

A PHENOMENOLOGICAL INVESTIGATION OF PHARMACISTS' EXPERIENCES,  
MOTIVATION, AND PREFERENCES IN THE CONTEXT OF  
CONTINUING PHARMACY EDUCATION

by

Laura Beth Ladymon

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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## ABSTRACT

The purpose of this phenomenological study was to describe select Tennessee pharmacists' experiences, motivation, and preferences in the context of continuing pharmacy education (CPE). The pharmacists' experiences, motivation, and preferences related to CPE were generally defined as participating in CPE programming in a manner that meets the needs of the pharmacist. Also, select pharmacists were defined as pharmacists with at least six hours of continuing pharmacy education credit within the last year. This study explored how 12 pharmacist participants in Tennessee experienced CPE as well as what motivated them to attend CPE activities. Additionally, the study investigated pharmacists' preferences in relation to CPE delivery methods. Individual interviews, virtual focus groups, and journal assignments were used to collect data. Data were analyzed via memoing, open-coding, transcendental phenomenological analysis, and via the analysis of emerging themes. The following research questions were explored: (1) How do select pharmacists describe their experiences with CPE in Tennessee? (2) What reasons do participants describe as their motivation to attend CPE activities? (3) In terms of design and delivery, what preferences do participants have in relation to CPE activities? (4) How do participants describe the impact of CPE on pharmacy practice? The major themes that emerged as a part of the investigation of pharmacists' experiences, motivation, and preferences in the context of continuing pharmacy education were (a) Impact on Patients' Lives, (b) Networking Opportunities (c) Licensure and Certification Requirements and (d) Increasing Knowledge. The results of this study will hopefully guide leaders in the profession of pharmacy as they develop new models for CPE and pharmacists as they seek to gain knowledge to improve the practice of pharmacy.

*Keywords:* pharmacist, continuing pharmacy education, experiences, pharmacy education

## **Dedication**

This dissertation and the five years of work that went into earning an Education Specialist degree and now Doctorate in Education is dedicated to my beautiful daughter Paisley Beth Ladymon. Paisley was only four months old when I began the doctoral program and now at five years old, she will see me complete what few mothers are able to achieve. As a working mother and graduate student, many nights and weekends have been spent focused on schoolwork. Paisley has always seemed to understand that I was working toward something that would benefit our family. A lot of life has been lived over the last five years, but Paisley has been my constant source of momentum in everything I have sought to accomplish.

As a doctoral student, I have faced many obstacles throughout the course of the program. The frustration and stress I have endured meant frequent text messages to friends and family to vent or to send pictures of piles of research articles at my workspace in Starbucks. Sarah Moore served as my sounding board for the last five years of this process, and she is to be commended for having the patience to handle my stress-induced vent sessions and phone calls that served as yet another way for me to procrastinate. Sarah has been my best friend and confidant for many years, but there are few people prouder of me than she is as she has walked this arduous road with me from beginning to end.

Last but not least, this dissertation manuscript is dedicated to my family as they have prayed for and encouraged me throughout the entire process. I would not have been able to achieve anything without their prayers and support.

## **Acknowledgments**

This dissertation would not be possible without the dedication of Dr. Gary Smith, my committee chair. Dr. Gary was a constant source of encouragement throughout the entire process and was always quick to help me in any way he could. His thoughtful responses and smiley face emojis in text conversations helped me focus on finishing. Dr. Gary spent countless hours working with me and in the background to ensure that I reached my goals. I could not have asked for a more caring or patient committee chair, and I will always be grateful that Dr. Gary was quick to see the potential I had and directed me toward the finish line no matter how burned out I was.

I would also like to acknowledge Dr. Andrew Martin and Dr. Eric Lovik who worked alongside Dr. Gary as the committee members. Dr. Martin provided his expertise as both a pharmacist and professor to ensure that the content of the dissertation was on target with what is happening in the world of pharmacy. His assistance with formatting, editing, and brainstorming was invaluable. Dr. Lovik was quick to provide encouraging notes and thoughtful editorial comments that helped me view the information from a different perspective. My committee guided me toward the light at the end of the tunnel, and without their feedback and assistance, I would not have finished this project.

In addition, I would not have been able to complete this dissertation without the pharmacists who volunteered to participate. Twelve individuals sacrificed their time to provide me with the data I needed to conduct this study and are to be commended for their dedication to the advancement of the field of pharmacy. While they are to remain anonymous for the purposes of the study, they each played a vital role in helping me earn my doctorate degree.

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### **List of Abbreviations**

Accreditation Council for Pharmacy Education (ACPE)

Continuing Education (CE)

Continuing Pharmacy Education (CPE)

Continuing Professional Development (CPD)

Patient Protection and Affordable Care Act (PPACA)

Tennessee Pharmacists Association (TPA)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

Continuing pharmacy education (CPE) is central to the profession of pharmacy in that it provides practicing pharmacists with the opportunities needed to increase their knowledge base in the field, which in turn helps them provide better patient care. Her professional interests and career goals motivate the researcher, while the philosophical assumptions she brings to the study provide a foundation for the research. A thorough review of the literature reveals a lack of research related to CPE and pharmacists' participation in related activities. A transcendental phenomenological study to add to the literature on the topic was conducted to contribute to the body of knowledge in the area of CPE. This chapter provides the background of the topic based on relevant literature. The historical, social, and theoretical contexts for the research problem are also covered. Both the research problem and purpose of the research are discussed. The significance of the study is grounded in the fact that there is a lack of research related to CPE, and the research questions covered in this chapter serve as guiding elements to conduct a thorough study.

While much research has been done on continuing education in healthcare professions including nursing and medicine (Al-Majid, Al-Majed, Rakovski, & Otten, 2012; Collins, 2013; Dacey, Arnstein, Kennedy, Wolfe, & Phillips, 2013; Dionyssopoulos, Karalis, & Panitsides, 2014; Kirby, Schattner, & Piterman, 2014; Kvas & Seljak, 2013), no qualitative research has been conducted specifically on pharmacists' experiences with CPE. Understanding pharmacists' preferences and motivation related to obtaining CPE credit impacts the field of pharmacy and how continuing education is managed. A thorough research plan complete with thorough data

collection and analysis methods led to understanding pharmacists' experiences, motivation, and preferences in the context of CPE at a deeper level.

### **Background**

After graduating from pharmacy school, new graduates must pass board exams to become a licensed pharmacist. In addition to passing board exams, licensure comes with other requirements. One condition of maintaining a professional license in the field of pharmacy is meeting CPE requirements. Tennessee pharmacists must earn at least 30 hours of CPE credits within every two-year license cycle. Pharmacists meet this requirement by attending CPE courses offered via several different methods including webinars, live seminars, and home study activities. A need exists to examine CPE in more detail. Tran, Tofade, Thakkar, and Rouse (2014) suggested that "health professions in general and pharmacy in particular are encouraged to publish more work on continuing education and continuing professional development" (p. 7). This specific request along with other supporting literature demonstrates the necessity for further research in the field of CPE because academic literature is limited.

Research is lacking in the area of CPE, and there is a gap in the literature related to the specific topic of pharmacists' experiences, motivation, and preferences in the context of CPE. The results of studies related to continuing education in other healthcare professions reveal that there is a need for research on topics related to CPE (Al-Majid et al., 2012; Collins, 2013; Dacey et al., 2013; Dionyssopoulos et al., 2014; Kirby et al., 2014; Kvas & Seljak, 2013; Nalle, Wyatt, & Myers, 2010; Trewet & Fjortoft, 2013). However, no qualitative research has been conducted on pharmacists' experiences, motivation, or preferences in the context of CPE. This research provides new insight into how pharmacists describe their experiences with CPE. The knowledge

gained from this study benefits the profession of pharmacy, the organizations involved in providing accredited CPE programming, and patients receiving care from a pharmacist.

### **Situation to Self**

I sought to explore the phenomenon of pharmacists' experiences, motivation, and preferences in the context of CPE. My motivation for researching this topic was to better understand pharmacists' experiences with CPE with the goal of contributing to the literature in this field. This study provides a wealth of knowledge and data that can be passed along to both pharmacy and continuing education leaders to be considered in the development of future CPE programming. Pharmacists are directly involved in patient care and must be as knowledgeable as possible to ensure they are providing safe and effective patient care. CPE is the method by which many pharmacists continually increase their knowledge base, so it is vital that those involved with CPE are completely informed about pharmacists' experiences, motivation, and preferences in the context of CPE to ensure that programming is of high quality and also meets the professional and educational needs of pharmacists.

Research was conducted based on an ontological philosophical assumption because data were collected based on an array of perspectives. This philosophical assumption is due in part to the fact that data were analyzed from a variety of viewpoints to find emerging themes as they developed (Creswell, 2013). Participants shared their experiences with the phenomenon of attending CPE activities. A social constructivist paradigm is utilized in the research as it allows participants to construct the meaning of the experiences they have had with CPE. Each of the participants provided a different perspective, and the phenomenon was analyzed based on the themes that emerged. These individual experiences, or multiple realities, became the basis for constructing meaning from the data (Creswell, 2013). Constructing meaning from the data

collected provided a thorough description of the pharmacists' experiences. The ontological philosophical assumption and the social constructivist paradigm served as the foundation for conducting research and analyzing data.

### **Problem Statement**

The problem is that while much research has been done on continuing education in healthcare professions including nursing and medicine (Al-Majid et al., 2012; Collins, 2013; Dacey et al., 2013; Dionyssopoulos et al., 2014; Kirby et al., 2014; Kvas & Seljak, 2013), no qualitative research has been conducted specifically on pharmacists' experiences with CPE. Understanding pharmacists' preferences and motivation related to obtaining CPE credit impacts the field of pharmacy and how continuing education is managed. There is a need for research to contribute to the academic literature related to the topic of CPE as well as the reasoning behind why pharmacists choose to seek opportunities for lifelong learning.

### **Purpose Statement**

The purpose of this phenomenological study is to describe select Tennessee pharmacists' experiences, motivation, and preferences in the context of CPE. Throughout the course of the research, pharmacists' experiences, motivation, and preferences related to CPE are generally defined as participating in continuing pharmacy education programming in a manner that meets the needs of the pharmacist. Also, select pharmacists are defined as pharmacists with at least six hours of CPE credit within the last year. The theories guiding this study are Malcolm Knowles' (1975, 1977, 1980; Knowles, Holton, & Swanson, 2011) andragogical adult learning theory and Jack Mezirow's (1990, 1997, 2003) transformational learning theory. Examining the experiences, motivation, and preferences of Tennessee pharmacists in the context of CPE

provided the researcher with the opportunity to align the goals of the research to fill the gaps in knowledge in this particular area.

### **Significance of the Study**

Research specifically related to pharmacists' preferences and experiences with CPE including their motivation to participate is nonexistent. Exploring pharmacists' experiences with CPE is significant in several ways. Understanding pharmacists' experiences, motivation, and preferences in the context of CPE is vital to the profession of pharmacy and will better prepare pharmacy leaders as they address issues related to CPE. There are multiple parties involved in the development and delivery of CPE activities. On one side, the accredited CPE provider should understand the needs of the pharmacists who are seeking educational opportunities. Pharmacists are the customers in the sense that they have educational and professional needs related to CPE. Exploring this phenomenon sheds light on the significance of pharmacists' experiences with CPE as they relate to providing competent patient care and expanding knowledge. The results of the study can assist pharmacy leaders as they seek to determine a new direction for CPE and could serve as a starting point for future research to add to the field of study. The findings can be applied to continuing education programs in other professions including nursing and medicine as these disciplines have similar requirements related to continuing education and professional expectations for lifelong learning.

The study is of empirical significance and also possesses theoretical implications as it contributes to the call of researchers (Nalle et al., 2010; Tran et al., 2014; Trewet & Fjortoft, 2013) to expand the body of research in the field of CPE. The research is one element of the contribution to the field of study; however, the theoretical implications can impact the future design of CPE and may influence future decisions related to continuing education in the

profession. The findings of the study impact the pharmacy community as well as those invested in CPE such as organizations that are accredited continuing education providers. Nalle et al. (2010) found that there is a need for research “to guide and sustain the continuing education efforts of both professional organizations and other continuing education providers” (p. 108). Providers can utilize the results of the study to alter the current direction of continuing education as well as adjust future programming to meet the needs of lifelong learners.

The theoretical significance of this study is apparent due to both the need for research in this area as well as the results of the study. From a theoretical standpoint, the results of this research align with the theories chosen to serve as the framework of the study. The findings contribute to adult learning theory. Adult learning theory closely aligns with the objective of the study as well as the participants’ role in the research. The observed relationship between the phenomena of participating in CPE and the element of adult learning demonstrates a strong tie to the theoretical significance of the research (Knowles, 1980; Nalle et al., 2010; Tran et al., 2014; Trewet & Fjortoft, 2013). Pharmacists, as adults, have specific educational needs. It is important to note that understanding adult learning theory and the science behind how adults learn is tied to being able to develop effective programming.

The results of this study could also benefit the Tennessee Pharmacists Association (TPA), an accredited CPE provider, as well as one of the other 13 providers throughout the state in understanding what motivates their members to participate in continuing professional education. TPA is interested in providing benefits to their members in the interest of meeting their educational and professional needs. Providers across the state have different objectives for maintaining accreditation to provide CPE, but all have at least one goal in common: educating pharmacists.



As a regulatory agency, the Tennessee State Board of Pharmacy can use this study to assist in identifying new methods for assisting pharmacists in the state as they work toward meeting the CPE requirements. The Board of Pharmacy is responsible for determining the requirements pharmacists must meet to hold an active license. The Board also holds pharmacists accountable for meeting the requirements they set forth as the regulatory body. Evaluating the current CPE model and the outcomes of the study may necessitate changes to the process by which pharmacists obtain CPE. As the governing body, the Board of Pharmacy may also consider changing the education requirements related to maintaining a license to practice pharmacy. Other healthcare boards throughout the state will have the opportunity to review the study and decide if changes need to be made to their continuing education models.

Finally, exploring this specific phenomenon gives a voice to pharmacists in Tennessee who are compelled to assist in improving the practice of pharmacy throughout the state. Pharmacists are driven to pursue opportunities to further their education throughout their career. Understanding the importance of maintaining an active license, as well as ensuring that their practice is current and evidence-based, requires pharmacists to actively participate in educational activities. The participants in this study were passionate about making an impact in the field of CPE, and by participating in the research, they provided information that will not only contribute to the academic literature, but will also influence pharmacy leaders in Tennessee. Providing pharmacists the platform for making changes means that as a collective group, they will be unified and push forward to make sure their voice is heard.

## **Research Questions**

In light of the purpose of this study, the following questions serve as the framework for this research:

1. How do select pharmacists describe their experiences with CPE in Tennessee?

Healthcare professionals must participate in some form of continuing education to maintain their license to practice. The field of pharmacy is no different. Pharmacists in the state of Tennessee must obtain CPE credits. The requirements of the Tennessee State Board of Pharmacy include a minimum of 30 hours of CPE every two-year license cycle to maintain a basic license. However, if a pharmacist has chosen to pursue specializations or certifications, these entities may have separate CPE requirements on top of what the Board requires. Recording the descriptions of pharmacists' experience can "provide a deeper and broader understanding of the full experience" (Gardner, 2014, p. 109). Asking participants to describe their experiences with CPE provides invaluable data. These deep, thick, rich descriptions are an important element of the phenomenological design (Creswell, 2013) and contribute to a better understanding of the experience of the phenomenon. These descriptions were combined with the data from other data collection methods to paint a vivid picture of how pharmacists experience the phenomena.

2. What reasons do select pharmacists describe as their motivation to attend CPE activities?

Motivation plays an important role in pharmacists' participation in CPE activities. The literature suggests that adult learners experience greater academic success when they are intrinsically motivated (Buxton, Burns, & De Muth, 2012). Motivating factors may include both non-personal and personal elements including organizational issues as well as family obligations. Understanding what motivates pharmacists to participate in CPE activities can benefit accredited

CPE providers, those who plan CPE programs, and pharmacists' employers who choose to support their employees who seek out educational opportunities.

3. In terms of design and delivery, what preferences do select pharmacists have in relation to CPE activities?

An individual's learning style and preference of delivery method impact how participants experience continuing education. McConnell, Newlon, and Delate (2010) found that "the lack of science underpinning CE [continuing education] for health professionals has made it difficult to identify effective educational methods to meet the needs of the diverse range of health professionals" (p. 1593). Identifying pharmacists' preferences for the design and delivery of CPE activities is vital to the development of future CPE programming. Pharmacists are adult learners and while their learning styles and preferences for delivery methods may vary, understanding how adults learn most effectively contributes to the effectiveness of educational programming. Determining preferences related to the design and delivery of CPE can provide CPE providers with the information needed to create programming that meets both the educational and professional needs of pharmacists.

4. How do select pharmacists describe the impact of CPE on pharmacy practice?

Continuing education can impact how pharmacists practice in the field as they provide patient care. Certain guidelines are in place to assist pharmacists in providing better patient care. Such guidelines are generally put in place by governing bodies such as accrediting agencies or boards of pharmacy. Trewet and Fjortoft (2013) stated, "Accreditation standards for continuing pharmacy education that place a stronger emphasis on learning outcomes, application of learning in practice, and evaluation of the impact on patient care have the potential to lead pharmacists to becoming more engaged in their learning" (p. 216). Measuring the impact CPE has on pharmacy

practice can ensure that standards for patient care are being met and that CPE activities are providing pharmacists with the knowledge needed to improve how they provide patient care. CPE has major implications for the practice of pharmacy and it is vital to understand the impact CPE can have on both pharmacists and the profession of pharmacy.

### **Definitions**

1. *Accreditation Council for Pharmacy Education (ACPE)*: ACPE accreditation is public recognition that a professional degree program leading to the Doctor of Pharmacy degree is judged to meet established qualifications and education standards through initial and subsequent periodic evaluations. The Continuing Education Provider Accreditation Program is designed to assure pharmacists, boards of pharmacy, and other members of pharmacy's community of interests of the quality of continuing pharmacy education programs (Accreditation Council for Pharmacy Education, 2017).
2. *Continuing Pharmacy Education (CPE)*: A structured educational activity designed or intended to support the continuing development of pharmacists and/or pharmacy technicians to maintain and enhance their competence (Accreditation Council for Pharmacy Education, 2017).
3. *Continuing Professional Development (CPD)*: A self-directed, ongoing, systematic and outcomes-focused approach to lifelong learning that is applied to practice. It involves the process of active participation in formal and informal learning activities that assist individuals in developing and maintaining continuing competence, enhancing their professional practice, and supporting achievement of their career goals (Accreditation Council for Pharmacy Education, 2017).

4. *Experiences* – The fact that a being that has reached the ability of cognition finds its manifestations in its consciousness as its experiences (Lossky, 2016).
5. *Motivation* – Motivation is anything that affects behavior in pursuing a certain outcome (Lussier & Achua, 2016).

### **Summary**

CPE is a vital element of every pharmacist's career, and it is important to understand pharmacists' experiences with CPE, what factors motivate them to attend activities, and their preferred delivery method of educational programming. Research in CPE is needed to fill a gap in the available academic literature in the field. A transcendental phenomenological approach provides a framework for a study that seeks to understand pharmacists' experiences with CPE. The research questions for this particular study guided both the researcher and participants to a better understanding of the phenomenon. It is obvious that there is a gap in the literature and research is needed to expand this area of interest.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

The lack of literature on the topic of CPE indicates that there is a need for research in this area. The current literature encompasses continuing education in health professions as well as the emerging concept of continuing professional development. Additionally, this literature reviews how the Patient Protection and Affordable Care Act (PPACA also known as the ACA) has expanded the roles of pharmacists so that continuing education and professional development is necessary now more than ever. Pharmacists also have expanded roles in patient and economic outcomes that necessitate professional development and training opportunities. However, there are no studies that address pharmacists' experiences with CPE. The gap in the literature demonstrates the importance of research within the context of CPE. Two theories serve as the theoretical foundation for this study: Knowles' andragogical adult learning theory (Knowles, 1968, 1975, 1980; Knowles et al., 2011) and Mezirow's transformative learning theory (Mezirow, 1990, 1997, 2003). In this chapter, a thorough synthesis of the literature is framed to contribute to the research in the field of CPE specifically related to pharmacists' experiences, motivation, and preferences.

### **Theoretical Framework**

Understanding how adults learn has been the subject of interest for many scholars and practitioners since adult education became a professional field of practice in the early 1920s (Merriam, 2001). The focus of inquiry for this study is established on a theoretical framework that assists in confirming the significance of the research and continuing adult education as a whole. This framework effectively guides the study and allows the research to be placed in a broader context. While there are numerous models of adult learning, no models exist that

explain everything there is to know about adult learners or how learning takes place. However, the collection of theories, models, and adult learning principles that do exist can be combined to create a solid foundation for the concept of adult learning (Merriam, 2001).

Two specific theories were chosen for this particular research inquiry and as such, the theoretical framework is grounded in the work of Knowles (1975), Knowles et al. (2011), and Mezirow (1997). Knowles' andragogical adult learning theory and Mezirow's transformative learning theory serve as the main theories for this study. These theorists have contributed to the field of continuing education, and the principles of adult learning rooted in their theories can be incorporated throughout the study. Utilizing these adult learning theories answers the call of pharmacists who are seeking CPE courses that are based on adult learning principles and evidence-based practice (McNamara, Duncan, McDowell, & Marriott, 2009). A solid theoretical framework supports the design of this research study and serves as the foundation for the research designed to describe pharmacists' experiences, motivations, and preferences in the context of CPE.

### **Knowles' Andragogical Adult Learning Theory**

Before the 1920s, the topic of adult learning was nonexistent. When theorists began to explore the concept of adult education and learning, research was focused on whether or not adults were capable of learning (Merriam, 2001). As the body of research on adult learning grew, theories about human learning began to develop and it was determined that adult learning could be distinguished from learning in childhood (Merriam, 2001). In 1968, Malcolm Knowles posited that the concept of andragogy, which he defined as "the art and science of helping adults learn" (p. 43), was different than pedagogy, the practice of teaching children (Knowles, 1968, 1975, 1980). Andragogy brought forth with it a more thorough understanding of adult learning

principles. Merriam (2001) identified the following five assumptions about andragogy based on Knowles' theory:

The adult learner is described as someone who (1) has an independent self-concept and who can direct his or her own learning, (2) has accumulated a reservoir of life experiences that is a rich resource for learning, (3) has learning needs closely related to changing social roles, (4) is problem-centered and interested in immediate application of knowledge, and (5) is motivated to learn by internal rather than external factors. (p. 5)

Knowles' andragogical adult learning theory is applicable to the practice of CPE and was used in developing the theoretical framework for the study of pharmacists' experiences with CPE.

Knowles et al. (2011) discussed the concept of adult education as "a process through which learners become aware of a significant experience. Recognition of significance leads to evaluation. Meanings accompany experience when we know what is happening and what importance that event includes of our personalities" (p. 38). Pharmacists who participate in CPE are immersed in learning activities that require them to complete this process of becoming aware of the experience which leads them to evaluate and then create meaning from the experience. Research has demonstrated that continuing education curriculum that is built around the adult learning theory improves the transfer of knowledge to the learner (Bandura, 2005; Caffarella, 2010; Knowles et al., 2011; Ruesseler & Obertacke, 2011).

### **Mezirow's Transformative Learning Theory**

Mezirow's transformative learning theory supports the researcher's goal of describing pharmacists' experiences with CPE as it is a concept rooted in adult education. Mezirow (2003) defined transformative learning as "learning that transforms problematic frames of reference – sets of fixed assumptions and expectations (habits of mind, meaning perspectives, mindsets) – to



make them more inclusive, discriminating, open, reflective, and emotionally able to change” (p. 58). The theory of transformative learning is a critical element of the educational process and involves a shift from thoughts and feelings to action as learners mature. In other words, learners transform their worldview as they interact with the world. In this sense, pharmacists, as learners, can change how they provide patient care based on the constructs of the theory of transformative learning.

Transformative learning theory describes what occurs when learners gain knowledge and move from one level, stage, or phase of development to another (Mezirow, 1990). In this context, as pharmacists participate in CPE activities, they are continually building on their knowledge base and developing their abilities as practitioners. When adult learners understand the meaning of their experiences, they can express their new knowledge (Mezirow, 1990). CPE activities provide pharmacists with the opportunity to increase their knowledge and impact society as they demonstrate their ability to express their knowledge of pharmacy in providing patient care. Transformative learning theory provides a “guide to action” (Mezirow, 1990, p. 141) that correlates well with the goals of CPE.

### **Related Literature**

#### **Continuing Professional Development vs. Continuing Pharmacy Education**

While often used interchangeably, continuing professional development (CPD) and continuing pharmacy education (CPE) are not one in the same in most cases. CPE is a method by which pharmacists maintain and increase their knowledge of pharmaceutical concepts and improve their practice whereas CPD requires that pharmacists determine their learning needs, develop a plan to meet those needs, and then evaluate how effectively the plan was implemented (Tran et al., 2014; Wilbur, 2010). In the field of healthcare, continuing education has been

defined as “organized learning experiences and activities in which healthcare professionals engage after they have completed entry-level academic education and training” (Austin, Marini, Glover, & Croteau, 2005, p. 25). Furthermore, Wilbur (2010) said that the core elements of CPD include “a pharmacist’s self-directed, structured and outcomes-oriented activities for practice-based learning . . . accompanied by reflection, planning, action and evaluation” (p. 236). CPE has been the model for pharmacists’ lifelong learning needs for decades, and until recently its effectiveness has not been questioned.

While lifelong learning has been identified as a critical element of maintaining one’s competence as a pharmacist, there is some debate as to what constitutes the most efficient system for continuing education. Research suggests that traditional continuing education leads to passive learning which does not impact pharmacists’ behavior and patient outcomes (Driesen, Verbeke, Simoens, & Laekeman, 2007; Mestrovic & Rouse, 2015). The argument exists that the primary goal of lifelong learning is not necessarily to change behavior but to build knowledge in a specific area. Lifelong learning has been described as “all learning activity undertaken through life with the aim of improving knowledge, skills, and competencies within a personal, civic, social, and or employment-related perspective” (Austin et al., 2005, p. 25). The main difference between CPD and CPE is that CPD requires pharmacists to be responsible for their continued learning (rather than the regulatory body mandating specific requirements be met) and is self-directed continuing education with practice-based implications (Hasan, 2009).

Professional development is a more recent attempt at encouraging pharmacists to be responsible for their professional goals and educational needs. The literature indicates that while CPE has value, the latest trend in the field of pharmacy encourages pharmacists to focus on CPD, which moves the emphasis from classroom learning to applying what is learned to one’s practice

(McConnell et al., 2010; Tofade, Hedrick, Dedrick, & Caiola, 2012). Research has shown that CPD is a better model than CPE because healthcare professionals base their learning needs on their current position rather than participation in CPE activities that may or may not fit their needs (McConnell et al., 2010; Tofade et al., 2012). The continuing professional development model requires that learners maintain a portfolio of their learning activities. The requirement of maintaining a professional development portfolio has been identified as cumbersome by pharmacists (Haywood, Pain, Ryan, & Adams, 2012).

CPD has also been noted to positively impact patient care as a result of specific learning behaviors. McConnell, Delate, and Newlon (2012) found that “pharmacists who participated in continuing professional development reported more often that their perceptions of various aspects of their learning behaviors changed positively as a result of their education activities compared with pharmacists who participated in traditional continuing pharmacy education” (p. 749). While the argument exists that CPD holds pharmacists responsible for their learning behaviors, CPE is still considered the foundation for pharmacists’ commitment to lifelong learning in most states. Until CPD becomes a mandatory component of a pharmacist’s professional license requirements, CPE will continue to meet licensing requirements and help pharmacists build their pharmacy knowledge as they strive to continually improve their practice (Trewet & Fjortoft, 2013). Whether pharmacists choose to focus on CPD or CPE as they pursue their commitment to lifelong learning, either model can improve their competency in the field.

While some groups prefer the CPD model, countries that are in the process of implementing lifelong learning models select the CPE model (Ibrahim, 2012). Reasons for this preference vary. However, the time commitment necessary for the CPD model and the need for extensive training in the CPD process have been noted as two of the barriers to implementing the

CPD model (Ibrahim, 2012). The traditional CPE model is generally chosen because rather than a learner-led self-evaluation process, CPE allows quantitative evaluation which pharmacists prefer and regulatory bodies prefer this type of evaluation rather than CPD portfolios (Austin et al., 2005; Mottram, Rowe, Gangani, & Al-Khamis, 2002). Accrediting bodies and continuing education providers must identify which model best fits the needs of the pharmacists participating in the educational programming.

### **Competency**

The value of continuing education for healthcare professionals in terms of maintaining and increasing competence is well-documented (Black & Plowright, 2010; Laaksonen, Duggan, & Bates, 2009; Leach & Fletcher, 2008; Robertson, Umble, & Cervero, 2003). The future of the pharmacy profession depends on the development of competent practitioners. Matillon, LeBoeuf, and Maisonneuve (2005) suggested that “competence in healthcare should be defined as based on the initial diploma, the implementation of effective continuing education, a minimal professional activity, and a regular peer review process” (p. 294). Professional competence can also be defined as the “habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served” (Epstein & Hundert, 2002, p. 227). In short, competencies are the knowledge, skills, and abilities one must possess to successfully perform his or her job.

Clinical knowledge and skills are not sufficient in terms of demonstrating competence in the practice of pharmacy. Pharmacists must also be able to demonstrate that they are capable of providing patient care in a way that adheres to ethical principles and general standards of care (Matillon et al., 2005; Rodolfa et al., 2005). As mentioned in the *Global Pharmacy Workforce*

*and Migration Report*, “Competence is the first and most fundamental responsibility of all healthcare providers and must be reinforced throughout the years of practice” (as cited in Tran et al., 2014, p. 2). CPE is one method by which pharmacists can increase their professional competence (Hasan, 2009; Tran et al., 2014). Patients deserve to be treated by healthcare professionals who possess knowledge that is current and evidence-based.

Healthcare professionals are expected to maintain a level of competence that enables them to provide the highest level of patient care possible. Competence is seen as a fundamental element of professional practice and ethical behavior (Ang, Pua, & Subari, 2013; Rodolfa et al., 2005). The most important goal for any pharmacist is providing patients with a standard of care that indicates knowledge of best practices and a commitment to a patient’s overall health. Trewet and Fjortoft (2013) articulated that “participation in CPE activities provides a measure of assurance that practitioners are maintaining and updating their professional knowledge and serves as a proxy for assuring the ongoing competence to practice” (p. 216).

Pharmacists must desire to not only maintain their knowledge of pharmacy but also seek to increase their skills and performance level by committing to lifelong learning. Lifelong learning is linked to high quality patient care (Gopee, 2002). As Wilbur (2010) stated, “Contemporary patient-centered care requires sustained pharmacist competency through maintenance and improvement of knowledge, skills, and performance” (p. 236). Competency is a major element of providing excellent patient care and pharmacists should strive to provide a level of patient care that demonstrates their competence in the field of pharmacy. However, not all practicing pharmacists are willing to commit to a lifestyle of continual learning. Because pharmacists may not be personally motivated to continue their education, most states require mandatory CPE attendance to maintain a license to practice pharmacy.

## **Mandatory CPE**

Mandatory CPE is one component of ensuring that pharmacists are taking the steps necessary to increase their competence related to the practice of pharmacy. In general, pharmacists view mandatory CPE as a critical element of maintaining a job and an active license. However, researchers have found that pharmacists find mandatory CPE more valuable for professional reasons than for reasons related to their job status (Ang et al., 2013; Buxton et al., 2012). The same has been found to be true in the profession of nursing. A literature review conducted by Nalle et al. (2010) concluded that “nurses appear to value continuing education, regardless of voluntary or mandatory status and accrue a similar number of contact hours, with or without a mandate” (p. 108). However, the effectiveness of mandatory continuing education has been challenged in recent years as CPD becomes more popular. Recent studies demonstrate that compulsory continuing education is not necessarily effective in improving pharmacists’ practice (Davis et al., 1999; Thomson et al., 2001). Mandatory participation in continuing education activities is the most common model for lifelong learning in healthcare professions (Mestrovic & Rouse, 2015).

In a study conducted by Ang et al. (2013), over half of the pharmacists who participated felt that mandatory CPE increased their knowledge and skills, motivated them to learn, and motivated them to reflect on their current practice. In the same study, approximately one third of the participants felt that CPE increased their marketability to employers. A similar study by Buxton et al. (2012) revealed that while meeting mandatory CPE requirements was important, being able to meet those requirements based on their own scheduling needs was crucial to their participation in CPE activities. A major obstacle for individuals seeking continuing education opportunities is a lack of time. However, if the learning is directly related to practice, time is

less of an issue (Bennett et al., 2000; Moore, Klingborg, Brenner, & Gotz, 2000). Pharmacists have great flexibility in the types of programs they may choose from to meet the requirements set forth by the state. Unfortunately, attending and participating in CPE activities is not always as simple as it may seem. Barriers exist that can prevent pharmacists from attending CPE activities.

### **Barriers to Participation in CPE Activities**

As with all goals in life, barriers exist that prevent or delay one from achieving set goals. This is also the case in CPE. Common non-personal barriers that pharmacists encounter include budget and organizational issues. Ang et al. (2013) found that “insufficient CPE resources may be a barrier to continuing education among pharmacists practicing in non-patient care and pharmacists who are non-practicing” (p. 570). Nalle et al. (2010) said, “Because healthcare organizations are primary sources of continuing education for their staff, more needs to be done to support professional development efforts and remove organizational barriers to participation” (p. 114). Healthcare institutions and retail pharmacies should implement policies and procedures that encourage employees to attend CPE activities. When developing continuing education programs for health professionals, educators should build courses based on the principles of adult learning and strive to avoid barriers such as accessibility issues (Ausburn, 2004; Gravani, 2012).

Utilizing surveys and focus group discussions, studies have found that participants cited a lack of time and family obligations as the biggest personal barriers to participating in CPE activities (Hanson & De Muth, 1991; Hull & Rutter, 2003; James, Beaumont, Carter, & Davies, 2002; Jennings, Empey, & Smith, 2000). Overcoming barriers to attendance at CPE activities is critical. Obstacles may be organizational or personal, but it is essential that CPE providers develop programs that appeal to the needs and preferences of as wide an audience of participants as possible. Pharmacists must meet the minimum CPE requirements set forth by the Board of

Pharmacy; however, it is not only these requirements that motivate pharmacists to participate in CPE.

### **Motivating Factors**

The motivation to pursue continued education is not necessarily a natural tendency for all pharmacists. Adult learners are driven to pursue continued education more so by intrinsic motivation rather than extrinsic motivation (Ausburn, 2004). While many pharmacists embrace the value of increasing their knowledge base to expand their competencies in the field of pharmacy, some are not sufficiently motivated to continue learning post graduation. However, due to licensing requirements and regulatory organizations, pharmacists must participate in formal lifelong learning. Many factors related to the motivation to participate in CPE courses are tied to the actual learning activity.

Several factors have been identified as playing a role in an individual's motivation to pursue continuing education ranging from maintaining one's competence and professional image to seeking financial incentives and career advancement (Haywood et al., 2012). One challenge of pursuing continuing education is the issue of work-life balance. As learners, adults are motivated to participate in continuing education activities when they view the potential knowledge to be gained through participation as applicable to patient care or professional practice (Gonzalez Rodriguez & Sjostrom, 1998).

Learners are also more likely to participate in continuing education if they have the perception that the programming benefits them in a personal manner (Haywood et al., 2012). In many cases, pharmacists attend CPE activities to obtain new information on pharmaceutical and scientific advances on topics that impact the practice of pharmacy. The ability to network and socialize with colleagues is also considered a motivating factor for pharmacists to attend CPE



activities (Driesen, Leemans, Baert, & Laekeman, 2005). Driesen et al. (2005) posit that maximizing pharmacists' autonomy and freedom increases their motivation to engage in lifelong learning. Traditional CPE has a history of limiting the autonomous development of pharmacists as there is not much room for personal choice because most continuing education activities are developed and delivered without regard to the personal choices and preferences of potential learners.

Nalle et al. (2010) summarized that studies on “voluntary versus mandatory continuing education on nurses’ beliefs about the value of CNE and their motives for participation showed that increased knowledge, career advancement, and professional competence were more important motivators than compliance with certification or licensure requirements” (p. 108). Similar results were reported in a survey of community pharmacists that sought to identify reasons for attending CPE activities; in this particular study, participants reported the opportunity to improve skills, build practical knowledge, and job satisfaction as the intrinsic motivating factors for participating in CPE courses (Ang et al., 2013). The literature suggests that adult learners experience greater academic success when they are intrinsically motivated (Buxton et al., 2012). Understanding these motivating factors can assist CPE providers as they seek to assist pharmacists in following through on their commitment to lifelong learning.

### **Lifelong Learning**

Lifelong learning is a popular phrase that is hard to define due to the changing healthcare landscape and the frequency of changes and updates to professional competencies. Pharmacists enter the profession with the understanding that they must be committed to lifelong learning because in today’s world of ever-expanding technological advances, they must have the skills and knowledge to be able to provide competent patient care (Buxton et al., 2012; Tran et al.,

2014). However, the desire to pursue lifelong learning does not always come naturally to pharmacists. Lifelong learning requires that an individual be “self-directed, confident, and open to learning” (Young, 2012, p. 109). In most cases, individuals who have dedicated their lives to improving the lives of their patients do want to pursue learning as it is a “natural, normal, organic part of living, as functional a part of living as breathing” (Knowles, 1977, p. 205).

Pharmacists are responsible for pursuing the knowledge they need to develop as practitioners. Previous studies have identified and assessed pharmacists’ continuing education needs (Adamcik, Oppenheimer, Brown, Eagen, & Denson, 1985; Hale, Altschuld, Gerald, & Reuning, 1989; Marriott, Duncan, & McNamara, 2007; Scott, Amonkar, & Madhavan, 2001). However, pharmacists should conduct a personal needs assessment to discover what types of CPE activities and delivery methods meet their learning needs. In an ideal world, pharmacists would identify gaps in their knowledge and competency levels and then develop a strategy to meet their educational needs in a manner that demonstrates a commitment to lifelong learning.

### **Delivery Methods**

Meetings and seminars aimed at influencing professional practice are the most common delivery methods for continuing education for healthcare professionals (Forsetlund et al., 2009; Thomson et al., 2001). Pharmacists’ preferences for continuing education formats and course content have been examined in recent studies (Maio, Belazi, Goldfarb, Phillips, & Crawford, 2003; Scott et al., 2001). A review of research studies conducted by Thomson et al. (2001) sought to identify if educational programming for healthcare professionals is effective in improving practice or outcomes. A variety of educational activities including workshops, meetings, lectures, and courses were included in the review and it was determined that

interactive workshops impacted professional practice in the most significant manner (Thomson et al., 2001; Wheeler, May, Kelly, Hattingh, & Davey, 2014).

Research has found that even in today's technology-driven world, lectures remain at the top of the list of preferred delivery methods (Hoyle, Mottram, Williamson, & Hart, 1990; Maio et al., 2003; Scott et al., 2001). In spite of this, research has found that lectures or presentations alone were unlikely to change professional practice (Forsetlund et al., 2009; Thomson et al., 2001). Workshops and other varieties of continuing education delivery methods can be effective but not nearly as effective as a combination of educational strategies (Wheeler et al., 2014). Identifying the most effective educational delivery strategy is an important task and should be based on the learners' needs and preferences.

However, as younger pharmacists enter the profession, different delivery methods are becoming more popular. Several studies have found that interactive courses requiring learner participation were preferred by younger pharmacists (Buxton et al., 2012; Cordero et al., 2004; Driesen et al., 2005). Interaction results in increased levels of learning which is important as learners transfer and apply new knowledge to everyday practice. Studies have found that adult learners are successful when there is a presence of a formal learning community and the material that is being presented has a focus on real-world applicability (Buxton et al., 2012). Forsetlund et al. (2009) determined that a combination of didactic delivery methods and interactive learning is more effective than utilizing a single delivery method.

It is important to determine successful methods for delivering online education to adult learners as the focus on utilizing technology increases. E-learning as a delivery method for continuing education courses is growing rapidly (Davis et al., 2007; Schilling, Wiecha, Polineni, & Khalil, 2006). Today's technology provides endless opportunities for e-learning. Buxton et

al. (2012) stated, “Over the past decade there has been a shift from the traditional classroom to the virtual classroom, especially within the area of continuing professional education and among nontraditional adult learners” (p. 1). E-learning is a preference for interactive delivery of continuing education programming because it is not limited by time or distance and technology allows for interaction among learners across the globe (Khan & Coomarasamy, 2006). Learners who are geographically dispersed seem to prefer continuing education that is delivered in an online format (Haywood et al., 2012). Studies have found that e-learning is an effective means of conducting continuing education programs for pharmacists in terms of knowledge retention and applicability to practice (McNamara et al., 2009; Nesterowicz, Fereshtehnejad, & Edelbring, 2015).

A study conducted by McNamara et al. (2009) identified that pharmacists prefer a range of delivery strategies built on evidence-based practice and taught based on adult learning principles. Pharmacists represent a wide range of specialties and professional interests. When developing CPE programming, educators should conduct a thorough needs analysis to identify gaps in knowledge or skills as well as what clinical outcomes need to be met. Identifying effective delivery methods for CPE activities is also essential to the implementation of effective programming that meets both the personal and professional needs of pharmacists. Once knowledge and skills gaps have been identified, programming should be created to focus on these areas and be delivered in a method that maximizes knowledge transfer by matching learning styles with delivery styles.

### **Regulatory Context**

Boards of Pharmacy serve as the regulatory bodies for the profession of pharmacy at the state level. Every two years, pharmacists are required to renew their license. Donyai,

Alexander, and Denicolo (2013) define this process as “the policy of proactively ensuring that practitioners who are registered to practice are still safe and competent to do so” (p. 127). Part of this process requires that pharmacists demonstrate that they have met the mandatory CPE requirements set forth by the Board of Pharmacy. These regulations exist to ensure the safety of patients and to ensure that pharmacists are maintaining their commitment to lifelong learning.

The Accreditation Council for Pharmacy Education (ACPE) sets guidelines and standards for doctor of pharmacy programs and providers of CPE at a national level. ACPE grants accreditation to organizations that provide CPE activities for pharmacists. Trewet and Fjortoft (2013) stated, “Accreditation standards for continuing pharmacy education that place a stronger emphasis on learning outcomes, application of learning in practice, and evaluation of the impact on patient care have the potential to lead pharmacists to becoming more engaged in their learning” (p. 216). Most regulatory bodies require pharmacists to participate in CPE courses provided by ACPE-accredited organizations. While pharmacists may attend other programs that are not accredited by this regulatory body, ACPE-accredited programs are the most widely recognized standard for excellence in CPE programming.

### **Impact of CPE on Pharmacy Practice**

CPE can have an impact on how pharmacists provide care. CPE assists pharmacists in developing and maintaining the competencies that improve patient care and health outcomes (McNamara et al., 2009). Pharmacists play an important role on the healthcare team. Traditional views of a pharmacist’s role involve counting pills and working behind a pharmacy counter. However, pharmacists are a part of an interprofessional healthcare team that focuses on providing patient care to the whole individual. As pharmacists’ roles evolve into a more patient-focused role, their professional educational needs change as well. A pharmacist’s role now

includes more social and administrative behaviors including patient education, workplace conflict management, and team building (Cooksey, Knapp, Walton, & Cultice, 2002; Yin, Lonie, Shah, & Shukla, 2010). Improving patient care is the goal of all health professionals and CPE is just one of many components that can impact the practice of pharmacy.

### **Continuing Education in Nursing**

Like pharmacists, nurses are responsible for providing patient care. Nurses are also required to meet continuing education requirements to maintain their professional license to practice. In the profession of nursing, continuing education is the most common mechanism for demonstrating professional competence (Nalle et al., 2010). Nurses often serve on interprofessional healthcare teams with pharmacists and other healthcare professionals. Nalle et al. (2010) recommended that “collaboration among clinical staff educators, nursing faculty, and other stakeholders would provide opportunities for a more in-depth assessment of learning needs and better direction for continuing education programs” (p. 114). Similar to CPE in the practice of pharmacy, Waddell (1992) concluded, “Continuing education does make a positive impact on nursing practice” (p. 168). While the argument about the effectiveness of continuing education exists in nursing as it does in pharmacy, “nursing has maintained its commitment to continuing nursing education (CNE) as a mechanism for ensuring practice excellence and quality of care” (Nalle et al., 2010, p. 108). Literature supports the practice of continuing education not only in pharmacy but also in other health professions including nursing.

### **Team-based Healthcare**

Pharmacists are a part of the multi-disciplinary professional healthcare team and contribute to the healthcare delivery system. The goal of the interprofessional team is to collaborate with members from various backgrounds with the overall goal of improving patient

outcomes. Research has found that pharmacists provide valuable interventions as a part of a multidisciplinary team and their contributions result in the minimization of pharmacotherapy-related problems by improving patient outcomes (Ackermann, Williams, & Freeman, 2010; Currie, Chrischilles, Kuehl, & Buser, 1997; Kane, Weber, & Dasta, 2003; Kassam et al., 2001; Magedanz, Silliprandi, & dos Santos, 2012; Vinks, de Koning, de Lange, & Egberts, 2006). This level of interprofessional teamwork requires cooperation and collaboration to deliver patient-centered care. The result of the merging of representatives from various health professions into one team is called interprofessional collaborative practice (World Health Organization, 2010). A recent review of organizational interventions noted that “multidisciplinary teams (collaborative practice teams of physicians, nurses, and allied health professionals) treating mostly patients with prevalent chronic diseases resulted in improved patient outcomes” (Titler, 2008, p. 121). The challenging part of team-based healthcare is related to the extreme differences in patient types, practice settings, tasks, and outcomes (Kane et al., 2003).

Effective collaboration is a necessity to providing patient care as team-based healthcare expands. CPE as well as other health professional continuing education programs must provide a thorough foundation for interprofessional education with participation from all healthcare professionals to ensure that all providers are able to collaborate effectively. Drawbacks of collaboration in a healthcare setting include that it takes time for health professionals to adjust to a new method of providing care and trusting relationships must be developed outside of the professional circle.

Pharmacists’ continuous improvement efforts have positioned them as integral team members on multidisciplinary healthcare teams. These teams reap rewards of improved healthcare benefits for patients and healthcare institutions as well. On a multidisciplinary patient

care team, physicians must trust the other members of the team. Physicians are often accustomed to working with nurses but as the healthcare delivery model changes, physicians are adjusting to developing relationships with other healthcare professionals including pharmacists. Education is needed to help physicians better understand the pharmacist's scope of practice as well as how collaboration can benefit both patients and physicians (Magedanz et al., 2012; Tannenbaum & Tsuyuki, 2013). The support pharmacists can provide the healthcare team benefits not only the patient but the healthcare system as a whole. Pharmacists have the ability to help physicians manage and improve patient care in a manner that increases patient safety and minimizes drug-related risks (Tannenbaum & Tsuyuki, 2013). Accreditation agencies continue to stress the value of pharmacists in the total care approach to patient care and often require or strongly urge hospitals to have accreditation standards that address the multidisciplinary team approach.

### **Evidence-based Practice**

CPE should provide pharmacists with knowledge that is evidence-based and applicable to practice. Evidence-based practice is a method of providing patient care that is based on the evidence available in the literature combined with clinical expertise and patient needs to guide health professionals' decisions and may include evidence from randomized controlled trials, research, and expert opinion (Titler, 2008). Evidence-based medicine is a process that includes identifying clinical problems, reviewing academic literature on the topic, and if appropriate, applying the knowledge gained from the literature review to professional practice and individual patient cases (Khan & Coomarasamy, 2006; Sackett, Rosenberg, Gray, Haynes, & Richardson, 1996). Pharmacists increase their knowledge base as they translate research into practice and provide evidence-based care to patients. Evidence-based medicine can be used as an



intervention that influences healthcare professionals' clinical behavior with the goal of improving patient outcomes. Khan and Coomarasamy (2006) determined through a review of literature that interactive delivery methods improve patient outcomes; however, didactic delivery methods utilized as a stand-alone method are not likely to result in improvements.

CPE programming rooted in professional literature and research can provide practitioners with the knowledge needed to provide care that is based on evidence from previous studies. Evidence-based practice promotes the use of research evidence in healthcare decision-making. Promoting practices that improve patient safety requires evidence-based information be provided to pharmacy educators and pharmacists to implement. CPE can add to the existing empirical and theoretical understanding of this field of inquiry. However, adding to or presenting recent research from the existing literature does not necessarily equate to improved patient safety and better practices. According to Titler (2008), "Organizations must invest in the tools and skills needed to create a culture of evidence-based patient safety practices where questions are encouraged and systems are created to make it easy to do the right thing" (p. 123).

### **Pharmacy Workforce**

As a result of increased prescription drug use and a growing patient population, the demand for pharmacists has risen. Cooksey et al. (2002) noted the pharmacists are the third-largest health professional group and the only health professionals who are trained to deliver pharmaceutical services. Currently, there is a nationwide shortage of pharmacists as the demand for their specific skillset has outpaced the supply. The factors that Cooksey et al. (2002) found to play a role in the shortage of pharmacists included an increase in prescription drug use, changes to pharmacists' roles, and underutilized automation. In light of the shortage, new pharmacy schools cropped up across the country and along with existing pharmacy programs

have produced a new group of graduating pharmacists every year. Factors such as healthier lifestyles, improved healthcare, novel treatment options, and extensive research in disease state management are partly responsible for the longevity of the nation's population. Due to the fact that individuals are living longer and healthier lives, there is an increased demand for health providers to be prepared to meet changing needs of patients across the country. As the demand for pharmacists increases, continuing education opportunities must be developed to meet the needs of both the changing landscape of patient care as well as pharmacists' expanding roles.

Pharmacists are an integral part of the healthcare team and are not immune to the challenges and opportunities related to the aging population and their healthcare needs. According to the University of California (2014), "During the 1990s alone, the number of retail prescriptions dispensed increased by 44%, from 1.9 billion in 1992, to almost 2.8 billion in 1999. By 2010, this number increased to approximately 3.7 billion prescriptions" (p. 5). The increase in the dispensing of prescriptions has contributed to the "development of medications and drug therapies, identification of new uses for existing medications, increased numbers of authorized prescribers, broader insurance coverage for medications, increased affordability and availability of more generic drugs, and direct marketing to the public by pharmaceutical companies" (University of California, 2014, p. 5). The workforce is slowly stabilizing but the demand for pharmacists is still high as pharmacy professionals work to manage the ever-changing healthcare needs of today's society. The influx of new practitioners has impacted the pharmacy workforce and has improved the ability of pharmacists to perform as competent members of the healthcare team.

## **The Patient Protection and Affordable Care Act**

Within the last few years, healthcare reform has been a political hot topic. Until recently, millions of uninsured Americans have had limited access to affordable healthcare. In 2010, Congress enacted the Patient Protection and Affordable Care Act (PPACA) which was intended to provide Americans with health insurance coverage and decrease the cost of healthcare. Dow, Bohannon, Garland, Mazmanian, and Retchin (2013) described the PPACA as a method of health reform that “seeks to improve health equity in the United States by expanding Medicaid coverage for adults who are uninsured and/or socioeconomically disadvantaged” (p. 1855). Provisions of the PPACA impact the practice of pharmacy and pharmacy-related services (Khanna, Mahabaleshwarkar, Holmes, & Jariwala, 2015). While the proponents of this health reform believe that the benefits to society as a whole outweigh the risks, the actual implications of implementing the PPACA will strain the nation’s healthcare delivery system.

Dow et al. (2013) found that expanding primary care access for the uninsured will require 4,500 to 12,100 more healthcare providers to care for individuals who are newly covered under the PPACA and could grow to 40,000 as baby boomers age. Pharmacists will be responsible for working with patients to help them understand the PPACA. In order to educate patients, pharmacists must be knowledgeable of the PPACA and have the ability to educate patients in a way that is easily understood. The PPACA will impact both patient and economic outcomes as a portion of the PPACA includes requirements intended to reduce costs and improve quality of care (Khanna et al., 2015). Recent studies found that 45% of pharmacists and 30% of medical students did not understand the major provisions of the PPACA (Huntoon et al., 2015; Khanna et al., 2015).

As other healthcare providers are stretched to accommodate and care for the expanding patient population, pharmacists will be called upon to provide expertise in areas such as medication reconciliation and adherence (Hennessy, 2013). The implications of a strained healthcare system include the need for pharmacists to build their knowledge base to serve the expanding patient population and serve as an extension of primary care providers. As methods are developed to meet the needs of the currently strained system and restructure the healthcare system, pharmacists will support the process by providing evidence-based patient care.

### **Implications for the Healthcare Workforce**

The influx of newly insured individuals requires that the traditional healthcare delivery system be modified to handle the growing patient population. The composition of the healthcare workforce must be modified to meet the demands of the ever-increasing patient population. The enactment of the PPACA now provides health insurance coverage options for approximately 12.7 million people enrolled in the program (Department of Health & Human Services, 2016). As the patient population grows, the need for patient-centered healthcare grows. To meet this need, pharmacists must have the knowledge base to participate on interprofessional collaborative patient-care teams. Fortunately, research has shown that patients who see non-physician providers such as pharmacists have similar outcomes as patients who are treated by physician-led teams (Dow et al., 2013; Kane et al., 2003; Wagner, 2000). In short, the PPACA has implications for the healthcare workforce as well as the continuing education of healthcare professionals such as pharmacists. The need for training and continuing education across all health professions is necessary to build successful interdisciplinary healthcare teams.

## Outcomes

Interdisciplinary healthcare teams, also known as patient care teams or interprofessional teams, improve both patient and economic outcomes (Cranor, Bunting, & Christensen, 2003; Epstein, 2014; Kane et al., 2003; Smith, Bates, & Bodenheimer, 2013; Wagner, 2000). Wagner (2000) defined a patient care team as a “group of diverse clinicians who communicate with each other regularly about the care of a defined group of patients and participate in that care” (p. 569). The pharmacist’s role on an interdisciplinary team involves impacting patients’ therapeutic regimens by “identifying drug-related issues such as nonadherence to therapy, interactions, and adverse reactions” (Machado, Nassor, Bajcar, Guzzo, & Einarson, 2008, p. 1196). Dow et al. (2013) found that “pharmacy-led clinics for medication management of chronic disease are increasing, and research shows that their outcomes are superior and their patients’ satisfaction higher than usual for primary care practices” (p. 1859). Prescription-related errors such as drug interactions, dosage errors, and unnecessary drug therapies have the potential to harm patients and in turn, negatively impact economic outcomes.

Benefits to the patient are not the only element associated with utilizing interdisciplinary healthcare teams. Economic outcomes can be significant as well. Multiple studies have demonstrated that the multidisciplinary team approach is valuable because it results in reduced resource utilization thus impacting economic outcomes (Kane et al., 2003; Kaye et al., 2000; Pronovost et al., 2002; Stenger, Schooley, & Moss, 2001). A study conducted by Cranor et al. (2003) assessed the outcomes for patients participating in community-based pharmaceutical care services through an agreement with their employer and found that the employer experienced a decline in direct medical costs. In a similar study, researchers examined the impact of critical

care pharmacists on pharmacy services in critical care units and the findings indicated that this model provided cost savings for both patients and healthcare systems (Kane et al., 2003).

Pharmacists are the some of the most easily accessible healthcare professionals and are often the first healthcare professional many individuals encounter when seeking medical advice (Wheeler et al., 2014). A study conducted by Benrimoj and Frommer (2004) found that society views pharmacists as experts in medication use who utilize easy to understand verbiage and collaborate with other health professionals to provide trustworthy and reliable information. Machado, Bajcar, Guzzo, and Einarson (2007) noted that pharmacists have been assisting patients in the community settings for decades by providing care focused on detecting, preventing, and potentially solving medication issues including a lack of compliance with drug therapy and drug interactions. Community pharmacists are readily available in pharmacies across the nation, providing individuals with relatively simple access to professional medical advice.

### **Expanding Role of Pharmacists**

Patients' health needs are outpacing the increase in number of healthcare professionals. The healthcare workforce gap can be narrowed if the traditional role of the pharmacist is expanded. Legislative changes such as the PPACA have supported the need for pharmacists to become increasingly participative in direct patient care: the traditional dispensing role has been expanded to include counseling, medication therapy management, and disease management. Specifically related to improving medication safety, a pharmacist's role is being expanded to include risk management. Risk management strategies as defined by Ackermann et al. (2010) "focus on interventions to high risk patient groups and disease states to use practice information technology systems to manage quality medication systems and services" (p. 164).

The implementation and expansion of the PPACA also modifies the role of a pharmacist to include healthcare policy decision-making (Khanna, 2015). Pharmacists are seeking provider status under the Social Security Act to be able to generate revenue from activities related to direct patient care (Dow et al., 2013; Hennessy, 2013). Provider status would allow pharmacists to bill for patient care services similarly to physicians. As pharmacists become more active in direct patient care and increase their scope of practice, the need for continuing education becomes more apparent, and in the case of the PPACA healthcare reform education is a necessity.

### **Employer Support for CPE**

Pharmacists have a wide variety of options for continuing education programs through outside vendors; however, many individuals seek opportunities for CPE at their place of work. Employers play an important role in ensuring that professional healthcare staff have the necessary support to pursue lifelong learning. Healthcare organizations that support the educational endeavors of their employees will reap the benefits of an engaged and educated staff, which in turn benefits patients and other stakeholders. Supporting the continuing education efforts of employees is important but a balance must be struck between improving the outcomes of the organization and improving individual development (Choy, Billett, & Kelly, 2013). Munro (2008) identified that individuals are more likely to participate in continuing education if their company supports the endeavor through financial support, time off, or career advancement opportunities. A supportive organization is one that values the development of its workforce and encourages healthcare professionals to enhance their skills and abilities to perform at high levels (Haywood et al., 2012). Investing in the development of staff can impact employee engagement,

retention rates, and operational costs (Cowell, 2009). An educated workforce enhances patient care.

## **Learning Styles**

Learning styles are an important element of continuing education. Educators and learners alike should be cognizant of the impact that learning styles can have on knowledge retention and application. In the field of pharmacy, learning styles can play a role in pharmacists' career decisions and everyday practice. Learning styles have been defined as the way in which individuals think, learn, and respond to the learning environment (Austin, 2004; Romanelli, Bird, & Ryan, 2009). A relationship between learning styles and preferences for continuing education has been identified as well as a trend toward an association between learning styles and career decisions (Austin, 2004). Understanding these associations can assist those who develop CPE programs to ensure that programming meets the needs of learners by matching delivery methods to a variety of learning styles.

Kolb's theory of learning styles is based on two dimensions upon which learning preferences are built. One dimension relates to the way individuals prefer to receive information and the other relates to how individuals prefer to process information (Kolb, 1981, 1984). The combination of the two dimensions results in four learning preferences: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb, 1981, 1984). From a behavioral perspective, Gardner (1999) identified choices individuals make in learning environments as well as relationships and created the Multiple Intelligences approach that suggests there are seven ways in which individual learning and environment interact. These modes of inquiry include verbal, logical, visual-spatial, aural, kinesthetic, and interpersonal (social or self-interaction; Gardner, 1999). In terms of learning styles, research has shown that



the ability to learn from reflection is an important component of a learner's engagement in continuing education (Haywood et al., 2012).

### **Teaching Styles**

Educators who deliver continuing education programs have the challenge of developing a teaching strategy built on adult learning theory that caters to a variety of learning styles, learner preferences, educational and career backgrounds, and generational differences (Curran, 2014; Mestrovic & Rouse, 2015). Rather than lecturing in a didactic format, educational activities need to be delivered in an interactive format that allows learners to apply what is learned to everyday practice. Faculty who teach CPE are tasked with delivering a learning activity that improves and enhances patient outcomes and the practice of pharmacy. This requires that a transfer of learning occurs which is how teaching styles influence learner outcomes (Curran, 2014). Transfer of learning is also identified as knowledge transfer, which is the “process by which organizations create, access, disseminate, and adapt new knowledge” (Curran, 2014, p. 233). Knowledge transfer rates are increased when a combination of teaching styles is utilized (Medves et al., 2010). The aforementioned concepts are related to adult learning theory, and as educators pursue a teaching style that is grounded in this theory, learners will be actively engaged and participate in the learning process in a way that ensures knowledge transfer (Ruesseler & Obertacke, 2011).

### **Continuing Education and Professional Development from a Global Perspective**

The concept of lifelong learning is not limited to pharmacists in the United States. Pharmacists practicing in other countries are also challenged to maintain their competence. A study conducted by Driesen et al. (2007) sought to examine lifelong learning frameworks for pharmacists in The Netherlands, Great Britain, France, Germany, Australia, New Zealand,

Canada, and the United States of America. Researchers examined the following features of lifelong learning systems in each of the eight countries: type of system, voluntary or mandatory nature of the system, presence or absence of rewards, system requirements, type of control, and consequences of noncompliance (Driesen et al., 2007). The majority of the countries utilized a traditional continuing education system and only five countries mandated that pharmacists participate in lifelong learning (Driesen et al., 2007).

### **Application to Practice**

The underlying goal of CPE is to ensure that pharmacists remain competent to practice, so it is necessary for pharmacists to have the ability to apply what is learned through continuing education. Recent studies have identified elements that are related to the application of learning to practice. Application to practice is influenced by the opportunity to share knowledge with colleagues and demonstrate clinical skills that were taught in a continuing education program in the clinical environment (Haywood et al., 2012). A review of research studies conducted by Thomson et al. (2001) sought to identify if educational programming for healthcare professionals is effective in improving practice or outcomes. A variety of educational activities including workshops, meetings, lectures, and courses were included in the review and it was determined that interactive workshops impacted professional practice in the most significant manner (Thomson et al., 2001). The healthcare industry is constantly improving due to advances in technology, and these changes can require health professionals to adapt to new procedural requirements.

Choy et al. (2013) found that workers learn from others through work activities and through interactions with others in the workforce. When employees work together and develop competence and knowledge, two types of learning occur: adaptive and developmental (Ellstrom,

2001). A review conducted by Forsetlund et al. (2009) reviewed 81 studies that evaluated the effects of educational meetings and found that such meetings alone or in conjunction with other interventions can improve professional practice. A culture of lifelong learning is encouraged when experienced pharmacists assist colleagues by contributing to their knowledge and competencies.

### **Summary**

A thorough review of the literature reveals that further studies are needed to provide the academic community with a knowledge base for issues related to CPE. Currently, no literature exists on the experiences of pharmacists in the context of CPE. The literature suggests that further studies be conducted to expand the research in the field of CPE. Research is needed in this area because pharmacists must be competent as they practice in their profession and continued education is the key to maintaining a sufficient knowledge base for successful practice. Meeting the educational needs of pharmacists can help them increase their current knowledge which has the potential to improve overall patient care.

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this phenomenological study is to understand select Tennessee pharmacists' experiences, motivation, and preferences in the context of CPE. Pharmacists' experiences, motivation, and preferences related to CPE are generally defined as participating in continuing pharmacy education programming in a manner that meets the needs of the pharmacist. This chapter includes a detailed explanation of the study design, research questions, setting, participants, procedures, researcher's role, data collection, data analysis, and ethical considerations.

### **Design**

A qualitative study was conducted using the transcendental phenomenological approach (Creswell, 2013; Moustakas, 1994). This approach is appropriate based on the gap in the literature and the researcher's intent to examine a single phenomenon among a group of individuals who experienced the same phenomenon (Creswell, 2013; Moustakas, 1994). Tieszen (2016) explained that "phenomenology is intended to use the resources of reason to ideate first-person phenomena in order to uncover their essential features" (p. 501). The design of the study exposes the experiences pharmacists in Tennessee have had with CPE which provides readers with the information needed to understand the participants' experiences, motivation, and preferences associated with CPE.

The research problem is well suited for the use of transcendental phenomenology because the objective of the research is to understand how pharmacists in Tennessee describe their experiences with CPE. The transcendental approach was chosen because it is important to view the phenomenon under investigation from a fresh, unbiased perspective (Moustakas, 1994).

Transcendental phenomenology requires that the researcher bracket out one's experiences with the phenomenon; in this study, the researcher does not have firsthand experience as a pharmacist who has participated in CPE activities (Creswell, 2013). However, to ensure that the research is unbiased, the researcher bracketed out her experience with CPE related to her career in pharmacy academia through the use of reflective memoing. Prejudgments and other thoughts were bracketed out so that the phenomenon was viewed from a clear perspective.

As part of the transcendental phenomenological approach, the data collected throughout the course of the study were analyzed to determine significant statements and themes. Another factor in the decision to utilize Moustakas's (1994) transcendental phenomenology approach was due in part to the fact that it fits the study well with an outline of data analysis procedures and a strategy for uncovering the textural and structural descriptions that are a critical element for this type of design (Creswell, 2013). The concept of phenomenology in general is based on Husserl's argument that "originally presenting eye witnessing should be allowed to become the source of all knowledge" (Wesolowska, 2014, p. 396). The participants in the study serve as the eyewitnesses of the experiences they have had with CPE and the findings are a result of their source of knowledge.

### **Research Questions**

In light of the purpose of this study, the following questions serve as the framework for this research:

1. How do select pharmacists describe their experiences with CPE in Tennessee?
2. What reasons do participants describe as their motivation to attend CPE activities?
3. In terms of design and delivery, what preferences do participants have in relation to CPE activities?

#### 4. How do participants describe the impact of CPE on pharmacy practice?

##### **Setting**

After graduating from pharmacy school, pharmacists must commit to being a lifelong learner. There are two regulatory organizations that develop standards and enforce regulations for CPE. At the national level, the Accreditation Council for Pharmacy Education is the accrediting body for professional degree programs in pharmacy and CPE providers. At the state level, the Tennessee Board of Pharmacy is an independent state health regulatory agency that ensures pharmacists in Tennessee are providing competent care in agreement with state and federal laws. The Tennessee Board of Pharmacy requires that all pharmacists complete a minimum of 30 hours of CPE per two-year license cycle to maintain a license to practice pharmacy.

The study was conducted in various cities across the state of Tennessee depending on the location of participants. Creswell (2013) suggests that interviews be conducted in a natural setting. In this case, the natural setting was dependent on the participant's preference. The individual interviews were scheduled in a manner that was conducive to the participant's schedule and were conducted via telephone giving participants the opportunity to discuss their experience with the phenomenon in question. A virtual focus group was conducted in Google Hangout, an online environment and communication platform similar to Skype or WebEx, and was monitored by the researcher. Each participant was asked to create a Google account if they did not have one which allowed participants to access the virtual focus group from the comfort of their chosen environment and from the device of their choice. The setting for this research varied due to the geographical separation of participants, but technology bridged the gap and allowed participants to describe their experiences with CPE in Tennessee.

## **Participants**

Participants were pharmacists licensed to practice in Tennessee and were chosen from a database of CPE registrants. Purposeful sampling (Creswell, 2013) was used to select participants that had experienced the phenomenon of CPE. The selected strategy for purposeful sampling was maximum variation sampling (Patton, 2002). The sample size consisted of 12 pharmacists who had participated in at least six hours of CPE within the last 12 months. In qualitative research, there is no specific number of participants required for a study, and in fact, Patton (2002) stated that “the validity, meaningfulness, and insights generated from qualitative inquiry have more to do with the information richness of the cases selected and the observational/analytical capabilities of the researcher than with sample size” (p. 245). However, as stated previously, the sample size consisted of 12 pharmacists, and it was at this number that data saturation was reached.

The researcher utilized maximum variation to ensure the sample was varied and represented a diverse range of pharmacists in Tennessee. Patton (2002) explained the benefits of maximum variation sampling when he said, “Any common patterns that emerge from great variation are of particular interest and value in capturing the core experiences and central, shared dimensions of a setting or phenomenon” (p. 235). Participants were selected to make certain that a variety of characteristics were represented including type of position (supervisor, staff pharmacist, clinical pharmacist, etc.), years of experience, gender, ethnicity/race, and geographic location (Patton, 2002). A broad range of participant characteristics provided the researcher with an opportunity to describe pharmacists’ experiences, motivation, and preferences in the context of CPE in great depth.

Participants were solicited based on their participation in CPE over the course of a period of 12 months. Planstone, a platform accessed through <https://www.planstone.com>, was utilized to create a list of potential participants based on the selection criteria. Once a list was generated, the researcher contacted each individual via email with information regarding the study and an invitation to participate. Individuals were given the opportunity to accept or decline the invitation within a limited period of time. When the invitation period ended, the researcher reviewed the list of potential participants and confirmed that each one had experienced the phenomenon and met the selection criteria prior to finalizing details with the individuals who agreed to participate.

### **Procedures**

The first step in this process consisted of obtaining Institutional Review Board (IRB) approval through Liberty University (Appendix A). The researcher conducted a purposeful sampling to obtain participants for this study after receiving approval from the IRB. Once the participants were selected and had indicated that they agreed to participate, the researcher began the data collection process by collecting data through individual interviews, a virtual focus group, and journal entries. Interviews were recorded and transcribed (Appendix B). Written data were collected from the virtual focus group and journals. All participants were assigned pseudonyms to protect their identities. Potential bias was minimized by bracketing the researcher's views from the data through reflective memoing (Creswell, 2013; Moustakas, 1994). The procedures utilized throughout the course of the research study provided a strong foundation for the research and gave the participants the opportunity to describe their experiences with the phenomenon through the utilization of various data collection tools.



### **The Researcher's Role**

I am motivated to study pharmacists' experiences, motivation, and preferences in the context of CPE because there is a gap in the current literature that needs to be addressed and because of the experience I have in the profession. I have perceived that there is a need for pharmacists to discuss their experiences with CPE as the profession is continually evolving. Throughout the development of the study as well as during the initial stages of research, I was an employee of two different organizations that provide accredited CPE activities to pharmacists in the state of Tennessee. My role was to ensure that CPE programming met the requirements of the accrediting body as well as the needs of pharmacists. I interacted with pharmacists throughout the state as they endeavored to meet CPE requirements and continue their education. Due to the fact that I am not a pharmacist, I did not participate in any CPE activities as a learner, nor did I have a personal relationship with the participants. However, I set aside my views of CPE by bracketing my opinions outside of the data.

Toward the conclusion of the study, I started a new job that, while still in healthcare, does not involve CPE. In this position, I am responsible for employee education and the implications of adult learning theory are still applicable. Working with healthcare professionals to ensure their educational needs are met closely aligns with the original intent of the research study. While I do not work closely with pharmacists at this point, understanding pharmacists' preferences and motivation related to obtaining CPE credit impacts the field of pharmacy and how continuing education is managed which in turn impacts how I work with adults as learners in a healthcare environment.

## **Data Collection**

The researcher collected data to better understand the phenomenon of pharmacists' experiences, motivation, and preferences in the context of CPE. After receiving IRB approval to conduct this study, three data collection methods were utilized. The data collection methods included individual phone interviews, a virtual focus group, and a journal assignment. Each of the three data collection methods were carefully monitored to ensure the validity of the data. After the data were collected, they were thoroughly analyzed to reveal the outcomes of this study. The data collection process was the initial step in identifying the themes that emerged from the study.

### **Individual Interviews**

After interview questions were pilot tested by a group of pharmacists, individual phone interviews were conducted with each participant (Appendix C). According to Englander (2012), "Interviewing in descriptive phenomenological human scientific research should be seen as a specific mode of data gathering that is integrally related to the research process as a whole" (p. 34). The research questions served as the foundation for the interview sessions. An interview guide was created with a detailed list of questions to ask each participant. Interview questions consisted of semi-structured open-ended questions. Interviews specifically addressed participants' experiences with CPE. However, other questions assessed motivating factors and preferences related to CPE. Each participant was asked the same set of questions to ensure consistency throughout the interview process; however, other dialogue did occur that contributed to the depth of the data collected. The interview questions are listed below:

1. Tell me about yourself.
2. Describe your experiences with continuing pharmacy education (CPE) in Tennessee.

3. What motivates you to attend CPE activities?
4. In terms of design and delivery, what preferences do you have in relation to CPE activities?
5. How would you describe the impact of CPE on pharmacy practice?
6. What do you perceive as benefits of participating in CPE?
7. What do you perceive as the negative aspects of participating in CPE?
8. Is there anything else related to this experience that you would like to add?
9. If I have other questions, may I contact you again?

The interviews varied in length due to the difference in each participant's responses. Participants were open to discussing each question and were inquisitive about the impact their participation may have on CPE in Tennessee. The participants were eager to provide the information that was requested of them. Every participant seemed to have a positive perception of CPE as a whole while also noting that there are some negative aspects related to obtaining the required hours. The interview process generated the most significant data and served as the foundation for the other data collection methods that were utilized including the virtual focus group and journal assignment.

### **Virtual Focus Group**

Research has shown that traditional focus groups can be modified to function in an online setting (Creswell, 2013; Remler & Van Ryzin, 2011; Stewart & Williams, 2005). A virtual focus group was selected as a data collection method due in part to the fact that pharmacists participate in CPE courses together and are used to collaborating in groups. Participants were geographically dispersed and in the interest of respecting participants' time, a virtual focus group was conducted online with the same content as that of a traditional focus group. Google Hangout

served as the host for the group conversation. The virtual focus group added depth to the research by allowing participants to discuss the topic of CPE amongst each other including their experiences, preferences, and the factors that motivate participation in CPE.

The participants were asked to create a Google Hangout account and due to the small sample size, only one virtual focus group was needed (Patton, 2002). Participants were notified of the date for the focus group meeting approximately three weeks prior to the event. However, only five participants were able to participate based on scheduling issues and logistical challenges such as childcare and other obligations. The focus of this group was to discuss the experience the participants have had with CPE in general. The discussion covered a variety of topics and the conversation flowed naturally. Individuals were given the opportunity to describe their experiences, motivation, and preferences related to CPE (Appendix D). The main goal for this discussion was to create a community of participants who communicate with one another and build on the input of their peers. The questions below served as a guide for the virtual focus group, but as the topic of conversation flowed, other elements were also covered. The virtual focus group discussion questions are listed below:

1. What type of pharmacy training did you receive?
2. What is your area of practice?
3. How many years have you been a practicing pharmacist?
4. What motivates you to pursue continuing pharmacy education activities?
5. What prevents (or has prevented) you from attending continuing pharmacy education activities?
6. Describe how current continuing pharmacy education activities meet or do not meet your educational and professional needs.

7. How does your employer support you in relation to participating in continuing pharmacy education activities?
8. Describe how continuing pharmacy education affects the way you practice.
9. Identify the most effective delivery method(s) for continuing pharmacy education.
10. What would enhance the overall value of the continuing pharmacy education activities you attend in the state of Tennessee?

The participants were active throughout the entire virtual focus group discussion. When a question was posed, participants took turns responding to the question. Participants' responses generated new discussion points which increased the depth of the data received from this data collection method. The data from the virtual focus group supplemented the data from the interviews and reiterated what had already been discovered during that phase of research.

### **Journal Assignment**

Participants were given the opportunity to freely express their thoughts and beliefs about CPE. Each participant was asked to create a Microsoft Word document to record his or her thoughts on CPE during the study. To add structure to the journal activity, participants were instructed to choose one CPE activity in which they participated within the last year and then to journal about their experiences pertaining to that specific activity including the factors that motivated them to attend the activity in question. This data collection method was chosen to supplement the interview and focus group data to provide a broader range of information.

Participants returned typed Word documents to the researcher via email. Participants were given the opportunity to write freely and the initial journal prompt served as a simple guide. The responses from participants consisted of approximately one half to one page of documentation related to their experiences with a recent CPE activity. Participants described the

activity and why they chose to attend the specific program. Each response also included information on the experience as a whole.

### **Data Analysis**

Data collection and data analysis should be a cohesive process to obtain quality information in a phenomenological study (Englander, 2012). The data from the study were analyzed through the use of a variety of transcendental phenomenological data analysis methods. Epoche, or bracketing, requires that the researcher step back from the experience of the phenomenon and view it from an unbiased and fresh perspective (Creswell, 2013). The process of horizontalization leads to uncovering emerging themes. The data analysis process was completed by creating a composite description of the themes.

### **Epoche**

Due to the qualitative nature of this phenomenological study, the data analysis process began with the researcher bracketing out her personal experiences related to CPE by writing reflective memos (Moustakas, 1994). A reflective memo notebook was maintained throughout the course of the study (Appendices G and H). During the first examination of the data, the researcher used memos as a technique to record initial thoughts and perspectives about what appeared in the data (Patton, 2002). Prejudgments and potential bias were set aside to ensure the data provided by participants were not misconstrued. The researcher actively bracketed out potentially influential thoughts and preconceived notions throughout the data collection and analysis phase of the research.

### **Emerging Themes from Document Analysis**

The participants' journal entries were analyzed as part of the document analysis (Creswell, 2013; Patton, 2002). The information gleaned from this analysis was considered in

conjunction with the themes that emerged from the individual interview sessions and the virtual focus group. Constant comparative analysis with the journal entries and interview data helped to identify themes related to the experiences participants have had with the phenomenon. This document analysis assisted the researcher with combining the information from all sources to create a complete picture of the data (Patton, 2002).

### **Horizontalization**

Moustakas (1994) lists several steps in the procedures for the data analysis portion of a transcendental phenomenological study. The data analysis process begins with horizontalization which requires that each expression from the transcripts be coded. The researcher utilized Excel and Microsoft Word to manipulate and organize the data from recorded transcriptions and other data sources into emerging themes. Transcripts and data from the individual interviews, content from the virtual focus group, and information from the journal entries was used. The recorded and transcribed interviews created a bank of accurate data records for coding and analyzing emerging themes.

### **Invariant Horizons**

After horizontalizing the data, invariant horizons were clustered into themes and each one that contained a significant portion of information related to the phenomenon was preserved (Moustakas, 1994). The themes that were not preserved were deleted; however, those that remained were grouped into themes. These themes were then considered in light of the complete transcriptions from each participant. This process assisted in developing themes and constituents that were included in the descriptions of the experience of the phenomenon. During this stage of the analysis, the researcher wrote a textural description of each item and then proceeded to write a structural description focusing on how the phenomenon was experienced (Moustakas, 1994).

The final portion of this process was completed by compiling the textures and structures into a composite description of the themes of pharmacists' experiences, motivation, and preferences in the context of CPE (Moustakas, 1994).

### **Trustworthiness**

The qualitative nature of this research required that steps be taken to ensure the trustworthiness of the study. Several procedures were utilized to increase the credibility, dependability, confirmability, and transferability of this study (Creswell, 2013; Maxwell, 2002). Combined, the strategies listed below contributed to a well-rounded and trustworthy study that contributes to the field of CPE. Steps such as triangulation, bracketing, and member checking contributed to the trustworthiness of the study. These strategies also provided a foundation on which future research may be built.

### **Credibility**

In order to provide validity to the study's outcome, triangulation, which is a process that involves incorporating evidence from a variety of data sources to discover an underlying theme, was utilized to verify the trustworthiness and credibility of the study and its data (Creswell, 2013; Moustakas, 1994). Data from each of the three data collection methods were used to assist the researcher in categorizing the emerging themes. Member checks were also used to increase the trustworthiness and credibility of the study. Member checks were conducted to ensure that the transcribed data were correct. This process requires "taking data, analyses, interpretations, and conclusions back to the participants so that they can judge the accuracy and credibility of the account" (Creswell, 2013, p. 252). The final data from the study were provided to participants in order for them to verify that the data they contributed to the study were correct. The researcher also employed a pilot test of interview questions. Interview questions were pilot tested with



pharmacists located in the West Tennessee area. The interview guide was adapted based on the responses of the pilot test participants with the purpose of increasing the trustworthiness of the study.

### **Dependability and Confirmability**

Dependability is based on identifying the reliability of the details in the research process. The data analysis procedures were monitored by a peer reviewer to provide an outside perspective on the process (Creswell, 2013; Patton, 2002). A content expert in CPE was invited to serve as a peer reviewer. The peer reviewer, as described by Creswell (2013), “keeps the researcher honest; asks the hard questions about methods, meanings, and interpretations, and provides the researcher with the opportunity for catharsis by sympathetically listening to the researcher’s feelings” (p. 251). The peer reviewer provided insight from a professional perspective. Member checks also contributed to the dependability of the study which provided validity for the themes that were discovered as a result of the research (Creswell, 2013). A thorough study and extensive notes about the research process could assist others interested in replicating the study in other professions and increases the dependability of the study (Creswell, 2013).

### **Transferability**

Triangulation of the data was utilized to ensure the research findings are transferable. The various sources of data were triangulated to provide validity to the themes that were found during the research process (Creswell, 2013). The participants and the themes that emerged as a result of the study were discussed using a rich, thick description that provides readers with the opportunity to determine if the research findings are transferable to other situations and participants due to commonly held characteristics (Creswell, 2013). The foundation of this study

is applicable to continuing education across all healthcare professions. The transferability of the study increases the likelihood that other researchers can utilize the study as a foundation for further research, which in turn, increases the potential for contributions to the field of study.

### **Ethical Considerations**

The study has few ethical considerations that must be taken into account. The potential issues that do exist are relatively minor in nature. Special precautions were taken to avoid potential complications related to ethics before, during, and after the research process. Participants were made aware of the nature of the study and were required to sign an informed consent form (Appendix E) prior to participating in the study. One ethical consideration is that the potential exists for the researcher to focus on critical comments about CPE. The solution to this potential issue was to ensure that multiple perspectives and negative feedback were reported (Creswell, 2013). The participants were able to communicate in a way that ensured the data were received from multiple perspectives. Reflective memoing was utilized to ensure that any preconceived notions were recorded.

During the data collection phase of the research, it was possible that the researcher could side with the participants' perspectives due to the nature of the subject. To avoid this issue, the researcher maintained the focus on the study's purpose and avoided sidebar conversations. Initially, the participants' potential to be guarded in their responses to questions was considered a potential issue because it was thought that participants would not be eager to completely disclose their true experiences with CPE due to the fact that it is tied to their profession and is a requirement for licensure. However, this was avoided by ensuring participants' anonymity and by maintaining the confidentiality of the data. No participant questioned the anonymity of the study and no one had concerns about participating. Pseudonyms were used for all participants

throughout the course of the study. Participants were made aware that they were free to discontinue their voluntary participation in the study without consequence. All study related data and materials were kept on a password-protected laptop in a secure location and will be maintained in the same manner.

### **Summary**

A transcendental phenomenological approach was used to explore the participants' experiences with CPE as well as the motivating factors that influence their decisions to participate in educational activities. The research questions served as the framework for the study. The researcher's role in this study was to conduct an investigation of lived experiences related to CPE. Data collection involved three methods which then required that the data analysis process be completed to discover emerging themes. The data from the interviews, virtual focus group, and journal assignments were then transformed into a thorough description of the experiences of study participants who have experienced CPE. The study was conducted in a manner that ensures the trustworthiness of the research. While the potential for ethical concerns existed, there is nothing to report and the researcher was prepared to handle any concerns immediately to prevent anything from negatively affecting the research process.

## **CHAPTER FOUR: FINDINGS**

### **Overview**

The purpose of this transcendental phenomenological study was to describe select Tennessee pharmacists' experiences in the context of CPE. As the process of phenomenological research is a way of presenting the experience of another individual (Creswell, 2013; Moustakas, 1994), this study endeavored to deliver a thick, rich, and descriptive representation of the pharmacists who experienced the phenomenon of participating in CPE by describing their experiences and motivational factors related to lifelong learning in the field of pharmacy. The themes that emerged from the data collected during the study represent the experiences pharmacist participants shared and include (a) Impact on Patients' Lives, (b) Networking Opportunities (c) Licensure and Certification Requirements and (d) Increasing Knowledge. Understanding how participants experienced the phenomenon of CPE in Tennessee is essential to the field of study in this area as well as to the pharmacists providing patient care throughout the state.

While the third chapter outlined the methodology utilized to conduct this transcendental phenomenological study, this chapter presents the findings and data analysis of the semi-structured participant interviews, the virtual focus group discussion, and the journal entries. The research for the study focused on twelve pharmacists who participated in CPE activities in the state of Tennessee. After the data collection process and analysis phase of the research was completed, the result was a description of the shared experiences of the study's 12 participants. The themes that emerged from the study connect with the original intent of the study as well as the initial questions that served as the foundation for the research. Four research questions guided the development of this study as well as the analysis of the data collected throughout the

research process and therefore, this chapter, which is focused on the findings of this study, is based on the following research questions:

RQ1. How do select pharmacists describe their experiences with CPE in Tennessee?

RQ2. What reasons do participants describe as their motivation to attend CPE activities?

RQ3. What preferences do participants have regarding design and delivery in relation to CPE activities?

RQ4. How do participants describe the impact of CPE on pharmacy practice?

### **Participants**

Pharmacists practice in a variety of settings but are all working toward one common goal: serving patients. The participants of this qualitative study were chosen from a database of licensed pharmacists in Tennessee who had each obtained at least six hours of CPE credits within the last year. In order to obtain a representative sample of pharmacists in Tennessee, the participants were chosen based on the fact that they met the requirements of the study and had experienced the same phenomenon. Once Liberty University's IRB granted permission to conduct the study on September 14, 2016, an e-mail (Appendix F) was sent to 375 pharmacists in Tennessee who met the requirements to participate in the study. The e-mail requested that interested participants return a signed copy of the attached stamped consent form and provide their availability for an interview. The original e-mail also included information about the journal assignment and instructions for participating in the virtual focus group discussion. Pseudonyms were assigned to individuals as they responded with their signed consent forms that were reflective of the participants, but not in such a way that their anonymity could be compromised.

Of the 375 pharmacists in Tennessee who were invited to participate in the study, 12 pharmacists completed all of the necessary steps to meet the requirements of the study. Of the 12 volunteers who participated in the study, four were Caucasian males and eight were Caucasian females. The participants' experience as a licensed pharmacist ranged from one year to over 32 years in practice with the average years of experience just over 11 years and a median of five years as a licensed pharmacist. The field of pharmacy consists of numerous specializations. A variety of specializations were represented among the participants and included clinical, academic, research, independent, chain, and specialty pharmacy practice. Clinical pharmacists practice in healthcare environments such as hospitals or clinics and often participate on an interdisciplinary team of health professionals. Academic pharmacists work in university settings as professors and researchers. Pharmacists in the research industry typically work for organizations that focus on clinical trials or pharmaceutical manufacturing. Independent pharmacists practice in a community retail setting, are not associated with a retail chain, and may or may not own their own practice. In independent and chain retail settings, pharmacists primarily dispense medications and counsel patients. Pharmacists who practice in specialty pharmacy work with patients who have rare or chronic diseases and require complex prescription treatments.

The participants each earned a Pharm.D., which is a professional doctorate degree in pharmacy. Prior to beginning the professional degree in pharmacy, many of the participants earned a bachelor's degree. Those who did not earn a bachelor's degree prior to graduating from pharmacy school would have been required to earn prerequisite credit hours before being accepted into a doctor of pharmacy program. Eight participants completed a pharmacy residency program after graduating with their doctorate in pharmacy. A pharmacy residency consists of

either one or two years in a clinical teaching environment that builds upon the resident's education and prepares him or her to become a residency-prepared pharmacist. The residency may be completed in a clinical environment or, less frequently, a community practice. A resident may choose to pursue a second residency that allows him or her to focus in a specialization in that field. CPE requirements may differ for pharmacists who choose to obtain additional training or certifications but will be no less than the requirements set forth by the Board of Pharmacy.

A synopsis of the participants' demographics is listed in Table 1. The overview includes participants' pseudonyms, age, gender, ethnicity, education, practice site type, and years as a licensed pharmacist. Wage information is not included in the data. However, as of May 2016, Tennessee was home to 7,980 licensed pharmacists with a mean annual wage of \$119,970 while during the same time period, 297,530 pharmacists were licensed in the United States with a mean annual wage of \$120,270 (U.S. Bureau of Labor Statistics, 2017). The demographics are representative of the current population of pharmacists in Tennessee. Pharmacists are considered healthcare professionals and experts in the field. The high rate of pay is indicative of their advanced training and specialized skill sets that contribute to the health and well-being of society.

Table 1 provides the background information for each of the 12 participants. The demographics are fairly comparable with the demographics of the population of pharmacists throughout the state of Tennessee outside of the ethnicities represented. The combination of each participant's experience in the field of pharmacy as well as their educational background served the study well as it provided the varied perspective that was needed to better understand pharmacists' experiences with CPE in Tennessee.

Table 1

*Participant Demographics Overview*

Participant	Age (years)	Gender	Ethnicity	Education	Practice Site	Years Licensed
Allen	30	Male	Caucasian	PharmD	Retail	4
Andrea	46	Female	Caucasian	PharmD	Independent	20
Dan	42	Male	Caucasian	BS, PharmD, Residency	Clinical	16
Denise	43	Female	Caucasian	PharmD, Residency	Specialty	3
Ellen	32	Female	Caucasian	BS, PharmD, Residency	Independent	4
Jennifer	27	Female	Caucasian	BS, PharmD, Residency	Academic	1
Jason	28	Male	Caucasian	BS, PharmD, Residency	Research	2
Lily	33	Female	Caucasian	PharmD, Residency	Academic	10
Mike	59	Male	Caucasian	BS, PharmD	Independent	33
Matt	58	Male	Caucasian	BS, PharmD, Residency	Academic	32
Mary	31	Female	Caucasian	BS, PharmD	Retail	5
Melanie	31	Female	Caucasian	BS, PharmD, Residency	Research	5

**Description of Participants**

The following section provides a detailed descriptive portrait of each participant at the individual level, including the participants' age, gender, ethnicity, educational background (i.e., bachelor of science, Pharm.D., residency), current practice area, years as a licensed pharmacist,



and his or her experience with CPE in Tennessee. The pharmacists who participated in this study were eager to provide as much information as needed to ensure that the end result was a better understanding of how pharmacists experience CPE. Each participant is described using his or her assigned pseudonym to protect his or her privacy.

**Allen.** Allen was a 30-year-old Caucasian male who was a married father of young children, served as a pharmacist in a high volume retail setting, and had been a licensed pharmacist for four years. He acquired his license after completing a bachelor's degree and then a doctorate in pharmacy. Allen works in central West Tennessee in a large city. When asked about his experience with CPE in Tennessee, he said:

I've only been out of school four years, and I can think off the top of my head of several drugs that were either in the pipeline or not even something I talked about at all. It has the potential to have a major impact on our practice, but what I fear is that, especially for retail pharmacists, unless they purposefully seek out awesome content areas, they will just digest whatever hours are required training like we have to.

**Andrea.** Andrea was a 46-year-old Caucasian female who was married with two young teenage children, owned an independent pharmacy in a small town, and had been a licensed pharmacist for 20 years. She completed a bachelor's degree in West Tennessee and then a doctorate in pharmacy before becoming a licensed pharmacist in 1997. She practiced under another pharmacist before purchasing her own pharmacy in rural West Tennessee. Andrea described her experience with CPE in Tennessee by stating:

Honestly, I know it is required for a reason. I understand the need for it and I understand the need for keeping up with the new parts that are coming out with the new techniques and new studies. I just don't like that the ones that I actually need are not always

available for me, and the ones that are available are not the ones that I need. I'm just doing it to get CE, and I really don't care anything about the subject.

**Dan.** Dan was a 42-year-old Caucasian male who was a married father of two teenage daughters, worked as a pharmacy leader in a hospital setting in East Tennessee, and had been a practicing pharmacist for 16 years. He completed a bachelor's degree, a doctorate in pharmacy, and a clinical residency program before beginning his career. Dan has varied experience in clinical pharmacy, has served as an academic faculty member, and also participates in activities related to legislative issues in pharmacy. Dan is passionate about the topic of CPE and described his experience when he said:

It's absolutely essential for me with what I'm trying to do. I think overall you'd have to say it's a positive thing. I don't think our current requirements for CE in Tennessee are enough. If it were left up to me, it would all be live hours. I'm not quite convinced that 30 hours in a two-year cycle is enough. I don't know what the right number should be, but pharmacy is changing so much. Even in the 16 years that I've been graduated, it has changed so much. There are so many new medicines on the market today that weren't available when we were in school and so many things that we did not learn about in school. Those medicines are gone now. They're not even on the market anymore, or they're no longer considered to be the standard of care.

**Denise.** Denise was a 43-year-old Caucasian female who was married with no children, worked in a specialty pharmacy in Middle Tennessee, and had been a practicing pharmacist for three years. She completed a bachelor's degree, and unlike many of her colleagues, pursued a career in pharmaceutical sales for several years prior to earning her doctorate in pharmacy. Denise was a non-traditional student when she returned to school. She also completed a

specialty practice residency in a community practice setting. Denise is highly involved in specialty pharmacy and provided an interesting perspective on her experiences with CPE by describing it as follows: “I like working and being with others. I think that’s so helpful when you learn from other pharmacists. That’s huge. The main thing is my license. We have to have it to keep up our license.”

**Ellen.** Ellen was a 32-year-old Caucasian female who was married with no children, worked in two different capacities as a pharmacist in both Tennessee and Arkansas, and had been practicing for four years in both a clinical and independent setting. Although she is licensed in two different states, Ellen provided insight particularly related to CPE activities in Tennessee. Her experience as a pharmacist in rural communities provided a perspective on the unique challenges practitioners face related to logistical challenges in obtaining CPE hours. Ellen has a broad range of educational needs due to her varying patient base in rural West Tennessee. When questioned about her experience with CPE, she said:

Well, I’ve gotten a lot of my CEs last year when I went to residency showcase in New Orleans, and that was pretty nice, so not only did we go down there and do poster presentations, but we were also able to sit in on some presentations and get CEs there. I got most of mine there. This has been my first experience with CEs. I haven’t had any issues. I guess my years following will be a little different, but I don’t know yet.

**Jennifer.** Jennifer was a 27-year-old Caucasian female who was newly engaged as well as a new practitioner. Of the 12 participants, Jennifer had the least experience in the field. She had recently finished a residency program in an academic environment but also practiced in an independent pharmacy setting. Jennifer completed the residency training to become an academic pharmacy faculty member in addition to her role as a licensed pharmacist. Jennifer is serving as

a pharmacist and resident faculty member in Middle Tennessee. As a new pharmacist, Jennifer had less experience with CPE than other participants, but had insightful answers related to the topic including the following:

I haven't had a whole bunch of experience just because I graduated last May, but the ones I've been to so far this year are through the Tennessee Pharmacists Association. It was more of how to get new services into practice essentially and get provider status within Tennessee and then within the federal government. Overall, it's just being able to continue to learn about pharmacy and not be stagnant in what we do. Just even from last year until now, there are new medications on the market, new protocols in place, new guidelines, stuff like that. It's just being able to stay up to date with that.

**Jason.** Jason was a 28-year-old Caucasian male who was married, practicing in an independent pharmacy as well as in an academic setting in the Nashville, Tennessee, area. Jason completed a residency program after earning a bachelor's degree and a doctorate in pharmacy. He serves as a faculty member at a college of pharmacy in addition to his role as a community pharmacist. Jason is a rather new pharmacist; however, when asked about his experience with CPE in Tennessee, he replied:

The way that I have obtained almost all of my continuing pharmacy education in Tennessee has been through the Tennessee Pharmacists Association by going to their winter and summer meetings and some other breakout sessions that they have had. I went to a medication safety summit and I did a grant program through them to start an accredited diabetes education program through the American Association of Diabetes Educators. In general, it's mandatory for our license. Obviously, we have to have 30

hours every two years, but I mean, I normally go well above and beyond that just because it seems to be the best way to stay current on topics that are relevant to our practice.

**Lily.** Lily was a 33-year-old Caucasian female who was married with two very young children who served as a professor in a pharmacy program. Before becoming a professor of pharmacy, Lily completed an undergraduate degree, a doctorate in pharmacy, and a residency program. Most of Lily's experience has been in West Tennessee. Lily's passion is educating pharmacy students. Because Lily is a pharmacy educator, she has a desire to grow her knowledge base in the field, so when asked about her experience with CPE, she said:

Obviously it's a requirement for licensure, but I don't think I've ever had any issues trying to meet the requirements for licensure. A lot of CE has been obtained over time due to being a resident and then also fulfilling criteria to maintain my certifications. Going to a meeting per year I think usually takes care of all the continuing pharmacy education needs that I have for licensure requirements.

**Mike.** Mike was a 59-year-old Caucasian male who was married with grown children and owned an independent pharmacy in West Tennessee. He began his career as a pharmacist while working in a retail setting before opening his own pharmacy. He serves patients in West Tennessee who are in need of specialty or compounded medications. Of all the participants, Mike had the most experience in the field of pharmacy with 33 years as a practicing pharmacist. He has seen the field of pharmacy change significantly and has had extensive experience with CPE. In addition to traditional CPE requirements, he has additional training requirements that he must maintain for his compounding practice. When asked about his experience with CPE in the last year, he said:

Well, you know, you can't do the job very well without keeping up, and it's difficult to keep up without CEs. The primary thing for me is new drugs and what's going on with the new things that are coming out because we don't get information very much any other way. Also, as scary as it can be sometimes finding out things, some of the law things are helpful. We don't see a lot of pharmaceutical reps anymore, so if you don't go to those, a lot of times you don't know what the new things are, the new drugs are, and then also, you get to see people that are across the state and learn what they hear and what they know. You pick up a lot of stuff that you wouldn't pick up other places.

**Matt.** Matt was a married 58-year-old Caucasian male with a college-aged daughter. Matt has been a practicing pharmacist for 32 years and for the last ten years has served as a professor and associate dean in a pharmacy program. Matt is passionate about serving pharmacy students who are preparing to enter the field and enjoys attending continuing education activities when he is able. Matt has served in several roles in the West Tennessee region but enjoys serving as a faculty member and pharmacy leader in the community. When asked to describe his experience with CPE, he said:

I don't know if there's data to prove that people do better, but I do think that if CE were not required for most professionals, everybody's busy enough that we'd have a lot of pharmacists who just would not do them. I think after I started working at this college and being a part of our continuing education program, I learned a lot more about how things should be, but for the most part, continuing education takes place in two different ways. You've got live hours and then non-live hours. I have a separate board certification that requires 120 hours of non-live CE on a seven-year cycle. So I have to do that, but it's certain types of CE that are required. The state obviously requires 30

hours of CE every two years. Half of that's live and half can be non-live, although you can certainly make the entire thing live if you want to.

**Mary.** Mary was a 31-year-old Caucasian female who had been married for a few years and had no children. After completing her pharmacy degree in West Tennessee where she served as a student pharmacist leader, Mary returned home to the Northwest Tennessee area to begin her career. At the time of the study, Mary was a pharmacy manager in a retail pharmacy and when asked about her experience with CPE, she mentioned the following:

It really just keeps our pharmacists knowledgeable on the changes happening in our practice. We can't help our patients if a new drug comes out if we are not knowledgeable on it. It's not only to keep my license active, but it's also to collaborate with other colleagues. It's kind of like a reunion a lot of times at CE classes. I get to catch up with them and to keep my knowledge active of the new drugs coming out, the new laws that have come out, but I don't often really dig deep into them until I get to CE class.

**Melanie.** Melanie was a 30-year-old Caucasian female who was newly married. A native of the St. Louis, Missouri, area, Melanie completed her pharmacy training in Tennessee. She had recently completed two residency programs and served as a clinical pharmacist in a pediatric research hospital in a major metropolitan area in West Tennessee. Melanie is dedicated to the pediatric patients she serves and seeks CPE activities that will help her become a better pharmacist. She strives to ensure that the pediatric population she serves receives the best care in the nation as she is employed by a world-renowned institution. She described her experience with CPE as follows:

I think one of the main goals of CE is just to keep expanding the knowledge because hopefully you don't know everything that the presenter is about to present. I think it all

depends on the topic and what I would gain from the topic, so if it's something that I had maybe a deficit in that knowledge and it's something I could use in my day to day practice, I feel like it impacts me a lot.

## **Results**

The findings of this study are organized according to the research questions as well as thematically based on the themes that emerged during data analysis. The research questions provided the foundation for the study and guided the data collection process which led to the discovery of the themes that describe the participants' experiences with CPE as a whole. While each participant provided a unique perspective of his or her experience with CPE, several themes emerged that represent the shared experiences of the group as a whole. The data collected from the participants is a result of extensive comments provided via the various data collection methods. The tables below display the results in a tabular format that allows the reader to view the data from a visual perspective.

### **Theme Development**

Themes developed and emerged throughout the data analysis phase of the research study as participants described their experiences with CPE in the state of Tennessee. The responses to the first research question as seen in the Description of Participants above sought to identify how select pharmacists describe their experiences with CPE. Overall, the results indicated that participants attend CPE because it is a requirement to maintain their professional license. The participants shared similarities related to the experience including identifying many of the same motivating factors, preferences for delivery, and opinions about the impact of CPE on the practice of pharmacy. Pharmacists stated that there are opportunities for improving the CPE system to ensure that programming is rigorous and beneficial to learners.



The second research question probed the motivation behind the reasons pharmacists attend CPE activities. Table 2 lists the individual responses to the question regarding motivation to pursue CPE.

Table 2

*Participant Motivations for Pursuit of CPE Activities*

Participant	Response
Allen	Impacting patients' lives
Andrea	Free meals
Dan	Networking opportunities
Denise	Required for licensure and certifications
Ellen	Required for licensure and certifications; increasing knowledge base
Jennifer	Impacting patients' lives; increasing knowledge base
Jason	Impacting patients' lives; networking opportunities
Lily	Increasing knowledge base; required for licensure and certifications
Mike	Impacting patients' lives; increasing knowledge base; networking
Matt	Required for licensure and certifications; increasing knowledge base
Mary	Required for licensure and certifications; increasing knowledge base; impacting patients' lives
Melanie	Increasing knowledge base

The responses included motivating factors such as impacting patients' lives, free meals, networking opportunities, licensure and certification requirements, and increasing one's knowledge base. The 12 respondents shared similar reasons for pursuing CPE activities.

In addition to the individual responses listed above, Table 3 includes the total response rate for the five factors that participants indicated as motivators. The number one motivator for participants was listed as increasing one's knowledge base as seven participants (58.3%) mentioned the importance of continued education. Five participants (41.7%) responded that their motivation to pursue CPE activities lies in their desire to impact their patients' lives.

Networking opportunities were also noted to be motivating factors by three (25%) of the

participants. The fact that CPE is required for pharmacists to maintain their licensure and certifications was also noted as a motivator by five participants (41.7%). One participant (8.3%) mentioned that free meals motivated her to attend CPE activities.

Table 3

*Frequency of Participant Motivations for Pursuit of CPE Activities*

Response	Participant	Count (%)
Impacting patients' lives	Allen, Jennifer, Jason, Mike, Mary	5 (41.7)
Networking opportunities	Dan, Jason, Mike	3 (25.0)
Required for licensure and certifications	Denise, Ellen, Lily, Matt, Mary	5 (41.7)
Increasing knowledge base	Ellen, Jennifer, Lily, Mike, Matt, Mary, Melanie	7 (58.3)
Free meals	Andrea	1 (8.3)

The data revealed that the participants shared similar reasons for pursuing CPE activities. The only response that was not shared by more than one participant was the opportunity to attend a CPE activity to receive a free meal. Free meals can be a benefit of attending a CPE activity, but many pharmacists are focused on the actual content and delivery of the educational material.

The third research question asked participants to list their preferred delivery methods of CPE programming. Currently, CPE activities can be presented in a variety of formats including but not limited to live programs, home studies, webinars, and workshops. As seen in Table 4, participants stated a variety of methods including online delivery, live lectures, CPE programs printed in reading materials, and hands-on workshops.

Table 4

*Preference of Delivery Method(s) for CPE*

Participant	Response
Allen	Online
Andrea	Online
Dan	Live Interactive Lectures
Denise	Online
Ellen	Online
Jennifer	Live Interactive Lectures
Jason	Online
Lily	Print CPE or Live Interactive Lectures
Mike	Live Interactive Lectures
Matt	Print CPE or Live Interactive Lectures
Mary	Live Interactive Hands-On Activities
Melanie	Live Interactive Lectures or Webinars

Participants shared similar responses to the question that asked them to identify the most effective delivery method for CPE activities. The respondents indicated that the most effective delivery methods include online activities, live interactive lectures, print CPE activities, live interactive hands-on activities, and webinars. Most participants responded with only one delivery type, but three respondents indicated two methods that could be effective.

Table 5 indicates the response rate for the most effective delivery methods for CPE. Six (50%) of the participants noted that live interactive lectures are the most effective delivery method. Notably, five (41.7%) of participants mentioned that their delivery method preference was online programming. Two (16.7%) participants indicated printed CPE activities were their preferred method of delivery. One (8.3%) participant mentioned that hands-on activities were her preference, and one (8.3%) other participant listed webinars as her most preferred delivery method for CPE.

Table 5

*Frequency of Preferred Delivery Method(s) for CPE*

Response	Participant	Count (%)
Live Interactive Lectures	Dan, Jennifer, Lily, Mike, Matt, Melanie	6 (50.0)
Live Interactive Hands-On Activities	Mary	1 (8.3)
Print CPE	Lily, Matt	2 (16.7)
Webinars	Melanie	1 (8.3)
Online	Allen, Andrea, Denise, Ellen, Jason	5 (41.7)

The majority of respondents indicated that live interactive lectures are the most effective delivery method for CPE activities. Only one participant reported that webinars are an effective delivery method. Live interactive hands-on activities only appealed to one participant as well. Participants did not mention the utilization of home studies as a method for obtaining CPE credit. This could be due in part to the fact that home studies can be more intensive and the hours are not counted toward the live hours requirement of the Board of Pharmacy.

The fourth research question inquired about the participants' description of the impact CPE has on the practice of pharmacy. As shown in Table 6, most participants expressed that CPE impacts practice on at least a frequent basis. However, some participants indicated that CPE does not impact their practice as a pharmacist. One participant noted that CPE affects the way she practices on an occasional basis. This information is vital to the organizations that provide accredited CPE activities as well as to CPE faculty and pharmacists attending CPE programs. CPE activities that do not contribute to a pharmacist's ability to impact his or her daily practice may not be viewed as effective or worthwhile from the perspective of the learner. The goal of CPE activities is to ultimately impact how pharmacists care for their patients. Effective CPE is necessary to ensure this objective is met.

Table 6

*Impact of CPE on the Practice of Pharmacy*

Participant	Response
Allen	Does not impact practice on a daily basis
Andrea	Does not impact practice on a daily basis
Dan	Impacts practice on a frequent basis
Denise	Does not impact practice on a daily basis
Ellen	Impacts practice on a frequent basis
Jennifer	Impacts practice on a frequent basis
Jason	Impacts practice on a frequent basis
Lily	Sometimes impacts practice
Mike	Impacts practice on a frequent basis
Matt	Impacts practice on a frequent basis
Mary	Impacts practice on a frequent basis
Melanie	Impacts practice on a frequent basis

Respondents had a differing perspective on how CPE impacts their daily practice as a pharmacist. While some participants indicated that CPE activities impact their practice on a frequent or daily basis, others reported that educational activities do not impact their daily practice at all. Eight (66.7%) participants reported that CPE impacts their practice on a frequent basis. One (8.3%) participant indicated that CPE sometimes affects the way she practices pharmacy. In addition, three (25%) participants responded that CPE does not impact the way they practice. Understanding the impact that CPE can have on a pharmacist's practice is beneficial to the field of pharmacy

The virtual focus group discussion followed a semi-structured question guide, but the flow of conversation centered around how current CPE activities meet or do not meet the participants' educational and professional needs as well as employer support for participation in CPE activities. Generally speaking, the participants identified that they have similar educational

and professional needs. Participants described varying degrees of support from their employers from the perspective of paid time off and monetary resources. The data collected from the virtual focus group discussion aligned with the data collected from other sources.

When participants were asked to describe how current CPE activities meet or do not meet their educational and professional needs, the five pharmacists who were involved in the discussion were open to discussing the frequency with which current CPE activities meet their needs as well as the reasoning behind their responses. Denise stated that she “only seeks out those that will meet my needs meaning that they pertain to my area of practice, are at appropriate times for my schedule, or the location is close to home or online.” The participants agreed that it is important for CPE activities to match their needs, especially personal needs related to logistical issues. Lily described her experience with finding relevant CPE activities that meet the requirements to qualify as CPE hours for her specialized certification. Her experience with CPE activities has been that programming occasionally meets her needs. She said,

I have to have 75 hours of diabetes-related CPE every five years for my certification. It's hard to find that much CE on a specific topic that will enhance my understanding, so it often seems like completing CE for the sake of completing it. While they enhance my knowledge of topics, the topics don't always relate to my pharmacy practice area. CEs can be beneficial if a person chooses a relevant topic that will expand their knowledge and they take the time to participate with focus.

It was obvious throughout the course of the virtual focus group discussion that the participants preferred to attend programming that at least somewhat aligned with their educational and professional needs. Jason was quick to explain to the group that he has had positive experiences when seeking programming that fits his needs. He said, “The current

offerings that I partake in always meet my needs because the choices are so abundant that I am able to select what I need.” The majority of the discussion pertained to the need to find individual CPE programs. However, Matt brought up the issue of obtaining multiple hours at conferences that provide several sessions over the course of one or more days. He discussed attending the American Association of Colleges of Pharmacy annual meeting which helps him meet his education and professional needs. He articulated, “It is the only meeting that has a focus on educating people in academic pharmacy.” For the most part, the participants who were a part of the virtual focus group had fairly positive experiences with finding CPE activities that relate to their areas of interest. Mary had positive comments in her response. She described that “the CPE activities I have participated in have fully met the needs and expectations I went into them with. I have always been able to find CPE activities with new topics I need to learn about or topics I need a refresher on.”

Based on the responses from participants in the focus group, employers are at least somewhat supportive of employees who seek out CPE activities. Denise works in a specialty pharmacy practice with limited external patient interaction. Her employer is flexible and supports her when she seeks to fulfill her educational and professional needs. She mentioned during the discussion that her employer is “supportive and will allow time during the day if there is a live event I want to view or attend. The time does not count against my vacation.” Depending on the employer and budgetary resources, employers may provide financial reimbursement for employees who attend CPE activities. Jason told the other participants that he is “granted professional leave that requires no vacation time and [is] partially reimbursed for travel expenses.”

Mary expressed that her employer is supportive of employees who take part in CPE activities. She explained, “My employer has a website we are able to access for non-live and home study CPE activities. We have also in the past years, particularly my first year out of pharmacy school, had CPE events held at our district office.” This type of support encourages employees and increases their engagement in the profession. Matt was also pleased with his employer’s support. He noted, “My employer allows me to attend the annual AACCP meeting and the annual TPA meeting. I can obtain a number of hours from those two meetings.” Lily, like Matt, is also employed in an academic setting that places a high priority on continued education. She remarked, “My employer will pay a portion of the funds needed to attend a professional meeting each year. My position often has flexibility in my day-to-day work schedule, which helps facilitate attending a shorter CPE program when one of interest arises.”

Participants were asked to complete a journal assignment as a method for collecting data related to experiences with recent CPE activities. The journal prompt requested that participants include the factors that motivated them to attend the CPE activity as well as how the program impacted their practice. Data collected from the journal assignments were compared with data from the interview portion of the research as well as the data from the virtual focus group. The participants responded to the journal assignment with personal reflections on their experiences with recent CPE activities.

Melanie returned her journal assignment describing her experience with a recent CPE activity. She disclosed the topic of the activity as well as the factors that motivated her to attend the program. In Melanie’s case, the program was located at her place of employment and was hosted by her department. She felt the need to attend the activity because it was hosted by her department. Melanie identified that the CPE activity will not impact her current practice as a



pharmacist but may in the future as “we learn more about pharmacogenomics, the growth of electronic health records, and how we can obtain information for research.” Some participants focused on the fact that the field of pharmacy is constantly changing. Mary described her motivation behind attending the CPE activity in question when she explained, “I chose to attend this event because even five years out of pharmacy school, I have already seen how fast pharmacy changes.” She also addressed the element of a CPE activity’s impact on a participant’s practice. She wrote, “These events always impact my practice because not only am I knowledgeable about the changes that have happened and what to watch for in the coming year, but I’m able to apply them in my practice setting more appropriately.”

From the perspective of patient care, some participants may not practice in their area of specialty or even in their preferred area of care. Matt wrote that he chose to attend the particular CPE activity he wrote about because as he said, “I have practiced in ambulatory care, and I have a particular interest in diabetes. However, I have been unable to keep up well in this area recently because I no longer take care of patients with this disease.” This particular response demonstrates the need for pharmacists to stay up to date on various disease states because patient care and pharmaceutical treatment regimens are always changing. If a pharmacist is not frequently practicing in a specific area, there may be a need for education on topics that, while still applicable, are outside of the daily scope of practice. Matt also noted that the speaker for the CPE program “was provided by a faculty member who is certified in diabetes management, so he was very knowledgeable.”

In contrast to attending a CPE activity that provides education on a topic that may not be related to a participant’s daily practice, Jason explained why attending a particular CPE activity was relevant to both his practice as well as initiatives identified by his employer. He

documented his experience with the CPE activity that consisted of a community pharmacy workshop. He detailed that the program was created “to assist with developing services out of the traditional pharmacy setting to boost revenue in the face of diminishing drug reimbursements,” regarding which many pharmacists are seeking information due to the opportunity to increase revenue. In addition to the workshop, he chronicled that “there was detailed information on collaborative practice, which we are currently trying to implement in our setting, and ways to combat the opioid epidemic.” Workshops allow pharmacists to practice real-life skills in a practice environment. Attending a program that can be immediately applied to the participant’s daily practice or that closely aligns with an employer’s strategic plans can benefit both the participant as an employee as well as the employer.

After collecting data from the participants, each piece of data collected was analyzed to find significant statements and themes. Participants were forthcoming when asked to describe their experiences with CPE in Tennessee. The collective responses provide a vibrant picture of the overall perspective of participating in CPE activities as well as the reasons pharmacists feel motivated to seek out further education. The significant statements were compared against each other to assist in identifying common themes in the data. The statements were then listed with repetitive statements removed from the group to prevent duplication. Table 8 identifies selected significant statements from participant interviews. A brief review of the significant statements indicates the data are consistent with the themes that emerged throughout the course of the study.

Table 7

*Selected Significant Statements from Participant Interviews*

- 
- You get new medicine that's coming out, it's on the shelf, and you don't know anything about it unless you look it up for yourself.
  - CE has the potential to have a major impact on our practice, but what I fear is that, especially for retail pharmacists, unless they purposefully seek out, you know, awesome content areas, they just digest whatever hours that are required training.
  - I think it has the potential to have a major impact, but I don't know how much impact it really has on overall outcomes.
  - I think, just from being in the field for several years, I think a lot of it is we're just checking the box to get our license, keep our license.
  - I think one of the biggest things is patient safety, patient care.
  - I probably don't say this with a complete digestion of the thought but if anything, we should have more CE. Some type of more structure or rigor than what it really is.
  - I like the benefit of learning from other pharmacists.
  - I definitely think it probably keeps you on your toes with new things that are out on the market or new ideas for pharmacists.
  - I think the impact varies and it depends on what an individual person puts into it.
  - While it's good to reaffirm what you know, sometimes you feel like it's a waste of time to do an activity and not really get anything out of it.
  - You can't do the job very well without keeping up, and it's difficult to keep up without CE.
- 

**Themes**

The results of this study also include the descriptive themes that emerged throughout the course of the data analysis of the participant interviews, virtual focus group discussion, and the

journal assignments. The major themes that emerged as a part of the investigation of pharmacists' experiences, motivation, and preferences in the context of CPE were (a) Impact on Patients' Lives, (b) Networking Opportunities, (c) Licensure and Certification Requirements, and (d) Increasing Knowledge. The data collected during the course of the study led to the development of textural themes which depicted the essence of the participants and their experience with the phenomenon.

**Impact on patients' lives.** The data from the interviews, virtual focus group discussion, and journal assignments identified that the pharmacists shared a desire to participate in CPE because of its potential impact on their patients' lives. Every participant mentioned their desire to serve patients and provide them with excellent care with the most up-to-date research and best practices. It was obvious from the data collection process and analysis that ensuring high quality patient care was one of the participants' highest priorities. Pharmacists choose a career in the field of pharmacy knowing that patients will be their top concern. The ability to provide appropriate evidence-based pharmaceutical treatment regimens requires that pharmacists participate in CPE activities that will increase their competency, which in turn, impacts patients' lives. As Mary, a pharmacist who has only been practicing a few years said, "We can't help our patients if a new drug comes out if we are not knowledgeable. I've already seen how easy it is to just forget to read stuff." From a similar perspective, Allen mentioned the impact he can have on his patients. He stated:

Well, I think one of the biggest things is patient safety, patient care. Anytime somebody comes to your counter and asks you about something, you don't want to be the guy who doesn't know what he's talking about. If you're not on purpose looking for stuff in CPE, then you're not going to know anything about it. Until that patient comes to you and

you've got to dispense something and you say, "All right, well, I don't feel comfortable dispensing something I don't know anything about." It takes 10 minutes to look it up, then you might find something out about it. But otherwise, it goes out the door and you don't see it again.

Mary stated, "I'm able to better serve my patients when I participate in a CPE. It just keeps me up in the practice." From a commitment perspective, Dan said, "I understand if you've got to give up a weekend to get these hours and everybody's weekends are precious, and your time with your kids is precious. But your patients' lives are precious too." Pharmacists understand the immense responsibility they have for ensuring that patients who place their trust in them as an expert in the field of pharmacy receive competent care.

**Networking opportunities.** Pharmacists enjoy networking with colleagues to compare practices and learn from like-minded peers. Networking opportunities are prevalent at live CPE activities because pharmacists who attend these types of programming are often interested in similar topics and aspects of patient care. On top of the knowledge gleaned from the actual presentation, attendees often walk away with a fresh perspective of the hot topics in pharmacy after having the opportunity to discuss such areas with colleagues. Mike believed that networking was a vital part of participating in CPE. He shared how the opportunity to network with colleagues influenced his decision to attend CPE programs. He said:

Networking is one of the big benefits because, like I said, you're getting to talk with colleagues in other parts of the state. For example, you know, I learned all about a colleague in Cookeville that was selling his store and I was doing the same thing about the same time and we compared, talked about, you know, what was going on with those kind of things. So beyond, you know, learning about medicines and what you need to

know, you learn about how people, how they're getting along in other parts of the state, uh, you know, financially and otherwise, so that's always important to me.

The participants shared that their desire to attend CPE activities stemmed from the opportunity to learn from other pharmacists. Having the opportunity to bounce ideas off of others in similar environments is beneficial to the development of new and creative strategies for improving patient care. Mary shared:

It's more than just keeping my license active, but it's also to collaborate with other colleagues, um, kind of like a reunion a lot of times at CE classes. I get to catch up with them, to keep my knowledge active of the new drugs coming out, the new laws that have come out because I hear about them, but I don't often really dig deep into them until I get to CE class.

Participants identified networking as a benefit of CPE activities and explained that it is helpful to be able to share similar experiences with others. They discussed the fact that while the intent of a CPE activity is to increase learners' knowledge, there are other elements that play a role in how they choose which programs to attend. Jason stated:

The benefit of CPE is usually the ability, especially if it's a live event, to network with other professionals who are kind of working through the same struggles you're working through in your practice setting, and kind of having the ability to brainstorm.

Likewise, Dan revealed, "I love to network with pharmacists from across the state or across the country. Participants agreed that the importance of networking made continuing pharmacy education programming more worthwhile."

**Licensure and certification requirements.** CPE is a requirement for maintaining a license to practice pharmacy in the state of Tennessee. Pharmacists are responsible for obtaining

the required 30 hours of credit during a two-year license cycle. However, many pharmacists have earned one or more certifications in a specialized area of pharmacy practice which can require additional hours of credit on top of the hours required by the Tennessee State Board of Pharmacy. One of the common themes that emerged throughout the course of the study was that of licensure and certification requirements. Participants divulged that participation in CPE activities tends to be an act of necessity rather than desire. Allen revealed:

You can kind of get complacent in it. I've just got to renew, I've just got to do my license and I gotta renew. I think, just from being in the field for several years, I think a lot of it is we're just checking the box to get our license, keep our license.

From the pharmacists' perspective, earning CPE credit can seem challenging both logistically and financially at times, but a few participants mentioned that it is not difficult to earn the credits required to maintain a license to practice. Lily acknowledge that she has "never had any issues trying to meet the requirements for licensure. Going to a meeting per year usually takes care of all the continuing pharmacy education needs that I have." From a similar angle, Jason explained:

I mean, it's mandatory for our license. Um, obviously, we have to have 30 hours every two years, but I mean, I normally go well above and beyond that just because, um, it seems to be the best way to stay current on, uh, topics that are relevant to our practice.

Matt contributed:

Board certification requires it, so as I mentioned before, you know, they have a certain number of hours that you've got to fulfill in a certain cycle, and, so, that's a piece of it. That's probably one of the major drivers, uh, is because it is required.

While many pharmacists are eager to learn everything they can to grow in their profession, there are some who may not consider CPE a high priority in their career. The licensure requirements are in place to protect patients as well as ensure that pharmacists are seeking additional training in the field. Pharmacists are held accountable by the State Board of Pharmacy to earn the required number of CPE hours, but without this accountability, even the best pharmacist may attend CPE activities on a less frequent basis due to a variety of factors. As Matt described, “I don’t know if there’s data to prove that people do better, but I think that if CPE were not required for most professionals, everybody’s busy enough that we’d have a lot of pharmacists who just would not do them.” The participants agreed that time is a precious commodity and while increasing one’s knowledge to better care for patients is critical to growing as a pharmacist, it can be challenging to balance everything. Mandatory CPE can be seen as both a positive and negative aspect of working as a pharmacist. Depending on the perspective with which the issue is viewed, mandatory requirements may be seen as a protective element or as a necessary evil.

**Increasing knowledge.** Throughout the study, participants reiterated the fact that CPE is one of the main ways pharmacists can increase their knowledge base. Research continues to advance the field of medicine, and in a field that is ever changing, continuing education is a vital component of staying up to date and knowledgeable about life changing medications and treatment plans. Matt clarified this point when he stated:

I think the thing really is, it's, um, making sure that we stay up to date, and knowledgeable, and current in practice. You know, we're in a profession where knowledge continues to grow, practice requirements change, and drugs of choice change. If you show me different things that are continually changing over time that you think



that you could leave school, or do just the minimal amount, that kind of stuff, and be able to remain knowledgeable enough to take care of patients, that'd be a foolish thought.

The participants confirmed what the interview data revealed about increasing knowledge through participation in CPE programs. Mary expressed:

It really just keeps our pharmacists knowledgeable on the changes happening in our practice. We can't help our patients if a new drug comes out if we are not knowledgeable on it, so I've already seen how easy it is just to forget to read stuff, especially with the new diabetes medications that are coming out. I mean it, it just keeps us knowledgeable and better able to answer our patients' questions when they have a question about, you know, a new drug.

While seeking additional training and education in one's area of specialty is vital, ensuring that continued education in topics outside of those related to daily practice are important. Melanie indicated that as a pharmacist, she needs to have a general knowledge of all areas of pharmacy in case her daily practice overlaps with another area of pharmacy. She said, "I also would like going forward to also get credits in other areas, just to make sure that I'm not so specialized in one area that I'm not super familiar with others areas." Patients may be on a variety of medications that can be contraindicated with other treatment methods or medications. Pharmacists who have narrowed their focus too much may miss the potential interactions of medications outside of their typical scope of practice. Participants noted that they tend to be drawn toward topics that are relevant to their practice, but it is also essential to take a step back and learn about other areas.

In addition to the themes that emerged from the data collected during the study, participants also identified elements that would enhance the overall value of the CPE activities in

the state of Tennessee. Table 8 lists the suggestions that the participants provided in response to the virtual focus group discussion related to enhancing the value of CPE activities. Each participant provided a unique perspective on his or her idea of what it means to increase the overall value of CPE activities. The responses to this question can serve as a guide for CPE providers as they begin to approach CPE programming from a learner's perspective. A few responses would benefit the Tennessee State Board of Pharmacy as well. As the State Board of Pharmacy evaluates potential modifications to the current model of mandatory CPE for licensure, the suggestions participants provided may contribute to the changes that are made.

Table 8

*Suggested Enhancements to Add Value to CPE Activities in Tennessee*

Participant	Response
Allen	Standardized testing to retain license
Andrea	CE programs after business hours, free food
Dan	Increase required CE hours and require that programs are rigorous and live
Denise	More workshops
Ellen	More live, online courses
Jennifer	Make CE programs more applicable to practice
Jason	Weekend CE programs
Lily	Rate CE programs based on skill level (i.e., novice, expert, etc.)
Mike	Receiving CE credit for special projects such as medical mission trips
Matt	Provide several different delivery formats for the same CE program
Mary	Offer CE programs on a weekly basis over the course of one or two months
Melanie	Make CE programs more accessible

### **Textural-Structural Description**

A textural description was derived by combining the individual textural descriptions. The information that participants provided throughout the data collection phase of the research process shaped the textural-structural description. This combination of descriptions created an

overall description of the participants' experience as a group. The textural descriptions assisted in the discovery of the essence of what the participants experienced in the context of CPE. The textural description for pharmacists' experiences with CPE in Tennessee was best represented by the themes of both patient care and increasing knowledge, which describes a positive experience with CPE in the state of Tennessee. In addition, it also demonstrates the critical role that CPE activities play in increasing pharmacists' knowledge as well as improving patient care. These themes are considered in the context of each pharmacist's experience with CPE. The themes that emerged were clear-cut, interacting elements that informed how the participants perceived their experience with CPE in the state of Tennessee. These elements were supported by the participants through the interviews, virtual focus group, and journal assignments. The final description was supported by the themes of impact on patients' lives, networking opportunities, licensure and certification requirements, and increasing knowledge.

### **Summary**

Utilizing the data from interviews, a virtual focus group discussion, and journal assignments, several themes related to the phenomenon of pharmacists' experience with CPE in Tennessee emerged throughout the course of the study. The themes included the following: Impact on Patients' Lives, Networking Opportunities, Licensure and Certification Requirements, and Increasing Knowledge. The research questions that served as the foundation of the study were answered from the data collected in this transcendental phenomenological study. The findings of this study have identified themes that could potentially enhance the role of CPE in a pharmacist's professional development as well as improve patient care. Enhancing the role of CPE could make educational activities more accessible and applicable to the pharmacists' daily practice. In addition to this, encouraging CPE providers to identify creative strategies for

developing and producing high-quality education for pharmacists seeking to satisfy licensure requirements while at the same time increasing their knowledge in a relevant and evidence-based manner will impact the field of pharmacy as a whole. The following chapter discusses how each research question was specifically answered from the data collection process and analysis. The themes that emerged were supported by the academic literature as well as the theoretical framework. Additionally, the emerging themes solidified the experiences participants had with CPE in Tennessee.

## **CHAPTER FIVE: CONCLUSION**

### **Overview**

The purpose of this transcendental phenomenological study was to describe select Tennessee pharmacists' experiences, motivation, and preferences in the context of CPE. The focus of this chapter is to explore the results of the study in greater detail. This chapter provides a detailed review of the findings from the collected data. Due to the opportunity for future research in this area, this chapter also contains discussion points, implications, limitations, and recommended research areas for future studies.

### **Summary of Findings**

Four research questions evolved out of the literature review and served as the foundation of this study. Each of the four research questions were answered through the data collection process and analysis. A discussion of each of the research questions is included in this chapter.

#### **Research Question One**

How do select pharmacists describe their experiences with CPE in Tennessee? From the data collected through interviews, the virtual focus group, and the journal assignments, it was determined that overall, participants have had positive experiences with CPE in Tennessee and understand that while participation in CPE is a requirement to maintain a license to practice, it can be beneficial to their daily practice as it builds their knowledge base of pharmacy-related education and competencies. However, some participants felt that CPE does not provide effective educational opportunities and is seen as a poor use of time. Most participants mentioned that there are both pros as well as cons to participating in CPE activities. Some participants identified that CPE activities throughout the state could be more rigorous as well as interactive, while others noted that their educational needs are met with current offerings.

Overall, opportunities for improvement exist with the current CPE model that, if resolved, could benefit both pharmacists and patients.

### **Research Question Two**

What reasons do participants describe as their motivation to attend CPE activities? The participants in this study identified five motivating factors for attending CPE activities. Five participants noted that they attend CPE programs because of the potential to impact their patients' lives. The opportunity to network was also listed as a factor that motivated pharmacists to participate in CPE. Although obvious, participants included the fact that CPE hours are required to maintain their license as well as other certifications in the field. The most popular motivator was increasing one's knowledge base. Participants expressed the importance of continued education as the field of pharmacy is constantly changing and patients' lives are at risk if pharmacists do not consistently seek to increase their knowledge.

### **Research Question Three**

In terms of design and delivery, what preferences do participants have in relation to CPE activities? Effective educational programming is a necessary component of CPE. With a variety of learning styles and delivery methods available today, it is critical that speakers utilize a delivery method that fits the needs of their audience. The participants listed five different preferred delivery methods. Live interactive lectures were the most popular delivery method with online delivery next in line. Online delivery can be an efficient delivery method because it can be the most cost effective form of conveying information in a highly accessible manner. One participant mentioned that hands-on workshops can provide a practice setting for role play and applying what was taught in a controlled environment. Printed CPE materials were also

identified as a preferred delivery method. The various preferences for delivery methods demonstrate the need for differentiated instruction in the area of CPE.

#### **Research Question Four**

How do participants describe the impact of CPE on pharmacy practice? The majority of the participants (66.7%) felt that CPE impacts their practice on a frequent basis. However, three participants communicated that participation in CPE does not impact their practice on a daily basis. One participant mentioned that CPE occasionally impacts her practice. The varied responses to this research question reflect the unique practice settings and educational needs of the pharmacists in the study. In its current state, the CPE model lacks consistent standards for ensuring that all activities provide measurable outcomes.

### **Discussion**

The purpose of this transcendental study was to describe pharmacists' experiences with CPE in Tennessee. The information presented in this section is intended to present the study findings in relationship to the theoretical and empirical literature reviewed in Chapter Two. In addition, discussion includes reasons this study both confirms and extends previous research in the field of CPE. The contribution of this study to the current field of study related to CPE is explained.

#### **Comparison to Theoretical Literature**

**Knowles' andragogical adult learning theory.** The data collected throughout the course of this study fits the andragogical theory developed by Malcolm Knowles. Based on Knowles' andragogical adult learning theory, the adult learner directs his or her learning, has educational needs related to flux in social roles, seeks immediate application of newly gained knowledge, and is most motivated to learn due to internal factors (Merriam, 2001).

Understanding how the model of CPE connects to how adults learn is part of the foundation of the current study. Examining each portion of Knowles' theory better illustrates how the findings align with the concept of adult learning.

As an element of Knowles' adult learning theory, the adult learner directs his or her own learning independently from other influences. Data from the participants show a connection to this element because pharmacists are responsible for creating and implementing a plan to continually expand their knowledge throughout the course of the year. Seeking educational opportunities provides pharmacists the opportunity to independently direct their own learning based on individual learning needs. The data revealed that participants desire to continue their education on their own accord which fits within the concept of Knowles' theory.

Another component of Knowles' adult learning theory is the concept that adult learners have educational needs tied to changes in their social roles. When pharmacists enter the field as recent graduates, the notion of continued education is relatively new as they have had little experience working in the field. Progressing from an undergraduate student to a graduate student signifies a change in social roles. As graduate students in pharmacy build their knowledge at a doctoral level and graduate from pharmacy school, they have once again achieved a new social role. Until this point, CPE has been viewed as a future obligation. Upon entering the field as a licensed pharmacist and establishing yet a new social role, CPE is now a vital component of maintaining one's license. As pharmacists continue to advance throughout the course of their career, social roles will continue to change. However, the requirement for attending CPE programs will not change. Knowles' theory is compatible with how pharmacists change social roles and continue to learn.



As participants communicated, there is a need for immediate application of knowledge learned during a CPE program. Knowles' theory identifies the desire learners have for immediate application as one portion of the adult learning theory. Pharmacists often participate in continuing education activities that include a workshop component where a new technique or tool is demonstrated. If the skills learned during this type of activity are not quickly utilized, learners may be unable to use their new skills. Participants also noted that new knowledge gained from educational programs can be quickly lost if not applied to practice within a short timeframe.

The final assumption about andragogical adult learning theory is that adult learners are motivated to learn based on internal rather than external factors. Participants identified that while there are external factors that motivate them to seek continuing education opportunities, the most influential motivation comes from their internal drive to continually expand their knowledge of pharmacy. The data from this study revealed that participants have varying internal factors that motivate them to continue their education. Internal motivating factors include their commitment to providing excellent patient care, a desire to improve the practice of pharmacy, and the internal obligation of meeting requirements. The data from the current study agree with this segment of Knowles' theory.

**Mezirow's transformative learning theory.** Mezirow's transformative learning theory aligns with the goal of depicting pharmacists' experiences with CPE. This particular theory is tied to CPE because as learners, pharmacists can modify how patient care is provided based on the constructs of Mezirow's theory. Transformative learning applies to the current study because as Mezirow (2003) said, it is "learning that transforms" (p. 58) whether it be a particular practice or concept. The data showed that CPE follows the precepts of transformative learning because

CPE activities are created to educate pharmacists in a manner that requires them to use their current knowledge in conjunction with the knowledge gained from the educational program in an effort to move from one level of understanding to a higher one. Mezirow's transformative learning theory supports the principle of lifelong learning and CPE.

### **Comparison to Empirical Literature**

**Competency.** Competent pharmacists are crucial to successful patient outcomes. The current CPE model addresses the need for building and maintaining one's competence as a pharmacist. Participants addressed the need to build their knowledge base to ensure that they are able to provide excellent patient care based on the most up-to-date recommendations and evidence-based data. Clinical education is not the only type of CPE. Other categories of education include business management, pharmacy law, certification courses, and many others. All CPE activities are required to be designed for pharmacists to obtain evidence-based knowledge that increases the learners' level of competence in the subject matter.

The data revealed that participants value CPE due in part to their need to maintain and increase their competency in the field. Previous research identified similar findings (Black & Plowright, 2010; Laaksonen et al., 2009; Leach & Fletcher, 2008; Robertson et al., 2003) related to the importance of developing competence among healthcare professionals. The participants identified that one of the reasons for seeking continued education in pharmacy-related topics is to increase competency in the chosen subject area which aligns with research findings (Hasan, 2009; Tran et al., 2014) that noted CPE is a method for increasing professional competence. When patients seek advice from a trusted pharmacist, they expect to be given the correct information based on the assumption that the pharmacist is competent in his or her field. Recognizing this fact, participants identified their commitment to lifelong learning to continually

increase their professional competence which is supported by research that found lifelong learning is linked to excellent patient care (Gopee, 2002).

**Mandatory CPE.** Pharmacists in Tennessee are required to complete a minimum of 30 hours of CPE activities every two years. The fact that continuing education is mandated by the Tennessee State Board of Pharmacy is one of the factors that motivates pharmacists to attend programs. In this study, participants noted that their involvement in CPE activities was partially driven by the fact that they had to meet certain criteria to maintain their license to practice pharmacy. Studies have shown that this correlates to findings from other studies including research conducted by Ang et al. (2013) and Buxton et al. (2012) that found the majority of pharmacists believed that mandatory CPE was essential to increasing their knowledge, skills, and abilities.

Participants had varying opinions on the effectiveness of mandatory CPE for increasing knowledge due partially to the fact that some pharmacists attend CPE simply to maintain an active license. Prior research (Davis et al., 1999; Thomson et al., 2001) ascertained that mandatory CPE is not consistently effective in improving the practice of pharmacy. Tennessee continues to utilize the model of mandatory CPE even as other states have moved toward a model of continuing professional development as a broad approach to continuing education and development of the professional as a whole. The most common approach to CPE across the United States is the model of mandatory CPE. Participants agreed that while there is value in mandatory education requirements, the current model utilized in the state of Tennessee lacks measurable outcomes.

**Barriers to participation in CPE activities.** The demands of daily life contribute to the barriers pharmacists have in relation to attending CPE activities. Potential barriers fall into two

categories: personal or non-personal. Personal barriers include monetary resources, time, familial commitments, and social obligations, to name a few. Non-personal barriers may involve an employer's budget and organizational factors related to pursuing CPE opportunities. Participants mentioned time, money, work commitments, and family obligations as the main barriers to attending CPE activities. Educational programming often requires a time commitment outside of normal work responsibilities and may also necessitate registration or travel related costs. In addition to monetary obstacles, pharmacists also have other social and familial obligations that can be difficult to coordinate with CPE opportunities. Other logistical challenges such as the location of the activity as well as the length of a commute can also prove to be hurdles to participation.

The obstacles and barriers to participation identified through the course of this study related to previous research from a variety of studies (Ausburn, 2004; Gravani, 2012; Hanson & De Muth, 1991; Hull & Rutter, 2003; James et al., 2002; Jennings et al., 2000) which reported similar findings. Each study found that both personal and non-personal barriers impacted the rate of attendance at CPE programming. Participants noted that both the Tennessee State Board of Pharmacy as well as accredited CPE providers must take into account the barriers to participation when developing programming and creating CPE requirements for licensure. Developing accessible CPE activities and creating licensure requirements based on the data related to barriers to participation could decrease frustration among all involved in the CPE process.

**Motivating factors.** Pharmacists are motivated by a variety of factors in relation to attending CPE activities. Part of the challenge related to selecting the most effective delivery methods and learning styles can be tied to the fact that every individual is motivated by

something different. Understanding the importance of identifying the motivation pharmacists have for attending CPE activities is one component of planning and implementation that can impact every aspect of a learner's experience. Mandatory CPE requirements are often mentioned as the reason for attending CPE programs.

The data identified that participants shared similar motivating factors for attending CPE activities which included a desire to impact patients' lives, networking opportunities, increasing knowledge base, and meeting licensure or certification requirements. This connects well with the findings from previous studies that indicated intrinsic motivation drives participation in continuing education activities (Ausburn, 2004; Driesen et al., 2005; Gonzalez Rodriguez & Sjostrom, 1998; Haywood et al., 2012). While external factors do impact pharmacists' motivation to attend CPE activities, the internal commitment to lifelong learning is the underlying factor for pharmacists' decisions to participate in continuing education.

**Lifelong learning.** Many pharmacists are committed to a lifetime of continued learning. Several participants noted that they are driven to pursue additional learning opportunities which correlates with previous research conducted by Young (2012) that found the desire to pursue lifelong learning opportunities comes from the participant's independent desire, confidence, and eagerness to learn. The commitment to lifelong learning, as many participants described, is part commitment and part drive. One without the other prevents successful attempts at furthering one's education. As identified in this study, pharmacists pursuing lifelong learning must identify their knowledge gaps to understand what type of education is needed. Other literature (Adamcik et al., 1985; Hale et al., 1989; Marriott et al., 2007; Scott et al., 2001) suggests that this is the first step of the journey to lifelong learning. Lifelong learning contributes to an individual's

level of competence, and as pharmacists seek to increase their competence in the field of pharmacy, dedication to lifelong learning is the key to success.

**Delivery methods.** Pharmacists represent a variety of demographics including age, race, and educational backgrounds. These differences represent a group of individuals with varied learning styles. With today's technology, there are few delivery methods that are not utilized in the development and implementation of CPE. There is no specific delivery method that will meet the needs of every learner in a CPE program. This requires that speakers combine a variety of delivery methods when presenting an educational activity, ensuring that the learning styles and delivery preferences of the participants are met. The 12 participants in this study indicated that there are varied preferences in relation to delivery methods. Several studies (Maio et al., 2003; Scott et al., 2001; Wheeler et al., 2014) sought to identify the most common delivery methods for continuing education programming. Similar to the results of the aforementioned studies, participants identified commonly preferred delivery methods including live programs, webinars, hands-on workshops, and online lessons.

Other research (Hoyle et al., 1990; Maio et al., 2003) identified delivery methods and the impact of each on the learners' professional practice. The data from the current study resembled the findings from previous research. Participants articulated that the delivery method does not significantly impact the overall practice of pharmacy. However, effective programs presented in a popular delivery method can increase a pharmacist's ability to utilize the new knowledge in a way that impacts his or her daily practice. Understanding how to meet the needs of the individual learner as well as the group as a whole is critical to an effective CPE program.

**Impact of CPE on pharmacy practice.** The participants noted that the impact CPE has on pharmacy practice can vary from pharmacist to pharmacist. Other studies (Cooksey et al.,

2002; Yin et al., 2010) have indicated that the pharmacist's role in the practice of pharmacy includes a variety of administrative duties in addition to the more traditional role of dispensing medication. In addition to examining the changes to the role of a pharmacist, these studies also focused on the impact of continuing education on pharmacists' daily practice. The data from participants in the current study reflect the findings from previous research and also contribute to the field of study. As pharmacists continue to seek CPE programming that will help them improve their daily practice, accredited providers and the Tennessee State Board of Pharmacy alike must consider how the current model of CPE impacts pharmacy practice.

**Evidence-based practice.** CPE providers have some discretion as it relates to content development. The end results may vary, but there are policies in place to help ensure that certain criteria are met. CPE speakers may not always rely on evidence-based practices when developing their program. However, as noted in this study, CPE activities and educational programming should be rooted in evidence-based practices to provide the most effective learning experience for the learners. Participants felt that the programming can be too biased at times which can be confusing for pharmacists as learners. Programs may be biased toward a certain medication or treatment plan which can potentially sway pharmacists to make biased decisions in patient care. There are guidelines in place to help prevent issues such as bias, but it does still occur.

In order to combat bias and other potential negative elements of CPE, programming must be evidence-based. Previous academic literature in the field of CPE (Khan & Coomarasamy, 2006; Sackett et al., 1996; Titler, 2008) determined that CPE must be evidence-based and applicable to practice. Ensuring that CPE is evidence-based requires that programming is developed based on current academic literature and practices. In general, participants voiced a

desire to attend programming that was clearly evidence-based to enhance their knowledge of topics and remain as up to date as possible on changes in the field.

**Pharmacy workforce.** CPE is one part of lifelong learning, but as young pharmacists enter the workforce and older pharmacists retire, the need for continuing education becomes more evident. Retiring pharmacists take with them the knowledge and wisdom that comes with years of experience in the field. Young pharmacists have the opportunity to learn from those who have been practicing for years and can seek that knowledge as they build their careers. Data collected from participants revealed that many carry a heavy workload due to shortages of licensed, experienced pharmacists and because of an increased workload and expanded responsibilities, some mentioned being unable to attend CPE programs. CPE activities benefit both the pharmacist and the pharmacist's employer because the knowledge gained from attending a CPE program can be applied to the pharmacist's daily work.

**Outcomes.** Pharmacists are challenged on a daily basis to improve patient outcomes. One way to ensure the best patient outcomes possible is to encourage pharmacists to have a desire to pursue continuing education opportunities. When pharmacists attend programming that is relevant to their daily practice, the knowledge gained from such programs can contribute to successful outcomes. Due to the fact that there are both societal and economic outcomes, participants did express a need to pursue CPE activities that assisted with improving outcomes in both patients and the organization's bottom line. Staying abreast of the latest technology and updates in the field is only one small part of improving patient outcomes.

**Expanding role of pharmacists.** The role of a pharmacist is constantly evolving as science and technology advance. From a traditional perspective, pharmacists are responsible for dispensing medications. Currently, the role of a pharmacist has expanded to include counseling,



medication therapy management, and disease management in addition to managerial responsibilities. Additionally, pharmacists in several states across the nation are seeking provider status which would allow them to bill for patient care services (Dow et al., 2013; Hennessy, 2013). Pharmacists play an active role in direct patient care and based on the data collected from participants, CPE is the means by which many pharmacists are learning what they need to know to meet the demands of an expanding role.

**Employer support for CPE.** A small number of participants noted that their employer supports their attendance at CPE activities. The support varies from paid time off to attend educational offerings, to funding for travel and registration fees. Employers who recognize the value of CPE often find the result is improved outcomes for the organization as a whole (Choy et al., 2013). Current research indicates that organizations who are supportive of the development of their pharmacists can see an increase in employee engagement, retention, and professional development (Choy et al., 2013; Cowell, 2009; Haywood et al., 2012). Of the participants who noted that their employer provided support for CPE, the most common forms of support were reported to be paid time off and financial support to attend CPE offerings. The results varied among participants as some mentioned that their employer did not seem to support the need for continued education. Organizations who recognize the potential positive outcomes of supporting their employees' participation in CPE programming can improve both their pharmacists' outcomes at work as well as impact the patient population they represent.

**Learning styles.** Pharmacists represent a wide variety of learning styles. While some pharmacists prefer a traditional lecture and presentation, others learn more effectively when material is presented in a workshop style. Research conducted by Austin (2004) and Romanelli et al. (2009) sought to define learning styles and found that the styles can be categorized as the

way in which people react to receiving new information in a learning environment. Participants revealed their preferred learning styles during both the virtual focus group and the personal interviews. During the discussion, participants disclosed that attending CPE activities can be an opportunity to learn from others in the field which, as Haywood et al. (2012) noted, is an important element of a learner's engagement in continuing education. Understanding that learning styles impact the actual retention of knowledge can benefit presenters as well as accredited providers when CPE programs are created to meet the learning preferences of those in attendance.

**Application to practice.** The pharmacists described varied perspectives on the application of CPE to pharmacy practice. Depending on the content of the CPE activity, pharmacists may be able to apply the knowledge to their area of practice. However, due to the fact that many pharmacists attend programming to primarily meet licensing requirements, not all programming is applicable to their daily practice. Participants noted that they preferred to attend CPE programs related to their interests and daily practice especially if the programs allowed for collaboration among learners. Prior academic literature in this area (Choy et al., 2013; Ellstrom, 2001; Thomson et al., 2001) found similar results in that collaboration among pharmacists during CPE activities increased learning and knowledge retention. Some participants in the current study felt the application of knowledge from CPE programs directly impacted patients in their care. This can be significant when considering how applicable a CPE activity may be to the field of pharmacy.

### **Implications**

This section addresses the theoretical, empirical, and practical implications of the study. The results of this study are important because the participants provide a voice to the pharmacists

in Tennessee who have experienced CPE and illuminate their motivation and preferences. The goal of the researcher was to determine and then expound upon the shared experiences of the pharmacists who participated in the study. The current study is of value because it examined the lived experiences of pharmacists in Tennessee who participated in CPE programs throughout the state as well as their motivational factors and preferences related to their pursuit of continued education. The implications are also tied to recommendations for various stakeholders.

The results of this study are of value to the current field of study related to CPE in the following ways:

1. This study emphasized the essence and shared experiences of pharmacists in Tennessee who experienced CPE as well as the motivational factors and preferences related to CPE.
2. This study investigated the current academic literature related to pharmacists' experiences with CPE across the globe.
3. This study expanded on Tennessee pharmacists' experiences with CPE by providing additional elements of pharmacists' experiences with CPE by identifying the motivational factors for pursuing CPE as well as the preferences related to CPE.
4. This study provided a voice for Tennessee pharmacists who experienced CPE which contributes to an expansion of the research in the field, potential process and structure changes related to the current CPE model, and providers of accredited CPE.
5. This study provides a solid foundation on which future researchers can build relevant and valuable studies related to pharmacists' experiences with CPE.

**Theoretical Implications**

This study was built on a theoretical framework that is grounded in Knowles' andragogical adult learning theory and Mezirow's transformative learning theory which both confirm the research and continuing education as a whole. Understanding how adults learn and apply new knowledge in daily practice is vital to the field of CPE. While the research is grounded in long-standing theories, the theoretical implications of this study can impact the field of CPE within the state of Tennessee and possibly throughout the country. There is more to learn about the way adults learn, and identifying the best practices for developing CPE programming is just one method for improving upon the current field of study.

**Empirical Implications**

The academic literature as well as the data from this study indicates a need to understand the current CPE model and the educational needs of pharmacists. The current model does not address the element of professional development. Also, as the field of pharmacy expands to include other aspects of healthcare and healthcare professionals, the educational needs of pharmacists also expand. The current model, while effective, may be rebuilt to reflect the changing dynamics in healthcare as well as the recent shift toward a multi-disciplinary approach to patient care. Based on the observations that occurred throughout the research, the empirical implications provide opportunities for improvements and advancements in the CPE model.

**Practical Implications**

Previous research in the field of CPE indicates that pharmacists encounter a variety of barriers to participation in CPE activities. Work responsibilities, a lack of financial resources, as well as familial commitments, contribute to the choices pharmacists make related to attending CPE programs. CPE providers should take note of the logistical and societal barriers

pharmacists face while trying to pursue continued education. The practical implications of this study indicate that there are opportunities for improvement in terms of the scheduling and delivery methods for CPE programs. Scheduling and delivery methods could be improved to increase attendance, ease of access to the program, and active participation in the programming. With the information gleaned from this study, CPE providers can schedule CPE activities based on the needs of the learners rather than on the needs of the organization providing the activity. Speakers should also be encouraged to approach their presentations from the perspective that the audience will consist of a mix of learning styles. To effectively address this, presentations should include a variety of delivery methods and impact multiple learning styles. The primary goal of CPE providers should be meeting the needs of the pharmacist as a lifelong learner. If this means restructuring the current CPE model as well as the style of activities an organization offers, then CPE providers should take note and make the necessary adjustments.

In addition to the logistical obstacles pharmacists face in relation to attending educational activities, the licensure requirements set forth by the Tennessee State Board of Pharmacy contribute to how pharmacists pursue lifelong learning. The mandate to meet or exceed licensure requirements can drive pharmacists to attend programming that is not applicable to their practice. While increasing one's knowledge even in an unrelated area can be beneficial, this type of activity is generally seen as an ineffective use of time by most participants. Attending CPE programming to simply earn credit for attending is a popular practice. The Tennessee State Board of Pharmacy should note that pharmacists are not always attending activities to increase their knowledge base, but rather to collect hours toward retaining their license to practice. The first step in this process may be adjusting the requirements for licensure

including the number of required hours and types of programming (live, non-live, etc.) that meet the educational requirements for a pharmacist to maintain his or her license to practice.

### **Delimitations and Limitations**

Careful attention was given to ensuring that the study was designed in a manner that would minimize limitations. However, a few limitations did emerge. Although participants of any ethnicity were offered the opportunity to participate, the only ethnicity represented in the study was Caucasian. In addition, participation was limited to pharmacists practicing in the state of Tennessee due to licensing requirements related to CPE. It is also possible that the sample is not representative of all pharmacists in the state. The researcher purposely selected participants to make certain that a variety of characteristics were represented including type of position (supervisor, staff pharmacist, clinical pharmacist, etc.), years of experience, gender, ethnicity/race, and geographic location. Varying the characteristics of the participants ensured that pharmacists as a whole were well represented in the study.

Another limitation is that only five participants were able to participate in the Google Hangout focus group due to other commitments and logistical issues. The lack of full participation could impact the generalizability of the study. Due to the aforementioned limitations, the experiences, motivation, preferences, and perception of impact on practice in the context of CPE as experienced by the participants may not be reflective of the experiences and perspectives of pharmacists of different ethnicities, educational and professional backgrounds, or those practicing in another state.

For the purpose of this study, the participant pool was limited to select pharmacists practicing in the state of Tennessee who had participated in CPE. The rationale for this decision was due to the fact that laws related to CPE vary by state, and it was necessary to have a sample

of participants that were all under the same law. This delimitation allowed the researcher to explore the phenomenon of pharmacists' experiences, motivation, and preferences in the context of CPE from the perspective of pharmacists who must all meet the same requirements to maintain an active professional license to practice pharmacy. Additionally, due to the scope of this study, the pharmacist participants were limited to those who had obtained at least six hours of CPE credits within the last year. This decision was made based on the need for pharmacists to have recently experienced the same phenomenon.

### **Recommendations for Future Research**

This study described the experiences the participants had as practicing pharmacists with CPE as well as the motivational factors they had for attending educational activities. Future research that may benefit the field of pharmacy as well as those who provide CPE programs may include studying pharmacists' experiences with CPE in other states, and particularly, what makes a CPE program effective in terms of design and delivery. There are a variety of studies that could be conducted in the context of CPE, and researchers who commit to increasing the breadth of academic literature in this field contribute not only to the academic study of CPE but also to the health and well-being of the population.

Replicating this study in another state with similar pharmacist licensing requirements would potentially provide insight into how states differ in relation to CPE. In states with licensing requirements tied to CPE participation, pharmacists may experience CPE differently than those in states that have less stringent requirements. Based on the outcomes of this study, it would seem that pharmacists in states with licensing requirements related to CPE may have less positive views of mandatory CPE.

Conducting a similar study in a state that has very different pharmacy licensing requirements than Tennessee could also provide a different perspective on the issue. Identifying states that require a professional development portfolio as a part of licensing requirements could provide researchers with the opportunity to explore the similarities and differences of patient outcomes related to pharmacists' knowledge, based on the impact of professional development versus CPE.

### **Recommendations for CPE Program Providers**

The results of this study indicate that there are opportunities for organizations that provide CPE programming. CPE providers have a special niche because pharmacists are required to seek continued education, but at the same time, programming must be delivered based on pharmacists' preferences to be most effective. Data from this study revealed that pharmacists based their choice of CPE programs on several motivating factors. CPE providers must seek to understand pharmacists' needs to ensure that effective programming is available to all pharmacists.

### **Recommendations for CPE Speakers**

The data collected during the course of this study revealed that CPE speakers play a vital role in the perceived quality of the education participants receive when they attend a program. The journal assignments revealed several important recommendations for CPE speakers. Speakers should be cognizant of the educational needs of their audience. Every audience is different and the individuals present will each prefer a different delivery style to match their learning style. Participants revealed that they retain material more effectively when it is presented in a manner that aligns with their preferences for learning. Taking into account the number of learning styles and potential delivery methods, CPE speakers have the difficult task of



creating and presenting programs that will be viewed as beneficial by the audience members. Based on the data collected in this study, CPE speakers must first identify the needs of their target audience and then create a presentation or activity that meets the identified needs.

### **Recommendations for Practicing Pharmacists**

According to the results of this study, practicing pharmacists can have an impact on the future of CPE. This study gave a voice to pharmacists who had participated in CPE in Tennessee. Based on the findings of this study, it is evident that pharmacists need the opportunity to contribute to the development of CPE programming as well as be given the option to provide input on the delivery styles as well as the scheduling of activities to ensure that their preferences for CPE are considered. While practicing pharmacists are required to participate in CPE activities, it is up to the individual pharmacist to apply what is learned. The data identified that there are some concerns about the current CPE model. Practicing pharmacists have the responsibility to ensure those concerns are heard both at the local and state levels.

### **Recommendations for the Tennessee State Board of Pharmacy**

The data analysis revealed that the Tennessee State Board of Pharmacy has the potential to steer the direction of CPE in the state. Participants voiced their concerns with mandatory CPE and noted that the licensing requirement related to CPE can be viewed as a “check box” activity rather than a valuable benefit that contributes to the pharmacists’ knowledge base.

### **Summary**

This study was conducted with 12 passionate participants who eagerly shared their experiences with CPE in Tennessee. In addition to experiences related to CPE, participants also discussed the factors that motivated them to attend CPE programming as well as the delivery styles preferred for effective learning. Participants provided details about their experiences by

participating in individual phone interviews, a virtual focus group discussion, and writing journal entries. Each of the four research questions was thoroughly answered according to the data the participants provided. A comparison to theoretical and empirical literature contributed to the discussion of the research. The theoretical, empirical, and practical implications of the study as well as delimitations and limitations were also covered in this chapter. The outline of the study as well as the procedures used to obtain the final results can be replicated in future research. Recommendations for those involved with CPE activities were also included.

The participants in this study as well as many pharmacists throughout the nation chose their profession based on the opportunities that exist to improve healthcare in society. Pharmacists have the ability to educate their patients who may otherwise have no understanding of their own health issues. Pharmacy is not only a profession but a passion to improve the health and overall lives of those one may come in contact with throughout the community. The ability to improve patient outcomes and adherence to physicians' recommendations as well as reducing adverse effects is a vital element of practicing pharmacy, but without continued education, pharmacists lack the resources they need to effectively fulfill their vision and purpose. The pharmacists who participated made it clear that while there are many reasons to participate in CPE, pharmacy is a calling, and the desire to provide excellent patient care to those who have entrusted them with their lives drives most pharmacists to seek opportunities to further their education to ensure that they can contribute to successful outcomes in their patients' lives.

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**APPENDIX A: IRB APPROVAL LETTER****LIBERTY UNIVERSITY**  
INSTITUTIONAL REVIEW BOARD

9/14/2016

Laura Ladymon

IRB Approval 2616.091416: A Phenomenological Investigation of Pharmacists' Experiences, Motivation, Preferences, and Perceived Impact on Practice in the Context of Continuing Pharmacy Education

Dear Laura Ladymon,

We are pleased to inform you that your study has been approved by the Liberty IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**The Graduate School**

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**APPENDIX B: SAMPLE TRANSCRIPT OF INTERVIEW**

- Laura: So, the first question is more of a statement, but tell me a little bit about yourself, your educational background, your experience in your career, um, and where you are now.
- Dan: Okay. Um, I graduated from the University of Tennessee College of Pharmacy in 2001. Um, I, uh, completed a residency at the VA Medical Center, um, a PGY1 Pharmacy Practice Residency from, um, July 2001 through June 2002. After that, uh, my wife and I, and our young daughter, our baby daughter at the time, we decided to move home. Uh, there was a position that opened up at my local hospital back in [inaudible 00:00:46] Tennessee. And, um, it was, uh, they just had a, sort of a basic pharmacy service back then at the time. But they told me that, um, if I, if I came here that they would pretty much give me in, uh, sort of a free hand to create and, uh, come up with whatever sort of clinical pharmacy services that I wanted to do.
- So we started that in 2002. And subsequently it's grown tremendously over the years. Uh, we are now doing, uh, a variety of different dosing services here. Um, I'm also the palliative care coordinator, uh, at the hospital. So all of the patients for palliative care, end of life care, I take care of all those people. Uh, antibiotic stewardship of course is a big focus right now with the new CMS and JACO requirements. So I'm doing that as well. Um, I do all the medicine consults, all the nutrition support consults, uh, the code blue response. Uh, I've done those for well over 10 years here. Um, so, um, that's been sort of the, the description of, of, of what I have done here in the last, um, almost 15 years.
- Laura: Okay. Great. You've been busy. (laughs)
- Dan: Yeah.
- Laura: Um, can you describe your experiences with continuing pharmacy education in Tennessee?
- Dan: Right. Well, um, I, I talked about this a little bit in the statement the other day, but I was hoping you'd ask me more cause I don't, I don't like to spend a lot of time typing. Um, I have done all of my CE over the years, um, through the, um, the live sessions. Um, so, I'm a member of [ASHP 00:02:21] and I go to that meeting every December so I get quite a bit of CE, uh, from that. And of course also through my experience with TPA. The two, uh, TPA [inaudible 00:02:31] that we have, the winter and summer meetings, I get a quite a bit of CE from that, too. Um, I have in the past had a subscription to a, a monthly newsletter called *Pharmacist*, um, oh, the title escapes me. *Pharmacist Letter* I think it was called.
- Laura: Mm-hmm (affirmative).

Dan: Um, and it offered, um, one hour of, uh, non live CE per month with that newsletter. And it was fall off the log easy, easy questions to answer. Uh, I could usually answer the questions without even reading the newsletter, but it was such a, it was, it, part of the subscription and it was such an easy way to get that CE. Especially for non live CE. Um, but after a few years of carrying that subscription I realized that it was not really doing me any good at all to carry that and I was getting so much CE for every two year cycle that I didn't see the need to keep paying \$85 a year for that subscription.

Laura: Mm-hmm (affirmative).

Dan: So I let that go. Uh, it's not uncommon for me to have, um, 60 to 70 hours of CE, of live CE for every two year cycle. Uh, in Tennessee our requirement is only 30 hours for every two years. 15 of those hours has to be live. So I thought why am I paying \$85 for this newsletter when it number one doesn't teach me anything and number two it's giving me an hour of live CE per month that I don't need.

Laura: Right.

Dan: So I just decided to drop that. So as I said, I think with all my activities with ASHP and TPA, um, I, I have more than enough CE per, per two year cycle. And often sometimes I know I kind of keep up especially since they added the, um, the CE tracker through the MABP website. I can keep up with my hours from that. And sometimes I'll go to a TPA meeting and I won't claim any credit. Uh, I'll go to the sessions just like I also would, but I don't go through the trouble of, of claiming the credit because I know I already have more than enough for that two year cycle.

Laura: Right. And I don't know that that many people are using ABP for tracking their CE like they should either.

Dan: Hm.

Laura: But -

Dan: I have been. I actually just checked it, um, uh, sometimes probably late December or early January because I added my hours for the ASHP meeting that I attended in Las Vegas this past December. And then went, uh, to the CE tracker to see how many that I had. And, at that point, um, I had well over 30 hours, um, and, uh, my, my license is due this coming summer. So I, I know that I have more than enough to get me through my, my next license cycle.

Laura: Okay. Perfect. What motivates you to attend CPE activities?

Dan: Well, I, up here in where I live in, in the northern part of the state, I'm about an hour north of Knoxville and I'm sort of on a little island up here. So there's not a

lot of other, um, well, what I would think of my peers in terms of clinical pharmacy here, um, so, I, for me learning is always fun. Uh, I love being challenged. I love being surrounded by, you know, these really smart people or learning from really smart people. So, um, that's a big part for me. Um, with my clinical responsibilities here, if I, I really believe if I was simply relying on sort of the written things that come out in journals or pharmacy times or, or *Pharmacist Today*, the source of what I think of the lay pharmacy journals.

Um, I think probably that it wouldn't in the sort of detail that I need, the sort of rigor that I need for, to keep on the, the level of clinical practice that I try to maintain on a regular basis.

Laura: Uh-huh (affirmative).

Dan: So I really think that the only way that I'm going to be able to keep up on a, on a, on a standard level of anything that I would hold myself to in terms of the way that I practice, it has to be a live session. And, uh, I, I think, you know, you want to be able to, to listen. You want to follow along with the slides. You want to be able to ask questions. Uh, listen to other people's questions and then just really learn from that and then think to yourself, "How am I going to apply this to what I do every day?"

Laura: Mm-hmm (affirmative).

Dan: Uh, so that's, I think, is my primary motivation. Um, there are CE events that happen closer to home. The, the US, not the US, but, um, the UT update that happens every fall and, um, spring, they do have those events in Knoxville. So, uh, it's a little bit less expensive and I wouldn't have quite so far to travel, but I, I've been biased against those for a number of years. Because looking at their agenda, it's pretty obvious it's geared towards the community pharmacist.

And their, their topics will be new drugs for 2016 or something like that. And that's not the kind, the level, the rigor that I need. Um, you know cause community, community pharmacist they have, not that they don't need to know this stuff, but they need, they need at a different level, a different, um, a different presentation style, let's say, than what I would require of myself.

So, uh, for me, it's, it's pretty much always in a situation where I'm going to have to travel a few hours to, uh, to maintain the, the sort of level of practice that I expect of myself.

Laura: All right. Um, in terms of design and delivery, what preferences do you have in relations to CE activities?

Dan: Well, as I said, I always want them to be live.

Laura: Mm-hmm (affirmative).

Dan: I always want them to be interactive. Uh, I'm looking for, um, non biased CE. I don't want, uh, necessarily someone to get up and just spout, uh, some, some company, company's mantra. Uh, I, I really want it to be a, an unbiased evidence based or science based, depending on what the topic is.

Laura: Mm-hmm (affirmative).

Dan: Uh, presentation. Uh, I want it to be from someone who is knowledgeable and an expert in their area. Uh, I don't want somebody who just simply has, you know, over a weekend of throwing together 35 or 40 slides and now they're just reading them off to me. As a matter of fact, I get offended when a present, a presenter is reading his slides to me. Uh, I can do that for myself. Uh, so I want to be taught. Uh, I want to learn from somebody and I want to, uh, to make sure that, that they are sufficiently knowledgeable in their area. That they have the ability to teach me.

Laura: Do you think we have a good supply outside of APHA and TPA activities of those kind of, uh, learning activities? Or, or are we kind of slamming that area?

Dan: I think it's pretty slim. Um, it's actually ASHP, not A, not APHA.

Laura: Oh wait. That's, sorry. That's correct.

Dan: No that's fine. I, I just wanted to make sure that we have that correct for being recorded. It's ASHP. Even when I go to ASHP sessions, I, I frequently complain about the fact that those sessions are too basic. Um -

Laura: Mm-hmm (affirmative).

Dan: - there's, there's a certain level that I feel like I need, um, and lots of times, I'm, it's not necessarily someone who's an expert in their field. It's someone's resident or maybe someone who's just finished residency who's, who's doing the presentation. And it's a topic that they're just sort of skimming the highlights on or they're going over some guideline or something. And they're not really; they're not really going over the level that I feel like I need. So, for ASHP, I think that lots of times their sessions are far too basic.

Now TPA on the other hand, is a little bit different because, um, these are awesome people that I know personally. And consider to be my peers. So when, um, when someone like that at that level is up speaking, someone who's been faculty at one of the schools of pharmacy for a number of years or someone who's been established in a hospital practicing in certain areas for a number of years, it, to me it's a better situation. Also it's a smaller group of people so you have a lot

more opportunities to answer, to ask and have your questions answered. Um, at ASHP, you might be sitting in a room with 2,000 people.

Laura: Mm-hmm (affirmative).

Dan: Or, or, or larger depending on what, which session's being offered. And they, um, now sometimes ASHP, it's just the, the crowd itself is overwhelming.

Laura: Yeah.

Dan: It may be sitting in the back of the room and can barely see the, the slides on the projector. Um, especially if your vision is, is as poor as mine is.

Laura: Mm-hmm (affirmative).

Dan: So, uh, at TPA, I do tend to think that those, those sections are better there.

Laura: Okay. How would you describe the impact of CE on pharmacy practice as a whole as well as your practice as an individual?

Dan: Well, it's, like I said, it's absolutely essential for me with what I'm trying to do. I think overall you'd have to say it's a positive thing. Uh, but I will say I'm pretty alone when I say this, I don't think our current requirements for CE in Tennessee are enough. Um, the 30 hours that I mentioned earlier -

Laura: Uh-huh (affirmative).

Dan: - the 15 live hours, um, I'd, I'd think I'd revamp that if it were left up to me. I think all our hours should be live. Uh, I, I say that because I know a lot of pharmacists who they'll fill up those little power pack CEs and then share the answers, um, with other pharmacists they work with. Or technicians will fill them out for them. Uh, most of those power pack CEs all you got to do is read the article and then answer the questions. You can find the answers. It's like an open book test. So they'll share the answers among several different pharmacists that they work with and they'll all send it in and get in their, get their hour or two hours of CE. Whatever it calls for. Uh, that's not effective learning. Uh, I never have felt like it was.

So, if it were left up to me it would all be live hours. Um, and I'm not quite convinced that 30 hours in a two year cycle is enough. Um, I don't know what the right number should be, but pharmacy is changing so much. Even in the 16 years that I've been graduated, uh, it has changed so much. There are so many new medicines on the market today that weren't available when we were in school. And so many things that we did that we learned about in school. Those medicines are gone now. They're not even on the market anymore. Or they're, they're no longer considered to be the standard of care.



- Laura: Mm-hmm (affirmative).
- Dan: So, um, I, I really think that we could use a more rigorous; I guess is the word, level of CE, uh, in Tennessee. And a more, and a, a probably a stronger requirement for the number of hours as well.
- Laura: I think you might be alone in that boat for the most part because the majority of the pharmacists that I've, I've spoken with even in, you know, in my last ten years in the pharmacy field, it's, it's, they kind of go back and forth. Yes we need CE, but we don't need as many hours or we don't ... And I'm kind of on your page where I would rather have, you know, 30 hours of live CE every year. But then you hear, "Oh, we don't have time." Or "We don't have this and that." But it is, it is so important.
- Dan: Yeah. I don't, I don't go along with that, but you know, as you might not have, you might not have realized it but I was sort of making these comments and conversations with pharmacists during my year as TPA president. But I never once said it in any sort of official capacity cause I knew I would be pilloried if I -
- Laura: (laughs)
- Dan: Um, but, um, we got, I mean, a lot, I understand if you've got to give up a weekend, um, to get these hours and, and, and everybody's weekends are precious and your time with your kids are precious. But your patient's lives are precious too.
- Laura: Yeah.
- Dan: And, uh, the community pharmacists out there all they really want is, they just want the, to keep the payday coming.
- Laura: (laughs)
- Dan: You know, they, they really, they, they, long ago they took their [inaudible 00:14:08] and they thought to themselves, "That's it. That's the last time I ever have to learn anything."
- Laura: Mm-hmm (affirmative).
- Dan: And, uh, that just really offends me. So, um, I know a lot of pharmacists like that around here. So, you know, they'll go into a session at TPA or ASHP or APHA or wherever it is, they'll get the code for session and then take off.
- Laura: Yep.

Dan: Go to the pool or the bar. I've seen it happen many times over the years and I just, I, I don't have any use for that.

Laura: What would, do you, and you've mentioned this, but I have to ask it anyway. What do you perceive as benefits of participating in CE?

Dan: Yeah. Um, it just, you know, the, I love to learn as I said earlier. Uh, I love to network, um, with, uh, pharmacists from across the state or across the country. People that I know, I love seeing them again and, uh, you know, lots of times it's not, it's not just during session that we're, we're sitting and listening, but then after the session we're talking about, you know, what was good about that or what didn't you like or what did you think was biased or that sort of thing. So you get a lot of good positive, or even [inaudible 00:15:14] good negative feedback about sessions.

Something maybe that I didn't pick up on the first time, but somebody else did. And they say, it makes me think, "Well, that was, that's more important than what I realized at the time." So that's my big thing about the live sessions that I really enjoy.

Laura: What about negative aspects? Do you perceive any negative aspects of participating in CE?

Dan: Well there is, there is a time requirement. Uh, there's also the expense. Um, you know the TPA meetings, AHPA meetings, you're looking at you know a good chunk of money just to register for the meeting. I think ASHP this past meeting I think was maybe \$600 just for registration. Um, then of course you've got your travel and you're, um, hotel if you're lodging. Uh, you're, um, having to eat food, uh, restaurants two, three times per day depending on where you are. Uh, you know all that adds up.

I think my, uh, the hospital actually supported me in the trip to, um, Las Vegas this past December, but, uh, I think what I submitted and what they reimbursed me for was right at about \$2,000. Um, so that's, uh, that's a chunk and that definitely, uh, puts off a lot of people, uh, from trying to attend things like that.

Laura: Okay. Um, is there anything else related to this experience that you would like to add?

Dan: No. I'm, I'm glad you asked me about the, the, give me a chance to sort of throw in my two cents on CE and what we think, or I didn't know if that would be part of the questions. But, um, no I don't think I have anything else that I want to add.

Laura: Okay. And if I have any other questions, may I contact you again?

Dan: Sure. Absolutely.

Laura: Okay. Well, great. Thank you so much Dan. And I hope you have a great week. Um, I'll be in touch with a, the other portion of the research -

Dan: Mm-hmm (affirmative).

Laura: - but that will probably be within the next few weeks or so. Probably not this week.

Dan: Well, when you get your dissertation done, I'd love to read it.

Laura: Okay. Great. I will, um, I'll let everyone involved in the research, um, see it for sure.

Dan: Okay.

Laura: Perfect. Thank you.

Dan: Thanks Laura.

Laura: Bye.

Dan: Bye.

## **APPENDIX C: INTERVIEW QUESTIONS**

Title: A Phenomenological Investigation of Pharmacists' Experiences, Motivation, and Preferences in the Context of Continuing Pharmacy Education

1. Tell me about yourself.
2. Describe your experiences with continuing pharmacy education (CPE) in Tennessee.
3. What motivates you to attend CPE activities?
4. In terms of design and delivery, what preferences do you have in relation to CPE activities?
5. How would you describe the impact of CPE on pharmacy practice?
6. What do you perceive as benefits of participating in CPE?
7. What do you perceive as the negative aspects of participating in CPE?
8. Is there anything else related to this experience that you would like to add?
9. If I have other questions, may I contact you again?

**APPENDIX D: FOCUS GROUP QUESTION GUIDE**

1. What type of pharmacy training did you receive? Please circle all that apply.
  - a. B.S.
  - b. Pharm.D.
  - c. Ph.D.
  - d. Pharmacy residency
  - e. Master's
  - f. Other, please specify: \_\_\_\_\_
2. What is your area of practice?
  - a. Chain
  - b. Independent
  - c. Hospital
  - d. Academic
  - e. Industry or Marketing
  - f. Other, please specify: \_\_\_\_\_
3. How many years have you been a practicing pharmacist? \_\_\_\_\_
4. What motivates you to pursue continuing pharmacy education activities?
5. What prevents (or has prevented) you from attending continuing pharmacy education activities?
6. Describe how current continuing pharmacy education activities meet or do not meet your educational and professional needs.
7. How does your employer support you in relation to participating in continuing pharmacy education activities?
8. Describe how continuing pharmacy education affects the way you practice.
9. Identify the most effective delivery method(s) for continuing pharmacy education.
10. What would enhance the overall value of the continuing pharmacy education activities you attend in the state of Tennessee?

## APPENDIX E: CONSENT FORM

### A PHENOMENOLOGICAL INVESTIGATION OF PHARMACISTS' EXPERIENCES, MOTIVATION, PREFERENCES, AND PERCEIVED IMPACT ON PRACTICE IN THE CONTEXT OF CONTINUING PHARMACY EDUCATION

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Liberty University  
School of Education

**Dear Participant:** You are invited to be in a research study of Tennessee pharmacists' experiences with continuing pharmacy education. You were selected as a possible participant because you are a licensed pharmacist in the state of Tennessee who has completed at least six hours of continuing pharmacy education within the last calendar year. I ask that you read this form and ask any questions you may have before agreeing to be in the study. Laura Ladymon, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this study is to describe select Tennessee pharmacists' experiences, motivation, preferences, and perception of impact on practice in the context of continuing pharmacy education (CPE).

**Procedures:** If you agree to be in this study, I would ask you to do the following things:

1. Participate in a confidential, individual, in-person or phone interview that will last a maximum of two hours and be audio recorded.
2. Participate in a virtual focus group. Your participation will be anonymous to other participants and confidential to the researcher. Participation will most likely not exceed a maximum of five hours of participation over the course of the study, and you can control the amount of time that you choose to participate.
3. Participants will be given the opportunity to freely express their thoughts and beliefs about continuing pharmacy education. Each participant will be asked to create a Microsoft Word document to record their thoughts on continuing pharmacy education during the study. To add structure to the journal activity, participants will be instructed to choose one continuing pharmacy education activity in which they participated within the last year and to then journal about their experiences pertaining to that specific activity including the factors that motivated them to attend the activity in question. This data will be confidential. The main journal activity should take no more than one hour with a maximum of five hours of journaling over the course of the study.

**Risks and Benefits of being in the Study:** The risks involved in this study are minimal, no more than you would encounter in everyday life. There are no benefits to participating in this study. The potential knowledge gained from this study could benefit the profession of pharmacy as well as the organizations involved in providing accredited continuing pharmacy education programming.

**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely and only the researcher will have access to the records.

The researcher will ensure participants' privacy by maintaining the confidentiality of the data. Pseudonyms will be used for all participants throughout the course of the study. All study related data and materials will be kept on a password-protected laptop in a secure location. Data will be destroyed after three years by shredding all paper documentation and deleting data stored on the researcher's laptop. The researcher does not anticipate a need to use the data in the future. Audio recordings will be maintained on an electronic audio recorder that only the researcher will have access to, and all recordings will be deleted after the end of the study.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting this relationship.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

**Contacts and Questions:** The researcher conducting this study is Laura Ladymon. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [lbadymon@liberty.edu](mailto:lbadymon@liberty.edu). You may also contact the researcher's faculty advisor, Dr. Gary Smith, at [gsmith61@liberty.edu](mailto:gsmith61@liberty.edu).

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall 1887, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

*Please notify the researcher if you would like a copy of this information to keep for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

☐ The researcher has my permission to audio-record me as part of my participation in this study.

Signature	Date
Signature of Investigator	Date

**APPENDIX F: EMAIL TO PARTICIPANTS**

Dear Recipient:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a Doctor of Education degree. The purpose of my research is to describe select Tennessee pharmacists' experiences, motivation, preferences, and perception of impact on practice in the context of continuing pharmacy education (CPE). I am writing to invite you to participate in my study. You are invited to participate in this study if you are a licensed pharmacist practicing in the state of Tennessee and have participated in at least six hours of continuing pharmacy education within the last year. If you feel you received this message in error, please let me know so that I can remove you from the mailing list.

If you are willing to participate, you will be asked to participate in a confidential, individual in-person or phone interview that will last a maximum of two hours and be audio recorded. You will also be asked to participate in a virtual focus group. Participation will most likely not exceed a maximum of five hours of participation over the course of the study and you can control the amount of time that you choose to participate. Participants will also be asked to create a Microsoft Word document to record their thoughts on one continuing pharmacy education activity in which they participated within the last year and to then journal about their experiences pertaining to continuing pharmacy education. The main journal activity should take no more than one hour with a maximum of five hours of journaling over the course of the study. Your name and other identifying information will be requested as part of your participation, but the information will remain confidential.

To be considered for participation, please complete and return the attached consent document to me at [lbladymon@liberty.edu](mailto:lbladymon@liberty.edu). The consent document contains additional information about my research.

Sincerely,

Laura Ladymon, MBA, EdS  
Principal Investigator



**APPENDIX G: EXCERPT FROM REFLECTIVE JOURNAL – INTERVIEW**

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Friday, March 24, 2017

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Phone Interview with Dan

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6:00 p.m. – 6:29 p.m.

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This was the fourth interview I conducted. I could tell that after I had spoken with Dan for a few minutes, I was beginning to get in a groove as far as the way I started the conversation and flowed from question to question. I knew before I called Dan that he had strong opinions about continuing pharmacy education based on his responses to the participant email. Going into the call, I felt like I would be able to get a wealth of information from him. Dan provided a different perspective than many pharmacists have because he is in favor of more stringent requirements for continuing pharmacy education. Few pharmacists would agree that the State Board of Pharmacy needs to increase the hours required to maintain an active license. Because I knew Dan was in the minority, our dialogue was interesting. While I did not challenge him to provide a stronger foundation for his argument, I did tell him that I felt like he would be a part of a very small group of pharmacists who would be in favor of more rigorous and stringent requirements.

Reflecting on this interview caused me to realize that while I have an opinion and perspective on the requirements as well as the politics that surround continuing pharmacy education, I have to refrain from reflecting my thoughts and ideas on to the interviewee. My role is to obtain the details of the participant's experience with continuing pharmacy education. Overall, the interview was excellent. I know Dan is an excellent pharmacist and wants his colleagues to perform well also because in the end, patients' lives are at stake.

**APPENDIX H: EXCERPT FROM REFLECTIVE JOURNAL – FOCUS GROUP**

Tuesday, April 25, 2017

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Focus Group

7:00 p.m. – 8:00 p.m

Participants: Ellen, Matt, Dan, Melanie, Allen

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I chose Google Hangout because I had read about the pros of being able to connect with others in an online environment without having to use something like a WebEx. This was my first attempt at using this system in the real world rather than in a practice run, and hindsight tells me that I should have tried it in a real world setting as well. It was very challenging to schedule a focus group that fit each participant's calendar. In total, eight participants originally agreed to participate in the Google Hangout. However, only five participants were actually present during the group session.

Ultimately, the Google Hangout focus group session simply reiterated the things the participants had stated during their phone interviews. The participants seemed to feel comfortable conversing with their peers. It was apparent that pharmacists share a common bond and have similar feelings about their experiences with continuing pharmacy education.

I reviewed the focus group dialogue and sent the recording to the participants for them to review to ensure it was a good representation of the conversation as well as to ensure accuracy through member checking. The five participants responded that the recording was acceptable.