assessment strategies that are effective and appropriate to different clinical situations
    - Using assessment and evaluation data to enhance the clinical teaching-learning process
2. Relating theory and practice
    - Understanding the links between different clinical placement within the course curriculum
    - Understanding overall curriculum design and clinical placement design

- Understanding how placement content meets curriculum objectives
- Identifying essential clinical teaching content that meets placement objectives

3. Engaging in scholarship
    - Using evidence and clinical knowledge to plan clinical teaching-learning activities
    - Participating in scholarly activities as a team member
    - Designing and implementing research in the area of expertise
    - Disseminating information to enhance clinical teaching skills in nursing education
    - Collaborating to influence development of nursing within academic and clinical settings
4. Functioning as a leader
    - Identifying your own leadership style in clinical environments as a clinical nurse educator
    - Serving as a mentor to students, new clinical educators, and/or nurses in clinical settings
    - Balancing academic commitments (clinical teaching, classroom teaching, scholarship, and service)
    - Building a climate of respect, collegiality, professionalism, courage, and caring within your institution and clinical settings
    - Promoting change in clinical nursing education
5. Participating in professional development
    - Participating in professional development activities to meet personal goals
    - Identifying personal professional development needs

- Demonstrating improvement of clinical teaching performance based on self-reflection, experience, and professional development (Nguyen et al., 2017).

This study took laborious steps to validate the CNESAA based on the platform of the NESAA instrument (Nguyen et al., 2017). Although there are no current reliable or valid instruments that measure perceived competence for clinical nurse educators, this study helped to provide validation for such a tool (Nguyen et al., 2017). Every detail regarding the procedures of the decision making process were provided in hopes that this instrument will assist clinical instructors in similar contexts (Nguyen et al., 2017). The instrument will be beneficial regarding the design of future training programs by evaluating factors that influence the development of confidence in clinical instructors.

Elements of a Clinical Instructor Program

Many resources exist explaining the importance of the instructors' roles and responsibilities although resources are scarce regarding how to start an instructor training program (Nash & Flowers, 2017). Nursing programs face a great amount of competition from many programs that are also pursuing clinical learning experiences. An evidence-based instructor program is essential for utilization with nurse instructor training for quality care and retention of students (Nash & Flowers, 2017). The study involved 402 RNs with baccalaureate nursing degrees providing a 49% response rate to help determine the type of instructor training program, length of time for the program, type of delivery format for the program, and identify topics for the instructor training program (Nash & Flowers, 2017).

Some of the positive attributes of instructors include helping to guide students in safe practice, helping students develop a professional identity, helping students to socialize into their discipline and creating positive learning experiences (Nash & Flowers, 2017). Instructors that are

supported with training programs typically perform well in their roles. However, instructors that are not supported with training programs and often struggle with lack of clear protocols, lack of appreciation, insufficient formal training, poor preparation for their role, insufficient time, workload pressures, restricted communication with other instructors and lack of structure (Nash & Flowers, 2017). The challenges that instructors face without training experience impacts the learning and supervisory experiences of students (Nash & Flowers, 2017).

Training programs for clinical instructors help to clarify the roles of the instructor and provides for a supportive workplace for such training programs (Nash & Flowers, 2017). Instructors often experience more collaboration between instructors as well as organizational support. These types of environments lead to positive partnerships with academic institutions as well as improved quality and safety in health care organizations (Nash & Flowers, 2017). The Commission on Collegiate Nursing Education (2015) standards provides suggestions to help identify potential nurse instructors: baccalaureate nursing degree or higher, enthusiasm for teaching, provides guidance for problem-solving and clinical judgment, good interpersonal skills, culturally sensitive, gives positive and negative feedback in a constructive manner, clinically competent, empathetic towards learners, passionate about nursing and promotes autonomy when appropriate (Nash & Flowers, 2017). Additionally, the nursing standards suggest that the nursing instructor is a full-time employee and that they have 3 years of work experience. Likewise, they recommend that the instructors are considered to perform at an intermediate level of clinical competency before becoming a clinical instructor (Nash & Flowers, 2017). The instructor should also be approached by the nurse manager to be considered for instructor status before undergoing a head-to-toe assessment. After being approached by the nurse manager, the potential instructor is observed by a nurse educator and then completes a self-assessment similar to the Nyberg

Caring Assessment Scale before the manager confirms a positive annual performance appraisal (Nash & Flowers, 2017). This selective instructor review process results in a head-to-toe assessment to assist the chief nurse in determining the final decisions regarding instructor status.

The format of the instructor training course would initially begin with 4 to 6 hours although the live format presented challenges for many attendees. Having attendees schedule time off and plan for coverage on their units presented challenges during the training process. It was acknowledged that a blended format for follow up training would best meet the need of the instructors (Nash & Flowers, 2017). The follow up training would include five online modules before being assigned as an instructor (Nash & Flowers, 2017). Instructors could take up to a year to complete the instructor training.

Suggested topics related to the content for instructors included adult learning styles, roles and responsibilities, communication and conflict resolution, teamwork, culture of safety, evidence-based practice, patient-centered care, and critical thinking (Nash & Flowers, 2017). Suggestions for the 4 to 6 hour live initial training session for instructors includes an overview of roles and responsibilities, time management and prioritization, nursing theories and instructor evaluation (Nash & Flowers, 2017).

The suggested online follow up training modules include:

- Module 1: Communication, conflict management, and teamwork
- Module 2: Culture of safety, patent and family centered care and quality improvement and assessment
- Module 3: Evidence based practice
- Module 4: Clinical judgment, clinical reasoning and critical thinking (Nash & Flowers, 2017).

Serving as an instructor can be a rewarding experience for health care practitioners if they have support for their educational program. Incentives such as recognition for instructor training, tuition reimbursement, merit-based bonuses, clinical promotion, reduced workloads for clinical instructors and release time for educational needs provides a supportive environment for those interested in training students in clinical environments. Nurturing instructors will aid in the continued recruitment and training of future health care practitioners (Nash & Flowers, 2017).

Mastering the Instructor Role

Instructors are noted to be an essential link between academic programs and clinical settings offering environments for students to apply theory to practice in health care settings (Lazarus, 2016). Teaching in clinical settings frequently occurs at a rapid pace as the nature of health care is unpredictable which can complicate learning scenarios for students that need structured environments (Burns, Beauchesne, Ryan-Krause, & Sawin, 2006). Instructors can help students to transition from the academic setting by creating safe environments for adult learners helping them to have positive learning experiences when incorporating a variety of teaching strategies (Lazarus, 2016). Novice and experienced clinical instructors often struggle to balance dual roles when trying to equalize their time with clinical instruction and providing quality patient care (Burns et al., 2006). Clinical instructors are challenged in their roles as educators with the responsibility of providing instructorship training experiences involving in excess of 500 hours of supervised clinical practice in health care settings (Burns et al., 2006).

Instructors are pivotal to student learning by serving as role models invoking problem solving and clinical reasoning abilities in students (Elisabeth, Christine, & Ewa, 2009). Novice instructors need additional support and training as they venture into the dual roles of health care provider and clinical instructor (Lazarus, 2016). Experienced instructors will need to have

continued instructor training including the support of the academic program's curriculum expectations (Lazarus, 2016). Ultimately the learning opportunities created for students should support the requirements of the educational program which would require instructors to have an understanding of pedagogical competence to properly function as an instructor (Elisabeth et al., 2009). Literature describing the pedagogical competence of clinical instructors teaching techniques is scarce (Elisabeth et al., 2009). Certain practices including demonstrating techniques, interviewing and identifying learning needs of students have surfaced in literature as instructor teaching methods although there are not any clearly defined strategies used in the clinical context (Elisabeth et al., 2009).

In a recent study by Elisabeth et al. (2009), strategies and techniques utilized by clinical instructors were assessed with 16 undergraduate nursing students from year 1 and 3 annually for 5 to 10 weeks. The study focused on guided observations with the central research question "How do instructors teach undergraduate nursing students during clinical practice" (Elisabeth et al., 2009). The undergraduate nursing students recorded field notes with their instructors that were considered to be teacher-learner interactions specifically including what happened, what was said, who was involved and informal conversations with their clinical instructors (Elisabeth et al., 2009). Thirteen instructors were included in the study with an additional focused sampling of 16 instructors for focus group interviews (Elisabeth et al., 2009). By incorporating an ethnographic approach, the collection of data and analysis of the data were a simultaneous process (Elisabeth et al., 2009). Observations were recorded after each shift in an organized manner to help determine specific patterns of behavior being incorporated by the clinical instructors as instructional methods (Elisabeth et al., 2009). It was noted that clinical instruction

was occurring as a continuous process by adjusting the level of clinical instruction, performing instructional strategies, and evaluating instruction (Elisabeth et al., 2009).

The category of "adjust level of instruction" is considered to be a starting point for instructors in which a great amount of planning occurs and adjustments are made according to the needs of the student (Elisabeth et al., 2009). Instructors shared the importance of sending a letter to their student with the names of the student's clinical instructor, the date and time that they should meet at the clinic site as well as where to meet the first day. The importance of the initial meeting with their student was also shared as a time to learn more about the goals and learning style of the student (Elisabeth et al., 2009). This allows the clinical instructor the opportunity to get to know the student better and to have an informal discussion about their previous clinical experiences as well as their expectations (Elisabeth et al., 2009).

The category of "perform instructional strategies" helps to explain how clinical instructors reason during the teaching process. Instructors expressed the importance of trustworthiness in clinical settings with students to help develop a sense of security which is essential in teaching and learning scenarios (Elisabeth et al., 2009). The clinical instructors shared with the students how they often advocate for their patients when they are not able to speak for themselves which helps the students to understand that they are equally important to their instructor (Elisabeth et al., 2009). Students are encouraged to ask questions and instructors help them to understand that you must seek instruction to gain knowledge (Elisabeth et al., 2009). A third method of establishing a safe learning environment is having an invisible presence in the clinical setting. Clinical instructors are able to make modifications to their physical presence by being in the area without being directly in the room every time a student has an intervention with a patient (Elisabeth et al., 2009). Additional teaching methods observed by the

undergraduate students included incorporating perceptual techniques where instructors incorporated hands on demonstrations and listened to different body sounds to help students learn psychomotor skills (Elisabeth et al., 2009). An example of this method would be having a student work on improving their skill with a stethoscope while having the clinical instructor close by guiding to listen for specific sounds. Cognitive teaching techniques were observed by students when clinical instructors provided lectures with different resources including textbooks, diagnostic tests, and x-ray images. Additionally, instructors often questioned students with low-level or factual questions which required students to recall knowledge from their academic training (Elisabeth et al., 2009). In addition to basic questioning methods, instructors were observed to engage students in reflective questioning methods which helped to stimulate the student's critical thinking ability as well as improve their ability to problem solve (Elisabeth et al., 2009). The following is an example of a reflective field note observation: "Why is it important that we follow all vital signs after this type of surgery?" Another example of reflective questioning was provided when the clinical instructor suggested to the student that "something is important here, what do you think that might be?" Instructors also encouraged students to verbalize their thinking which helped students to have more dialogue with their supervisors (Elisabeth et al., 2009). One instructor described this method as "talk and drive" when she discusses what she will do throughout the day with her student (Elisabeth et al., 2009). Providing situational feedback was highly favored by the undergraduate students as they had a great sense of insecurity when they were in difficult situations and their instructors could step in and provide confirmation to the student (Elisabeth et al., 2009).

Finally, the evaluative instruction category provides important feedback to students and helps them as they continue to develop their confidence (Elisabeth et al., 2009). Allowing time

for the instructor and student to reflect daily provided needed feedback to allow growth and development in all areas. Providing constructive feedback in a positive manner to help the student reflect will provide additional guidance to direct the students towards goal attainment. The findings of this study helped to provide a better understanding of how clinical instructors teach undergraduate nursing students. These methods could be utilized in future training programs for clinical instructors.

Teaching Strategies for Instructors

Regardless of the demanding environments in health care settings, educating students has proved to be deeply satisfying to clinical instructors (Lazarus, 2016). As shortages of health care providers continue to grow, there is an increasing need to train and develop clinical instructors to prepare future health care leaders (Lazarus, 2016). One study of midwifery instructors supported the love of teaching and supporting the profession as primary incentives to precept students (Lazarus, 2016). In addition, instructors in the study identified sharing and demonstrating knowledge, giving back to the profession, learning updated evidence-based clinical information from the student, professional duty, and personal satisfaction as incentives for educating students (Lazarus, 2016). Although there are many incentives for instructors to value clinical education, midwifery educational programs are challenged with limiting enrollment due to the shortage of instructors (Lazarus, 2016). Efforts are needed to continue to develop instructor skills as there are often misconceptions by potential instructors regarding the need for development of specialized skills to educate health care students (Lazarus, 2016).

Clinical learning experiences are often impacted by a shortage in clinical instructors willing to serve as educators for health care students (Lazarus, 2016). Prior to serving in the role as a clinical instructor, appropriate resources should be identified to foster the professional

development, mentoring and understanding of the academic expectations of health care students (Lazarus, 2016). Without appropriate resources, clinical instructors will be challenged to develop confidence in their new role as a clinical educator (Lazarus, 2016). There are many areas to consider in the preparation of the role of the clinical instructor including but not limited to the initial preparation for becoming an instructor, teaching strategies, as well as integrating students in the health care environment (Lazarus, 2016).

The initial preparation phase of becoming an instructor is critical to ensure successful learning experiences. New instructors may experience a journey similar to students including a great amount of uncertainty related to their new skills (Lazarus, 2016). While growing in the role of a clinical instructor, new skills are learned that can be helpful although many new instructors do not receive any formal training (Lazarus, 2016). Understanding that many new instructors do not receive formal training, there is a great amount of stress associated with their role (Lazarus, 2016). It has been well documented that instructors want and need ongoing support and training to be competent in their roles (Lazarus, 2016).

Instructors are a critical link between the health care environment and the academic program helping to develop critical thinking, clinical skills, problem solving, safety, flexibility, and respect (Lazarus, 2016). Clinical instructors are most effective when they consider their preferred teaching and learning methods which impact the way that students process and recall information (Lazarus, 2016). It has been noted that students are most successful when instructors match the student's learning style to their style of instruction (Lazarus, 2016). Understanding the different types of online teaching and learning style assessments available will help clinical instructors to effectively prepare for working with beginning, intermediate and advanced students (Lazarus, 2016). Specific online teaching and learning assessments include:

1. VARK: Visual, Aural, Read/Write, Kinesthetic
    - Free 16-item questionnaire that indicates learning style and strategies for learning.
    - http://vark-learn.com/the-vark-questionnaire/
2. What Is My Learning Style
    - Free 30-item questionnaire to help indicate learning styles. Learning strategies are provided for each type of learner.
    - http://www.whatismylearningstyle.com/learning-style-test-1.html
3. Teaching Perspectives Inventory
    - Teaching perspectives are reviewed on this website including how to review your results.
    - http://www.teachingperspectives.com/tpi/
4. The American Academy on Communication in Healthcare
    - Effective communication resources for learners in clinical settings.
    - https://www.achonline.org (Lazarus, 2016).

Clinical instructors should clearly communicate the types of learners that would work well in their clinical settings including any specific characteristics of students that they could work well with in their clinical area (Lazarus, 2016). Academic programs should provide support to clinical instructors that provide educational opportunities for their students including mentoring, resources, and site visits (Lazarus, 2016). There is an extensive amount of planning that should be considered by clinical instructors before students begin their clinical placements including the following student orientation checklist items:

1. Confirmation of contractual and onboarding requirements

2. Set up the initial meeting to orient the student to the site before the first day of the clinical rotation
3. Learn about the student's previous experiences, skills, weaknesses, and expertise
4. Share your teaching style and practice history
5. Discuss preferred learning strategies
6. Review the student's course and learning goals to help focus your teaching strategies
7. Orient the student to all areas of the clinical setting once they arrive for their first day of the clinical rotation
8. Introduce the student to the staff and other health care providers
9. Orient the student to the policies and protocols
10. Introduce the student to the patients (Lazarus, 2016).

Clinical teaching strategies that are essential to help clinical instructors include a variety of methods to help their student obtain their learning outcomes (Lazarus, 2016). Incorporating a variety of teaching strategies such as observation, direct questioning, think aloud, and case presentations helps students to improve clinical reasoning (Lazarus, 2016). Additional teaching strategies can be beneficial to the student and instructor helping to provide insight into critical thinking and problem solving. Some of the additional teaching strategies include:

1. Modeling – Clinical skills are demonstrated by the instructor
2. Observation – Instructor and student observe each other
3. Case presentations – Identifies knowledge gaps
4. Direct questioning – Develops critical thinking
5. Think aloud method – Encourages student to verbalize problem solving process
6. Coaching – Instructor provides supportive cues during performance (Lazarus, 2016).

Integrating students in clinical settings is essential for instructors to experience successful learning outcomes (Lazarus, 2016). Working with adult learners provides opportunities to connect with mature students with a variety of cultural backgrounds and educational experiences (Lazarus, 2016). Many adult learners have a desire to integrate their past areas of experience as active participants in their education settings (Lazarus, 2016). Beginning students primarily need to focus on observation and the development of clinical reasoning skills. There are opportunities to incorporate manipulated schedules in which beginning student's caseloads are regulated to prevent anxiety allowing the instructor to increase the number and complexity of the cases as the student's clinical skills improve (Lazarus, 2016). As the students continue to improve their clinical skills, the instructor will be able to become less involved allowing the student more independence. Intermediate students will begin to transition to a level allowing the instructor to provide less direct supervision as they become more efficient with their clinical skills (Lazarus, 2016). These students will be able to have more patient interactions each day maintaining a focus on quality over quantity (Lazarus, 2016). The advanced student is a proficient learner working with an increasingly complex caseload incorporating safe evidence based practice (Lazarus, 2016).

Although the clinical instructor role can be intimidating, helping others to reach their educational goals can be quite rewarding (Lazarus, 2016). Ultimately, the student and instructor will recognize the value of educational and professional goals when experiencing a successful instructorship (Burns & Northcutt, 2009). Clinical instructors are essential in meeting the shortage of health care providers (Lazarus, 2016). With effective training programs and teaching strategies, instructors can be better prepared to meet the demand of the clinical settings and help

students to be successful meeting their learning outcomes (Lazarus, 2016). Clinical instructor training programs are critical to help instructors be effective in their roles (Lazarus, 2016).

Summary

The literature review provides additional evidence supporting the need to evaluate a clinical instructor program model to determine best practices in clinical instructor training. The review provided insight into essential issues related to clinical instructors including: attributes of clinical instructors, mastering the instructor role, teaching during clinical practice, clinical fieldwork educator performance and learning environments, teaching strategies, key elements to develop a clinical instructor program, instruments to measure educator perceived confidence, adult learning theory, communications, culture, evidence based practice, problem solving, clinical judgment, engaging students, demonstrating collegiality, and fostering a positive environment for learning. Clinical instructor training needs must be met to foster excellent learning experiences in clinical settings.

CHAPTER 3: STUDY DESIGN

Introduction

The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training. The program evaluation design will provide information via an anonymous survey focusing on the effectiveness of the clinical instructor resource website as well as essential elements for an open access online clinical instructor training module (Boone, 1985). Program evaluation will enhance the understanding of the perceived value of the clinical instructor program model. Through the process of program evaluation, clinical instructors will be involved, educated on the alternative means for decision making and develop a better understanding of the program being evaluated (Worthen et al., 1997). The value of an open access clinical instructor training program will be assessed by using a program evaluation research design method for this study (Creswell, 2015).

Statement of the Problem

Issues regarding clinical instructor qualifications are prevalent in the field as many active clinical instructors have not received any formal training for their role (Rye & Boone, 2009). The development of clinical instructor resources benefits both the students and the clinical instructors alike by improving educational experiences thus improving retention rates and professional growth of those involved (Singer, 2006). The clinical instructor training resource will also help to support role confidence of the clinical instructor as well as quality health care services (Burns & Northcutt, 2009). Investigating training models available to help with clinical instruction is necessary to provide high quality health care services and successful student outcomes (Walker & Grosjean, 2010). This study may help to bring to the foreground perceptions of clinical instructors' future training needs.

Study Question

The research question for this study will focus on "What additional training strategies are needed in an open access online clinical instructor training module?" The goal of this program evaluation is to implement an online survey to evaluate and create innovative solutions for clinical instructor training needs to help practitioners prepare for clinical education experiences. Implementing the program evaluation of clinical instructor training will allow for inquiry and discovery. Therefore, there are two study questions for this study. The study questions are follows:

1. How do clinical instructors value the current content of the "Clinical Instructor Resource"?
2. What are the essential elements for an open access online clinical instructor training?

The benefits of evaluating and recommending the essential elements for an open access clinical instructor training module include the potential to improve the quality of health care and professional growth of those professionals involved (Singer, 2006). A clinical training program for instructors would also help to support the learning outcomes of students (Burns & Northcutt, 2009). Open access clinical instructor training will assist health care practitioners in responding to the educational needs of future health care providers and address the concerns associated with the lack of clinical instructorship training. This research study contributes to the higher education body of knowledge by providing the framework for the development of an open access online clinical instruction training program or health care practitioners that supervise student.

Study Design

The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training. The exploration of an open access clinical instructor

training program will be conducted by using a program evaluation research design (Creswell, 2015). Evaluating the clinical instructor training program will provide valuable information to help make judgements regarding the worth and merit of the program (Joyner et al., 2018). Program evaluation as the method for this study will assist with answering questions regarding the "Clinical Instructor Resource" as well as best practices for clinical instructor training (Worthen et al., 1997).

An online survey format will be implemented with closed and open ended questions to collect responses of the participants selected for this program evaluation. Questions on the survey support the innovative strategies of clinical instructors regarding training. Data will be collected in an aggregate format with an analysis confirming the sufficiency of the "Clinical Instructor Resource" website and the needs related to clinical instructor training. The results of this study can be shared with stakeholders in all health care fields (Worthen et al., 1997).

Participants

The population in this study incorporates a census of 100 with a randomized sample of 40 clinical instructors (N = 30) of the Pitt Community College Occupational Therapy Assistant Program. The population in this study incorporates a census or 100 (N = 40) of clinical instructors of the Pitt Community College Occupational Therapy Assistant Program. The population of this study consists of 100 current and past clinical instructors. This population represents those who were and are still employed from 2015 – 2018. The Pitt Community College Occupational Therapy Assistant Program has successfully conferred degrees for occupational therapy assistant students since 1992. This population would offer diversity in backgrounds including clinical work experience, values, culture, age, gender, personalities, communication styles, health status, financial well-being, educational status, leadership,

management, and supervision experience. The identity of the participants would be protected when incorporating a program evaluation research design. There are broad implications of this study in many health care clinical education programs. The criteria selection for this research project is reasonable in the assessment of the problem as the issue and the solution can be measured through data collection and analysis over the years to come.

Data Collection

An anonymous online survey format will be implemented with closed and open ended questions to collect responses of the participants selected for this program evaluation. The survey was sent to an expert panel to establish construct validity. The purpose of the committee of experts was to validate that the questions ask their intent. The program evaluation survey will be sent by email with a two-week response time frame. Participants will receive a link to the Clinical Instructor Resource Website to reference during the survey. Questions on the survey will support current content of the clinical instructor resource as well as recommendations for the future open access online training module. Data will be collected in an aggregate format with an analysis confirming the sufficiency of the "Clinical Instructor Resource" website and the needs related to clinical instructor training. The results of this study can be shared with stakeholders in all health care fields (Boone, 1985). User analytics will be collected from the Clinical Instructor Resource Website as a secondary data source to assist with identifying links that are of high priority to users. The summary of data will include the anonymous survey data as well as the website analytics for comparative purposes.

According to Worthen et al. (1997), data collection should incorporate information organization, control, checks, storage, and retrieval. All survey information will be collected through the use of "Qualtrics" which is a secure and confidential online survey tool.

Confirmation of data will be cross-checked for accuracy to prevent misinterpretation (Worthen et al., 1997). All collected information will be safeguarded and remain confidential in password protected computer files for three years (Worthen et al., 1997).

Analysis of Data

The population in this study incorporates a census or 100 (N = 40) of current clinical instructors of the Pitt Community College Occupational Therapy Assistant Program. Questions related to the evaluation of the current content of the "Clinical Instructor Resource" website as well as the essential elements for an open access online clinical instructor training module will be analyzed. Likewise, anonymous user analytics will be collected from the Clinical Instructor Resource Website as a secondary data source to assist with identifying links that are of high priority to users. The summary of data will include the anonymous survey data as well as the website analytics for comparative purposes.

Once the participants complete the anonymous survey, the survey responses will be analyzed. Central tendencies of each item, the shape of the distribution, identifying options that were selected more than anticipated, items that were selected less as well as any outliers (Worthen et al., 1997). Data will be analyzed through descriptive statistics and graphics (Worthen et al., 1997). Responses of subgroups will be analyzed including professional designation, years of practice experience, highest degree earned, and years serving as a fieldwork educator (Worthen et al., 1997). The analysis of data may help to determine if the data reveals something that was already known or something new (Kinzie, 2015). The data analyzed from this study will evaluate a clinical instructor program model to determine best practices in clinical instructor training.

Ethical Considerations

All of the ethical aspects of the study will be cleared with the Institutional Review Board of East Carolina University which provides for the protection of human subjects through informed consent. The identity of the participants will be protected when incorporating a program evaluation research design (Worthen et al., 1997). Data collection methods and the dissemination of findings will be protected from any potential ethical dilemmas that could possibly arise with an anonymous survey design (Worthen et al., 1997). When data is collected in aggregated form the question of anonymity is not problematic (Worthen et al., 1997).

Assumptions and Limitations

When considering the limitations of this study design, the strengths of the program evaluation outweigh its limitations (Boone, 1985). The program evaluation research design was selected to effectively measure outcomes related to the training resource. This method will provide insight regarding the strengths and weaknesses of the program, participant experiences, and adequacy. Due to the technical nature of the resource, the program evaluation research design will best meet the needs of this study. Some limitations may include the recognition that all views of individuals may not be represented in the survey format.

CHAPTER 4: DATA ANALYSIS

Introduction

As stated in Chapter 1, this study evaluated a clinical instructor program model utilizing a program evaluation design to assist with the analysis of best practices in clinical instructor training. This was accomplished by soliciting anonymous survey responses from past clinical instructors on the Clinical Instructor Resource Website (CIRW) Survey. Additionally, data usage analytics of the CIRW will be discussed according to the specific categories on the website. The results of this study will provide insight into the effectiveness of the CIRW as well as offer insight into the essential elements for an open access online clinical instructor training module (Boone, 1985). Finally, this chapter is organized with a brief overview of the study design, the participants, the results of the CIRW Survey and the CIRW website usage analytics.

Study Design

The perceived value of the clinical instructor program model will be enhanced through a program evaluation method of research design (Creswell, 2015). Program evaluation as the method for this study will help to provide clarity on the merit and worth of an open access clinical instructor training program (Joyner et al., 2018). The involvement of clinical instructors will help to develop a better understanding of the program being evaluated (Worthen et al., 1997). An online survey format utilizing closed and open ended questions to collect responses of the participants with data collected in aggregate format was selected for this program evaluation. Questions on the survey support the innovative strategies of clinical instructors regarding training.

Summary of Results

The results of this program evaluation will provide an analysis of training concepts for the development of resources to meet the needs of current and future clinical instructors (Singer, 2006). These results may also help to support the learning outcomes of students by identifying approaches to assist with clinical instructor training (Burns & Northcutt, 2009). Open access clinical instructor training will assist health care practitioners in responding to the educational needs of future health care providers and address the concerns associated with the lack of clinical instructorship training. The results of this study contributes to the higher education body of knowledge by providing the framework for the development of an open access online clinical instruction training program for health care practitioners that supervise students and can be shared with stakeholders in all health care fields (Worthen et al., 1997).

Participants

The population in this study incorporates a census of 100 with a randomized sample of 40 clinical instructors (N = 30) of the Pitt Community College Occupational Therapy Assistant Program. The population of this study consists of 100 current and past clinical instructors. This population represents those who were employed from 2015 – 2018. The identity of the participants would be protected when incorporating a program evaluation research design. The criteria selection for this research project is reasonable in the assessment of the problem as the issue and the solution can be measured through data collection and analysis over the years to come.

Study Questions Analysis

The research question for this study will focus on "What additional training strategies are needed in an open access online clinical instructor training module?" The goal of this program

evaluation is to provide an analysis of the results of the CIRW survey and data usage analytics to evaluate and create innovative solutions for clinical instructor training needs to help practitioners prepare for clinical education experiences. Implementing the program evaluation of clinical instructor training will allow for inquiry and discovery. Therefore, there are two study questions for this study. The study questions and analysis are as follows:

1. How do clinical instructors value the current content of the "Clinical Instructor Resource"?

Participants accessing the CIRW found the information to be advantageous considering the newness of the clinical instructor program model in health care. Of those accessing the CIRW, 85.71% (N=6) of the participants indicated value in the resource when they have a fieldwork student. Specific areas of the CIRW showing value include articles 57.14% (N=4) sometimes and professional organizations with 57.14% (N=4) accessing sometimes and 14.29% (N=1) frequently or 71.42% sometimes and frequently. Evidence based practice resources were indicated at 28.57% (N=2) for frequent access. The website and patient education resource links were rated at 28.57% (N=2) for accessing more than sometimes (frequently/always).The link for Area Health Education Center (AHEC) was accessed 28.57% (N=2) sometimes and 14.29% (N=1) frequently or 42.86% sometimes and frequently. Occupational Therapy apps received 28.57% (N=2) ratings for sometimes and frequently (see Figure 7). Overall, the current content/links on the CIRW received favorable ratings for access by the survey participants.

Anonymous data usage analytics of the CIRW were collected by the institution library from July 2016 – February 2019 to assist with determining the value of the current content offered to clinical instructors. Topics including patient education, websites, evidence based practice, professional organizations, OT apps, AHEC (continuing education), and articles were

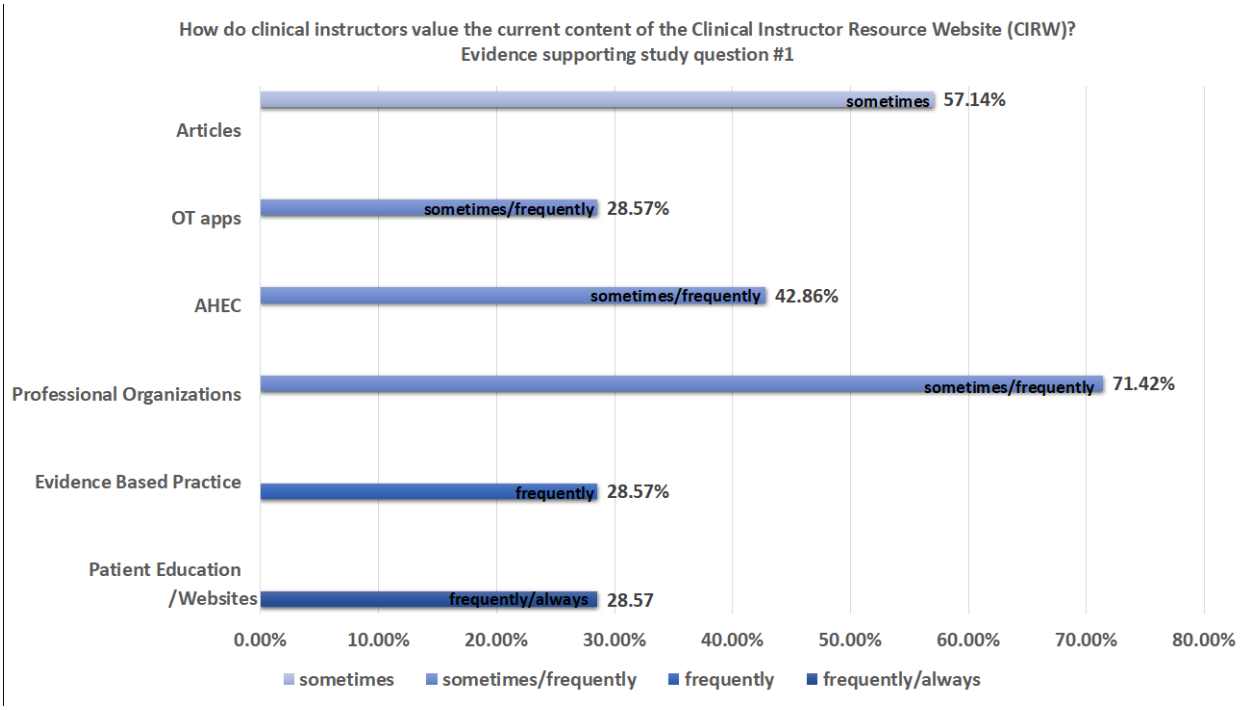


Figure 7. Survey results – Clinical instructors value of the current content of the CIRW.

accessed more than sometimes by participants according to the CIRW survey results. The CIRW data usage analytics were compared from July 2016 – June 2018 for a yearly measurement indicating all links on the CIRW had an increase in access as follows: 43.4% teaching and learning which houses articles, 15.5% database/search tools, 22.3% evidence based practice, 14.1% continuing education which houses AHEC and professional organizations, and 26.6% mobile apps which houses OT related apps. While the last measured time frame was an eight month period (July 2018 – February 2019), the following results are projected increases in access based on an average during a twelve month period of time: 31.1% teaching and learning which houses articles, 42.3% database/search tools, 3.6% evidence based practice, 54.8% patient education (this link was added after the first year of development of the CIRW). Each of the topics listed above are in the order listed on the website. Based on the percentage of access, individuals selecting topics related to the order of convenience was not a concern with this analysis which may indicate actual interest in the topics/links accessed. The CIRW data usage analytics for each link/topic provide an overview of specific topics accessed (see Figure 8). The peaks in accessing the CIRW are consistent with the schedules of students attending two eight week placements August – October, October – December, one week in November, March, April, and June. The July 2016 – June 2017 data usage analytics provide an overview of the peaks in accessing data (see Figure 9). The data analytics provides an overview of the links/topics accessed and total usage of the CIRW from July 2016 – February 2019 (see Figure 10). Overall, the data usage analytics for the CIRW indicated value in the current content of the CIRW based on the current and projected levels of access.

2. What are the essential elements for an open access online clinical instructor training?

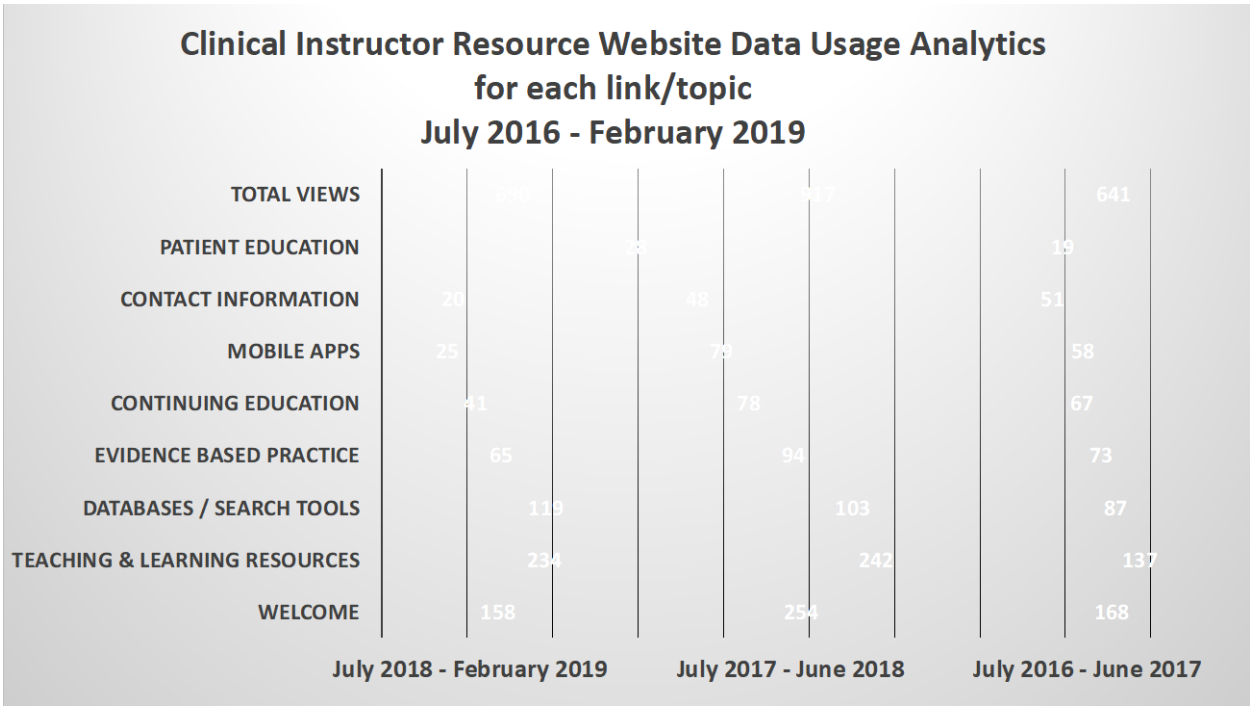


Figure 8. CIRW data usage analytics for each link/topic.

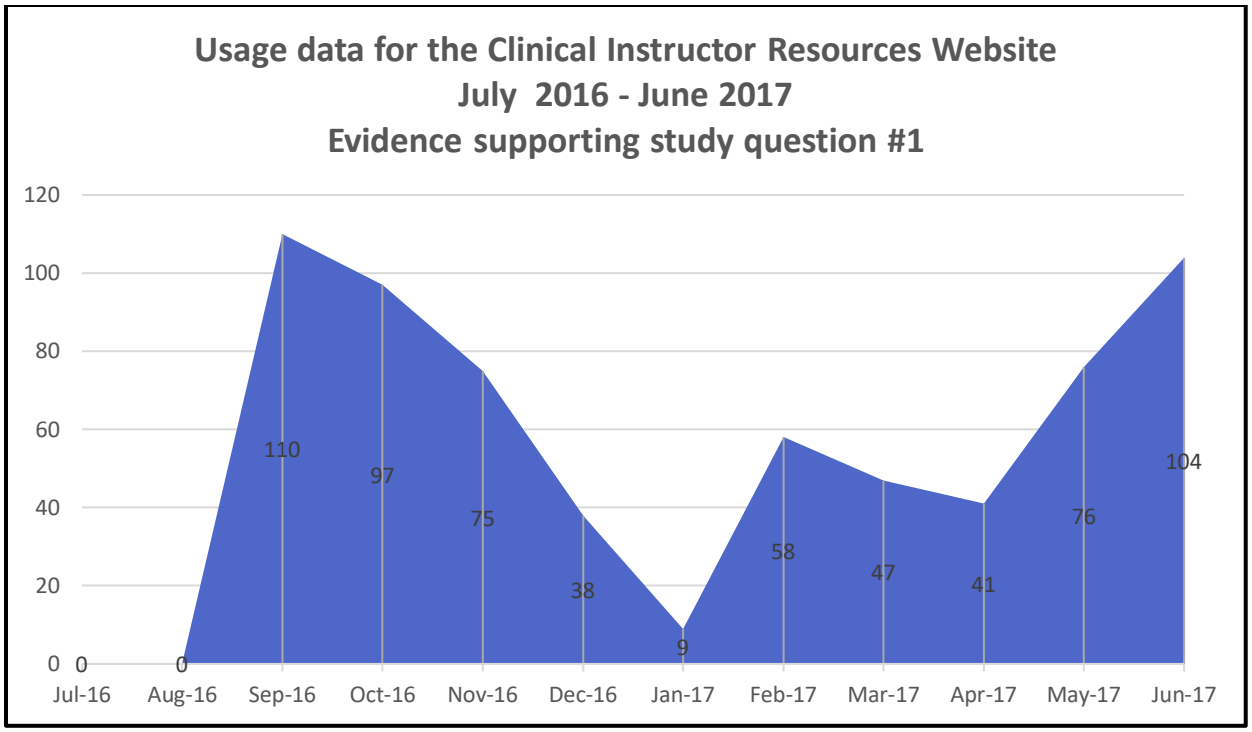


Figure 9. CIRW peaks in usage.

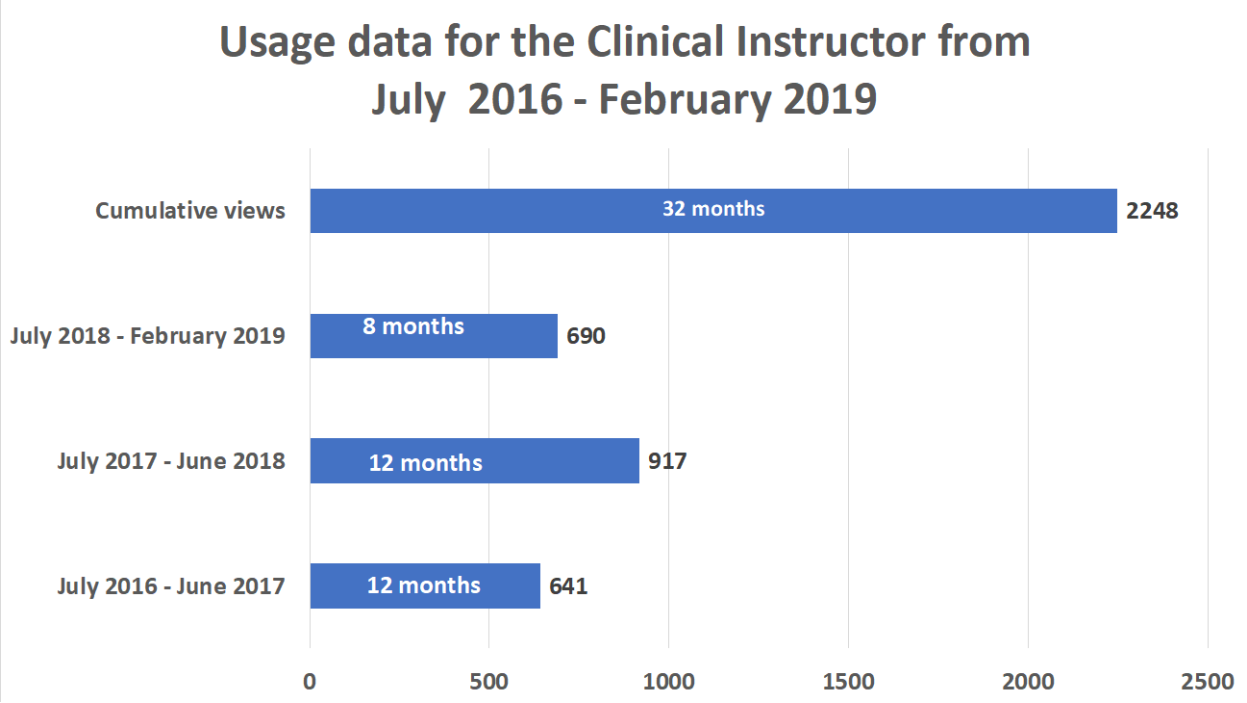


Figure 10. Usage data for CIRW from July 2016 – February 2019.

This area of the survey was developed to assist in determining the most important topics rated by participants for essential elements for an open access online clinical instructor training module. The topics that were indicated with high value for future training modules with combined ratings of frequently and always include 79.31% (N=23) conflict management, 79.31% (N=23) teaching quality, 79.31% (N=23) teamwork, 78.57% (N=22) adult learning methods, 75.86 % (N=22) clinical instructor confidence, 75.86 (N=22) teaching role confidence, 72.41% (N=21) instructional skills, 72.41% (N=21) teaching styles/strategies, 72.41% (N=21) leadership styles, 72.41 (N=21) mastering the instructor role, and onboarding at 67.85% (N=19). Additional topics of interest include one comment for each of the following: handling ethical situations, motivation of students, introduction for new clinical instructors, communication, information on filling out student evaluations, initial certification course for clinical instructors, and more life skills, more team skills, and more good skills. Of the participants suggesting topics of interest, only one had accessed the CIRW. These findings support participants having value in the essential elements of an open access clinical instructor training (see Figure 11).

CIRW Survey Data Analysis

The Clinical Instructor Resource Website (CIRW) survey consisted 34 questions divided into three areas for the purposes of this program evaluation. The three areas of the survey were demographic information, CIRW questions, and the essential elements for an open access online clinical instructor training module (see Appendix B). Demographic information was collected using the CIRW survey to assist with the analysis of the anonymous participant responses. Questions related to the demographics include professional designation, years of practice, and highest degree earned. There was a 75% (N=30) response rate for this study including the professional designations of 36.67% (N=11) Occupational Therapists, 53.33% (N=16)

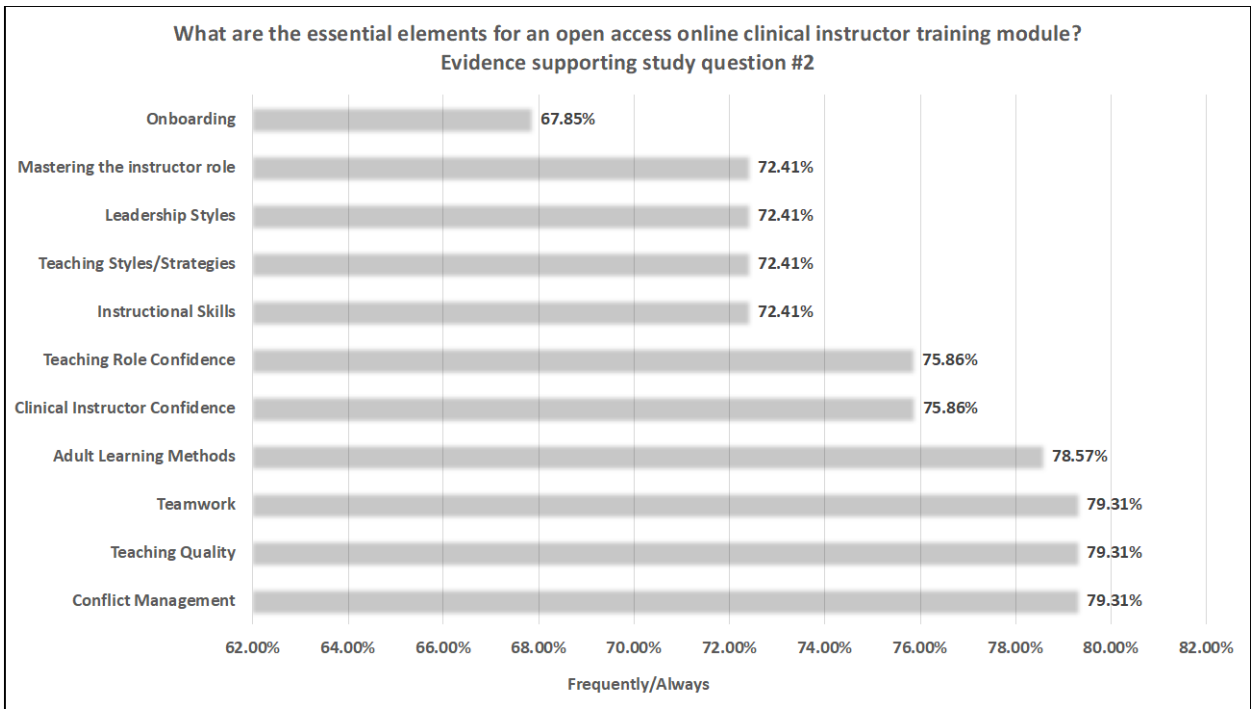


Figure 11. Survey results – Essential elements for an open access clinical instructor training module.

Occupational Therapy Assistants, 6.67% (N=2) Physical Therapists, and 3.33% (N=1) other professionals. Occupational Therapy practitioners accounted for 90% (N=27) of the respondents with Occupational Therapy Assistants accounting for 53.33% (N=16) of the respondents. Participants were asked to share the number of years that they have been practicing with the majority or 43.33% (N=13) having over 20 years of practice, 16.67% (N=5) between 16 - 20 years, 13.33% (N=4) practicing 11 – 15 years, 16.67% (N=5) practicing for 6 – 10 years, and 10% (N=3) practicing 0 – 5 years. Participants were asked to identify the highest degree earned, with 3.33% (N=1) completing a PhD/EdD degree, 3.33% (N=1) completing an OTD/DPT degree, 36.67% (N=11) completing a master's degree, 30% (N=9) completing a bachelor's degree and 26.67% (N=8) completing an associate degree. The majority of the respondents or 56.67% (N=17) completed either a bachelor's degree or an associate degree with 43.33% (N=13) completing a graduate degree or terminal degree.

Additional demographic questions included the years practitioners served as a clinical instructor, years practiced as a clinician, hours of clinical instructor training, and the number of students supervised. Participants were asked to identify the number of years that they served as a clinical fieldwork instructor with 24.14% (N=7) indicating over 20 years, 13.79% (N=4) indicating 16 – 20 years, 27.59% (N=8) indicating 11 – 15 years, 20.69% (N=6) indicating 6 – 10 years, and 13.79% (N=4) indicating 0 – 5 years. Of the total respondents, 37.93% (N=11) indicated serving as a clinical fieldwork instructor for over 16 years and 34.48% (N=10) indicated serving less than 10 years as a clinical fieldwork instructor. Participants were asked how many years they have practiced as a clinician with 40% (N=12) indicating over 21 years of experience, 23.33% (N=7) indicating 16 – 20 years of experience, 10% (N=3) indicated 11 – 15 years, 16.67% (N=5) indicated 6 – 10 years, and 10% (N=3) indicated 0 – 5 years practicing as a

clinician. Participants were asked to identify how many continuing education hours they had completed towards clinical fieldwork instructor training with the majority or 65.52% (N=19) indicating less than five hours, 10.34% (N=3) 6 – 10 hours, 6.9% (N=2) 11 – 15 hours, 6.9% (N=2) 16 – 20 hours, and 10.34% (N=3) more than 21 hours. Participants were asked how many occupational therapy (OT) and occupational therapy assistant (OTA) students they have supervised with 23.3% (N=7) supervising 0 – 5 students, 26.67% (N=8) supervising 6 – 10 students, 20% (N=6) supervising 11 – 15 students, 16.67% (N=5) supervising 16 – 20 students, and 13.33% (N=4) supervising over 20 students. Over 46.67% (N=14) of participants indicated supervising 6 – 15 students and 30% (N=9) have supervised 16 – 20+ students.

The next section of the survey focused on the questions related to the access and frequency of accessing the CIRW. Participants were asked if they had utilized the Clinical Instructor Resource Website with 23.33% (N=7) indicating yes. If they answered "No", the survey would direct them to question #21 which focused on the essential elements of an open access clinical instructor training module. Over 76.67% (N=23) of the participants were redirected to question #21 as they indicated no access to the CIRW. Participants were asked how often they utilized the CIRW with 85.71% (N=6) indicating usage when they have a student and 14.29% (N=1) indicating weekly usage.

The next three questions indicate participants levels of access to the different areas of the CIRW for Teaching and Learning. The first question asked participants to indicate the level of access to articles with the majority or 57.14% (N=4) indicating sometimes, 28.57% (N=2) rarely and 14.29% (N=1) never. The second question asked participants to indicate the level of access to E-books on the CIRW with 14.29% (N=1) frequently, 14.29% (N=1) sometimes, 28.57% (N=2) indicating rarely, and 42.86% (N=3) indicating never. The final question in this section

asked participants to indicate the level of access to websites on the CIRW with 14.29% (N=1) indicating always, 14.29% (N=1) frequently, 14.29% (N=1) sometimes, 42.86% (N=3) indicating rarely, and 14.29% (N=1) never.

The next three questions indicate participants levels of access to the CIRW for continuing education information including AHEC resources, professional organizations, and Massive Open Online Courses (MOOCS). The first question in this section asked participants to indicate the level of access to the AHEC area of the CIRW with 14.29% (N=1) indicating frequently, 28.57% (N=2) sometimes, 28.57% (N=2) rarely and 28.57% (N=2) as never. The second question in this section asked participants to indicate their level of access to professional organizations with 14.29% (N=1) indicating frequently, 57.14% (N=4) sometimes, and 28.57% (N=1) rarely. The final question in this section asked participants to indicate their level of access to Massive Open Online Courses (MOOCS) with 14.29% (N=1) indicating sometimes, 42.86% (N=3) participants indicating rarely and 42.86% (N=3) indicating never.

The next two questions indicate participants levels of access to the CIRW for mobile apps. The first question in the section asked participants to indicate their level of access to apps for occupational therapy with 14.29% (N=1) indicating frequently, 14.29% (N=1) indicating sometimes, 28.57% (N=2) indicating rarely, and 42.86% (N=3) indicating never. The final question in this section addressed participants level of access for library apps with 14.29% (N=1) indicating sometimes, 42.86% (N=3) rarely, and 42.86% (N=3) never.

The next three questions indicate participants levels of access to the CIRW for database/search tools which would include CINAL and ProQuest, evidence based practice, and patient education. The first question in the section asked participants to indicate their level of access to the database/search tools with 100% (N=7) indicating that the rarely access the

database/search tools. The second question asked participants to indicate their level of access to evidence based practice resources with 28.57% (N=2) indicating frequently, 28.57% (N=2) sometimes, and 42.86% (N=3) rarely. The final question in this section asked participants to indicate their level of access to the patient education resources with 14.29% (N=1) indicating always, 14.29% (N=1) frequently, 28.57% (N=2) sometimes, 28.57% (N=2) rarely, and 14.29% (N=1) never. Ratings of 28.57% (N=2) were indicated for accessing patient education resources more than sometimes.

The next 11 questions focused on the essential elements for an open access online clinical instructor training module. Participants were asked to determine the importance of training in instructional skills with 34.48% (N=10) indicating always, 37.93% (N=11) frequently, 20.69% (N=6) sometimes, 6.9% (N=2) rarely, with a total of 72.41% (N=21) indicating this topic as important more than sometimes. The next question focused on the importance of teaching styles/strategies with participants indicating 37.93% (N=11) as always, 34.48% (N=10) frequently, 20.69% (N=6) sometimes, 6.9% (N=2) as rarely with a total of 72.41% (N=21) indicating this topic as important more than sometimes. Participants were asked to determine the importance of training in teaching quality with 41.38% (N=12) indicating always important, 37.93% (N=11) frequently, 13.79% (N=4) sometimes, 3.45% (N=1) rarely, 3.45% (N=1) never, with a total of 79.31% (N=23) indicating this topic as important more than sometimes. The next question focused on the importance of clinical instructor confidence with 48.28% (N=14) indicating always, 27.59% (N=8) frequently, 20.69% (N=6) sometimes, 3.45% (N=1) rarely, with a total of 75.86% (N=22) indicating this topic as important more than sometimes.

Participants were asked to rate the importance of leadership styles as a topic to include in training with 34.48% (N=10) indicating always, 37.93% (N=11) frequently, 24.14% (N=7) sometimes, 3.45% (N=1) rarely with 72.41% (N=21) indicating this topic as important more than sometimes. The next question focused on the importance of teaching role confidence with 37.93% (N=11) indicating always, 37.93% (N=11) frequently, 20.69% (N=6) sometimes, 3.45% (N=1) never, with a total of 75.86% (N=22) indicating this topic as important more than sometimes. Participants were asked to rate the importance of training in mastering the instructor role as a topic to include in training with 31.03% (N=9) indicating always, 41.38% (N=12) frequently, 24.14% (N=7) sometimes, 3.45% (N=1) never with 72.41% (N=21) indicating this topic as important more than sometimes. The next question focused on the importance of training in adult learning methods with 39.29% (N=11) indicating always, 39.29% (N=11) frequently, 14.29% (N=4) sometimes, and 7.14% (N=2) rarely, with a total of 75.58% (N=22) indicating this topic as important more than sometimes. Participants were asked to rate the importance of training in teamwork as a topic to include in training with 58.62% (N=17) indicating always, 20.69% (N=6) frequently, 17.24% (N=5) sometimes, 3.45% (N=1) rarely with 79.31% (N=23) indicating this topic as important more than sometimes. The next question focused on the importance of conflict management with 41.38% (N=12) indicating always, 37.93% (N=11) frequently, 17.24% (N=5) sometimes, 3.45% (N=1) rarely, with a total of 79.31% (N=23) indicating this topic as important more than sometimes. Participants were asked to rate the importance of training in onboarding as a topic with 32.14% (N=9) indicating always, 35.71% (N=10) frequently, 25% (N=7) sometimes, 3.57% (N=1) rarely, 3.57% (N=1) never, with 67.85% (N=19) indicating this topic as important more than sometimes. Additional topics of interest include one comment for each of the following: handling ethical situations, motivation of

students, introduction for new clinical instructors, communication, information on filling out student evaluations, initial certification course for clinical instructors, and more life skills, more team skills, and more good skills.

CIRW Data Usage Analysis

Anonymous data usage analytics of the CIRW were collected by the institution library from July 2016 – February 2019 as a secondary data source to evaluate and create innovative solutions for clinical instructor training needs helping practitioners to prepare for clinical education experiences. Data usage analytics assisted with identifying links/topics on the website that are of high value to users. Additionally, usage analytics identify the timeframe during the year information is accessed and the overall growth in website access during 32 months. The data usage analytics for the CIRW are consistent with the clinical instructors usage responses on the CIRW survey. Survey participants that had accessed the CIRW indicated 85.71% value in the resource when they have a fieldwork student. Clinical instructors receive a link to the CIRW before each fieldwork placement. The peaks in accessing the CIRW over 32 months are consistent with the schedules of students attending two eight week placements August – October, October – December, one week in November, March, April, and June. The total number of views for the CIRW were 641 (July 2016 – June 2017), 917 (July 2017 – June 2018), and 690 (July 2018 – February 2019) with a total of 2248 views.

Participants in the CIRW survey indicated similar interest in topics that were also evaluated with CIRW data usage analytics. Topics including patient education, evidence based practice, professional organizations, OT apps, AHEC (continuing education), and articles were accessed more than sometimes by participants according to the CIRW survey results. The CIRW data usage analytics were compared from July 2016 – June 2018 for a yearly measurement

indicating all links on the CIRW had an increase in access as follows: 43.4% teaching and learning which houses articles, 15.5% database/search tools, 22.3% evidence based practice, 14.1% continuing education which houses AHEC and professional organizations, and 26.6% mobile apps which houses OT related apps. While the last measured time frame was an eight month period (June 2018 – February 2019), the following results are projected increases in access based on an average during a twelve month period of time: 31.1% teaching and learning which houses articles, 42.3% database/search tools, 3.6% evidence based practice, 54.8% patient education (this link was added after the first year of development of the CIRW).

Summary

The results presented from the CIRW survey and CIRW data usage analytics clearly indicated value in the CIRW resource and the essential elements of an open access clinical instructor training module. The participants indicated value in several of the links on the CIRW including patient education, evidence based practice, professional organizations, OT apps, AHEC (continuing education) and articles. Each link/topic on the CIRW experienced growth in access over a period of 32 months including teaching and learning, database/search tools, evidence based practice, continuing education, mobile apps and patient education. These findings were consistent with the participant ratings or overall value of links/topics on the CIRW. Participants in the CIRW survey indicated interest in future training topics including handling ethical situations, motivation of students, introduction for new clinical instructors, communication, information on filling out student evaluations, initial certification course for clinical instructors, and more life skills, more team skills, and more good skills. These findings support the value in the current content of the CIRW and interest in the essential elements of an

open access clinical instructor training. Therefore, the findings in this study support the study questions.

CHAPTER 5: SUMMARY, RECOMMENDATIONS, AND CONCLUSIONS

As mentioned in previous chapters, the purpose of this study was to evaluate a clinical instructor program model to determine best practices in clinical instructor training. Program evaluation will enhance the understanding of the perceived value of the clinical instructor program model (Worthen et al., 1997). Clinical instructor training in all areas of health care is a perplexing topic in higher education due to the responsibilities of the clinical instructor. Thus, clinical instructors play a vital role in the education of students; however, they often do not receive the training to support student learning (Rye & Boone, 2009). Therefore, concerns related to clinical instructor training have been prevalent in health professions including advanced practice registered nurses, physicians, and physician assistants (Witt et al., 2013).

Without focused training, students and instructors are not able to fully experience the benefits of positive educational outcomes (Burns & Northcutt, 2009). Nursing instructor program goals at the University of Pittsburgh requires students to collaborate with their clinical instructors regarding their goals for the internship (Burns & Northcutt, 2009). Encouraging students to collaborate with their clinical instructor helps to facilitate engagement in the process of active learning. Investigating training models available to help with clinical instruction is necessary to provide high quality health care services and successful student outcomes (Walker & Grosjean, 2010).

Statement of the Problem

Issues regarding clinical instructor qualifications are prevalent in the field as many active clinical instructors have not received any formal training for their role (Rye & Boone, 2009). The development of clinical instructor resources benefits both the students and the clinical instructors

alike by improving educational experiences thus improving retention rates and professional growth of those involved (Singer, 2006). The clinical instructor training resource will also help to support role confidence of the clinical instructor as well as quality health care services (Burns & Northcutt, 2009). Investigating training models available to help with clinical instruction is necessary to provide high quality health care services and successful student outcomes (Walker & Grosjean, 2010). This study may help to bring to the foreground perceptions of clinical instructors' future training needs.

Study Design

The research question for this study focuses on "What additional training strategies are needed in an open access online clinical instructor training module?" The goal of this program evaluation is to implement an online survey to evaluate and create innovative solutions for clinical instructor training needs to help practitioners prepare for clinical education experiences. An anonymous online survey format will be implemented with closed and open ended questions to collect responses of the participants selected for this program evaluation. The program evaluation survey will be sent by email with a two-week response time frame. Questions related to the evaluation of the current content of the "Clinical Instructor Resource" website as well as the essential elements for an open access online clinical instructor training module will be analyzed. Likewise, anonymous user analytics will be collected from the Clinical Instructor Resource Website as a secondary data source to assist with identifying links that are of high priority to users. The results of this study can be shared with stakeholders in all health care fields (Worthen et al., 1997).

Study Questions

The research question for this study focused on "What additional training strategies are needed in an open access online clinical instructor training module?" The goal of this program evaluation is to provide an analysis of the results of the CIRW survey and data usage analytics to evaluate and create innovative solutions for clinical instructor training needs to help practitioners prepare for clinical education experiences.

Implementing the program evaluation of clinical instructor training will allow for inquiry and discovery. Therefore, there are two study questions for this study. The study questions are follows:

1. How do clinical instructors value the current content of the "Clinical Instructor Resource"?
2. What are the essential elements for an open access online clinical instructor training?

Summary of the Results

The research question for this study focused on "What additional training strategies are needed in an open access online clinical instructor training module?" The goal of this program evaluation is to provide an analysis of the results of the CIRW survey and data usage analytics to evaluate and create innovative solutions for clinical instructor training needs to help practitioners prepare for clinical education experiences.

Implementing the program evaluation of clinical instructor training will allow for inquiry and discovery. Therefore, there are two study questions for this study. The study questions are as follows:

1. How do clinical instructors value the current content of the "Clinical Instructor Resource"?

Participants accessing the CIRW found the information to be advantageous considering the newness of the clinical instructor program model in health care. Of those accessing the 85.71% (N=6) of the participants indicated value in the resource when they have a fieldwork student. Specific areas of the CIRW showing value include articles 57.14% (N=4) sometimes and professional organizations with 57.14% (N=4) accessing sometimes and 14.29% (N=1) frequently or 71.42% sometimes and frequently. Evidence based practice resources were indicated at 28.57% (N=2) for frequent access. The website and patient education resource links were rated at 28.57% (N=2) for accessing more than sometimes (frequently/always).The link for Area Health Education Center (AHEC) was accessed 28.57% (N=2) sometimes and 14.29% (N=1) frequently or 42.86% sometimes and frequently. Occupational Therapy apps received 28.57% (N=2) ratings for sometimes and frequently (see Figure 7). Overall, the current content/links on the CIRW received favorable ratings for access by the survey participants which supports study question #1.

Anonymous data usage analytics of the CIRW were collected by the institution library from July 2016 – February 2019 to assist with determining the value of the current content offered to clinical instructors. Topics including patient education, evidence based practice, professional organizations, OT apps, AHEC (continuing education), and articles were accessed more than sometimes by participants according to the CIRW survey results. The CIRW data usage analytics were compared from July 2016 – June 2018 for a yearly measurement indicating all links on the CIRW had an increase in access as follows: 43.4% teaching and learning which houses articles, 15.5% database/search tools, 22.3% evidence based practice, 14.1% continuing education which houses AHEC and professional organizations, and 26.6% mobile apps which houses OT related apps. While the last measured time frame was an eight month period (July

2018 – February 2019), the following results are projected increases in access based on an average during a twelve month period of time: 31.1% teaching and learning which houses articles, 42.3% database/search tools, 3.6% evidence based practice, 54.8% patient education (this link was added after the first year of development of the CIRW). Each of the topics listed above are in the order listed on the website. Based on the percentage of access, individuals selecting topics in order of convenience was not a concern with this analysis which may indicate actual interest in the topics/links accessed. Survey participants that accessed the CIRW indicated 85.71% (N=6) value in the resource when they have a fieldwork student. The peaks in accessing the CIRW are consistent with the schedules of students attending two eight week placements August – October, October – December, one week in November, March, April, and June. Overall, the data usage analytics for the CIRW indicate value in the current content of the CIRW based on the increase in access for each link/topic and the overall level of access which supports study question #1.

2. What are the essential elements for an open access online clinical instructor training?

This area of the survey was developed to assist in determining the most important topics rated by participants for essential elements for an open access online clinical instructor training module. The topics that were indicated with high value for future training modules with combined ratings of frequently and always include 79.31% (N=23) conflict management, 79.31% (N=23) teaching quality, 79.31% (N=23) teamwork, 78.57% (N=22) adult learning methods, 75.86 % (N=22) clinical instructor confidence, 75.86 (N=22) teaching role confidence, 72.41% (N=21) instructional skills, 72.41% (N=21) teaching styles/strategies, 72.41% (N=21) leadership styles, 72.41 (N=21) mastering the instructor role, and onboarding at 67.85% (N=19). Additional topics of interest include one comment for each of the following: handling ethical

situations, motivation of students, introduction for new clinical instructors, communication, information on filling out student evaluations, initial certification course for clinical instructors, and more life skills, more team skills, and more good skills. Of the participants suggesting topics of interest, only one had accessed the CIRW. These findings support participants having value in the essential elements of an open access clinical instructor training and study question #2.

Recommendations

The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training. Program evaluation enhances the understanding of the perceived value of the clinical instructor program model by providing clarity on the merit and worth of an open access clinical instructor training program (Joyner et al., 2018). The involvement of clinical instructors provides better understanding of the program being evaluated (Worthen et al., 1997). For consistency with data usage analytics, only one tab was added to the CIRW from July 2016 – February 2019 focusing on patient education. After completing the analysis of the CIRW survey results and CIRW data usage analytics, comprehensive review of the specific CIRW topics was completed to assist with the summary of current resources available on the website.

The CIRW essentially offers one stop shopping for any practitioner that has access to the resource. The intent of the CIRW is to offer any potential resource that a health care practitioner may need on a day to day basis to assist with clinical instructor training provided. Access to the CIRW is free and available online 24/7. Any potential resource that a clinical instructor needs for training is available in the CIRW including over 25 specific articles with direct links targeting student behavior, clinical instruction, and professional relationships under the Teaching and Learning tab. Within each of those categories, specific topics/articles related to teaching and

learning experiences are offered including: stress and emotional issues, motivation and confidence, perceived social support for college students, coping strategies, learner motivation, motivating adult learners, the impact of teacher's behavior on student problem solving skills, reflective practice, rubrics, scaffoldging learning techniques, self assessment, role of a mentor, toolkits for preceptors, case based education, students perceptions of preceptors, harmonious relationships, conflict management, supervisors trusting students, supervisory styles, and interpersonal communications. Over 12 e-books were specifically added to the CIRW resource with direct links under the Teaching and Learning tab and Evidence Based Practice tab including topics related to the following: clinical teaching strategies, cultural competence, educating health professionals, evidence based practice for health care, teaching models, frames of reference and cultural competence. Additionally, a link was provided for Google books offering practitioners access to any book online through the library if not available in full text. The database and search tools tab offers direct access to CINAHL, ProQuest, Nursing and Allied Health and Medline plus. Additional resources offered under the database/search tools tab includes: occupational therapy related practice videos, nursing and allied health videos, films on demand, the Atlas of Human Cardiac Anatomy, and the National Institutes of Health image gallery. The evidence based practice tab offers access to STAT ref providing evidence based medical care, CINAHL, E-books, Centers for Medicare and Medicaid inventory to access their quality measures, PubMed – Clinical queries, and Trip which is a clinical search engine to allow users to access high-quality research/evidence to support their practice. The tab for continuing education offers direct links for AHEC, state/national associations, state/national regulatory boards, and MOOCS. The apps tab offers access to library apps and OT related apps including Ebsco host, CINAHL Plus, and STATRef which are available for direct download on mobile devices. The patient education tab

offers internet resources, Medline plus with patient handouts in English and Spanish, Information from the National Institutes of Health, National Institutes of Mental Health, prescription medication information for patients, nutrition from the Academy of Nutrition and Dietetics and NORD (National Organization for Rare Disorders).

Offering one stop shopping seems to be an excellent option for access to a vast amount of data for clinical instructors. It is concerning to know that practitioners are limited on the amount of time that they have to access these types of resources when providing patient care is their primary role. Likewise, practitioners may encounter technology barriers that were not assessed in this study when accessing the CIRW at their workplace. Based on the survey results, there are some areas of the resource that will need to be continually monitored for importance and updates including E-books and MOOCS. Practitioners may benefit from more education on the valuable resources offered such as MOOCS which provides many opportunities for either free or very low cost online courses to assist with any area of professionalism for practitioners. It is essential to continuously review and monitor data analytics to determine the need of all links and provide the most important information to prevent information overload.

After completing the program evaluation of the clinical instructor training model or the CIRW, it seems that clinical instructors may need a simplified point of access specifically focusing on a primer to help them quickly onboard for the clinical instructor role prior to working with a student. This could be an additional tab that is added to the existing tabs on the main CIRW website including the suggested topics shared on the survey. The remainder of the resources could continue to exist as a central location for offering access to comprehensive evidence based practice, clinical instructor training resources, patient education resources and any additional resources that would be beneficial. Incorporating fewer click options for content

may help with ease of access for specific resources. Additionally, sending eblasts to practitioners providing any updates regarding new resources and perhaps a summary of resources will be important with future revisions of the CIRW.

This program evaluation provided positive indications for such pertinent clinical instructor training needs that have been observed by this researcher for years. Practitioners are focused on primary care of the patients on a daily basis with limited time and resources to take off and attend expensive workshops to prepare professionally for clinical instructor roles. This is something that in many situations seems to come naturally to practitioners as they teach their patients new techniques every day. However, as this study indicates in the demographic results, 65.52% of the survey respondents have attended 0 - 5 hours of clinical instructor training to prepare for their students. Likewise, many of the clinical fieldwork instructors or 24.14% have served for over 20 years and 13.19% have served 16 – 20 years. These statistics are concerning understanding that nearly a quarter of the survey participants will potentially be entering into the retirement phase of life in less than a decade and nearly one third of the participants have only received five hours or less of training for the clinical instructor role. This statistic is staggering and concerning as research specifies that the growth in health care jobs will impact providers confronting challenges related to the delivery of services and changes in payment methods which is not being addressed through clinical instructor training (Fraher et al., 2018). There is great potential for a vacuum effect as the seasoned practitioners retire and the need for health care services continues to increase.

According to the U.S. Department of Labor, Bureau of Labor Statistics (2018), the employment of occupational therapists is projected to grow at 24% and occupational therapy assistants are projected to grow 28% from 2016 to 2026. The rate of growth for occupational

therapists and occupational therapy assistants is much faster than the average for all occupations. In North Carolina total health care employment from 2000 – 2016 grew by 70%; the job growth rate for nursing at 74%; and allied health jobs have grown rapidly at a pace of 83% respectively (Fraher et al., 2018). Issues regarding clinical instructor qualifications are prevalent in the field as many active clinical instructors have not received any formal training for their role (Rye & Boone, 2009). Regardless of the health care specialty area, students and instructors share similar concerns about the need for formal instructor training for health care internships (Walker & Grosjean, 2010).

Relationship of the Study to Previous Research

This study provides the framework for a future open access online clinical instructor training module. Previous research supports the need for clinical instructor training with similar concerns and interest in topics to support the teaching and learning experience. The majority of clinical instructor training models that are available only address the field of nursing and exclude many other health care fields (Walker & Grosjean, 2010). Concerns presented by respiratory therapists regarding clinical instructor training included the need for training related to assessment, providing effective feedback, understanding instructor roles, demonstrating good communication skills as well as inter-rater reliability with educational methods (Walker & Grosjean, 2010). Students and instructors share similarities in several of the desired attributes of clinical instructors suggesting a need for further investigation of training models available to help with the success of all involved (Walker & Grosjean, 2010).

One study specifically focused on the evaluation of clinical instructors by students to help determine the attributes of excellent instructors (Young et al., 2014). Although medical personnel typically perform in an educational mode with their clients, these skills may or may

not naturally transfer into the clinical instructor role. Medical personnel do not typically receive education on training future practitioners in health care settings (Young et al., 2014). The literature suggests that there are key traits of clinical supervisors that help to promote positive learning experiences (Young et al., 2014). In one study, students identified the following five attributes of effective instructors: engaging students, demonstrating collegiality, fostering a positive environment for learning, and discussing concerns with students (Young et al., 2014). Additional positive instructor attributes included providing feedback, being enthusiastic, allowing questions, delegating responsibilities and reviewing the different diagnoses (Young et al., 2014).

Concerns were revealed in one study regarding the awareness of the learning styles of adult learners which impacts the effectiveness of educational outcomes in clinical settings (Burns & Northcutt, 2009). The Kolb's Learning Cycle was incorporated as the theoretical framework guiding this research study as it offers a systematic view of the teaching and learning process for the clinical instructors. The learning cycle approaches four areas that are significant to experiential learning as follows including: concrete experience (doing), reflective observation (observation), abstract conceptualization (thinking) and active experimentation (planning) (Burns & Northcutt, 2009). This cycle of learning allows the teacher to progress the learner through a cycle of learning that incorporates teaching actions and the assessment process throughout the cycle.

Kolb's Learning Cycle incorporates active engagement which helps adults to transform their experiences into learning (Burns & Northcutt, 2009). The first stage of the learning cycle helps learners by offering hands on experiences which could be similar to a clinical placement. Phase two of the cycle focuses on observation skills incorporating the ability to reflect and assess

what the student has learned. The third phase incorporates abstract conceptualization which helps individuals to begin to think and make generalizations about their observations or possibly begin to conceptualize a model. Finally, in stage four, the learner incorporates active experimentation by evaluating their knowledge in which they could possibly test the the model or what they have learned for future experiences (Witt et al., 2013). As the learner progresses through the cycle, there are learning checkpoints at each of the four stages incorporating all of one's senses in the learning process. Although adult learners may decide where they should begin their learning process, the stages all flow in sequence and are circular (Witt et al., 2013). Clinical instructors will be more effective in their instructional processes when incorporating adult learning concepts by incorporating the four stage process (Witt et al., 2013).

Instructors that are supported with training programs typically perform well in their roles. However, instructors that are not supported with training programs often struggle with lack of clear protocols, lack of appreciation, insufficient formal training, poor preparation for their role, insufficient time, workload pressures, restricted communication with other instructors and lack of structure (Nash & Flowers, 2017). Positive attributes of instructors were identified in one study including helping to guide students in safe practice, helping students develop a professional identity, helping students to socialize into their discipline and creating positive learning experiences (Nash & Flowers, 2017). The challenges that instructors face without training experience impacts the learning and supervisory experiences of students (Nash & Flowers, 2017). Training programs for clinical instructors help to clarify the roles of the instructor and provides for a supportive workplace for such training programs (Nash & Flowers, 2017).

In another study, the Commission on Collegiate Nursing Education (2015) standards provides suggestions to help identify potential nurse instructors: baccalaureate nursing degree or higher, enthusiasm for teaching, provides guidance for problem-solving and clinical judgment, good interpersonal skills, culturally sensitive, gives positive and negative feedback in a constructive manner, clinically competent, empathetic towards learners, passionate about nursing and promotes autonomy when appropriate (Nash & Flowers, 2017). Suggested topics related to the content for instructors included adult learning styles, roles and responsibilities, communication and conflict resolution, teamwork, culture of safety, evidence-based practice, patient-centered care, and critical thinking (Nash & Flowers, 2017).

The suggested online follow up training modules include:

- Module 1: Communication, conflict management, teamwork
- Module 2: Culture of safety, patent/family centered care and quality improvement and assessment
- Module 3: Evidence based practice
- Module 4: Clinical judgment, clinical reasoning and critical thinking (Nash & Flowers, 2017).

Serving as an instructor can be a rewarding experience for health care practitioners if they have support for their educational program. Incentives such as recognition for instructor training, tuition reimbursement, merit-based bonuses, clinical promotion, reduced workloads for clinical instructors and release time for educational needs provides a supportive environment for those interested in training students in clinical environments. Nurturing instructors will aid in the continued recruitment and training of future health care practitioners (Nash & Flowers, 2017).

Recommendations for Further Research

Additional research is needed to determine the most effective platforms to host future open access online clinical instructor training modules. Universities and colleges may be able to combine efforts with local agencies or apply for grants to assist with resources to offer access to every practitioner regardless of their practice area. Future evaluation and research is needed related to educational institution regulations/policies for clinical instructors, health care organization regulations/policies for clinical instructors, state/federal laws impacting student clinical experiences, cultural competence, updates in technology trends, evidence based practice, as well as the continued development of models and frames of reference related to health care and education.

Transitioning from a clinician to a clinical instructor role can be very stressful to those without training to assist with the development of role competence (Nguyen et al., 2017). In such a fast paced and complex environment, health care settings can make it difficult for new clinical instructors to master the ability to care for their patients and facilitate learning with students that are new to clinical settings (Nguyen et al., 2017). Clinical instructors provide opportunities for their students to integrate theoretical knowledge from their academic settings by helping them to integrate into the clinical environment with their health care team in which they incorporate communication skills and professionalism in their daily learning activities (Nguyen et al., 2017). Although the value of the clinical instructor has been clearly recognized, it is concerning that guidance and training are not preparatory factors in most settings for instructors in their important role instructing students in clinical environments (Nguyen et al., 2017). Unfortunately, students receiving instruction from clinical instructors without training will be negatively

impacted due to poor teaching quality, anxiety and stress related to role confidence as a clinical instructor (Nguyen et al., 2017).

Although there are many classroom teaching assessment tools, there is not currently a valid clinical instructor assessment tool that could potentially assist with the development of role confidence of clinical instructors (Nguyen et al., 2017). The Clinical Nurse Educator Skill Acquisition Assessment instrument (CNESAA) used in this study was adapted from the Nurse Education Skill Acquisition Assessment (NESAA) tool which measures the confidence of nursing teachers in the classroom (Nguyen et al., 2017). The NESAA tool was adapted from the Dreyfus Model of Skill Acquisition framework which includes 40 items and eight domains. Although the NESAA tool has high statistical reliability, the instrument has not been validated (Nguyen et al., 2017).

Brown et al. (2013) indicated that the clinical learning environment could be predictive of the effectiveness of the students learning experience. It is understood that clinical instructors have a pronounced impact on students in clinical learning environments and can nurture positive learning experiences (Brown et al., 2013). The clinical instructor helps to develop and facilitate learning in the clinical environment for students by providing constructive feedback, listening to the student, facilitating questions, and motivating students (Brown et al., 2013). Likewise, a supportive clinical learning environment contributes to the student feeling confident capable, engaged, supported and feeling comfortable (Brown et al., 2013).

Instructors are noted to be an essential link between academic programs and clinical settings offering environments for students to apply theory to practice in health care settings (Lazarus, 2016). Teaching in clinical settings frequently occurs at a rapid pace as the nature of health care is unpredictable which can complicate learning scenarios for students that need

structured environments (Burns et al., 2006). Instructors can help students to transition from the academic setting by creating safe environments for adult learners helping them to have positive learning experiences when incorporating a variety of teaching strategies (Lazarus, 2016). Novice and experienced clinical instructors often struggle to balance dual roles when trying to equalize their time with clinical instruction and providing quality patient care (Burns et al., 2006).

Conclusion

The purpose of this study is to evaluate a clinical instructor program model to determine best practices in clinical instructor training. Without focused training, students and instructors are not able to fully experience the benefits of positive educational outcomes (Burns & Northcutt, 2009). Likewise, health care practitioners are not fully equipped to respond to the changing educational needs of their students, which ultimately affects the quality of health care provided and the success of students. Hence, to rectify the problem, an online open access training program for clinical instructors may help to improve the quality of health care and positively impact student outcomes. It is in the interest of many stakeholders, including consumers, to provide training for clinical instructors (Fraher et al., 2018).

The results of this study indicate value in the CIRW resource and the essential elements of an open access clinical instructor training module including patient education, evidence based practice, professional organizations, OT apps, AHEC (continuing education) and articles. Likewise, data usage analytics of the CIRW indicated overall growth in the usage of the resource from July 2016 – February 2019. Each link/topic on the CIRW experienced growth in access over a period 32 months including teaching and learning, database/search tools, evidence based practice, continuing education, mobile apps and patient education. These findings were consistent with the participant ratings or overall value of links/topics on the CIRW. Results of

the CIRW survey indicates a need for formal clinical instructor training including the topics of interest shared by participants as follows: 79.31% (N=23) conflict management, 79.31% (N=23) teaching quality, 79.31% (N=23) teamwork, 78.57% (N=22) adult learning methods, 75.86 % (N=22) clinical instructor confidence, 75.86 (N=22) teaching role confidence, 72.41% (N=21) instructional skills, 72.41% (N=21) teaching styles/strategies, 72.41% (N=21) leadership styles, 72.41 (N=21) mastering the instructor role, and onboarding at 67.85% (N=19). Participants in the CIRW survey indicated interest in future training topics including handling ethical situations, motivation of students, introduction for new clinical instructors, communication, information on filling out student evaluations, initial certification course for clinical instructors, and more life skills, more team skills, and more good skills. These findings support the value in the current content of the CIRW and interest in the essential elements of an open access clinical instructor training. Students have identified specific attributes that clinical instructors should demonstrate including clinical knowledge, positive role modeling, objective evaluation, honest feedback and respect for students' experiences to name a few (Walker & Grosjean, 2010). The CIRW serves as a model for clinical instructor training.

Based on the demographic questions, 90% (N=27) of the respondents were occupational practitioners with 53.5% (16) indicating occupational therapy assistant as their professional designation. The majority of the participants or 56% completed a bachelor's degree or associates degree with 36.67% completing a master's degree and 3.33% completing an OTD/DPT or PhD/EdD. Participants indicated 13.33% have supervised more than 20 students, 16.67% 16 – 20 students, 20% 11 – 15 students, 26.67% 6 – 10 students, and 23.33% 0 – 5 students. The findings from this study indicate that many supervisors are educating students without formal training for the clinical instructor role with 65.52% of the survey respondents indicating 0 - 5 hours of

clinical instructor training. The goal of this resource and any future versions of the CIRW would be to have more consistent access for clinical instructor training and preparation for students throughout the year. Likewise, it is essential to require instructors to have some type of formal training related to clinical instruction prior to working with and evaluating a student.

Based on the results of this study, there is excellent potential to develop a clinical instructor training module in an open access online format for all clinical instructors with the potential for certification based on the completion of modules. Data from this study would complement the development of such modules. Additional research is needed to prioritize the specific modules to incorporate for training or certification and how practitioners will maintain their certification. Educational and health care organizations will need to determine the requirements for clinical instructor training based on any local, state, national regulatory policies/laws or accreditation. The goal would be to increase the training provided to clinical instructors prior to receiving a student to provide positive teaching and learning outcomes.

The greatest challenge for open access online clinical instructor training will be determining the type of platform to offer the training, the resources needed for development, content specialists, and support staff to monitor and update the resource. Updates to the resource should occur on a scheduled basis involving continuous review and research of evidence based practice. These updates will help with development of pertinent content considering constant societal, health care, and regulatory changes. Developing a similar type of resource as the CIRW presents the potential opportunity for higher education institutions to collaborate with their Center for Teaching Excellence or faculty training/onboarding departments to assist with the development of a similar resource. Higher education institutions may be able to partner with

health care agencies or organizations that will offer support for training clinical instructors sponsored by research and grants.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
4N-64 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office **252-744-2914** · Fax **252-744-2284** ·
www.ecu.edu/ORIC/irb

Notification of Exempt Certification

From: Social/Behavioral IRB
To: Tommianne Haithcock
CC: Art Rouse
Date: 6/27/2019
Re: UMCIRB 19-000667
INNOVATIONS IN HIGHER EDUCATION CLINICAL INSTRUCTOR TRAINING FOR OCCUPATIONAL THERAPY: A PROGRAM EVALUATION

I am pleased to inform you that your research submission has been certified as exempt on 6/27/2019. This study is eligible for Exempt Certification under category #2A.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: CIRW SURVEY

Clinical Instructor Resource Website (CIRW) Survey

Demographic Information					
1. What is your professional designation?	OT	OTA	PT	PTA	Other
2. How many years have you been practicing?	0 – 5	6 – 10	11 – 15	16– 20	21 +
3. What is the highest degree you have earned?	Associates	Bachelors	Masters	Professional Doctorate	Research Doctorate
	0 - 5	6 - 10	11 - 15	16 - 20	21+
4. How many years have you served as a clinical (fieldwork) instructor?					
5. How many years have you practiced as a clinician?					
6. How many continuing education hours have you completed towards clinical (fieldwork) instructor training?					
7. How many OT/OTA students have you supervised?					

Clinical Instructor Resource Questions					
8. Have you utilized the Pitt Community College Occupational Therapy Assistant Clinical Instructor Resource Website? ***Survey directs to section #3 if answer is "No"***	Yes	No			
9. How often do you utilize the Clinical Instructor Resource Website?	Daily	Weekly	Monthly	When I have a fieldwork student	
Please indicate your level of access to the following areas of the Clinical Instructor Resource Website:	Never	Rarely	Sometimes	Frequently	Always
Teaching & Learning Resources					
10. Articles					
11. E-books					
12. Websites					

Continuing Education					
13. AHEC					
14. Professional Organizations					
15. MOOCS (Massive Open Online Course)					
Mobile Apps					
16. Apps for Occupational Therapy					
17. Apps for Library					
18. Database / Search tools					
19. Evidence Based Practice					
20. Patient Education					
Essential Elements for an Open Access Online Clinical Instructor Training Module					
How important are the following topics for clinical instructor training?	Never	Rarely	Sometimes	Frequently	Always
21. Instructional Skills					
22. Teaching Styles/Strategies					
23. Teaching Quality					
24. Clinical Instructor Confidence					
25. Leadership Styles					
26. Teaching Role Confidence					
27. Mastering the Instructor Role					
28. Adult Learning Methods					
29. Teamwork					
30. Conflict Management					
31. Onboarding					
32. Please list additional topics of interest related to clinical instructor training:					