Nurse Educators' Beliefs about the Relevance of Continuing Professional Development

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by

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Dedications

This dissertation is dedicated respectively to the late *William Rogan, Jr*., and *Esther Levinson Groeniger*, my father and maternal grandmother.

This project has been fraught with challenges and pitfalls. There were many times I asked myself whether I truly wanted to continue.

During these times, I thought of my father, who stopped with a terminal Master's degree from Johns Hopkins University, though he could have achieved so much more, and my grandmother who, born in 1907, achieved great things in her lifetime. She was one of the first female jurors in Anderson County, Tennessee, and completed most of the coursework for a doctorate in English. One of Nana's greatest regrets was that she never completed her PhD, and when I thought of quitting, I could well imagine her shaking her head and saying, "That poor child…"

So… in the end, this dissertation is not FOR them, but has been completed because of them.

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My daughter, ***Sylvia-Jean Katherine*** (Pope) ***Philippine Rogan***,
or as we like to call her, "Skpr"

My daughter is the light of my life; the apple of my eye – albeit an apple who definitely fell close to the tree! We aspire to inspire our children to greatness, but in this case, it is my daughter who inspires me. Her contagious *joie de vivre* and positive outlook on life (which is endearing when it isn't annoying!) have inspired me more times than I can count. Sylvia has made the most of every opportunity she's been given or has found. She finds light where there is dark. She enjoys life to the n^{th} degree, and I don't know what I would do without her. I love you, honey!

My mother, ***Dr. Eleanor*** (M.F.) ***Groeniger Rogan***

A couple of years ago, I did what many scholars do: I looked up my own name in the EBSCO search program. I found myself – immediately under an article by my mother on which she was the primary author. While I do not aspire to be published professionally as widely as she, for I would rather publish my time travel-romance-adventure (see Jorge de Serrano, below), I am humbled by the sight of my name on the same page as hers. Mom has been an amazing role model throughout her life and in so many ways: As a scholar, as a single mother, and as a faith-filled woman. Mom, thank you for sticking with me, and for supporting me in oh, so many ways.

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…Especially the *Boston Bruins, Vancouver Canucks,* and *Tampa Bay Lightning (*or *The Bolts),* and the *Baltimore Ravens,* and the *Kansas City Royals* who kicked tail in the playoffs and World Series for the first time in 29 years!

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BlackAdder,
and his oh, so witty sayings,
such as one that has been particularly *a propos* to this entire dissertation process:

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Abstract

Based on the literature and the fact that only two-thirds of states in the United States require Continuing Professional Development (CPD) for relicensure of nurse educators, there appears to be a lack of consensus within the nursing profession about the importance of CPD. The purpose of this study was to explore the beliefs of nurse educators about the relevance of CPD and the instructional materials employed for those events. There were 454 respondents to the online survey, whose responses indicate that nurse educators can relate CPD information to practice, experience, and existing knowledge and/or skills. Nurse educators believe that CPD is relevant to their needs because they don't already know most of the information presented. Nurse educators believe that they benefit from CPD and that the benefits of CPD are clear to them. Lastly, nurse educators believe that CPD presenters make their information seem important. These findings are consistent with the existing literature.

Chapter I: Introduction

Nurse scholars assert that a basic nursing education is insufficient for a lifetime of professional practice and that a nurse's formal education is likely to be out of date within two-and-a-half to five years of the nurse entering the profession (Al-Majid, Al-Majed, Rakovski, & Otten, 2012; Bradley, Drapeau, & DeStefano, 2012; Hogston, 1995; Woodruff, 1987). As Levett-Jones has written, a nurse's initial education "keeps no better than fish" (2005, p. 229).

The purpose of this study was to explore the beliefs of nurse educators about the relevance of CPD, which for the purpose of this study includes live and online programs or presentations, and the instructional materials employed for those events. CPD "is a key driver of change [and] the attitudes of employers and indeed nurses themselves will determine the success of CPD" (Joyce & Cowman, 2007, p. 627).

The nursing profession is dynamic and professional nursing practice takes place in a complex, fast-paced healthcare environment where change is the rule, versus the exception. In this setting, competence is fluid and ever-changing and health care professionals are held to a higher standard of professional accountability as are the educators who train them. CPD is the means by which ongoing competency is achieved, although the number of years one has practiced contributes to his or her developing professional competence (Bradley et al., 2012).Nurse educators are doubly-challenged to remain abreast of best practices. Not only must nurse educators be aware of and employ best practice related to nursing practice, they must also be aware of and employ best practice in higher education (National League for Nursing [NLN], 2005), as shown in Figure 1.

Figure 1. Balancing the Needs of Professional Development

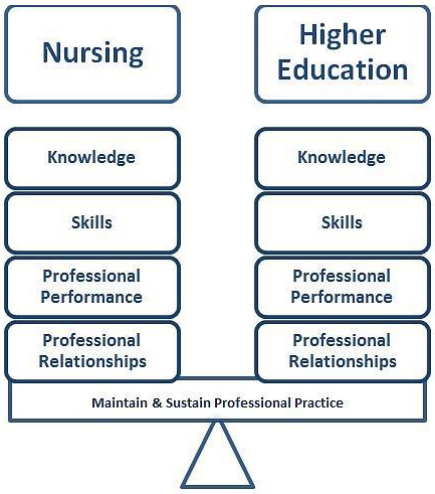


Figure 1. This figure illustrates the balance nurse educators must find in order to ensure best practice for both nursing and higher education.

In a concept analysis of competency, Axley (2008) asserts that nurse "educators should… demonstrate competency in their own practice and make students aware of the lifelong learning required to maintain competency" (p. 221). Dickerson (2012) suggests that nursing competence is a key element of safe patient care. Ongoing competence in nursing relies upon the nurse's ability to self-assess his or her practice to identify learning needs. In this respect, nurse educators must also be learners who routinely employ self-assessment and looking for and aware of opportunities to enhance their professional practice (Dickerson).

Citing a need for realistic self-assessment, Axley (2008) calls for "competent professionals [to] have an understanding of their own limitations… to autonomously provide safe care according to defined responsibilities, professional standards, education, and qualifications" (p. 221). In order to achieve and maintain professional competence, relevant CPD is relevant (Bradley et al., 2011; Penz et al., 2007). CPD is "an array of educational activities that health professionals undertake to maintain, develop, and

enhance the knowledge, skills, professional performance, and relationships they use to provide care for patients, the public, and the profession" (Sargeant et al., 2011, p. 167; Hogston, 1995).

Professional nursing organizations and accrediting bodies mandate that nurses in all disciplines, including nursing education, maintain and enhance their practice by engaging in lifelong learning, which is the hallmark of contemporary nursing practice (American Nurses Association [ANA], 2013a; Higgins, 2011; NLN, 2011). In spite of these mandates, only 67% of state boards of nursing in the United States (Appendix A) require CPD for relicensure which suggests that there is a lack of consensus within the nursing profession about the importance of CPD. This lack of consensus is evident in the titles of recent articles focusing on CPD. Authors have asked whether CPD is a necessity or nicety (Levett-Jones, 2005), a chore (Robertson, 2012), friend or foe (Lucas, 2012), or a privilege or burden (Coutts, 2012) (Figure 2).

Figure 2. Literature-based Labels of Continuing Professional Development

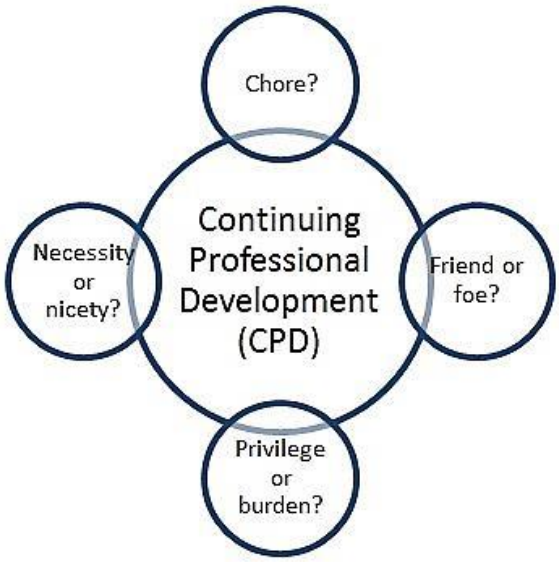


Figure 2. Descriptions of CPD from the literature (Rogan, 2014)

CPD is essential to safe, competent nursing practice (Al-Majid et al., 2012; Bradley et al., 2012; Woodruff, 1987). There is evidence that access to CPD is one of the most important factors influencing job satisfaction, recruitment and retention of nurses, including nurse educators (Gould, Kelly, Goldstone, & Maidwell, 2001). Engaging in CPD alone does not contribute to or result in improved learning and or competence (Moore, Green, & Gallis, 2009). Nurse authors assert that it is not sufficient to register for and attend a seminar or course simply for the contact hours (Al-Majid et al.; Barriball & While, 1996; McCoy, 2009; Nugent, 1990; Schweitzer & Krassa, 2010). Nurses are best-served by pursuing CPD that is relevant to their practice (Al-Majid et al.; Barriball & While; McCoy; Nugent; Schweitzer & Krassa), and it is the same for nurse educators.

Research Problem

Three interrelated issues served as the impetus for this study. The first was the fact that only 67% of states require CPD for their nurses to relicense, and second issue was the lack of consensus about the importance of CPD. The third issue inspiring this study was the lack of literature regarding about relevant CPD. The following section offers a brief review of CPD in the United States, from its origins to its current importance to the nursing profession.

Continuing Professional Development

CPD has a long history in the United States. Its roots are found in the latter half of the 19th century when the first CPD programs were sponsored by the alumni associations of schools of nursing for their members (Stein, 1998). The first program of this kind was a post-graduate course offered in 1894 by the Illinois Training School for Nurses, Chicago, Illinois (Stein). Since their inception, CPD programs have afforded

practicing nurses in all disciplines abundant opportunities to remain abreast of current trends and best practices in the rapidly-changing health care environment (Eason, 2010). CPD programs are approved by state boards of nursing or another accrediting body (Armstrong & Weidner, 2011). These events take place beyond formal nursing education (Mackereth, 1988) and are designed to foster the updating of existing nursing knowledge and skills or the acquisition of new nursing knowledge and skills.

The literature related to CPD calls for and supports the need for programs that are relevant to the nurse's practice. In the context of the present study, the term nursing practice refers to practice in an academic setting (Al-Majid et al., 2012; Barriball & While, 1996; McCoy, 2009; Nugent, 1990; Schweitzer & Krassa, 2010). There is no means of providing CPD opportunities that are immediately relevant to everyone who attends them, but in order to create relevant CPD programs, it would behoove the planners, presenters or facilitators of these programs to understand prospective attendees' beliefs about the relevance of CPD to their practice.

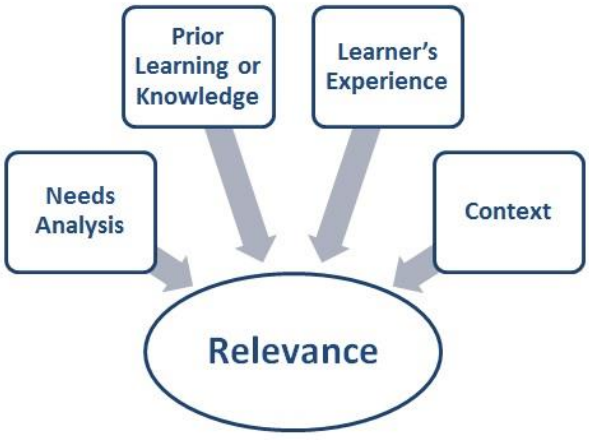
The Importance of Being Relevant

There are two disciplines wherein a definition and theory related to relevance: information retrieval (Borlund, 2003), and communication (Sperber & Wilson, 1995). In spite of these sources, there is no clear analysis of relevance related to nursing or nursing education that includes the attributes, antecedents, and consequences of relevance as a concept. One means of bridging this chasm is to consider relevance in the same manner as other subjective phenomena, such as pain or grief. These phenomena are unique to the individual experiencing them and "directly observable only by the subjects who possess these characteristics" (Turner & Martin, 1984, p. 407). It is common for scholars to

explore subjective phenomena within the context of people's attitudes, beliefs, and opinions about them. One means of identifying the manner in which information might be relevant to the learner is to understand the learner's prior knowledge of a subject (Hailikari, Katajavuori, & Lindblom-Ylanne, 2008). Placing new information into a context familiar to the learner, or building upon their foundation of existing knowledge and experience, enables the facilitator of learning to engage (Fitzgerald & Townsend, 2012; Nalle, Wyatt, & Myers, 2010; Woolforde, & Lumley, 2012).

Context contributes to an individual's ability to apply new information with a higher degree of satisfaction (Fitzgerald & Townsend, 2012; Nalle et al., 2010; Woolforde & Lumley, 2012). A learner's existing knowledge about a subject and the context in which they assess new information are important aspects of the lifelong learning/CPD process (Akhtar-Danesh et al., 2010; Ali et al., 2005; Fitzgerald & Townsend; Gagliardi, 2011; Nalle et al.; Woolforde, & Lumley). The literature related to lifelong learning and CPD supports the idea that a thoughtful, deliberate needs analysis will increase the likelihood of the learner being able to make sense of new information and apply it to their personal or professional life (Figure 3).

Figure 3. Factors Contributing to Relevance



Need for and Significance of the Study

The need for this study was based upon gaps in the extant CPD literature. There is little to no literature specifically addressing relevant CPD, though authors mention it briefly in studies related to CPD. The literature related to CPD includes that related to the types of CPD offerings, benefits and barriers of to engaging in CPD (Armstrong, & Weidner, 2011; Atack & Rankin, 2002; Balls, 2010; Banning & Stafford, 2008; Dowling, Power, & O'Boyle, 2012; Fitzgerald & Townsend, 2012; Griscti & Jacono, 2006; Kleib, Sales, Lima, Andrea-Baylon, & Beaith, 2010; Korhonen & Lammintakanen, 2005; Paavilainen & Salminen-Tuomaala, 2010; Schweitzer & Krassa, 2010; Woolforde & Lumley, 2012; Yfantis, Tiniakou, & Yfanti, 2010; Yoder & Terhorst, 2012; & Zahner et al., 2009). The significance of this study is its potential to provide information related to nurse educators' beliefs about the relevance of CPD and to highlight the need for CPD that meets the learning needs of nurse educators. Nurse educators deserve to know that the time and money they spend to engage in CPD is rewarded with information they can apply directly to their nursing practice (Fitzgerald & Townsend, 2012; Jukkala, Henly, & Lindeke, 2008).

Research Questions

Two research questions guided this study. Question 1 was, *What are nurse educators' beliefs about the relevance of Continuing Professional Development*? Question 2 was, *Do relationships exist between demographic variables (gender, age, state of residence, type of employer nursing program, geographic location of employer nursing program, faculty status, years of experience as a nurse, years of experience as a*

nurse educator, highest academic degree, and possession of specialty certification) and nurse educators' beliefs about the relevance of Continuing Professional Development?

Delimitations to the Study

There were two delimitations to this study, the first of which was that only nurse educators who were employed in accredited pre-licensure nursing programs were recruited to participate in the study. The second delimitation was that nurse educators who teach in RN to BSN bridge programs were not included in the recruitment efforts. The students in these types of programs are already licensed as registered nurses (RNs) so this type of program is not a pre-licensure program.

Operational Definitions of Key Elements and Terms

The following operational definitions of key elements and terms have been used throughout this study and should be considered only within the context of the present study.

Accreditation. In the United States, the agencies that currently accredit these nursing programs are non-governmental agencies: the Collegiate Commission on Nursing Education (CCNE) and the Accreditation Commission for Education in Nursing (ACEN, known formerly as the National League for Nursing Accreditation Commission, or NLNAC). Pre-licensure nursing programs seek accreditation voluntarily from CCNE and ACEN. These agencies have established criteria, as do state boards of nursing, with which the nursing program prepares a self-study for review by the accrediting agency. The self-study provides an opportunity for these to facilitate self-review and quality improvement of courses and programs (NLNAC, 2012). ACEN and CCNE support safety and promote the public good by ensuring that nursing education programs in the

United States meet requisite safety standards and perform regular, systematic evaluation of courses and programs.

Accredited pre-licensure nursing programs. There are two types of accredited pre-licensure nursing programs: practical (LPN) or vocational (LVN) nursing programs, and registered nurse (RN) programs (Table 1). Following successful completion of a pre-licensure nursing program, the graduate will sit for the National Council Licensure Exam for Practical (or Vocational), or Registered Nurses (NCLEX-PN or NCLEX-RN) to obtain initial nursing licensure.

Table 1

Number of Pre-Licensure Nursing Programs per Accrediting Agency (July, 2013)

Type of Program	Accreditation Agency	Number of Programs
Practical or Vocational (PN)	ACEN	159
Diploma	ACEN	47
Associate Degree (AS or ADN)	ACEN	713
Baccalaureate (BSN)	ACEN	205
Baccalaureate (BSN)	CCNE	589
	Total BSN	794
	TOTAL	1713

Note. The number of programs per degree was determined by accessing the ACEN and CCNE sites related to each type of program.

Continuing Professional Development (CPD). CPD occurs in a wide variety of formal and informal educational activities. The purpose of these activities is to inform, enhance, and improve professional nursing practice. CPD activities or opportunities are found in online and live environments and must have been approved by the state board of nursing or another accrediting body (Armstrong & Weidner, 2011). Health professionals, including nurse educators, engage in these learning activities voluntarily and because

they may be required to do so in order to remain abreast of current trends in nursing and educational practice and as part of lifelong learning.

Faculty status. Full-time faculty members are defined as educators whose major regular assignment amounts to a minimum of 50% instruction (American Association of University Professors (AAUP), 2013a). These individuals may be given release time for research. AAUP (2013b) defines part-time faculty as individuals whose primary responsibilities are unrelated to the institution for which they teach. These individuals may be assigned to teach one or two classes and typically do not carry additional institutional responsibilities, such as committee work. An adjunct faculty member is one who is compensated based on the number of courses and/or the number of credit hours a course is worth (AAUP, 2013c), and who, like the part-time faculty member, does not carry additional institutional responsibilities.

Nurse educator. A nurse educator is a licensed registered nurse (RN) who possesses a minimum of a baccalaureate degree in nursing and teaches students studying for a practical (or vocational) and registered nursing license (Johnson & Johnson, 2013).

Nurse educator's nursing practice. The primary focus of a nurse educator's practice is educating student nurses in an academic environment. The nurse educator is responsible for preparing graduates for professional nursing practice and must balance the roles and responsibilities which vary depending on the nursing program and institutional mission (AACN, 2008). Within the types of programs listed above, there are additional categories. There are several types of RN programs: two-year Associate degree programs, three-year Diploma programs, and Baccalaureate degree programs of

various lengths: traditional four-year programs, shorter second degree or accelerated BSN programs, and bridge programs for licensed practical or vocational nurses (Table 1).

Relevance. For the purpose of this study, relevance refers to the way an individual perceives that information is applicable to his or her life and work (Pappas, 2009). In the present study, information is relevant when the nurse educator can apply new information to his or her practice of educating student nurses.

Assumptions of the Study

Three assumptions were present at the outset of this study, the first of which was that there is a lack of consensus within the nursing profession about the importance of CPD. This assumption is illustrated in the literature as well as the fact that only 67% of state boards of nursing in the United States require CPD for relicensure. The second assumption was that all nurse educators who teach in pre-licensure nursing programs have access to a computer and the Internet at home or at work. The third assumption was that the nurse educators who responded to the survey would be honest in their responses.

Theoretical Framework: Keller's ARCS Model of Motivational Design

Keller's ARCS Model of Motivational Design emerged from the field of educational research and pertains to the selection and use of teaching and learning strategies that meet the needs of the learner. These teaching-learning strategies should be based on the learner's previous knowledge, academic abilities and attitudes toward learning (Keller, 2010; Shellnut, 1998). The ARCS Model is composed of four elements: attention, relevance, confidence, and satisfaction (Figure 4).

Figure 4. Keller's ARCS Model of Motivational Design

The ARCS Model has been used in a variety of disciplines (Stockdale, Sinclair, Kernohan, & Keller, 2011b), for it is "both simple and powerful in its approach" (p. 116). This model was appropriate to the present study because "motivational design can be applied to improving… employees' motivation to work" (Keller, 2010, p. 22).

Elements of the ARCS Model. The elements that comprise the ARCS Model are reminiscent of Gagne's nine-step instructional process, *Conditions of Learning*. The first priority in Gagne's process is to gain the attention of the learner, just as it is in Keller's ARCS Model, then to stimulate the learner's recall of prior learning (University of Florida, 2013), providing information in such a manner that makes the new information relevant to the learner. Armed with new knowledge, the learner becomes more confident in his or her ability to use the information. The following section of this chapter provides additional information about the elements of the ARCS Model of Motivational Design, and their relationship to the present study.

Attention. This element includes the attributes of concreteness, variability, humor, participation, inquiry, and incongruity/conflict (Figure 5), some of which could be used to engage the learner.

Figure 5. Attributes of the ARCS Model Elements

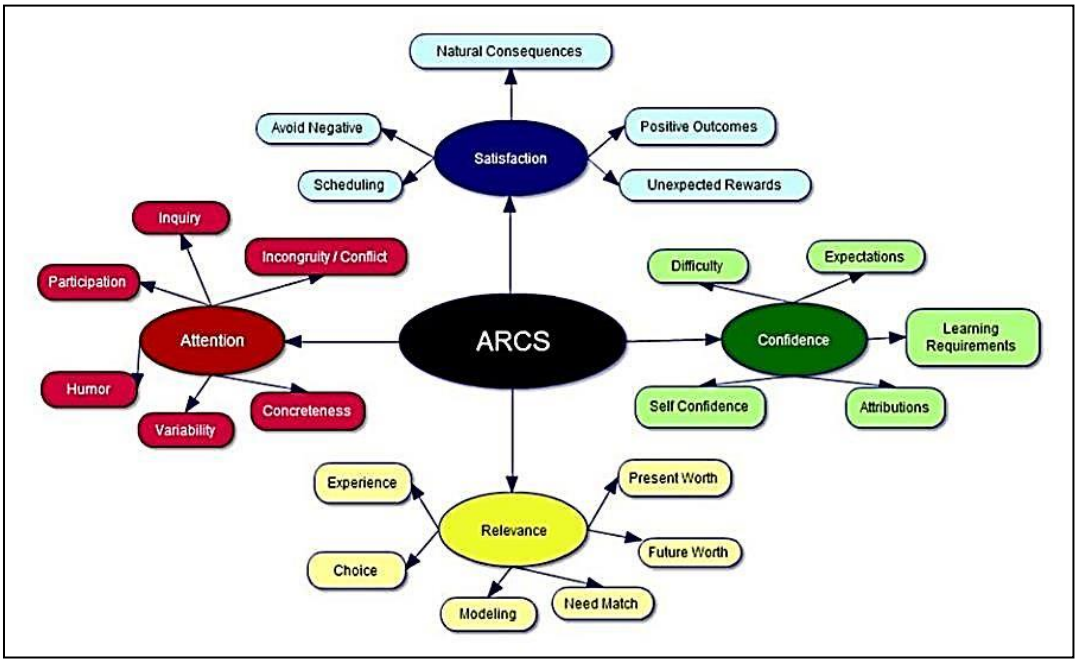


Figure 5. This model shows the four parts of the ARCS Model. Retrieved from http://www.arcsmodel.com/ and used with permission (Appendix B).

The presenter captures the attention of the learner then sustains and renews that interest throughout the program. An effective means of attracting the learner's attention and thereby engaging the learner is to ensure that the information being presented is relevant to the learner, which suggests that these first two elements of the ARCS Model are inextricably related (Keller, 2010).

Carl Jung (n. d.) said that "the meeting of two personalities is like the contact of two chemical substances: if there is any reaction, both are transformed." Within the context of the study, Jung's words underscore the importance of engagement, for if there is no reaction between the facilitator and learner, there will be no learning and therefore no transformation. Keller (2006) notes that the learner may simultaneously determine the relevancy of information while being engaged at the beginning of a presentation. This

synergy seems to indicate that the first two elements of the ARCS Model, attention and relevance, can occur simultaneously.

Table 2

Relationship of Attention to the Present Study

Element	Keller's Definition & Related Process Questions	Relationship of the Element to this Study
Attention	"Capturing the interest of learners; stimulating the curiosity to learn" (Keller, 2010, p. 45).	Attention is related to the study for the simple reason that in order to motivate someone to learn something new, one must somehow capture their attention. A learner's lack of attention, or lack of engagement in a presentation, is detrimental to the learner being able to use new information.

Relevance. Relevance refers to "people's feelings or perceptions of attraction toward desired outcomes, ideas, or other people based upon their own goals, motives, and values" (Keller, 2010, p. 98). The greater the individual's attraction to a goal, and the more the goal is perceived as being achievable by the individual, the more likely that individual will be to voluntarily pursue that goal (Keller, 2010). Relevance incorporates experience, choice, modeling, need match, future worth and present worth (Figure 5).

Keller (2006) lists six strategies for demonstrating the relevance of information to a learner: experience, worth, future usefulness, needs matching, modeling and choice. Experience and need match are related to the needs assessment or assessment of prior learning that can serve as the foundation for CPD programs. Determining the value of any piece of information might be the most important aspect of the learner's determining the relevance of the information. Is the information related to anything presently known? Will the information contribute significantly to the way he or she performs his or her job?

Once the learner has answered these questions, he or she can make a conscious choice about whether or not the information is worth learning. The more difficult it is to determine the relevance of a given piece of information, the less likely the learner will be to identify the information as being relevant (Sperber & Wilson, 1995).

When information is presented in a manner that is relatable to the learners' interests and experiences, this information becomes relevant. Relevance is enhanced when the information is communicated with "personal warmth, attention and enthusiasm" by a presenter or facilitator "who generates a vicarious sense of interest in the students" (Keller, 2010, p. 133). Relevance is also heightened when the information is presented in reference to the learners' existing knowledge and past experience. The use of concrete language and examples (e.g., story-telling) are effective strategies for making information relevant to the learner (Puckett, 2011). When using story-telling, nurse educators recount examples from their own practice to illustrate a concept or other related nursing information to their students. The relationship of relevance to the present study can be seen in Table 3.

Table 3

Relationship of Relevance to the Present Study

Element	Keller's Definition & Related Process Questions	Relationship of the Element to this Study
Relevance	"Meeting the personal needs/goals of the learner to effect a positive attitude" (Keller, p. 45).	The nurse educator who does not perceive that the subject or content to be learned is relevant to his or her practice as a nurse educator will not take time to learn about it.

Confidence. Confidence "refers generally to people's expectancies for success in the various parts of their lives" (Keller, 2010, p. 135). Keller recommends that facilitators of learning ask the following question: "How can I help the students [or

learners] succeed and believe in their ability to control their successes?" (Keller, 2010, p. 137). Individuals in all professions produce their best work when they perceive a high level of confidence in themselves (Cockerell, 2008), part of an individual's confidence rests in the perceived locus of control. Confidence is also buoyed by the promise of receiving a reward for achieving something, or meeting a goal (Keller, 2010). The relationship of confidence to the present study can be seen in Table 4.

Table 4

Relationship of Confidence to the Present Study

Element	Keller's Definition & Related Process Questions	Relationship of the Element to this Study
Confidence	"Helping the learners believe/feel that they will succeed and control their success" (Keller, p. 45).	A lack of experience with new information may preclude a nurse educator's desire to integrate the information or ideas in course work, clinical settings, and in other ways, such as for student development.

An individual's self-efficacy and the effects of self-efficacy or self-fulfilling prophecy are germane to increasing one's confidence in his or her abilities or use of information (Keller, 2010). The learner's previous educational experiences, both successes and failures, should be considered when contemplating strategies to enhance a learner's confidence related to the subject being taught (Bastable, 2013). A student who has failed in an experience may believe that she can only fail in the future. Keller (2010) asserts that "confidence is an important dimension of motivation" (p. 162). A learner's lack of confidence might affect the learner's ability to pay attention or become engaged in learning.

Satisfaction. This element is related to how good the learner feels about the learning experience and his or her desire to continue learning. Keller's (2010) description of satisfaction includes descriptions of classical and operant conditioning, reinforcement, and the relationship between extrinsic reinforcement and intrinsic motivation. While earning praise or high marks in a learning effort may be pleasant, the learner does not always experience feelings of satisfaction (Keller, 2010). Certain conditions must be met in order for the learner to experience satisfaction in his or her efforts and those conditions are related to the learners' expectations (Keller, 2010).

Keller (2010) asserts that intrinsic motivation is more important than extrinsic motivation, particularly in reference to the last element of the ARCS Model, satisfaction. Extrinsic motivation or some kind of positive reinforcement, such as a reward or incentive, lowers one's personal satisfaction with the learning experience. According to Keller (2010), the primary goal for a facilitator of learning should be the learner's development of a personal interest in the subject matter. One means of comprehending a learner's motivation to learn is to conduct an audience analysis before or at the beginning of the program (Keller, 2010, p. 59). The relationship of satisfaction to the present study can be seen in Table 5.

Table 5

Relationship of Satisfaction to the Present Study

Element	Keller's Definition & Related Process Questions	Relationship of the Element to this Study
Satisfaction	"Reinforcing accomplishment with rewards (internal and external)" (Keller, p. 45).	A nurse educator's satisfaction with new information related to teaching will affect the regularity with which he or she employs it.

Use of the ARCS Model in research. Keller's ARCS Model has been used throughout the world to support research, in 17 countries from the United States and Mexico, to Great Britain, France, Saudi Arabia, Japan, and China (Shellnut, 1998). The model has been used to conduct research within post-secondary education, including health professions education (J. M. Keller, personal communication, May 1, 2012). It has also been used within the sphere of new mothers' motivation to breast-feed (Stockdale et al., 2008).

In addition to its use as a theoretical framework to support research, the ARCS Model has been used by educators in a number of settings to design teaching-learning strategies meant to increase the motivation of post-secondary students and faculty to use campus technology, such as email and text messaging (Surry & Land, 2000). The following section of this chapter is partial review of the research conducted using Keller's versatile ARCS Model as a framework.

Research exploring student or learner motivation. Wlodkowski (1999) examined the individual's motivation to learn and ways to encourage it effectively, espousing the view that "learning is a naturally active and normally volitional process of constructing meaning from information and experience" (p. 7). In keeping with the theme of volition, it should be noted that Keller's later works include this element along with the original elements of the ARCS Model. Donald (1999) sought to explain strategies for increasing understanding of student motivation and its relationship to higher-order and lifelong learning. Hudson, McGowan, and Smith (2010) explored learner motivation related to Personal Response Systems (e.g., clickers) as an effective

means of increasing learner attention, inspiring learners' confidence in their ability to master material.

Research exploring lifelong learning. Within the context of lifelong learning, Wlodkowski (2003) employed the ARCS Model to investigate the importance of motivating learners in professional development programs. Wlodkowski asserts that a learner's emotional reaction to instruction can make or break his desire to learn and proposed a motivational framework for culturally-responsive teaching.

Research exploring volition. Kim and Keller (2008; 2011) examined the element of volition within the context of higher education. In the 2008 study, Kim and Keller explored the type of supportive information needed for, and effective in, improving an educational situation wherein there are serious motivational challenges. For this study, motivational and volitional email messages (MVEM) were constructed and sent to students to determine whether this type of strategy would improve students' motivation to learn. Kim and Keller found that students who received MVEMs demonstrated a higher level of motivation related to confidence than those who did not receive the MVEMs. The mean exam scores of these students increased as well.

In the second study, Kim and Keller (2011) again attempted to determine the effects of MVEMs, this time targeting "pre-service teachers' motivation, volition, performance and attitudes toward technology integration" (p. 91). The results of this study revealed that the experimental group "showed higher volition and more positive attitudes toward technology integration than control group but there was no difference in motivation or performance" (p. 91).

Research exploring web-based education. Gormley, Colella, and Shell (2012) applied Keller's ARCS Model "to course design to encourage student participation in class" (p. 180) in the hope that the students would "feel less isolated from faculty and peers, and remain motivated to learn" (p. 180). Keller (1999; 2008), and Huett, Moller, Young, Bray, and Huett (2008) applied the ARCS Model to Web-based or distance learning instructional design. The focus of these studies was the identification of methods and guidelines for incorporating motivational tactics into computer-based and distance learning environments (Keller, 1999), and manipulating confidence and performance in an online course (Huett et al.). Keller (2006) described five principles of motivation (and volition) related to the effective motivation of post-secondary students, particularly related to learning systems (i.e., online courses).

Summary of the ARCS Model. The ARCS Model of Motivational Design has supported research since its inception and is widely used by researchers around the world. The first two elements of the ARCS Model of Motivational Design, attention and relevance, are not interchangeable but they are inextricably related. One cannot exist without the other, for a learner will not pay attention to and retain new information if that information is not demonstrated by the presenter to be relevant to the learner. Conversely, the learner will not be able to identify the relevance of information if he or she is not engaged or paying attention to the new information. The ARCS Model of Motivational Design is a useful model within education in general as well as discipline-specific education and research. It has been used in a number of milieus to measure motivation.

Summary

This chapter began with a description of the background serving as the impetus for the study: a lack of consensus about the nature of and need for CPD. The research questions guiding the study were presented, as were the operational definitions providing context for the study. The delimitations and the assumptions of the study were reviewed, as was the theoretical framework supporting the study, Keller's ARCS Model of Motivational Design. This last section was followed by a summary of the scholarly research conducted using the ARCS Model.

Chapter II provides an overview of CPD, including the types of CPD. Following this overview, Chapter II includes information related to the concepts guiding the study: relevance and motivation. The section about motivation includes descriptions of extrinsic and intrinsic motivation. The Review of Literature does not include information related to demographic variables. That information can be found in Chapter III: Methods, in the section related to the selection of the sample.

Chapter II: Review of Literature

This chapter provides an overview of CPD that includes its historical origins and a description of the research related to the types of CPD, or the modalities by which CPD is offered to learners, the benefits of and barriers to engaging in CPD. Chapter II concludes with information related to the major concepts guiding the study: relevance and motivation, including extrinsic and intrinsic motivation.

The Search for Literature

The search for literature related to CPD, relevance, and motivation was conducted between 2010 and 2014 using several databases: Academic Search Premier, CINAHL Plus with Full Text, OmniFile Full Text Select (H. W. Wilson), and Google Scholar, and a variety of search terms. The results of the search for literature highlighted the fact that CPD is a global topic of interest. The literature came from the United States, Australia, Canada, China, Africa, Sweden, the United Kingdom (including Ireland), and other parts of Europe, as well as the Middle East and China. There is a plethora of research about the types of CPD, attitudes about, the benefits of and barriers to participation in CPD events. There is little literature related specifically to the provision of relevant CPD to nurse educators. Relevant CPD is referred to in conjunction with literature related to other aspects of CPD, especially within specific populations (e.g., rural nurses, critical care or emergency nurses).

A Brief History of Continuing Professional Development

Understanding what CPD is, how it came to be, its purpose and its relevance to the nursing profession are integral to comprehending why the relevance of CPD is important. CPD is a "process of lifelong learning for all individuals and teams which

meets the needs of patients and delivers the health outcomes and health care priorities… which enables professionals to fulfill their potential" (Hughes, 2005, p. 41).

In the late 19th century, when formal nursing educational programs and CPD efforts were being founded, a group of nurses drafted The Nightingale Pledge to complement the physicians' Hippocratic Oath (American Nurses Association [ANA], 2013b). In this pledge, the nurse vows to "do all in my power to maintain and elevate the standard of my profession" (ANA, 2013b, para. 1). This pursuit includes maintaining and improving his or her nursing practice. Thirty or so years after the Nightingale Pledge was composed, Charles Judd (1928) addressed a joint meeting of professional nursing organizations at which he informed the audience that additional education for nurses promotes the "well-being of the nation" (p. 564). In other words, CPD benefits the common good, and enhances the healthcare available to the public (Mackereth, 1988). Pursuit of additional nursing education is the professional responsibility of the nurse, asserted Judd.

More recently, in an effort to emphasize the importance of CPD to the nursing profession six standards for CPD (Woolforde & Lumley, 2012) were drafted by two national nursing organizations, the ANA and the National Nursing Staff Development Organization, which is now known as the Association for Nursing Professional Development (ANPD). These standards include (a) assessment, (b) identification of issues and trends, (c) outcomes identification, (d) planning, (e) implementation, and (f) evaluation, and reflect the nursing process (Woolforde & Lumley, p. 391). The first step of this process, assessment, is integral to delivering CPD in such a manner that it contributes to one's ability to critically appraise his or her practice (Hughes, 2005).

The Attitudes of Nurses toward CPD

The literature related to CPD indicates that nurses seek out and engage in CPD for their own reasons, or are intrinsically motivated to do so (Schweitzer & Krassa, 2010). Schweitzer and Krassa's research shows that, in spite of the fact that CPD is not universally mandatory, nurses engage in CPD voluntarily and value lifelong learning. This research suggests that nurses are primarily extrinsically motivated to seek out learning opportunities, but that intrinsic motivational factors may be a greater influence on nurses' decisions to participate in CPD.

Schweitzer and Krassa (2010) are not alone in suggesting that nurses have positive attitudes about attending CPD events or programs. Hayajneh (2009) also made that observation. Positive attitudes toward CPD may result from the opportunities these programs provide to the attendee to remain current in his or her practice and derive immediate or future benefits. Germane to the present study is the study by Cleary, Horsfall, O'Hara-Aarons, Jackson, & Hunt (2011) in which the research team determined that a nurse who engages in relevant CPD is more likely to advance his or her career than one who does not do so. Seeking career advancement is only one reason for pursuing CPD opportunities, for there are other benefits of CPD, including increased job satisfaction, reduced work-related burnout (Hayajneh), meeting state licensure requirements, professional certification, and employment requirements. Nurses also appreciate the opportunity to interact with colleagues (Levett-Jones, 2005).

Assessing the Professional Development Needs of Nurse-Learners

The purpose of needs assessment is to identify the gap between what is and what should be. At its core, the goal of CPD is to close that gap (Moore et al., 2009). There

are three types of needs assessment: prior knowledge or learning assessment, self-assessment, and self-directed assessment (Hailikari et al., 2008; Hayajneh, 2009; Yoder & Terhorst, 2012). Ideally, needs assessment takes place before a learning activity is decided upon, although needs assessment can also be conducted at the beginning of a learning session. Prior learning assessment is another means of conducting a needs assessment. Understanding what learners already know about a subject is a proactive means of identifying the information that will be most relevant to them.

Self-assessment can bring to light gaps in the learner's professional database. Lucas (2012) asserts that self-assessment should be conducted realistically, by which is meant that the learner should not overrate their performance or knowledge, for doing so can lead to a false sense of mastery. Eva and Rigehr (2008) acknowledge the importance of self-assessment in the CPD cycle, referring to it as a key step, but point out that health care professionals do not self-evaluate well. Low performers tend to overestimate their ability or knowledge; they don't know what they don't know. Self-assessment is not synonymous with self-directed assessment (Galbraith, Hawkins, & Holmboe, 2008). Self-assessment is an autonomous, reflective process whereas self-directed assessment requires external feedback from other individuals (Galbraith et al.).

Experts in the field have issued a call for CPD planners and presenters to conduct proactive needs assessment (Hayajneh, 2009; Yoder & Terhorst, 2012). This type of proactive assessment is illustrated by Woolforde and Lumley's (2012) online assessment of learning needs in which 70% of the respondents identified technological advances within nursing education as a priority learning need. Furze and Pearcey (1999) describe three types of need(s): real need, felt need, and normative need. Real need is that which

is objectively determined or defined, while felt need is that which is perceived by an individual. Normative need is the gap between the desired state and the existing standard.

Needs assessment has been explored in a variety of settings and with a number of nursing disciplines, such as community health nursing (Akhtar-Danesh et al., 2010), and in nursing in general (Dickerson & Chappell, 2012; Nalle et al., 2010). These studies explored systematic evaluation of nurses' learning needs and found that both subjective and objective assessment of those needs is valuable to planning CPD programs.

Prior learning experiences can both positively and negatively influence one's motivation to engage in additional learning (Bastable, 2008): "Prior learning experiences, whether they be past accomplishments or failures, will be reflected in the current level of motivation demonstrated by the learner for accomplishing the task at hand" (p. 111). In support of this view, and relevant to the present study, Siemens (n. d.) explains that

> What we know today is not as important as our ability to continue to stay current. So, if what I know today is going to change because knowledge changes rapidly; if I'm not continually learning, I am becoming obsolete in my particular field or within a particular knowledge space.

The needs of particular types of faculty members. Kezar (2012) and Kezar and Maxey (2013) have studied the needs of adjunct faculty members, for these individuals possess unique faculty development needs, but rarely receive that type of support from the departments or institutions wherein they teach. Kezar refers to two parallel worlds in which one is inhabited by fully-supported full-time, tenure-track

educators, and the other by non-tenure track (NTT) educators. In the current post-secondary academic environment, this second world is dwarfs the first. Kezar explains that NTT educators are overburdened with teaching responsibilities, yet are not given the support they need in order to function competently in their role, including faculty development.

In addition to the literature related to the lack of support of NTT faculty, there exists literature exploring the learning outcomes of students who complete courses taught by adjunct faculty members versus full-time faculty members (AFT Higher Education, 2010; Carrell & West, 2010; Eagan & Jaeger, 2009; Jacoby, 2006). These authors assert that student learning outcomes are poorer when the students have completed courses taught by NTT faculty than they are when students have completed courses taught by tenure track faculty.

Types of Continuing Professional Development

CPD is delivered in a number of modalities, from live offerings, such as can occur in conjunction with a professional meeting or an employer-sponsored seminar, to synchronous and asynchronous online delivery, and self-study modules.

Live CPD programs. CPD is frequently provided at professional association meetings at the local, state, and national levels. These programs are often sponsored by professional nursing organizations (e. g., the American Association of Critical-care Nurses), or even vendors (e.g., Elsevier, or Assessment Technologies Institute [ATI]).

Online (or web-based) CPD programs. Post-secondary education has rapidly embraced the online delivery of course content. CPD is also making strides in that

venue, for online course delivery is a viable option for CPD. This type of course delivery can be used for synchronous and asynchronous courses.

Hybrid CPD programs. A hybrid course or program employs more than one medium or modality, such as an e-learning module paired with a live workshop (Dowling et al., 2012).

Nurses have a number of choices for the CPD pursuit and can pursue that which they believe benefits them the most. The type of delivery modality may benefit one student over another, yet the benefit of the learning milieu is not the only benefit of CPD. There is a great deal of literature related to the perceived benefits of CPD and the barriers to engaging in CPD. These two topics will be explored below.

Perceived Benefits of CPD Programs

There are studies describing the benefits nurses hope to derive from CPD programs (Akhtar-Danesh et al., 2010; Armstrong & Weidner, 2011; Barriball & While, 1996; Cleary et al., 2011; Dealy & Bass, 1995; Evans, Timmins, Nicholl, & Brown, 2007; Fitzgerald & Townsend, 2012; Hayajneh, 2009; Livneh & Livneh, 1999; McCoy, 2009; Nalle et al., 2010; Schweitzer & Krassa, 2010; Yoder & Terhorst, 2012; Yfantis et al., 2010). The benefits associated with attending CPD include increased self-esteem, job satisfaction, and self-confidence, as well as improved social relations, improved professional knowledge, compliance with requirements, relief from the normal nursing tasks or work, and professional advantages (Levett-Jones, 2005; Mackereth, 1989). Participation in CPD is also viewed as a means of alleviating job-related burnout (Mackereth), or reviving interest in the nursing profession. Looking further into the perceived benefits of CPD programs as identified by nurses, authors have underscored

the benefits of online programs because these types of programs require less time and money for travel, and allow the learner to engage in learning on his or her own schedule.

Perceived Barriers to Participating in CPD Programs

The literature related to CPD explores the challenges nurses and nurse educators face when related to CPD opportunities. In many of these studies, the cost of attendance has been identified as the single most prohibitive factor related to whether he or she will seek out a CPD event (Armstrong & Weidener, 2011; Barriball & White, 1996; Brekelmans et al., 2010; Penz et al., 2007). Cost-related challenges include but are not limited to the cost of travel or the program itself, but includes the need for additional child care, time off from work, and an insufficient number of nurses to cover a shift when one or more want to take time away for CPD (Barriball & White; Brekelmans et al.; Penz et al.).

In addition to these barriers to engaging in CPD, other factors that make it difficult to do so have been identified. For example, Penz et al. (2007) found that age was a factor in the perception of barriers to engaging in CPD by nurses. Nurses between 30 and 59 years of age perceived more barriers to pursuing CPD, as did nurses with higher academic degrees. Nugent (1990) determined that nurses with 15 to 20 years of experience do not seek out CPD because their years of perfecting their nursing skills precludes their needing to attend CPD opportunities, for these opportunities have little value. Ousey and Roberts (2012) determined that older nurses may experience a greater lack of access to CPD compared with younger nurses, but when they do seek out CPD, older nurses are more likely to seek out development opportunities that are relevant to

their practice, role, and responsibilities, just as Nugent's study showed that nurses are inclined to seek out learning opportunities relevant to their specialty area.

Other challenges experienced by nurses to seeking out or attending CPD programs are domestic responsibilities, irrelevant programs or opportunities, travel, and peer opinions or attitudes about CPD, including those of managers or administrators. Hogston (1995) avers that it will no longer be possible for managers or administrators, including the deans and directors or pre-licensure nursing programs, to ignore the CPD needs of their employees. Levett-Jones (2005) supports this view, asserting that managers or administrators must support CPD in order for it to become part of the institutional culture.

In summary, there is much about CPD that is already known, for researchers on several continents have been exploring facets of this topic for decades. The studies referred to in the Review of Literature shed light on nurses' attitudes toward CPD as well as the perceived benefits of and challenges to engaging in CPD. Related studies have focused attention on the importance of proactively identifying learners' needs and prior knowledge or learning, and effective delivery modalities for CPD. There is a great deal more to uncover about CPD. Gaining insights to nurse educators' beliefs about relevant CPD programs and instructional materials will contribute to this literature in general, as well as providing insights to those individuals who plan and present in CPD programs.

Relevance and Motivation

This section of the Review of Literature provides a definition of relevance, the concept at the heart of the study, and its companion: motivation. Within the context of

this study, these two concepts are at the heart of the theoretical model supporting the study, Keller's ARCS Model of Motivational Design (described in Chapter I).

Relevance. A concept analysis of relevance was identified in the field of Information Retrieval (Borlund, 2003). The only thorough study of relevance came from the field of communication (Sperber & Wilson, 1995).

> Learning is relevant when the student understands how this information or skill has some application in their life, has an opportunity to follow their own process rather than just learn "the facts," [and] is not just learning content and skills, but is learning how they learn. (Pappas, 2009, Slide 10)

In order to understand relevance as it relates to CPD, it is helpful to consider relevance in the same light as they would other subjective phenomena such as pain or grief. Relevance is unique to the individual experiencing it and "directly observable only by the subjects who possess these characteristics" (Turner & Martin, 1984, p. 407). In an example of the manner in which subjective phenomena are considered in nursing practice, during their formal education, student nurses learn that pain is accepted at face value without judgment. Relevance is a similarly subjective concept; one that is used and defined "differently by different people, or by the same people at different times" (Sperber & Wilson, 1995, p. 119).

Individuals do not come to situations wherein new information may be presented as a blank slate. The individual who prepares to process new information then apply it to existing experience and knowledge has in his or her mind additional information from both short- and long-term memory stores (Sperber & Wilson). This existing information

creates the context in which the individual considers the new information and determines its relevance. "There is a single property… which makes information worth processing for a human being" (Sperber & Wilson, p. 46): relevance, or "an assumption [that] is relevant in a context if and only if it has some contextual effect in that context" (Sperber & Wilson, p. 122). The relevance of any piece of information relies upon several factors, including but not limited to its relationship to information that already exists in the individual's mind or experience. When old information and new information come together, they form a different piece of new information that may or may not be relevant to the individual and may or may not eventually give rise to additional ideas or information (Sperber & Wilson).

Processing information is a taxing practice and individuals may undertake this effort only when there is an expectation or promise of reward (Sperber & Wilson, 1995). The harder one has to work to determine the relevance of information, the less relevant that information becomes and the less that information is valued (Sperber & Wilson). Just as a manufacturing company is evaluated on its production in terms of return on investment, a piece of information is evaluated similarly. If too much work is required to identify the relevance of the new information, the return on investment may not make it worth the individual's while (Sperber & Wilson).

"How relevant is 'relevant enough to be worth the addressee's attention'?" (Sperber & Wilson, 1995, p. 160). Relevance is related to one's experience and knowledge base, which is one of the reasons that understanding a learner's prior knowledge about a subject or experiential needs is important. In fact, Blair (n. d.) surmises that all too often, an individual's learning is more than just learning or acquiring

new information; it is contingent upon the learner's ability to unlearn old information which is no longer useful. As such, Blair asserts that it equally important to know how to forget as it is to learn.

Relevance is "a multidimensional cognitive concept whose meaning is largely dependent on users' perceptions of information and their own information need situations" (Schamber, Eisenberg, and Nilan, 1990, p. 774). Relevance is dynamic and depends upon a user's appraisal of quality of the relationship between information and information need at a given moment (Schamber et al.). Relevance is complex but measurable if approached systematically from the user's viewpoint and can also measure relationships or utility (Schamber et al.). Relevance depends on whether the learner (or user) identifies the information as being valuable at a given time, for the relevance of information may change depending on the learner's present personal or professional situation (Schamber et al.).

Relevance is part of a broader concept: motivation. One's motivation to pursue CPD may be contingent upon whether the subject of the CPD program or presentation is relevant, or useful, to the learner. The next section of this Review of Literature provides an overview of motivation.

Motivation. Motivation is polymorphous, or has origins in many places (Donald, 1999). It is also multi-faceted. Motivation "explains what goals people choose to pursue and how actively or intensely they pursue them" (Keller, 2010, p. 4). It represents "the factors and processes that initiate and direct the magnitude, persistence, and quality of goal-directed behaviors" (Paulsen & Feldman, 1999, p. 18; Schunk, 2012). Many people "would find it difficult to define 'motivation' without relying on some familiar image

such as 'the carrot before the donkey's nose'" (Stockdale, Sinclair, Kernohan, and Keller, 2011a, p. 92). The type of motivation perceived by the individual learner related to learning new information can make a difference in the manner in which the learner approaches a goal.

Types of motivation. There are several types of motivation apropos to this study: (a) amotivation, or a lack of intent to do or achieve something, (b) extrinsic motivation, and (c) intrinsic motivation. Amotivation is a state wherein the individual lacks intention or a desire to act and can refers to an individual's indifference toward something (Keller, 2010).

Extrinsic motivation, which is a state wherein activities are undertaken because they have instrumental value (Keller, 2010), refers to one's desire to achieve a goal, for though the individual may experience enjoyment during the activity or task, the promise of reward is more important than enjoyment. The first type of extrinsic motivation is external regulation, which has its foundations in one being motivated to do something because of an external source or requirement (Keller, 2010). For example, many states require nurses to complete CPD in order to renew their nursing license (Gannett Healthcare Group [GHG], 2012).

The second form of extrinsic motivation is introjected regulation which combines external motivation with a desire for approval or reward for performance above the 'call of duty' (Keller, 2010). An example of introjected regulation is that of the educator seeking promotion or tenure who believes that completion of professional development programs will mark them as deserving of reward, such as promotion or tenure. Another type of extrinsic motivation is integrated regulation, wherein the individual internalizes

the behavior or action (Keller, 2010), and performs the behavior or action "for instrumental reasons to accomplish external outcomes" (Keller, 2010, p. 119). An example of integrated regulation is the nurse educator who is required to attend CPD events, programs or presentations per licensure or employment requirements, but attends also because of personal interest and/or a desire to learn. The last form of extrinsic motivation is identification wherein the individual is motivated by an external source or requirement but "identifies with its importance which results in a degree of intrinsically generated motivation." For example, a nurse educator may be required to attend a CPD event, program or presentation, but during or after the program, the nurse educator acknowledges the importance, and perhaps the relevance, of the information.

Extrinsic motivation, such as the promise of tangible rewards, or the aforementioned carrot before the donkey's nose, may be a more powerful factor than intrinsic motivation, or one's satisfaction in a job well-done (Keller, 2010). A person who is motivated intrinsically does something for his or her own reasons, unmindful of the promise of reward.

Motivation to learn. Motivation to learn has been studied widely. The visible outcome of motivation is engagement in learning (Wlodkowski, 2003), and motivation is influenced by one's emotions, language, beliefs, values, and behaviors (Wlodkowski, 2003). One's interest in a given topic is the key to developing a positive attitude toward learning; Wlodkowski refers to it as an emotional nutrient. Measuring a learner's motivation to learn is challenging but there are some reliable, rigorous instruments to do so, particularly the seminal work on learner motivation: The Academic Motivation Scale

(L'Échelle de Motivation en Éducation) (Vallerand et al., 1992). Vallerand et al. assert that motivation is one of the most important concepts in education.

Review of Literature Summary

This Review of Literature began with an overview of CPD that included a description of its historical origins and the research related to the delivery of CPD, the benefits of and barriers to engaging in CPD. This information was followed by a description of the chief concepts at the center of the present study: relevance and motivation.

Chapter III describes the procedures related to the conduct of the study, including the study design and setting, the process by which respondents were recruited and informed of their rights to participate and within the study, including the ethical considerations guiding the study. Finally, there is a description of the methods of data collection, as well as the data analysis process.

Chapter III: Methods

In this chapter, the processes, procedures, and tasks related to the exploration of nurse educators' beliefs about the relevance of CPD are described, beginning with an overview of study design, and followed by a description of the population from which the sample was recruited. This chapter also includes a description of the setting in which the study was conducted. This description is followed by a summary of the process for the data collection and analysis, as well as the ethical considerations related to the study, including the rights, risks to, and benefits to the study participants.

Study Design

The design employed for this study was a cross-sectional, descriptive, correlational survey design. The methodologies related to these design elements were useful for a study whose purpose was to explore a subjective phenomenon such as beliefs about something (Creswell, 2012). The cross-sectional design was warranted because the data was collected to examine participants' beliefs about a topic at one moment in time, versus longitudinally. The survey method of data collection has been employed for scholarly research for nearly a century (Dillman, Smyth, & Christian, 2009), though surveys have been conducted for millennia (The Domesday Book Online, 2013; Former Things, n. d.). Surveys are appropriate tools for exploring individuals' opinions or beliefs (Dillman et al.). This study employed an Internet survey on a stable online platform: Qualtrics (www.qualtrics.com).

Population and Sample

The sample for this study was recruited from a population of over 56,000 nurse educators in the United States (United States Department of Labor's Bureau of Labor

Statistics, 2013). These nurse educators are employed by 1,713 accredited pre-licensure nursing programs in the United States (ACEN, 2013; CCNE, 2013; Appendix C) and other, non-accredited programs. Probability sampling was employed to identify the respondents for this study. This type of sampling allowed the investigator to recruit individuals who were representative of the population being studied (Creswell, 2012). Probability sampling is the most rigorous form of sampling and assures the investigator that any generalizations made based on the study's findings are applicable to the population from which the sample was derived (Creswell).

Inclusion criteria. Three inclusion criteria guided recruitment of participants in the study: (a) residence in the U. S., and (b) full-time, part-time, or adjunct employment in an (c) accredited pre-licensure nursing program in the United States. All program faculty members were included in the recruitment effort, versus only full-time faculty. The rationale for recruiting all faculty members versus only full-time was that there are documented differences in the professional development needs of full-time and other faculty (Baldwin & Wawrzynski, 2011).

Study Setting

There was no single setting for this study. The participants were recruited from accredited pre-licensure nursing programs across the United States. The basis for recruiting a national sample versus a local or regional sample was based on documented differences identified by social geographers' between individuals who live in one place and another (Garreau, 1981; Krug & Kulhavy, 1973; Plaut, Markus, & Lachman, 2002; and Rentfrow, Gosling, & Potter, 2008). Nurse educators in and from different parts of the United States may possess unique beliefs about the relevance of CPD.

Response Goal

After reviewing the primary nurse contacts for the 1,713 accredited pre-licensure nursing programs, and removing duplicate email addresses from that list, the investigator identified 1486 individuals to whom email/letters would be sent to recruit participants. A minimum sample size for the study was determined using two online sample size calculators (Easycalculation.com, 2013; Raosoft, 2013): 382 individual responses, which would equate to a return rate of approximately 26%.

Data Collection

Data was collected using a demographic questionnaire created by the investigator and two survey instruments created by Keller (2010) in conjunction with the ARCS Model of Motivational Design: the Course Interest Survey (CIS) and the Instructional Materials Motivation Survey (IMMS) (Keller, 2010). Permission was received from Dr. Keller to use and modify the instruments for the study as long as no change was made to the "language pertaining to the motivational issue contained in a given item" (J. M. Keller, personal communication, May 1, 2012; Appendix D). The following section describes these instruments, which were combined into one online survey (Appendix E), and the process employed by the investigator to collect the data.

Demographic Questionnaire. The Demographic Questionnaire was comprised of standard items (e. g., gender, age, and state of residence), as well as the type of employer nursing program, the geographic location of program (e.g., urban versus rural), the type of faculty position (e.g., full-time, part-time, or adjunct), the respondents' years of experience as a nurse and experience as a nurse educator. The remaining demographic

variables were the respondents' highest academic degree, and whether the respondent possessed a specialty certification (Appendix F).

Instrumentation. The CIS and IMMS are versatile surveys designed by Keller as "situational measure[s] of students' [or learners'] motivation to learn with reference to a specific learning condition such as an instructor-facilitated learning environment (the CIS), a self-paced print module (the IMMS), or a self-directed e-learning course" (Keller, 2006, p. 1). Each survey is comprised of sub-scales related to the model's four elements: attention, relevance, confidence, and satisfaction, but only the nine items related to relevance on each survey were employed for a total of 18 items related to relevance.

These instruments were appropriate for use in this study because they are reliable, valid instruments that can be used in entirety, or in part (i.e., sub-scale) with adult learners in non-collegiate settings (Keller, 2006). Keller designed the surveys using default wording that can be modified for use in a wide variety of specific situations, with items that are similar in intent but which measure the respondent's need for achievement, locus of control, and self-efficacy (Keller, 2006). Minor modifications were made for use of the instruments in the present study, substituting the phrase 'continuing professional development' for 'course.' The spirit of all relevance items was maintained.

A 2011 survey by the United States Census Bureau found that over 20% (n = 60,637,010.93) of the individuals surveyed (n = 291.5 million) spoke a native language other than English (United States Census Bureau, 2012). Among those individuals, 12.9% (or n = 7,822,174.41) spoke Spanish or Spanish Creole. The Qualtrics survey platform has a function to provide translation of the text of the survey questions into

other languages. All items were translated into Spanish and prospective respondents who were native Spanish speakers could elect to complete the survey in English or Spanish.

Course Interest Survey (CIS). The CIS (Appendix G) is a 34-item instrument that is a situation-specific measure (Keller, 2010). As explained above, only the 9-item relevance sub-scale was employed for the present study. The CIS and its companion, the Instructional Materials Motivation Survey (or IMMS), are scored using a Likert scale, from 1.00 (Not True) to 5.00 (Very True). Two items on the relevance sub-scale were scored in reverse, which means that when the respondent scored the item as 5.00 (Very True), the item's value was converted to 1.00; if the item was scored as 4.00 (Mostly True), the score was converted to 2.00. A value of 3.00 did not change.

Instructional Materials Motivation Survey (IMMS). The IMMS (Appendix H) is a 36-item instrument from which only the nine items related to relevance were employed. One item on this survey was scored in reverse, so that when the respondent scored the item as 5.00 (Very True), the item's value was converted to 1.00; if the item was scored as 4.00 (Mostly True), the score was converted to 2.00. A value of 3.00 did not change.

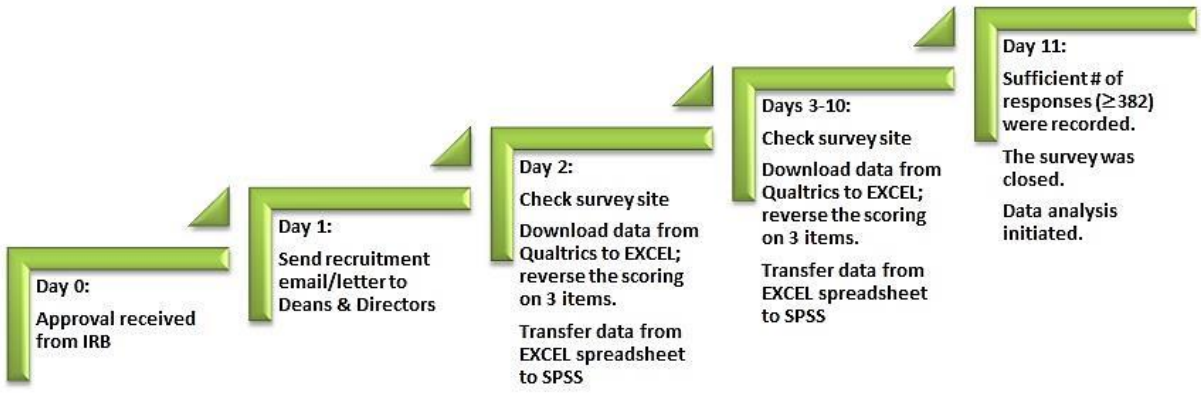
Reliability and validity of the survey instruments. Reliability and validity were established for both the CIS and the IMMS (Keller, 2010). Reliability and validity

> Influence the extent to which you can learn something
> about the phenomenon you are studying, the probability
> that you will obtain statistical significance in your data analysis,
> and the extent to which you can draw meaningful conclusions
> from your data. (Leedy & Ormrod, 2010, p. 28)

Initial internal consistency was established by Keller (2010) who calculated a Cronbach's α of 0.84 for the CIS relevance sub-scale. The IMMS was tested for reliability and validity at the same time as the CIS with similar findings: initial internal consistency and a Cronbach's α of 0.81 for the IMMS relevance sub-scale. In summary, the CIS and IMMS are robust, reliable instruments that measure what they were created to measure.

Process for data collection. Data collection commenced following formal notification by the Institutional Review Board (IRB) that approval to conduct the study had been granted (Appendix I). Prior to sending the recruitment email/letter, the investigator verified that the online survey was functional, after which data collection proceeded as described in Figure 6.

Figure 6. Data Collection Process



Recruitment of Respondents

Accredited pre-licensure nursing programs were identified by the investigator using the online, public list of accredited programs of two accrediting agencies: ACEN and CCNE. The recruitment process was initiated when the investigator sent the recruitment email/letter to the Deans and/or Directors of these programs. This email/letter requested the Dean or Director to forward the email/letter to all members of

the nursing faculty in their department. The recruitment email/letters were sent using the Blind Carbon Copy (i.e., BCC), function of the investigator's email account to maintain the privacy of the recipients. If an email address was undeliverable, the investigator attempted to identify an alternate contact or classified the email in a non-response category.

Data Entry Procedures

Due to the use of Qualtrics as the online survey delivery platform, the investigator was able to download electronically all individual responses, or raw data in Microsoft EXCEL. Qualtrics automatically assigned a unique identifier (i.e., R_78aAoBffjUSk6Bn) to each survey response, mitigating the need for the investigator to do so. It was necessary to manually change the scores for the items scored in reverse.

Analysis and Report of the Survey Data

The demographic data was analyzed using descriptive statistics: frequencies and means. Descriptive statistics facilitate a detailed view of the individuals comprising the sample. Investigators employ descriptive statistics in order to "determine whether it is appropriate to apply research findings from that study sample to populations similar to the one that has been included in the sample" (Giuliano & Polanowicz, 2008, p. 212).

The data reported in Chapter IV includes (a) the demographic data, (b) the survey responses, and (c) the statistically-significant relationships between demographic variables and survey items. The mean score is reported for each item in each sub-scale and the mean scores for all items by demographic category (i.e. e., gender, age, years of nursing and teaching experience, state, geographic area, geographic region, highest academic degree, type of faculty position, and possession of specialty certification).

The Pearson *r* correlation coefficient (r = -1.000 to 1.000), and confidence interval (CI) of 95, or the level of significance of $p \leq .05$, are provided for all statistically-significant correlations. The level of significance, or CI, told the investigator in statistical terms how confident she could be with the results (Kravitz, n. d.). If the relationship was statistically-significant, the researcher could be 95 percent confident that the relationship didn't occur by chance and is likely to recur in similar samples (Kravitz). Throughout the analysis process, the investigator reviewed the results with a statistician to ensure the data was analyzed correctly and that any conclusions drawn from the data were appropriate.

Ethical Considerations

The investigator completed ethics training prior to drafting the proposal (Appendix J). In keeping with the rules and regulations of the IRB of the parent institution, the rights of the study participants were protected during all phases of the study's conduct: data collection, data analysis, and reporting (Creswell, 2012). There were no survey items that required the respondents to provide information that would allow identification. All responses were anonymous.

The recruitment email/letter sent to the Deans and Directors (Appendix K) included the Online Survey Consent document (Appendix L) and the Rights of Research Participants document as an attachment. Prospective participants were informed that they might withdraw from the study at any time by simply exiting the online survey before clicking the Submit button. In addition, the first item on the online survey was a yes/no item, asking the respondent whether he or she elected to participate in the study voluntarily. If the respondent selected no, meaning that the he or she did not elect to continue participating in the study, the survey logic was set up to take the respondent to a

page that thanked him or her for the time spent considering whether or not to participate in the study, rather than to the first survey item.

Throughout the data collection and analysis phases of the study, the investigator was the only person with access to password-protected files containing the survey responses, EXCEL and SPSS spreadsheets, and analyses. All paper documents containing survey responses were secured in locked files. In accordance with the IRB Committee's guidelines, these records will be retained, secured in locked files, by the investigator for a period of seven years following conclusion of the study. At the end of seven years, all paper documents will be shredded. Electronic files, including the EXCEL spreadsheets, SPSS data files, and any other file that might contain respondents' information will continue to be secured by a password known only to the researcher.

Risks and Benefits to the Respondents

The risks to the respondents of participating in the study were minimal; no greater than the risks typically associated with studies of this type (e.g., breaches of confidentiality and the consequences that may follow from such breaches) (Singer, 2004). These threats exist when the researcher is careless with study documents, such as not removing identifiers from survey forms or electronic records (Singer). In this study, no identifiers of any kind were required. No incentives were offered to prospective respondents to participate in the study. The benefits of participating in this study included an opportunity to reflect on one's attitude toward CPD and lifelong learning.

Summary

This chapter described the processes, procedures, and tasks related to the exploration of the beliefs of nurse educators about the relevance of CPD to their nursing

practice. In addition to a description of the study's design, as well as the general setting for the study, Chapter III provided a description of the population from which the sample was recruited and the processes by which data were collected and analyzed. This summary included a description of the instruments used to collect the data and the statistics used to analyze the data. Chapter III concluded with an overview of the ethical considerations and participant rights, including the risks and benefits of participating in the study.

Chapter IV presents an accounting of the data collected using the online survey. The summary of the demographic data is presented first and is followed by the report of the mean scores of all survey items. The report of results concludes with a review of statistically-significant relationships between demographic variables and the survey items, including the initial analysis as well as a second analysis to explore relationships between the survey items and various ranges of the respondents' age and years of nursing and teaching experience.

Chapter IV: Results

This summary of the data is organized by the questions guiding the study: (1) What are nurse educators' beliefs about the relevance of Continuing Professional Development (CPD)?, and (2) Do relationships exist between demographic variables and nurse educators' beliefs about the relevance of Continuing Professional Development? The demographic characteristics of the respondents are summarized first. The mean scores for all survey items are reported, followed by the statistically-significant relationships between demographic variables and survey items.

Survey Results

A total of 1,486 individual recruitment email-letters were sent via email. This effort resulted in 521 individual responses (Table 6), though only 454 of these responses were complete responses. This number of responses represents a 31% response rate.

Table 6

Survey Responses

	N	%
Completed Survey	454	87.00
Completed Demographic and Course Interest Survey Items Only	29	5.7
Completed Demographic Items Only	15	2.9
No Responses Recorded after Accessing the Online Survey	20	3.8
Elected Not to Participate after Accessing the Online Survey	3	0.6
Total	521	100%

Demographic profile of the study sample. The mean age of the mostly female (93.6%) respondents was 53.12 years (Table 7). Nearly one-half of the respondents reported an age between 51 and 60 years (45.8%), and an additional 40.6% reported an age between 41 and 70 years (i.e., 19.2% = 41 to 50 years; and 21.4% = 61 to 70 years).

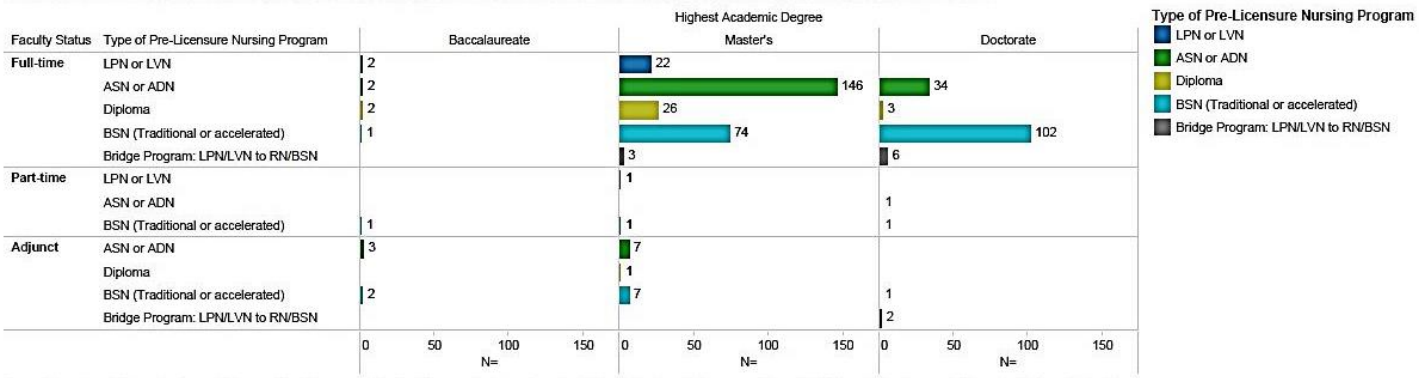
Table 7

Respondents' Age, Years of Nursing and Teaching Experience

	Age	Years Nursing Experience	Years Nurse Educator
Mean	53.12 years	28.43 years	13.99 years
Median	55.00 years	30.00 years	11.00 years
Mode	57.00 years	40.00 years	10.00 years

The respondents' years of nursing experience ranged from less than one year to 50 years (mean = 28.43 years), and their years of teaching experience ranged from less than one year to 47 years of teaching experience (mean = 13.99 years). Ninety-four per cent (n=426) of respondents held full-time faculty positions, and 91% (n = 413) of the respondents were employed in RN programs (Figure 7). Ninety-seven per cent of the respondents possessed advanced degrees (97%, Figure 7), most of which were master's degrees, followed by doctoral degrees. The sample was evenly divided as to whether or not they possessed a specialty certification.

Figure 7. *Respondents' Faculty Status, Type of Employer Program, and Highest Academic Degree*



Geographic profile of the respondents. Three variables were used to organize the data geographically: (a) the geographic region in which each state was located, (b) the

respondent's state of residence, and (c) the geographic location of the program (i.e., urban or rural). With regard to the first of these variables, the geographic region, Garreau's (1981) nine nations of North America provided the framework for regional designations. Employing Garreau's nomenclature, each of the 50 states and District of Columbia were grouped into seven regions (Figure 8): (a) New England, (b) The Foundry, (c) Dixie, (d) The Breadbasket, (e) The Empty Quarter, (f) Mex-America, and (g) Ecotopia. Garreau's model included a category called 'Outliers,' in which the state of Hawaii, and the District of Columbia were included. For the purpose of this study, the District of Columbia was included in Dixie, as it borders states placed in that region (i.e., Virginia and Maryland).

Figure 8. Regional Configuration of States

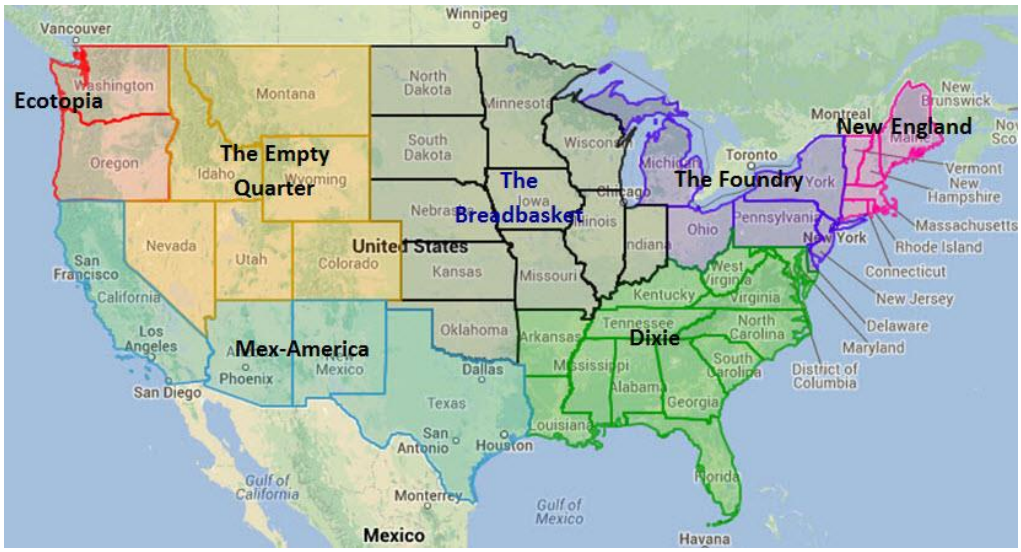


Figure 8. Garreau, 1981. Used with permission of the author (Appendix M).

Over one-half of the programs in which the respondents were employed (54%) were located in Urbanized Areas, or areas with a population of 50,000 or more residents (Table 8). The programs represented in the study were located in all geographic regions of the

United States, with one exception: There were no respondents from Hawaii which was classified as an Outlier. The region with the most respondents was The Foundry, followed by The Breadbasket, Dixie, Mex-America, The Empty Quarter, Ecotopia, and, New England (Table 8). The state with the most respondents was Pennsylvania, followed by Ohio, New York, and California.

Table 8

Distribution of Respondents throughout the United States by Geographic Region and State

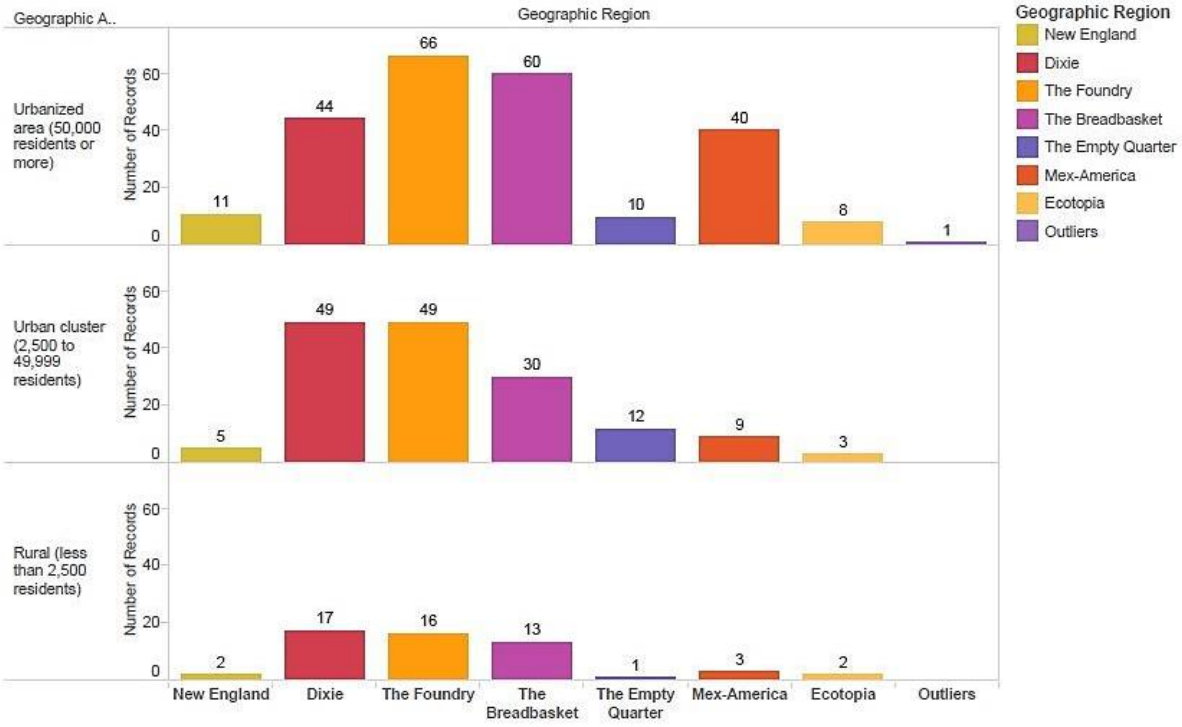
Region	N	%	Region	N	%	Region	N	%
Dixie	105	22.3	The Breadbasket	113	25	The Foundry	135	30
Alabama	20	4.4	Illinois	10	2.2	Michigan	17	3.7
Arkansas	4	0.9	Indiana	14	3.1	New Jersey	11	2.4
D. C.	1	0.2	Iowa	10	2.2	New York	28	6.2
Florida	8	1.8	Kansas	13	2.9	Ohio	29	6.4
Georgia	14	3.1	Minnesota	11	2.4	Pennsylvania	50	11
Louisiana	4	0.9	Missouri	9	2			
Kentucky	6	1.3	Nebraska	6	1.3	New England	12	2.5
Mississippi	9	2	N. Dakota	4	0.9	Connecticut	2	0.4
N. Carolina	7	1.5	Oklahoma	18	4	Massachusetts	7	1.5
S. Carolina	8	1.8	S. Dakota	4	0.9	New Hampshire	1	0.2
Tennessee	13	2.9	Wisconsin	14	3.1	Rhode Island	1	0.2
Virginia	4	0.9				Vermont	1	0.2
W. Virginia	7	1.5						

Region	N	%	Region	N	%	Region	N	%
The Empty Quarter	23	5	Mex-America	53	11.7	Ecotopia	13	2.8
Colorado	1	0.2	Arizona	6	1.3	Oregon	2	0.4
Idaho	3	0.7	California	24	5.3	Washington	11	2.4
Montana	6	1.3	New Mexico	3	0.7			
Nevada	5	1.1	Texas	20	4.4			
Utah	7	1.5						
Wyoming	1	0.2						

Note. States from which there were no respondents are not included in this table.

Only one individual responded from six states (Colorado, District of Columbia, New Hampshire, Rhode Island, Vermont, and Wyoming), and there were no respondents from five states (Alaska, Delaware, Hawaii, Maine, and Maryland) (Table 8). The distribution of these respondents between the geographic regions (i.e., The Foundry) and geographic areas (i.e., Rural or Urban) is depicted in Figure 9.

Figure 9. Distribution of Respondents between Geographic Regions and Areas



Study-related Reliability and Validity of the Survey Instruments

Chapter III included a brief overview of the importance of using instruments that are reliability and valid. These characteristics indicate the extent to which the investigator can learn something about the phenomenon under exploration. They also indicate the probability of obtaining statistical significance in the data analysis, and the extent to which the investigator can draw meaningful conclusions from the data (Leedy &

Ormrod, 2010). Keller (2010) established initial internal consistency for not only the full Course Interest Survey and Instructional Materials Motivation Survey, but also for the sub-scales within those instruments, or the sub-scales related to attention, relevance, confidence, and satisfaction, the four elements comprising the ARCS Model of Motivational Design. Both survey instruments are strong, reliable instruments that measure what they were created to measure. When the data collection phase of the study ended, the investigator employed SPSS, v. 20, to calculate reliability and validity scores for the 454 complete individual responses (Figure 10). The Cronbach's α calculated by the investigator using the survey data were equal to or greater than Keller's calculated reliability and validity, indicating that the instruments employed for this study were reliable and valid for the purpose of the study.

Figure 10. Reliability and Validity Comparison between Keller (2010) and Study Sample

Keller's Reliability & Validity	Study Reliability & Validity
• CIS α = .84 • IMMS α = .81	• CIS α = .84 • IMMS α = .862

Following the calculation of the Cronbach's α, three survey items were excluded from analysis: two CIS items (13 and 23), and one IMMS item (10). The rationale for including these items in the online surveys was to facilitate the calculation of comparative reliability and validity statistics for the study sample versus Keller's Cronbach's α. The justification for excluding them from the final analysis was their

being related to performance and evaluation of that performance in formal continuing education, such as graduate work.

Question 1: What are nurse educators' beliefs about the relevance of CPD?

Total survey and mean item scores. The total score possible for both the CIS and IMMS was 9.00 to 45.00. The mean of the total score, or the mean of all respondents' total scores, for the CIS items was 36.49, with a range of 19.00 to 45.00, and the mean total score for the IMMS items was 36.02, with a range of 18.00 to 45.00. The survey item with the highest mean score was also the CIS item with the highest mean score: Item 8 (Table 9).

Table 9

Mean, Median, and Mode Scores for Course Interest Survey Items (in descending order of the mean score)

Item	Item Text	Mean	Median	Mode
Item 8	I do NOT see how the content of CPD programs or presentations relates to anything I already know.	4.68	5.00	5.00
Item 25	I do NOT think I benefit from CPD programs or presentations.	4.53	5.00	5.00
Item 5	CPD presenters make their subject matter seem important.	4.06	4.00	4.00
Item 2	The things I learn in CPD programs or presentations will be useful to me.	4.02	4.00	4.00
Item 28	The personal benefits of CPD programs or presentations are clear to me.	3.97	4.00	4.00
Item 20	The content of CPD programs or presentations relates to my expectations and goals.	3.89	4.00	4.00
Item 22	The attendees of a CPD program or presentations actively participate in CPD programs or presentations.	3.33	3.00	3.00

The survey item with the lowest mean score was also a CIS item, Item 22 (Table 10). The CIS item mean scores are reported by demographic category in Appendix N.

The IMMS item with the highest mean score was Item 26, which was the survey item with the third-highest score (Table 10). The IMMS item with the lowest mean score was Item 18. The IMMS item mean scores are reported by demographic category in Appendix O.

Table 10

Mean, Median, and Mode Scores for Instructional Materials Motivation Survey Items (in descending order of the mean score)

Item	Item Text	Mean	Median	Mode
Item 26	CPD programs or presentations are not relevant to my needs because I already know most of the information.	4.38	5.00	4.00
Item 16	The content of CPD program or presentation learning material is relevant to my interests.	4.04	4.00	4.00
Item 30	I can relate the content of CPD programs or presentations to things that I have seen, done or thought about.	4.02	4.00	4.00
Item 33	The content of CPD program or presentation activities or lessons will be useful to me.	3.99	4.00	4.00
Item 23	The content and style of writing of the CPD program or presentation learning materials convey the impression that its content is worth knowing.	3.93	4.00	5.00
Item 6	It is clear to me how the content of CPD program or presentation materials relate to things I already know.	3.89	4.00	4.00
Item 9	There are stories, pictures, or examples in CPD program or presentation learning materials that show me how the materials could be important to some people.	3.86	4.00	4.00
Item 18	There are explanations or examples of how the information in CPD program or presentation learning materials was used.	3.73	4.00	4.00

The online survey afforded the respondents an opportunity to make additional comments and many of them took advantage of that opportunity (Appendices P and Q). Due to the quantitative nature of this study, there was no qualitative analysis of these comments, but the respondents' comments provided additional insights to their beliefs about CPD.

Question 2: Correlations between Survey Items and Demographic Variables

Statistically-significant correlations were identified between eight demographic variables and four CIS items and five IMMS items (Table 11). Only those correlations that met the criteria for statistical significance ($p \leq .05$) are shown in Table 11, while the full tables of correlations are provided in Appendices R and S. The Pearson's *r* correlation coefficient values for statistically-significant correlations ranged from -0.111 to 0.157, with *p*-values between 0.001 and 0.049.

Table 11

Statistically-Significant Correlations between Demographic Variables and Survey Items in Descending Order of the Pearson r *Value*

Item	Demographic Variable	Pearson *r*	*p*-value
CIS Item 8	Years of Nursing Experience	.157**	.001
CIS Item 25	Years of Nursing Experience	.136**	.004
CIS Item 8	Years of Teaching Experience	.130**	.006
CIS Item 8	Respondent's Age	.126**	.007
IMMS Ite71m 23	Respondent's Age	.117*	.013
IMMS Item 16	Years of Teaching Experience	.112*	.017
CIS Item 8	Geographic Region	.106*	.023
IMMS Item 26	Years of Nursing Experience	.101*	.032
CIS Item 2	Program Type	.098*	.037
Total and Mean of Total CIS Score	Respondent's Age	.098*	.038
IMMS Item 6	Years of Teaching Experience	.093*	.048
CIS Item 25	Possession of Specialty Certification	-.093*	.049
IMMS Item 18	State of Residence	-.098*	.037
CIS Item 5	Highest Academic Degree	-.107*	.023
Total and Mean of Total CIS Score	Possession of Specialty Certification	-.111*	.018

Note. *Statistically-significant at the .05-level in 2-tailed bivariate analysis; **Significant at the .01-level in 2-tailed bivariate analysis

The majority of these correlations were between survey items and the age of the respondents and their years of nursing and/or teaching experience (Table 12).

Table 12

Primary Correlational Analysis: Statistically-significant Correlations between Survey Items and Age of Respondents, Years of Nursing, and Years of Teaching Experience

Item Number	Item Text	Age		Years of Nursing Experience		Years of Teaching Experience	
		r	*p*	*r*	*p*	*r*	*p*
CIS Item 8	I do NOT see how the content of CPD programs or presentations relates to anything I already know.	.126**	.007	.157**	.001	.130**	.006
CIS Item 25	I do NOT think I benefit from CPD programs or presentations.			.136**	.004		
IMMS Item 16	The content of CPD program or presentation learning material is relevant to my interests.					.112*	.017
Item 26	CPD programs or presentations are not relevant to my needs because I already know most of the information.			.101*	.032		
IMMS Item 6	It is clear to me how the content of CPD program or presentation materials relate to things I already know.					.093*	.048

Note. *Significant at the .05-level in 2-tailed bivariate analysis; **Significant at the .01-level in 2-tailed bivariate analysis

The existence of relationships between certain demographic variables and survey items actually spurred additional questions, for the most significant relationships were seen between respondents' reported age and years of nursing and/or teaching experience. The literature reflects relationships between beliefs about CPD and certain age and/or years of nursing or teaching experience groups and so, in order to determine whether one

age or experience group was more related to survey item responses than others, a second correlational analysis was performed on the data.

Deeper Exploration of Statistically-Significant Correlations

As reported in Tables 11 and 12, the respondents' reported age and years of nursing and teaching experience correlated in a statistically-significant manner with many of the survey items. As indicated above, these results spurred additional questions as to which ages and/or years of experience are related to survey item responses and because there is literature that speaks to this topic, the investigator elected to perform a second analysis, for without additional information, it was not possible to determine which age groups or groups of nursing or teaching experience correlated with the survey items.

The respondents were grouped by age, starting with those respondents reporting less than 30 years of age then dividing the remaining respondents using 10-year increments (i.e., 31 to 40 years or 41 to 50 years) until the age of 70. Respondents reporting an age over 70 were placed into a 70+ years group. In turn, the years of nursing and teaching experience were divided similarly. The respondents were grouped by years of nursing and/or teaching experience, starting with less than one year and then by five year increments (i.e., 1 to 5 years, 6 to 10 years) up to 20 years, after which the remainder of the respondents were divided by 10 year increments (i.e. 21 to 30 years of nursing or teaching experience, 31 to 40 years). Only the statistically-significant correlations are reported in this chapter, but all correlations are reported in Appendices T, U, V, W, X, and Y.

Secondary analysis of the data for statistically-significant correlations. In the second analysis, only two age-range categories (61 to 70 Years and 70+ Years) correlated with survey items in a statistically-significant manner (Table 13).

Table 13

Statistically-Significant Correlations between the Respondents' Age and Survey Items

Respondent's Age	Item	Pearson *r*	*p*-value
70+ Years (n=3)	CIS_2	1.000**	.000
	CIS_5	1.000**	.000
	CIS_20	1.000**	.000
	IMMS_6	1.000**	.000
	IMMS_9	1.000**	.000
61 to 70 years (n=96)	CIS_5	-.327**	.001

Note. The statistically-significant correlations are reported in descending order of the Pearson *r* correlation coefficient.

Statistically-significant correlations were identified between survey items and five Years of Nursing Experience categories: 1 to 5 Years, 11 to 15 Years, 16 to 20 Years, 21 to 30 Years, and 41 to 50 Years (Table 14).

Table 14

Statistically-Significant Correlations between the Respondents' Years of Nursing Experience and Survey Items

Years of Nursing Experience	Item	Pearson r	*p-value*
21 to 30 Years	CIS_25	.182**	*0.005*
41 to 50 Years	IMMS_18	-.341*	*0.017*
41 to 50 Years	IMMS_9	-.369**	*0.009*
41 to 50 Years	CIS_5	-.414**	*0.003*
11 to 15 Years	IMMS_23	-.440*	*0.040*
41 to 50 Years	IMMS_23	-.474**	*0.001*
41 to 50 Years	IMMS_6	-.550**	*0.000*
1 to 5 Years	IMMS_18	-.634*	*0.049*

Note. The statistically-significant correlations are reported in descending order of the Pearson *r* correlation coefficient.

Statistically-significant correlations were identified between survey items and four Years of Nursing Teaching categories: 1 to 5 Years, 11 to 15 Years, 16 to 20 Years, and 41 to 50 Years (Table 15).

Table 15

Statistically-Significant Correlations between the Respondents' Years of Teaching Experience and Survey Items

Years of Teaching Experience	Item	Pearson *r*	*p*-value
11 to 15 Years	CIS_28	.425**	.001
11 to 15 Years	CIS_22	.287*	.022
16 to 20 Years	CIS_28	.287*	.048
1 to 5 Years	CIS_25	.205*	.037
41 to 50 Years	CIS_22	-.831*	.040

Note. The statistically-significant correlations are reported in descending order of the Pearson *r* correlation coefficient.

Summary

This chapter summarized the data collected and analyzed during a survey study whose purpose was to explore the beliefs of nurse educators about the relevance of CPD. Online surveys provided the means of collecting data. The final chapter is a discussion of the results reported in this chapter and will include consideration of the limitations to the study. In addition, Chapter V will review the implications of this study to the provision of relevant CPD for nurse educators and will conclude with recommendations for future research related to this topic.

Chapter V: Discussion and Conclusions

The purpose of this last chapter is to consider and discuss the results reported in Chapter IV. This discussion will include the survey items and the statistically-significant relationships between demographic variables and survey items. The scores of the survey items provided insights into the participants' beliefs about the relevance of CPD programs and the materials used in those programs. Throughout this discussion, the results of the study will be discussed within the context of the existing literature. The implications of the study's findings to nursing education will be considered, as will avenues for future research related to this topic.

Discussion of the Findings related to the Demographic Profile of the Respondents

Gender. Due to the chiefly female composition of the population from which the sample for this study was recruited, it was not surprising that most of the respondents were female. There were several instances wherein the male respondents achieved the higher mean score on survey items, but for the most part, the female respondents achieved the high mean score.

Age and years of nursing and teaching experience. The average age of nurse educators is similar to that recorded in this study: mid-50s. In this study, there were respondents who reported an age above 70 years and there were respondents who reported an age below 30 years. This information, combined with the fact that there were study respondents who reported less than one year of both nursing and/or teaching experience, illumines several trends within nursing education, not least of which are nurse educators are remaining in their positions longer and nurses are entering nursing education earlier in their careers, even when the length of their professional practice is

less than five years. The acquisition of professional competence is a lifelong process (Hallin & Danielson, 2007). Prior to this study, as reported in the existing literature, nurse scholars have learned that nurses with greater experience in nursing and teaching value CPD, but believe it to be less useful to them at this point in their careers than when they first entered the profession (Fowler, 2011; McCumpsey, 2011; Ousey & Roberts, 2012; Penz et al., 2007).

While it is desirable for nurse educators with considerable experience to remain in their positions in order to mentor newer and/or younger educators, these individuals also represent a conundrum, for as reported in the literature, older and/or more experienced nurses may be less likely to seek out CPD programs. Age has been discussed within the literature as a barrier to engaging in CPD by nurses, such as the finding by Penz et al. (2007 that nurses between 30 and 59 years of age perceived more barriers to pursuing CPD. Nugent (1990) discovered that nurses with 15 to 20 years of experience who do not seek out CPD believe that their many years of nursing practice precludes their need for CPD opportunities. Ousey and Roberts (2012) reported that older nurses may experience a greater lack of access to CPD compared with younger nurses. In a study exploring the perceptions about CPD of nurses in Nigeria, Nsemo, John, Etifit, Mgbekem, and Oyira (2013) discovered that nurses who had qualified for entry into practice within the past five years were generally favorably disposed toward CPD. Conversely, Gould et al. (2001) suggest that nurses who have been in the profession for a longer period of time are less inclined to value and participate in CPD.

In the second analysis of the data, statistically-significant correlations were identified between groups of nurse educators based on their reported years of nursing

experience. Positive correlations were identified between survey items and the responses of nurse educators with 16 to 20 and 21 to 30 years of nursing experience, while the correlations associated with less and more experienced nurse educators were negative. One explanation for these results may be that, as discussed above, older and/or more experienced nurse educators do not believe there is anything more for them to learn and so they do not value CPD, while the younger nurse educators believe that, having recently matriculated into or completed a master's program in nursing, they do not need to pursue professional development at this time.

This theory may not withstand additional scrutiny, however, for as identified in the second analysis of the correlational data, the correlations between the responses of nurse educators with 1 to 5, 11 to 15, and 16 to 20 years of teaching experience were positive correlations, while the correlations between the responses of nurse educators with 41 to 50 years of teaching experience were negative. Future efforts may be warranted to explore this facet of nurse educators' pursuit of CPD, or belief in the need for CPD.

In the first analysis of the statistically-significant relationships between survey items and demographic variables, there was a statistically-significant correlation between CIS Item 8 ("I do not see how the content of CPD programs or presentations relates to anything I already know"), a negatively-worded item with the highest mean score, and the years of nursing and years of teaching experience. These significant relationships suggest that a nurse educator's years of nursing and teaching experience are associated with his or her ability to identify CPD as being relevant to their nursing practice, though the precise nature of this relationship was unclear even after the second analysis, for in

the latter, there were no direct correlations between CIS Item 8 and the Years of Nursing or Teaching Experience. This phenomenon occurred more than once; there were a number of survey items that correlated with demographic variables in the initial analysis but not in the secondary analysis. This analysis will be discussed later in this chapter.

Faculty status. Less than six per cent of the respondents reported adjunct faculty status. Within post-secondary education in general, including nursing education, increasing numbers of non-tenure track (NTT) faculty members are being hired to teach where once full-time, or tenure-track, faculty used to be the majority. While nursing education is no stranger to the recruitment of adjunct faculty members, this group was underrepresented in the present study. Even with this lack of representation, the group reporting adjunct faculty status achieved the highest mean score on five of seven CIS items and six of eight IMMS items. This finding merits additional exploration. The literature related to adjunct faculty members is clear in its assertion that these individuals possess unique faculty development needs, but rarely receive that type of support from the departments or institutions wherein they teach (Kezar, 2012; Kezar & Maxey, 2013).

Regarding NTT faculty members, Kezar (2012) refers to two parallel worlds, the first of which is inhabited by fully-supported full-time, tenure-track educators. In today's post-secondary academic environment, this world is dwarfed by a second world in which non-tenure track (NTT) educators are overburdened with teaching responsibilities, but are not given the support or faculty development they need in order to function competently in their role. In addition to the literature related to the lack of support of NTT faculty, there exists literature exploring a critical element within this topic: The fact that students' learning outcomes are poorer when they've been taught by primarily adjunct faculty,

versus those of students whose course experience has been primarily with full-time or tenure-track faculty members (AFT Higher Education, 2010; Carrell & West, 2010; Eagan & Jaeger, 2009; Jacoby, 2006). If this is indeed the case, efforts to provide faculty development for NTT faculty would benefit not only the faculty members, but also the students.

Discussion of the Findings related to the Research Questions

Question 1. Most respondents believe that they are able to identify the manner in which the content of CPD programs or presentations relates to their existing knowledge. They believe that they are able to relate new information (I^N), to existing information (I^E) in order to derive relevant information (I^R) (Figure 11).

Figure 11. Relevant Information 'Equation'

Figure 11. Rogan, 2014

The respondents also believe that they can relate CPD information to experiences they've had. These findings are consistent with the literature, wherein researchers have reported that the ability of the nurse to place new information into a familiar context, or relate new information to that which they already know, is crucial to their being able to identify information presented in CPD programs or presentations as relevant (Fitzgerald & Townsend, 2012; Nalle et al., 2010; Woolforde, & Lumley, 2012).

Mackereth (1988) asserts that the most significant benefit of CPD is becoming aware of best practice and there is a concomitant benefit in improving patient outcomes. An awareness of best practice contributes to the common good, or as Judd (1928) said, the well-being of the nation. Nurse educators pursue best practice by identifying CPD programs that are relevant to their practice (Al-Majid et al., 2012; Barriball & While, 1996; McCoy, 2009; Nugent, 1990; Schweitzer & Krassa, 2010). In the present study, most of the respondents believed the content of CPD programs is relevant to their needs because the presenters provided information that they do not know.

Benefiting from relevant CPD. In general, the study respondents believe that they benefit from attending CPD programs. They also believe that the benefits of CPD programs are clear to them. The literature is replete with studies exploring and enumerating the perceived benefits of engaging in CPD. The most frequently reported benefits are improved professional knowledge that will contribute to improved patient safety and outcomes (Mackereth, 1988). Hayajneh (2009) also identified increased job satisfaction, reduced work-related burnout, meeting state licensure requirements, professional certification, and employment requirements, as well as the opportunity to interact with colleagues as benefits to engaging in CPD. Hughes (2005) even cited an instance wherein the nurse valued CPD not only for the enhancements to his or her practice, but in the way the information will benefit coworkers as well as patients. In the present study, the list of stakeholders includes student nurses and the patients for whom those student nurses provide care.

In addition to the benefits listed above, there are additional benefits of relevant CPD cited in the literature, including the learner being more likely to advance his or her

career than one who does not do so (Cleary et al., 2011), as well as (a) remaining aware of best practice, or increasing knowledge and skills, (b) personal and professional growth, (c) improved social relations, and (d) relief from the normal nursing tasks or work (Akhtar-Danesh et al., 2010; Armstrong & Weidner, 2011; Barriball & While, 1996; Cleary et al.; Dealy & Bass, 1995; Evans et al., 2007; Fitzgerald & Townsend, 2012; Hayajneh, 2009; Levett-Jones, 2005; Livneh & Livneh, 1999; Mackereth, 1988; McCoy, 2009; Nalle et al., 2010; Schweitzer & Krassa, 2010; Yoder & Terhorst, 2012; Yfantis et al., 2010).

Essential to realizing benefits from a CPD program is the need for an energetic learning environment (DeSilets & Dickerson, 2008). This type of learning environment is more conducive to attracting and sustaining the attendee's attention, thereby stimulating his or her curiosity about the topic. Keller (2010) recommends two strategies for securing a learner's attention or stimulating the learner's curiosity: the use of surprise or uncertainty, and the use of inquiry. These strategies may vary in the manner in which they are deployed, but are most effective when combined with active participation (Keller, 2006).

The instruments employed for this study addressed the topics of the benefits of CPD, but did not specify particular benefits. Additional study of this topic will contribute to a deeper understanding of nurse educators' perceptions of the benefits of CPD as well as the particular benefits they seek when considering a CPD program.

The importance of CPD information. The respondents believe that CPD presenters are able to make their subject matter seem important, and that the learning materials distributed at CPD programs convey the worth of the content. They believe

that the speakers and materials incorporate stories, pictures, or examples to illustrate how the information is important. In order to understand these findings more completely, it would be beneficial to understand within the context of CPD who it is that defines important or importance, as well as how these individuals define those terms. Definitions of these terms alone will not suffice, for it is essential to determine whether importance equals relevance. These distinctions may seem superfluous, given the fact that Keller (2010) included items related to importance in the survey items related to relevance, but because learners possess different foundations of knowledge, experience, or prior learning, they perceive topics differently in terms of importance and therefore relevance.

If relevance is determined by an individual based on that individual's experience and the context of a given situation, and each nurse educator possesses a different life experience, including his or her experience as a nurse and a nurse educator, is it possible to provide relevant information to all CPD attendees? For example, it is important for a health care professional to know generally about current threats to universal health and wellness, such as influenza. Unless influenza becomes epidemic in one's community, the nurse educator may not consider this information relevant to his or her nursing practice. Similarly, nursing concepts such as safety or therapeutic communication are important and relevant to all areas of nursing practice. As such, nurse educators are well-served by remaining aware of current and best practice related to safety and therapeutic communication in order to facilitate students' acquisition of the knowledge and skills related to these concepts.

Most CPD planners and presenters are not able to anticipate attendees' experience existing knowledge. For this reason, they may cast a wide net when presenting

information, rather than targeting a specific group in the audience. It would be advantageous for CPD planners and presenters to survey registered attendees prior to or at the beginning of a CPD program in order to understand the attendees' level of knowledge of or experience with a given topic. This information will contribute to the presenter's ability to determine which resources and teaching-learning strategies are best suited to the program and attendees.

Needs assessment is a means of identifying the gap between what is and what should be (Moore et al., 2009). Needs assessment has been explored in a variety of settings, such as community health nursing (Akhtar-Danesh et al., 2010), and in nursing in general (Dickerson & Chappell, 2012; Nalle et al., 2010). The findings of these studies advocate systematic evaluation of nurses' learning needs employing both subjective and objective assessment of those needs. Proactive needs assessment has been recognized throughout the literature as the preferred strategy to identify topics or gaps in knowledge (Hayajneh, 2009; Yoder & Terhorst, 2012). An example of this type of needs assessment can be found in Woolforde and Lumley's (2012) online assessment of learning needs in which 70% of the respondents identified technological advances within nursing education as a priority learning need.

Conducting needs or prior knowledge assessments at the beginning of a program, or even after the registration, can provide insights to the planner or presenter about the audience's existing understanding of a topic, and what they want to know. Prior learning experiences can positively or negatively influence one's motivation to engage in additional learning (Bastable, 2008). Relevant to the present study, Siemens (n. d.) asserts that, "What we know today is not as important as our ability to continue to stay

current… if I'm not continually learning, I am becoming obsolete in my particular field or within a particular knowledge space" (p. 2). No method of learning is as effective as when one actively engages in relevant professional education and by doing so experiences increased job satisfaction and retention (Cleary et al., 2011, p. 3656).

Subjective and objective assessment of nurses' learning needs is invaluable to planning CPD programs or presentations (Akhtar-Danesh et al., 2010; Dickerson & Chappell, 2012; Nalle et al., 2010). The literature supports this effort, for identifying "a gap in knowledge, skills, and/or practice for the target audience based on the difference between current behavior/practice and desired behavior/practice" is integral to meeting the needs of the learners (Dickerson & Chappell, 2012, p. 390).

The worth of new information. The respondents believe that the materials they receive at CPD programs should include examples of how the information has been used by others. Story-telling is a teaching-learning strategy that is and has been used effectively within nursing education as well as in CPD programs. In the academic setting (i.e., the classroom, clinical, or lab setting), a nurse educator may employ stories from his or her own nursing practice to illustrate a point. For example, a nurse educator who presents information about emergency situations, such as a heart attack, might recount to the learners a story about a situation in which he or she had to respond to a patient who was having a heart attack. This personal account conveys information relative to process and procedure, as well as the emotions and actions necessary to ensure a positive outcome. Use of this strategy contributes to the learner's ability to consider new information within the context of his or her existing knowledge and previous experience.

The expected outcome of this strategy is that the learner will be able to relate the story to an experience from his or her own practice, initiating a cyclical reflection. Nursing education employs experiential learning wherein the learner reflects upon an experience to assess his or her actions or behaviors. The use of reflection in nursing practice enhances the educators' ability to relate new information to existing information. A CPD presenter who is well-versed in a topic will describe to the attendees experiences that convey meaning to the learner and increase the likelihood of the learner being able to relate the information to his or her nursing practice.

Summary of the findings related to Question 1. The key finding related to Question 1, and for this study, is that nurse educators believe that they are able to determine how CPD program content relates to what they already know, and that the content of these programs is relevant to their practice. The respondents also believe that they benefit from CPD programs and that the information and program materials are both worth knowing and useful to them in their practice as nurse educators.

Question 2: statistically-significant relationships. The second question explored in this study was, Do relationships exist between demographic variables and nurse educators' beliefs about the relevance of CPD?, and the simple answer to this question is yes, there are indeed statistically-significant correlations between some of the demographic variables and survey items.

Initial analysis of correlations. The seven most significant correlations were between the respondents' age and their years of nursing and teaching experience and these relationships will be discussed in greater depth later in this chapter. There was a statistically-significant relationship between the belief that the things the respondent

learns in a CPD program will be useful and the type of program in which the respondent worked. The majority of respondents teach in RN programs, versus LPN/LVN or LPN/LVN Bridge programs. No second analysis was performed on the data to identify which type of program correlated most significantly with survey items, but this type of analysis might provide additional information about the this topic.

Statistically-significant correlations from the second analysis. In the primary correlational analysis, a positive correlation existed between the age of the respondents and CIS Item 8 (I do NOT see how the content of CPD programs or presentations relates to anything I already know.), but this item was not related to specific age groups in the second analysis. A negative correlation existed between CIS Item 25 (I do NOT think I benefit from CPD programs or presentations.) and the respondents' years of teaching experience in the primary analysis, though in the second analysis, this item was positively related to respondents reporting 21 to 30 years of nursing experience and 1 to 5 years of teaching experience. The third item that correlated with age or experience variables was CIS Item 5 (CPD presenters make their subject matter seem important.), which correlated positively with all three of these demographic variables in the primary analysis, but negatively with 41 to 50 years of nursing experience and positively with respondents reporting an age between 61 and 70 years and an age of 70+ years.

In the first analysis, three items from the IMMS instrument correlated positively with the age of the respondents and their years of teaching experience. First, there was a positive correlation existed between Item 16 (The content of CPD program or presentation learning material is relevant to my interests.) and the respondents' years of teaching experience. There was a positive relationship between Item 23 (The content and

style of writing of the CPD program or presentation learning materials convey the impression that its content is worth knowing.) and the age of the respondents. Item 6 (It is clear to me how the content of CPD program or presentation materials relate to things I already know.) was related positively with the respondents' years of teaching experience.

The following discussion reviews specific correlations within these demographic groups, including consideration of these findings in relation to the existing literature.

Correlations with the respondents' age. With regard to the respondents' reported age, the highest correlations existed between the age group 70+ years and three CIS items and two IMMS items. These items were:

- CIS Item 2: The things I learn in CPD programs or presentations will be useful to me.
- CIS Item 5: CPD presenters make their subject matter seem important.
- CIS Item 20: The content of CPD programs or presentations relates to my expectations and goals.
- IMMS Item 6: It is clear to me how the content of CPD program or presentation materials relate to things I already know.
- IMMS Item 9: There are stories, pictures, or examples in CPD program or presentation learning materials that show me how the materials could be important to some people.

A statistically-significant correlation existed between Item 5 and nurses reporting 41 to 50 years of nursing experience, although this correlation was a negative one, suggesting that the respondents did not believe that the CPD presenters make their subject matter seem important. The negative correlation is in keeping with the literature in which

findings have been reported that although these nurses see the value in CPD, these nurses may not believe that they need to pursue CPD owing to their vast experience in the nursing profession (Fowler, 2011; Gould et al. (2001; McCumpsey, 2011; Nugent, 1990; Ousey & Roberts, 2012; Penz et al., 2007). The latter finding appears to be belied by the presence of a statistically-significant correlation between these nurses and CIS Item 2, which was a statement regarding the usefulness of CPD information, and Item 20, a statement regarding the content of CPD programs being related to the respondents expectations and goals. The remaining items that correlated with the age group 70+ Years were from the IMMS and also relate to CPD information, and materials being related to what they already know (Item 6) and the way CPD materials illustrate the manner in which CPD information is important to some individuals.

The other age group that correlated in a statistically-significant albeit negative manner with a survey item was that reported as 61-70 Years: CPD presenters make their subject matter seem important. These findings suggest that older and/or more experienced nurse educators do not believe that CPD information is important.

There were five statistically-significant correlations between survey items and nurse educators with 41 to 50 years of nursing experience, all of which were negative correlations. These items were:

- CIS Item 5: CPD presenters make their subject matter seem important.
- IMMS Item 6: It is clear to me how the content of CPD program or presentation materials relate to things I already know.

- IMMS Item 9: There are stories, pictures, or examples in CPD program or presentation learning materials that show me how the materials could be important to some people.
- IMMS Item 18: There are explanations or examples of how the information in CPD program or presentation learning materials was used.
- IMMS Item 23: The content and style of writing of the CPD program or presentation learning materials convey the impression that its content is worth knowing.

Correlations with the respondents' years of nursing experience. The only positive correlation between the respondents' years of nursing experience and survey items was between nurse educators reporting 21 to 30 years of nursing experience CIS Item 25, which indicates that these nurses do believe that they benefit from CPD programs. The other group of nurse educators for which there was a positive correlation with this item were those reporting 1 to 5 years of teaching experience. With regard to the first group, 21 to 30 years of nursing experience, if we accept the fact that within the study sample, the mean years of teaching experience is 13.99 years, nurse educators reporting 21 to 30 years of nursing experience would have between 7 to 16 years of teaching experience. This amount of time is sufficient that these individuals have progressed along the novice to expert pathway which, according to Benner (1981) takes approximately 10 years. It seems reasonable that these individuals believe that they benefit from CPD programs.

The other group of educators that correlated positively with Item 25 were those reporting 1 to 5 years of teaching experience. This explanation for this finding is intriguing, for in today's nursing education environment, these educators are likely to

have minimal years of nursing experience. In the present shortage of nurse educators, the IOM mandate to increase the number of credentialed nurse educators has resulted in the creation of educational programs that provide initial nursing education so that the graduates can sit for the NCLEX and immediately return to the classroom to earn a graduate degree while engaged in their first year as a practicing nurse.

The negative correlations with these items suggest that these nurse educators with greater nursing experience do not believe that CPD information is useful or worth knowing, nor did they believe that the CPD materials were related to their existing knowledge and included relevant examples about how to use the information. It is not surprising that some of these relationships also exist between the nurse educators reporting higher ages (i.e., 70+, 61-70 years), for there are numerous examples of similar findings in the existing literature.

There were statistically-significant but negative correlations between Items 18 and 23 and the nurse educators reporting 1 to 5 and 11 to 15 years of nursing experience. There could be several explanations for this finding. For instance, the nurse educators with less than five years of nursing experience are still in the process of moving from novice to expert. If we accept Benner's (1981) assertion that it takes a professional of any kind approximately 10 years to move from novice or advanced beginner to expert, nurse educators with 1 to 5 years of nursing experience are still close enough to their formal training and education as a nurse that they may not believe they need to seek out CPD to enhance their practice.

The negative finding related to the nurse educators who reported 11 to 15 years of nursing experience bears additional scrutiny. Could this negative correlation exist

because nurse educators reporting between 11 and 15 years of nursing experience are just transitioning into practice as educators but are in formal educational programs (i.e., master's programs) and so are not seeking out informal CPD? Alternately, if nurses are returning for graduate degrees shortly after graduating from baccalaureate programs, this negative correlation may exist because the respondents are engaged in formal learning specific to their new practice as nurse educators and so do not believe that informal educational programs merit their attention.

Correlations with the respondents' years of teaching experience. The statistically-significant correlations between the respondents' years of teaching experience and survey items were mostly positive correlations. The survey items with which there were statistically-significant correlations were:

- CIS Item 22: The attendees of a CPD program or presentation actively participate in CPD programs or presentations.
- CIS Item 25: I do not think I benefit much from CPD programs or presentations.
- CIS Item 28: The personal benefits of CPD programs or presentations are clear to me.

These items correlated positively with nurse educators reporting 11 to 15 years, 1 to 5 years, and 16 to 20 years of teaching experience. The only negative correlation that existed between Item 22 was that with nurse educators reporting 41 to 50 years of teaching experience. In general, Item 22 is perhaps the most difficult for the respondents to answer, for the answer depends on there being opportunities during the CPD program to participate actively. Either way, the belief of nurse educators with 41 to 50 years of teaching experience is explicable given the likelihood that they completed their initial

nursing education and probably their graduate education in an academic environment that employed lecture as the primary means of communicating information. If this teaching-learning modality is the preferred modality for this group of educators, it seems reasonable that they did not perceive active participation. This finding warrants additional study and an observational study is likely to provide additional information.

The positive correlation of Item 25 with the nurse educators reporting 1 to 5 years of teaching experience is thought-provoking, for one might assume that these individuals are fresh enough from the educational trenches to believe they would benefit from CPD programs. It is both intriguing and encouraging that these less experienced nurse educators believe that there are benefits to engaging in CPD. In today's climate of disagreement about the nature of CPD, these nurse educators are likely to make a difference in establishing CPD as a mandatory part of re-licensure for nurses in all states. Even though this group of nurse educators believed that they benefit from CPD programs, there was no correlation between the group and Item 28; the benefits exist but are not clear to them. This finding speaks to the need for CPD program planners, including professional nursing organizations, increasing their promotion of CPD as beneficial, including pointing out in their publications the number and nature of these benefits. Potential CPD attendees need to know and understand that they can increase their chances for promotion, minimize the potential for burn-out, and increase their professional networks (Akhtar-Danesh et al., 2010; Armstrong & Weidner, 2011; Barriball & While, 1996; Cleary et al., 2011; Dealy & Bass, 1995; Evans et al., 2007; Fitzgerald & Townsend, 2012; Hayajneh, 2009; Livneh & Livneh, 1999; Mackereth,

1988; McCoy, 2009; Nalle et al., 2010; Schweitzer & Krassa, 2010; Yoder & Terhorst, 2012; Yfantis et al., 2010).

Equally intriguing to these findings is the existence of a positive correlation between nurse educators with 11 to 15 years of teaching experience and Item 28, but no correlation between the group and Item 25. In other words, they don't necessarily believe that they benefit from CPD programs, but the personal benefits of those programs are clear to them. This is an odd finding which warrants additional study, such as small group interviews or the use of a more detailed survey. For instance, Levett-Jones (2005) and other authors who have explored nurses perceptions of the benefits of CPD maintain that the self-esteem and self-confidence of a nurse who engages in relevant CPD increases (Yoder & Terhorst, 2012). Hayajneh (2009) and Mackereth (1988) concluded that CPD contributes to relieving job-related burnout and has the potential to revive a nurse's interest in the profession. This finding, or lack thereof, also exists between nurse educators with 16 to 20 years of teaching experience and Item 28. It would be beneficial to include these individuals with the other group in future studies.

Summary of the second correlational analysis. Most of the findings of this second correlational analysis are consistent with those reported in the literature, but this second analysis raised more questions than it answered and so further exploration of the reported statistically-significant relationship is warranted. The second analysis was helpful in providing additional information regarding relationships between survey item statements and specific groups of nurse educators, but additional research may shed additional light on this subject.

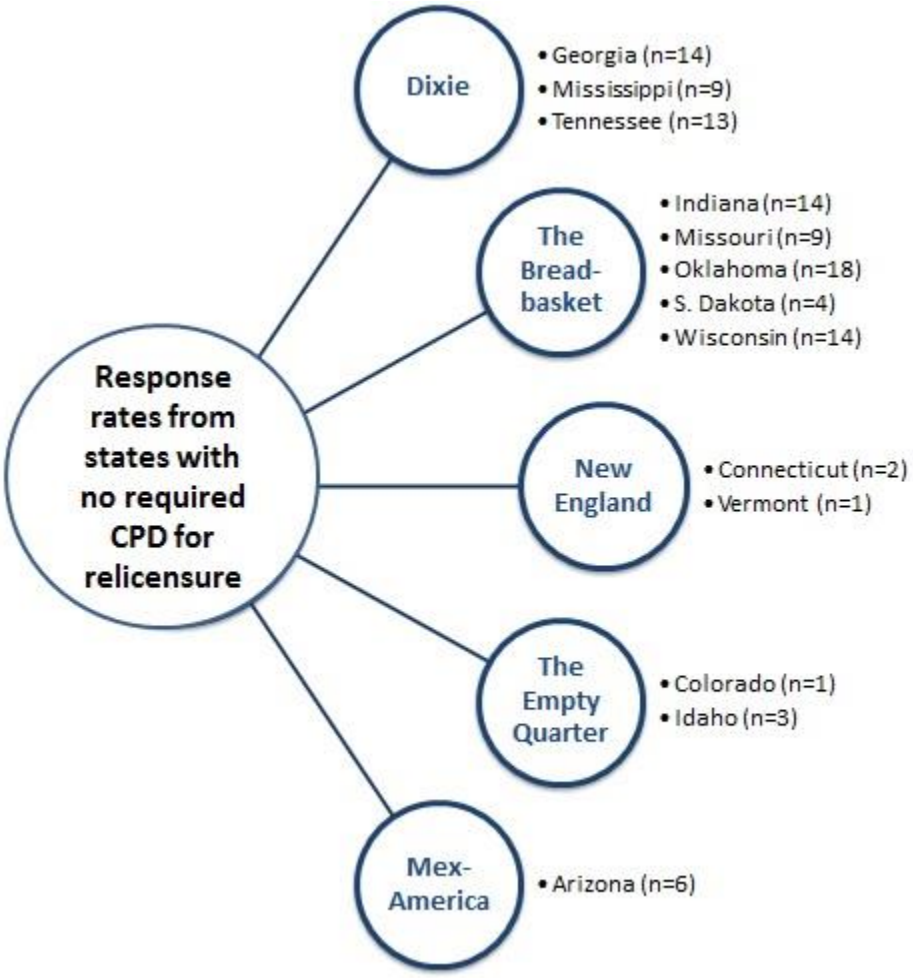
Implications of the Study

The implications of this study's findings to nursing education are related to CPD in general as well as the CPD provided to nurse educators. These findings can be viewed in several contexts, from mandatory CPD, CPD for nurse educators, and improved teaching strategies for nursing education.

Responses from nurse educators in states without mandatory CPD. As reported earlier, there is no universal agreement about the nature of CPD. As such, CPD is not globally required for relicensure. While some nurse scholars debate the nature of CPD, asking whether it is friend or foe, or a nicety or necessity, others disparage mandatory CPD as being at odds with a competency-based profession such as nursing (Carpenito, 1991). The literature is full of references to CPD being integral to enhancing nursing practice and patient outcomes. CPD is the responsibility of the nurse and is an essential element of maintaining competence (Claflin, 2005; McCarthy, Cornally, & Courtney, 2011). In the fast-paced, high-tech world of modern health care, change is the rule rather than the exception. Claflin asserts that CPD is not necessary to improve nursing practice; it is necessary to maintain nursing practice.

A hint from the data about the importance of CPD to nursing practice can be seen in the fact that, while there were no respondents from three of the states that do not require continuing education units (CEUs) for nurses' relicensure (Hawaii, Maine, and Maryland), there were respondents from 13 states that do not require CE for relicensure (Colorado Connecticut, Georgia, Idaho, Indiana, Missouri, Mississippi, Oklahoma, South Dakota, Tennessee, Vermont, Virginia, and Wyoming) (Figure 12).

Figure 12. Response Rates for States that do not Require CPD for Nurses' Relicensure



There was no means of determining these nurse educators' motivation for responding to the survey, but the fact that they did respond marks it as an intriguing area for additional research.

Nurse educators' CPD. This study supports the need for regular engagement by nurse educators in CPD related to nursing practice and post-secondary education. Carpenito's (1991) suggestion that, once deemed competent, a nurse is always competent and has no need for CPD, has given way to revised conventional wisdom. The nursing profession "must give up the doctrine that a nurse is forever competent because at one

time somebody put on (her) the stamp of approval as a graduate of some more or less adequately equipped training school" (Judd, 1928, p. 654).

In both nursing and post-secondary education, best practice is a byword. The expectation of nurse educators in the academic setting is that they will be and remain aware make use of best practices. They are also expected to employ methods for combining information related to best practice in nursing with that related to education in order to provide high-quality educational experiences to student nurses. It is advantageous for the provision of relevant to be based on the learner's prior knowledge in order to facilitate seamless application of this information to their practice.

Nursing education. Earlier in this chapter, the investigator reported that respondents with greater experience in nursing and/or nursing education saw the value of CPD but did not believe there was much that was new to learn. This finding has important implications for nursing education in that, as technology advances exponentially, so will change the teaching-learning strategies that can be employed in a nursing education program. A nurse educator who does not remain abreast of current pedagogical trends may be less prepared to deliver a high quality educational experience. If this occurs, the educator's stakeholders (i.e., students and their patients) may not experience the highest quality educational experience.

Limitations to the Study

At the outset of this study, several potential limitations to the study were identified, the first of which was the potential for there to be a dearth of respondents. Fortunately, there was no lack of respondents, for the 454 complete individual responses exceeded the minimum number of participants (n = 382) required to generalize the

study's findings to nurse educators as a whole. A second potential limitation, the prospect that the respondents would not respond honestly to the survey but in the manner they believed the investigator wanted them to respond, does not appear to have materialized, though it is not possible to determine this fact from the existing information. The candid nature of the respondents' anecdotal comments suggests that the nurse educators were honest and open in their responses to the survey items. Additional studies may be warranted to enhance understanding of this aspect of the study.

Limitations related to the survey instruments. The potential limitations to the study also included limitations related to the survey instruments and to the recruitment of the respondents. With regard to the former, several respondents remarked upon a lack of clarity of the study questions, referring to them as being too general, broad, or global. Some of the respondents were confused by the presence of both positively-worded and negatively-worded items on the survey. In addition to the wording causing confusion, some of the respondents thought that the questions applied to him or her equally as a CPD presenter or CPD attendee and so were uncertain how to answer the questions. Other respondents remarked upon the fact that the questions seemed to be directed at a specific CPD program versus CPD in general.

It was expedient to use the Course Interest Survey (CIS) and Instructional Materials Motivation Survey (IMMS), for both instruments have been used in a number of different research settings and have established reliability and validity. Even so, it may have been advisable to review the modified items with a nurse educator experience in the creation of survey instruments to determine whether the items were modified (with permission of the author, Appendix D) in a way that made them as clear as possible to the

prospective respondents. Alternately, there exist other instruments that might have been appropriate to exploring this subject, such as Hayajneh's (2009) Major Domains of Attitudes toward Continuing Education (CE) Scale, as well as Armstrong and Weidener's (2011) Formal and Informal Athletic Training Continuing Education Activities (FIATCEA) survey.

Another survey-related limitation was that the focus of this study was to explore individuals' beliefs about a concept (relevance) which is a difficult task. There are few concrete measurements of subjective phenomena, such as attitudes or beliefs, phenomena which are dependent upon the complexity of the individual (Polit & Hungler, 1991). Even using instruments of proven reliability and validity, such as the CIS and IMMS, may not have mitigated this potential limitation, and therein lies a fourth limitation: The instruments employed for the study were modified from their original form (with the author's permission, Appendix D), but were not piloted prior to being delivered to the prospective respondents. Future studies of this topic will benefit from a review of the modified survey items, as well as conducting a small pilot to ensure that the items are clear enough to the respondents and clear enough to elicit the information which the item meant to elicit.

Limitations related to the recruitment of the respondents. The recruitment of participants could have been executed more efficiently, for it happened that there were a number of nurse educators who could not respond to the survey owing to the requirement of additional IRB approval by their employer-institution. In order to avoid this eventuality, the investigator could have recruited respondents using state or local nursing associations or even LinkedIn, which is an online professional networking site. Another

means of recruiting participants might have been attending nurse educator conferences and providing an opportunity for attendees to respond to the survey at that time using a laptop, tablet, or iPad to do so.

Recommendations for Future Research

In addition to contributing to the existing literature about CPD within the nursing profession, this study has identified a number of opportunities for research on this topic, some of which has been mentioned above. While in general the study sample may seem to be a heterogeneous segment of the population, coming as they did from all areas of the United States, the sample was essentially homogenous: It was comprised mostly of women in who teach in RN programs and hold full-time positions. Then again, the respondents reside in different parts of the United States, completed their initial nursing education in different types of programs, and represent a wide variety of generations (i.e., Baby Boomers, Generations X and Y, and Millennials, or Digital Natives). The literature related to CPD in nursing has been focused largely on homogenous populations, such as nursing in rural settings or specific geographical locations (i.e., cities or states, rural versus urban areas), or nurses within particular disciplines, such as obstetrics or critical care. Focusing on smaller sub-sets within nursing education may prove valuable, particularly with the groups that were underrepresented in this or other studies.

Underrepresented populations. According to the University of California San Francisco School of Nursing (UCSF, 2012), only approximately 5% of the full-time educators in BSN programs are men. This study sample reflects the current gender composition within nursing education, but means that while there were male respondents, their beliefs about the relevance of CPD were overshadowed by those of the female

respondents. Given the 2010 imperative of the Institute of Medicine (IOM) and the efforts of the Robert Wood Johnson Foundation to attract men to nursing and support their education, future research related to any aspect of or discipline within nursing should include a gender component. In the future, there will be more men entering the nursing profession, there will also be more men entering nursing education. It would be incumbent upon nurse scholars to focus on other demographic groups as well, such as nurse educators who teach in LPN/LVN and LPN/LVN bridge programs, all of whom were under-represented in the present study.

Another group that was poorly represented in the sample for the present study was non-tenure track (NTT), or part-time and adjunct, faculty. Most of the survey respondents were employed full-time in the programs where they teach. In spite of the large difference between the size of the two groups (i.e., full-time versus adjunct), the respondents who reported adjunct status achieved the highest mean score on most of the survey items. The meaning of this finding is elusive. According to the literature, post-secondary institutions are hiring a greater number of NTT faculty members. The faculty (or professional) development needs of these individuals are distinct from those of full-time faculty members (AFT Higher Education, 2010; Carrell & West, 2010; Eagan & Jaeger, 2009; Jacoby, 2006; Kezar, 2012; Kezar & Maxey, 2013).

The literature also indicates that there is a definitive difference between the student learning outcomes when students have been educated mostly by adjunct faculty members, which should serve as a signal to post-secondary programs, including nursing at all educational levels, the need for fully-vested faculty who are supported and allowed to engage in faculty development (AFT Higher Education; Carrell & West; Eagan &

Jaeger; Jacoby; Kezar; Kezar & Maxey). If adjunct or non-tenure track faculty had more professional development, would these outcomes improve?

Geographic variables. The nursing literature related to CPD in general already explores CPD for rural nurses. In fact, it was this branch of the literature that served as part of the impetus for this study. In the present study, there were no statistically-significant correlations with the Geographic Region (i.e., New England) or Geographic Area (or Location, i.e., Urban or Rural), though there were statistically-significant relationships between the respondent's state of residence and responses to a CIS item. Further research is needed that focuses on the geographical element, including research that explores the beliefs of nurse educators in different parts of the country about the relevance of CPD, particularly the beliefs of nurse educators who teach in rural areas.

A last recommendation for future exploration comes from the survey item related to the respondents' assessment of whether CPD attendees participate actively in CPD programs. The answer to this item is subject to the respondent's personal views and biases. The literature about this topic is limited and, depending on the type of CPD program (i.e., lecture, professional meeting), there may be little or no opportunity for attendees to engage actively in the program. As such, it is likely that observational studies would be invaluable to gauging the level of active participation in CPD programs.

Conclusion

The purpose of this chapter was to discuss the results reported in Chapter IV, including the relationship of these results when viewed in proximity to the existing literature about CPD for nursing professionals. The findings of this study are consistent with the existing literature. Nurse educators can relate CPD information to practice,

experience, and existing knowledge and/or skills. Nurse educators believe that CPD is relevant to their needs because they don't already know most of the information presented. Nurse educators believe that they benefit from CPD and that the benefits of CPD are clear to them. Lastly, nurse educators believe that CPD presenters make their information seem important.

In this last chapter, the investigator also considered the implications of this study for nursing education and the provision of CPD for nurse educators. The investigator also reflected upon and reviewed the limitations to the study, some of which served as a foundation for making recommendations for future research related to this topic.

In the United States, there is no universal agreement about mandatory CPD, which could be the result of authors' assertions that mandatory CPD is at odds with the values and beliefs on which lifelong learning was founded. CPD targets the learning needs of individuals who were at one time deemed as competent in their profession. One's competence as a nurse and/or a nurse educator is not an end-point. Health care and education do not occur in a vacuum, but rather in a dynamic environment that is subject to change on a daily basis. Competence is a dynamic state wherein one routinely re-evaluates one's learning needs based on scientific and technical advances. The data from the present study illustrates the fact that nurse educators value CPD, and believe that it is relevant to their practice. They acknowledge that they must continue to hone their practice, or as Cockerell puts it, to sharpen their saws, in order to remain abreast of current and best practices (2008).

Levett-Jones (2005) asserts that a hospital's greatest asset is its nurses, knowledgeable nursing professionals who employ evidence to inform their practice. If

this is true, then a nursing program's greatest asset is its educators, knowledgeable practitioners who employ evidence from both the education and nursing fields to inform their practice. It has been widely reported in the literature that a nurse educator's initial training or education, his or her foundational knowledge, "keeps no better than fish" (Levett-Jones, 2005, p. 229), which means that one's formal nursing education, including a nurse educator's initial education, has a very short half-life: two-and-a-half to five years (Al-Majid et al., 2012; Bradley et al., 2012; Hogston; Levett-Jones; & Woodruff, 1987). Levett-Jones asserts that one's knowledge decreases in value by 10% every six years. Changes within the health care environment, such as those related to nursing technology, render initial education obsolete within 10 years, which is only one reason that nurse educators should engage in CPD that is relevant to their practice as nurse educators.

Cleary et al. (2011) propose that in general, all CPD is relevant, for it promotes the development of one's knowledge and skill acquisition. However, general CPD opportunities may not meet the unique needs of learners. Still, the pursuit of relevant CPD by nurse educators should "focus on all stages of professional development and offer all learners opportunities to grow in the depth and breadth of knowledge needed" (Bowers-Lanier, 2009, p. 236). As long ago as 1928, scholars were aware that "the day has passed in education when a teacher can depend on… initial preparation to carry their life" (Judd, 1928, p. 653).

For decades, CPD hasn't been merely a functional requirement of professional nursing practice. It has been and will continue to be a pursuit that should spark the nurse educator's curiosity and desire to learn, not only for learning's sake, but to inform professional nursing practice and provide opportunities for professional advancement

(Hogston, 1995). Engaging in relevant CPD provides many opportunities to the nurse educator and ensures that his or her foundational knowledge will keep much better than fish.

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Appendix A

Continuing Education Requirements by State

State	# Contact Hours/year
Alabama	24 hours/2 years
Alaska	30 hours/2 years
Arizona	None
Arkansas	15 hours/2 years
California	30 hours/renewal period
Colorado	None
Connecticut	None
Delaware	24 hours (PN) to 30 hours (RN)/2 years
District of Columbia	24 hours/2 years
Florida	24 hours /2 years
Georgia	None
Hawaii	None
Idaho	None
Illinois	20 hours/2 years
Indiana	None
Iowa	36 hours /3 years
Kansas	30 hours/2 years
Kentucky	14 hours /year
Louisiana	5-15 hours /year
Maine	None
Maryland	None
Massachusetts	15 hours/2 years
Michigan	25 hours /2years
Minnesota	24 hours /2 years
Mississippi	None
Missouri	None
Montana	24 hours /year
Nebraska	20 hours /2 years
Nevada	30 hours /2 years
New Hampshire	30 hours /2 years
New Jersey	30 hours /2 years
New Mexico	30 hours /2 years
New York	3 hours/4 years
North Carolina	30 hours/time not specified
North Dakota	12 hours/2 years
Ohio	24 hours/2 years
Oklahoma	None
Oregon	1-time: 7 hours
Pennsylvania	30 hours /2 years
Rhode Island	10 hours/2 years (RNs)
South Carolina	30 hours /2 years

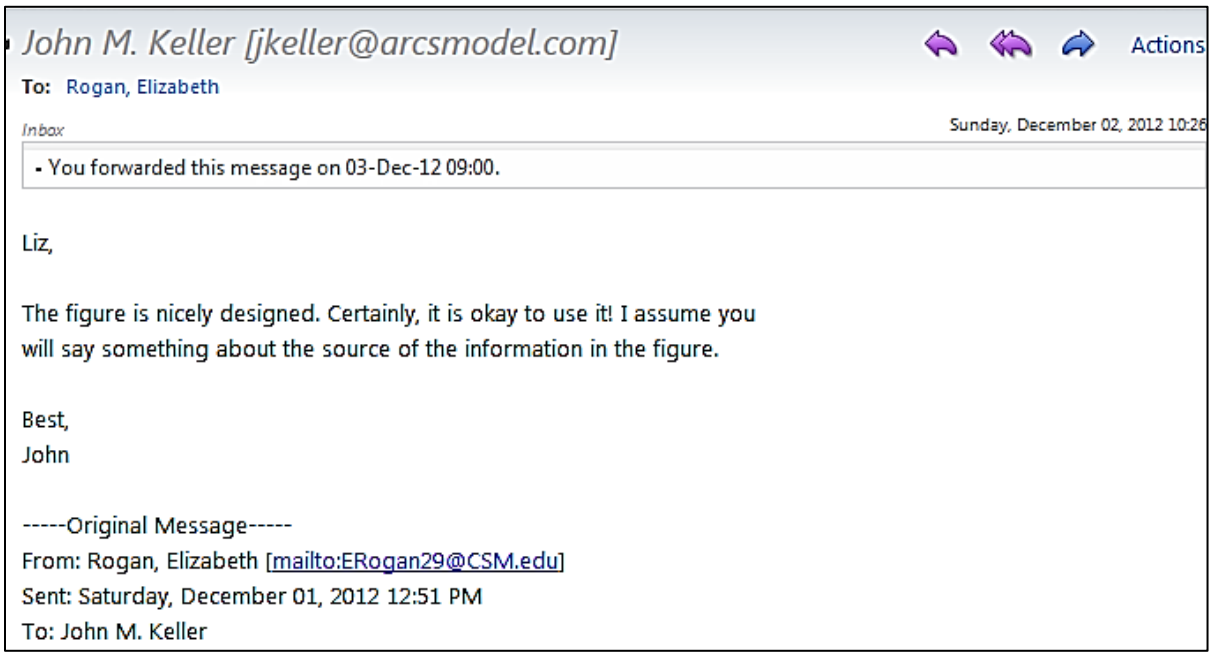
State	# Contact Hours/year
South Dakota	None
Tennessee	None
Texas	20 hours /2 years
Utah	15 hours (200-400 practice hours) to 30 hours (if no practice hours)/2 years
Vermont	None
Virginia	After August 1, 2015: 15 + practice hours, or 30 hours
Washington	45 hours /3 years
West Virginia	12 hours /year
Wisconsin	None
Wyoming	0 hours (500 practice hours or 1600 practice hours in 5 years) to 20 hours (if practice requirement is not met)/2 years

Note. Data related to the number of continuing education units (CEUs) a licensed RN is required to earn toward re-licensure was retrieved from http://ce.nurse.com/RStateReqmnt.aspx; http://www.medscape.org/public/nursecestaterequirements; http://www.dphss.guam.gov/sites/default/files/pdf/RN%20LPN%20Renewal%20Application-09132011.pdf; http://www.nmicbne.com/LicensureDocuments/tabid/55/Default.aspx; http://www.ceu.org/state_nurses_assn.html

Appendix B

Email from Dr. John Keller re: Permission to use Figure Depicting the

ARCS Model of Motivational Design



John M. Keller [jkeller@arcsmodel.com] Actions

To: Rogan, Elizabeth

Inbox Sunday, December 02, 2012 10:26

- You forwarded this message on 03-Dec-12 09:00.

Liz,

The figure is nicely designed. Certainly, it is okay to use it! I assume you will say something about the source of the information in the figure.

Best,
John

-----Original Message-----
From: Rogan, Elizabeth [mailto:ERogan29@CSM.edu]
Sent: Saturday, December 01, 2012 12:51 PM
To: John M. Keller

Appendix C

Accredited Pre-Licensure Nursing Programs in the United States

	ACEN-PN	**ACEN-Diploma**	**ACEN-Associate**	**ACEN-BSN**	**CCNE - BSN**	State Totals
Alabama	13	0	23	3	12	51
Alaska	0	0	1	1	0	2
Arizona	0	0	16	1	5	22
Arkansas	1	2	11	7	4	25
California	0	0	27	2	37	66
Colorado	4	0	15	4	8	31
Connecticut	0	1	8	1	8	18
Delaware	1	1	3	2	2	9
District of Columbia	0	0	1	1	5	7
Florida	3	0	35	11	19	68
Georgia	3	0	18	11	14	46
Hawai'i	0	0	4	1	2	7
Idaho	1	0	4	2	3	10
Illinois	5	1	26	7	29	68
Indiana	4	1	6	11	15	37
Iowa	1	0	4	1	15	21
Kansas	3	0	17	2	13	35
Kentucky	1	0	16	4	10	31
Louisiana	1	1	11	6	9	28
Maine	0	0	8	1	5	14
Maryland	3	0	13	3	7	26
Massachusetts	6	1	20	4	16	47
Michigan	3	0	15	4	20	42
Minnesota	3	0	14	1	22	40
Mississippi	3	0	32	0	6	41
Missouri	1	1	13	4	18	37
Montana	0	0	6	2	3	11
Nebraska	2	0	6	5	4	17
Nevada	2	0	5	2	4	13
New Hampshire	3	0	7	2	3	15
New Jersey	2	8	15	5	16	46
New Mexico	1	0	11	1	5	18
New York	5	1	47	12	38	103
North Carolina	5	2	19	5	15	46
North Dakota	3	0	0	3	4	10

	ACEN-PN	**ACEN-Diploma**	**ACEN-Associate**	**ACEN-BSN**	**CCNE - BSN**	State Totals
Ohio	3	2	31	8	29	73
Oklahoma	13	0	15	12	5	45
Oregon	1	0	3	0	4	8
Pennsylvania	28	19	25	17	33	122
Rhode Island	1	1	2	1	2	7
South Carolina	9	0	13	3	9	34
South Dakota	1	0	3	1	5	10
Tennessee	0	0	14	9	17	40
Texas	2	1	43	9	30	85
Utah	7	0	9	4	5	25
Vermont	1	0	3	1	2	7
Virginia	7	4	13	3	16	43
Washington State	0	0	22	1	8	31
West Virginia	1	0	10	4	7	22
Wisconsin	2	0	20	0	20	42
Wyoming	0	0	10	0	1	11
Totals	**159**	**47**	**713**	**205**	**589**	**1713**

Appendix D

Email/Letter from Dr. John Keller: Permission to Use

the *Course Interest Survey* and *Instructional Materials Motivation Survey*

Liz Rogan

Subject: FW: Dissertation Study/Use of instruments
Attachments: Stockdale et al 2011 Chapter Four Understanding motivational theory and the psychology of breastfeeding FINAL.pdf; Stockdale et al 2011 Chapter Five Motivation, breastfeeding and midwives _ theory in action FINAL.pdf; Stockdale, et al (2008) Feasibility study designer breastfeeding.pdf

From: John M. Keller [jkeller@arcsmodel.com]
Sent: Tuesday, May 01, 2012 09:30
To: Rogan, Elizabeth
Subject: RE: Dissertation Study/Use of instruments

Dear Liz,

It is nice to hear from you and you are welcome to use these instruments in your research. It is appropriate in these types of instruments to modify the language to fit the situation as long as you don't change language pertaining to the motivational issue contained in a given item.

The ARCS model is being used quite a lot in nursing education and other areas of medical education, especially in Japan and Ireland and maybe other areas that I don't know about. I have attached three readings from Ireland.
They are specific to breastfeeding, but you might get some ideas from them.

Thank you for the reference to my book!

Good luck, and let me know if there are other items that I can send to you.

Sincerely,
John

John M. Keller, Ph.D.
Professor Emeritus
Educational Psychology and Learning Systems Florida State University

9705 Waters Meet Drive
Tallahassee, FL 32312-3746
Phone: 850-294-3908

Official ARCS Model Website: http://arcsmodel.com
Professional Website: http://mailer.fsu.edu/~jkeller/JohnsHome/

Keller, J.M. (2010), Motivational Design for Learning and Performance: The ARCS Model Approach. New York: Springer. Now available in English and Japanese. Will soon be available in Korean.

"Do not seek to follow in the footsteps of the men of old. Seek what they sought."

Bashō (1644 – 1694)

—Original Message—
From: Rogan, Elizabeth [mailto:ERogan29@CSM.edu]
Sent: Friday, April 27, 2012 10:15 AM
To: jkeller@arcsmodel.com
Cc: Lois Linden; Janet Philipp
Subject: Dissertation Study/Use of instruments

Dear Dr. Keller,

I am a doctoral candidate in an EdD program at College of Saint Mary, Omaha, and have entered the dissertation process.

In my work as an Implementation Specialist for ATI Nursing Education, a company that creates and supports standardized testing and tutorial resources for both Practical Nursing and Registered Nursing pre-licensure programs, I've observed that faculty buy-in is lacking, among other barriers or challenges to implementation of these resources. As an educator who seeks to engage the learner and make what I'm communicating relevant to them, I believe your ARCS model is ideal to frame this dissertation study!

Would you be willing to grant me permission to use your Course Interest Survey and Instructional Materials Motivation Survey for my dissertation study?

If so, I read (p. 277) that "both instruments can be adapted to fit specific situations" and am hopeful that you would allow me to modify the language of the surveys so that it applies to nurse educators/faculty specifically and to the type of resources.

Please let me know if you have questions about my request. I look forward to hearing from you and hope you have a wonderful weekend!

Liz Rogan

Liz Rogan, MA, MSN, RN

Doctoral Candidate

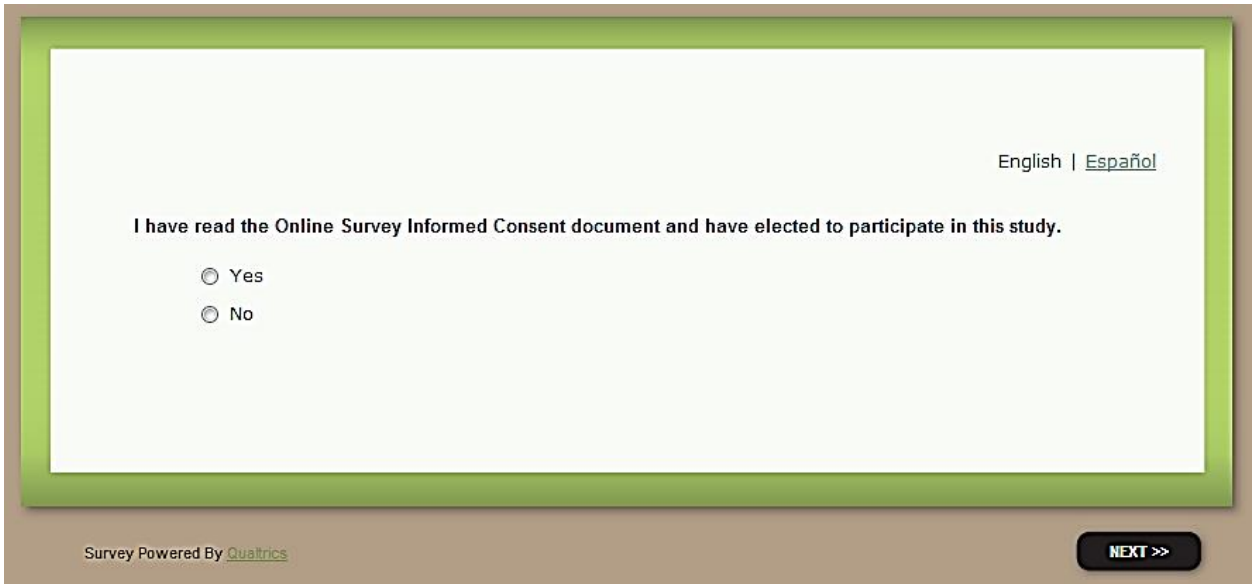
EdD-Health Professions Education

"The ink of the scholar is more sacred than the blood of the martyr."

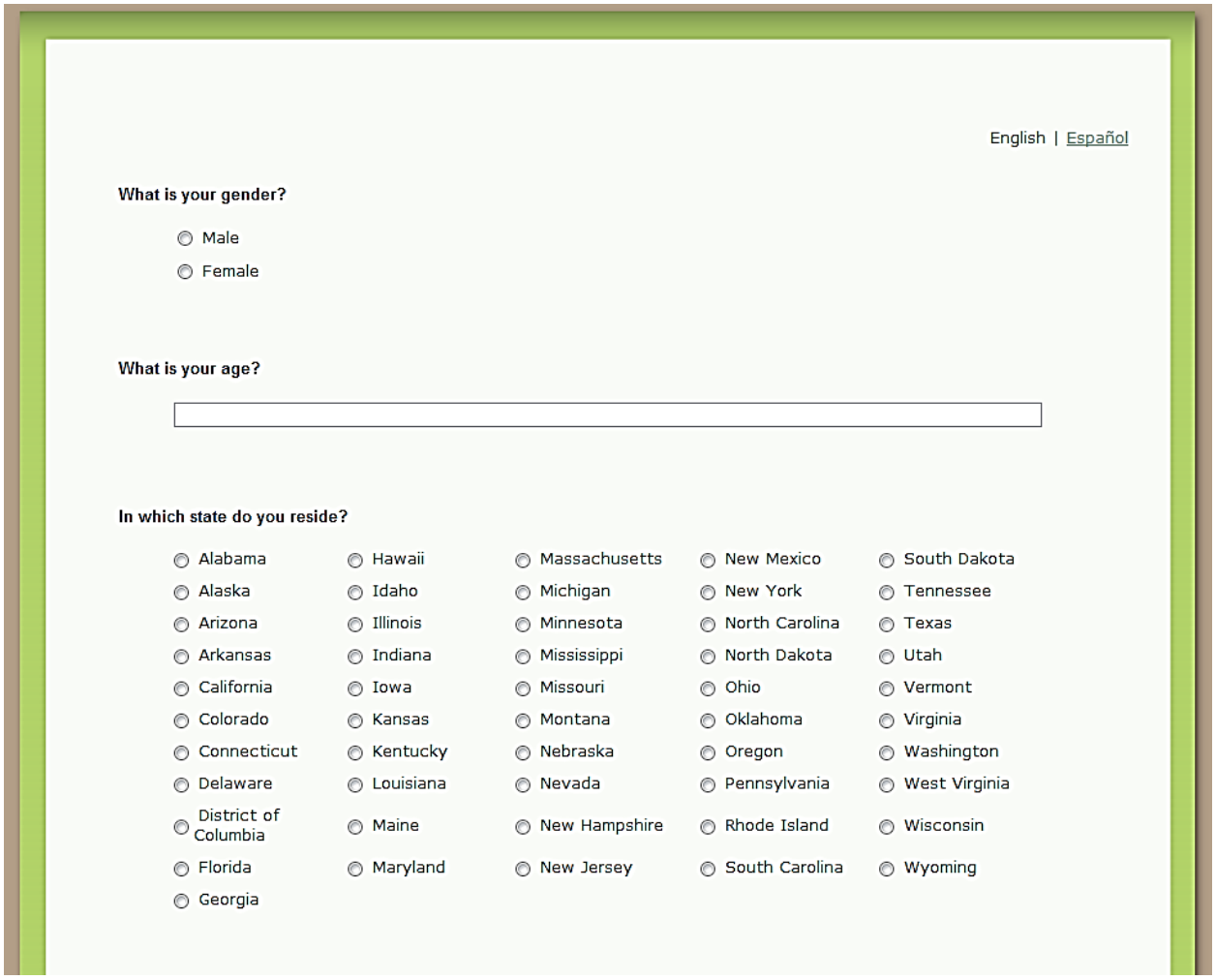
The Prophet Muhammad

Appendix E

Online Survey: Consent Item



Demographic Questionnaire



English | Español

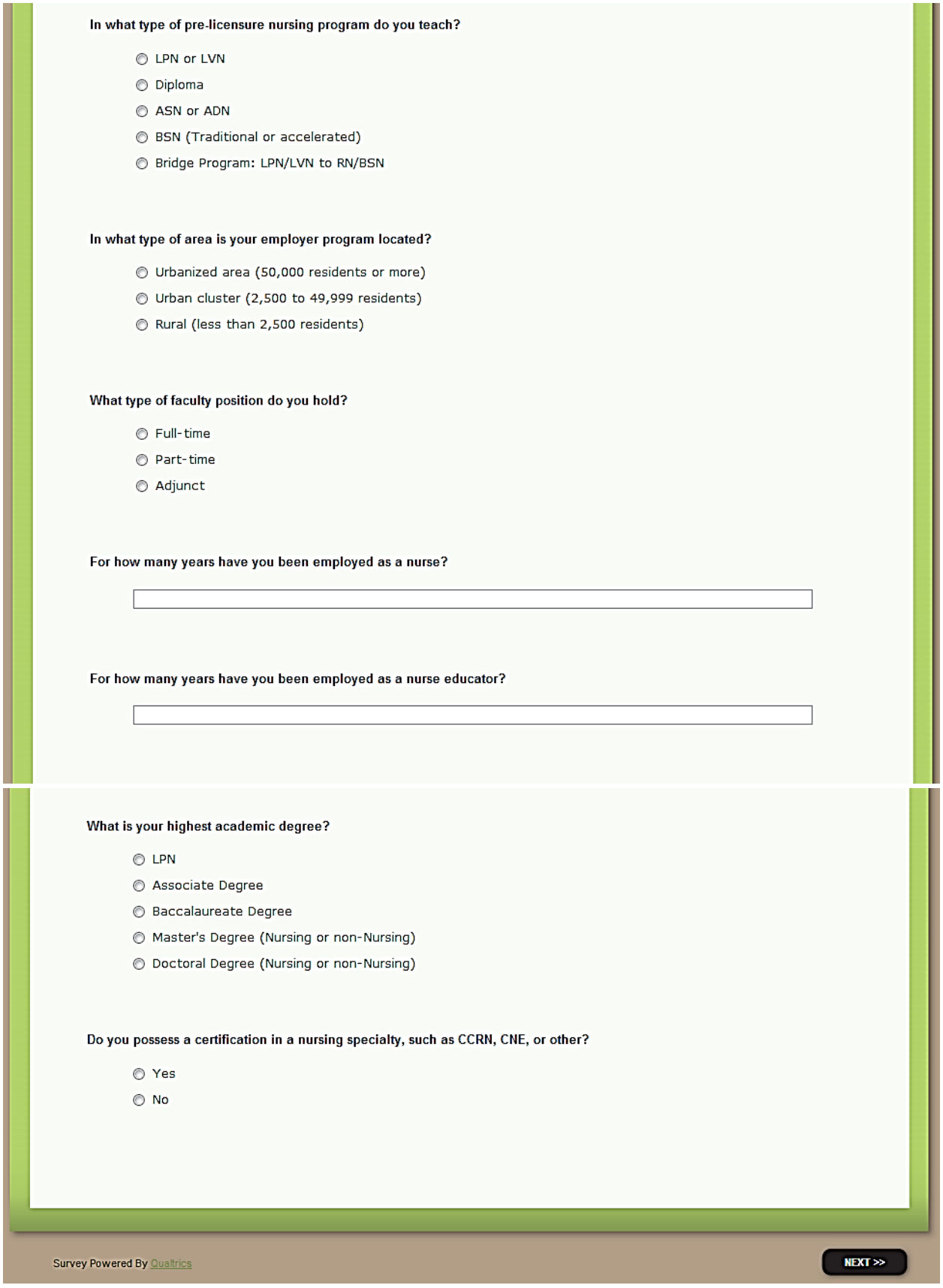
What is your gender?

- Male
- Female

What is your age?

In which state do you reside?

Alabama	Hawaii	Massachusetts	New Mexico	South Dakota
Alaska	Idaho	Michigan	New York	Tennessee
Arizona	Illinois	Minnesota	North Carolina	Texas
Arkansas	Indiana	Mississippi	North Dakota	Utah
California	Iowa	Missouri	Ohio	Vermont
Colorado	Kansas	Montana	Oklahoma	Virginia
Connecticut	Kentucky	Nebraska	Oregon	Washington
Delaware	Louisiana	Nevada	Pennsylvania	West Virginia
District of Columbia	Maine	New Hampshire	Rhode Island	Wisconsin
Florida	Maryland	New Jersey	South Carolina	Wyoming
Georgia				



In what type of pre-licensure nursing program do you teach?

- LPN or LVN
- Diploma
- ASN or ADN
- BSN (Traditional or accelerated)
- Bridge Program: LPN/LVN to RN/BSN

In what type of area is your employer program located?

- Urbanized area (50,000 residents or more)
- Urban cluster (2,500 to 49,999 residents)
- Rural (less than 2,500 residents)

What type of faculty position do you hold?

- Full-time
- Part-time
- Adjunct

For how many years have you been employed as a nurse?

For how many years have you been employed as a nurse educator?

What is your highest academic degree?

- LPN
- Associate Degree
- Baccalaureate Degree
- Master's Degree (Nursing or non-Nursing)
- Doctoral Degree (Nursing or non-Nursing)

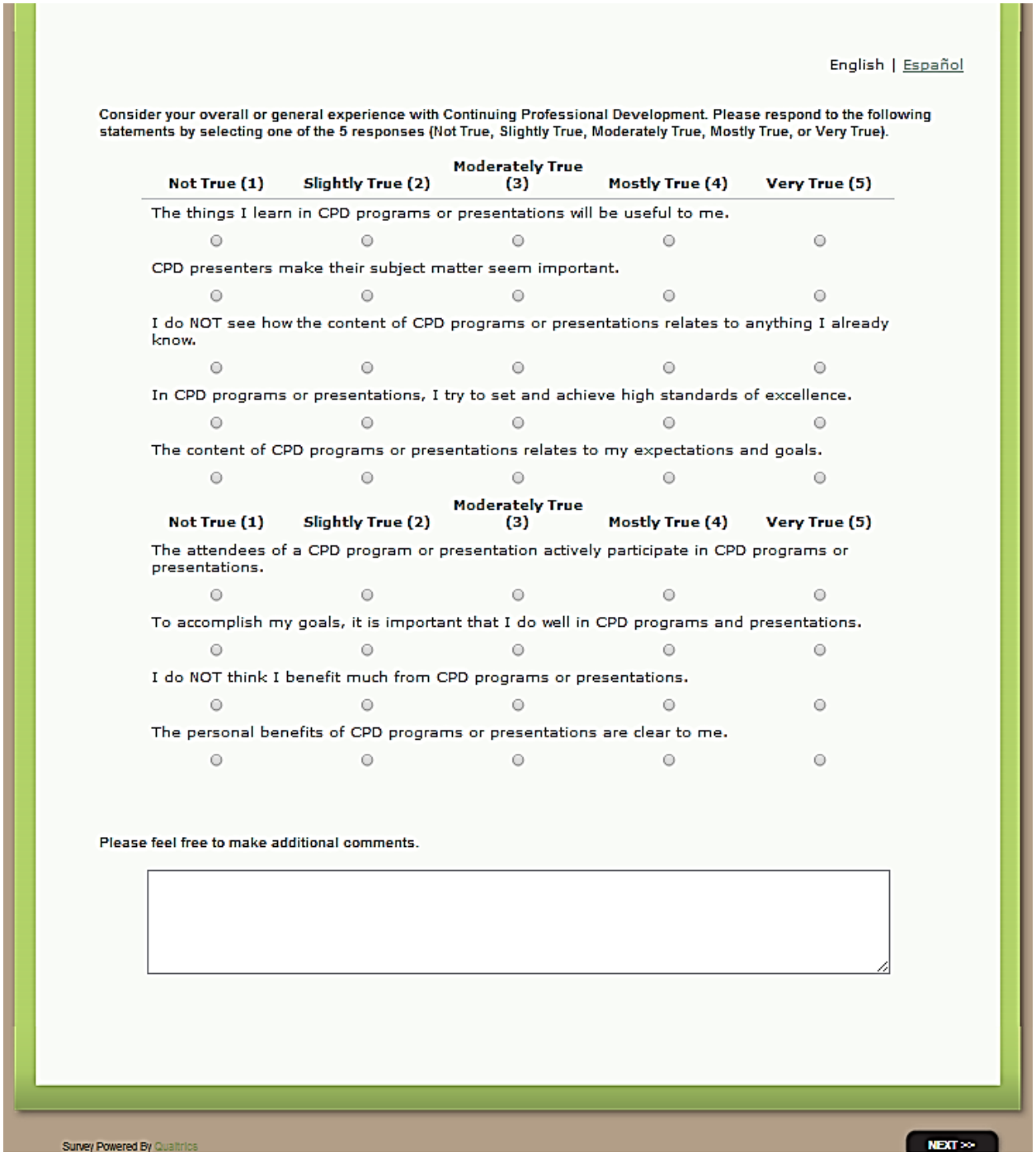
Do you possess a certification in a nursing specialty, such as CCRN, CNE, or other?

- Yes
- No

Survey Powered By Qualtrics

NEXT >>

Course Interest Survey: Relevance Items



English | Español

Consider your overall or general experience with Continuing Professional Development. Please respond to the following statements by selecting one of the 5 responses (Not True, Slightly True, Moderately True, Mostly True, or Very True).

	Not True (1)	Slightly True (2)	Moderately True (3)	Mostly True (4)	Very True (5)
The things I learn in CPD programs or presentations will be useful to me.	○	○	○	○	○
CPD presenters make their subject matter seem important.	○	○	○	○	○
I do NOT see how the content of CPD programs or presentations relates to anything I already know.	○	○	○	○	○
In CPD programs or presentations, I try to set and achieve high standards of excellence.	○	○	○	○	○
The content of CPD programs or presentations relates to my expectations and goals.	○	○	○	○	○

	Not True (1)	Slightly True (2)	Moderately True (3)	Mostly True (4)	Very True (5)
The attendees of a CPD program or presentation actively participate in CPD programs or presentations.	○	○	○	○	○
To accomplish my goals, it is important that I do well in CPD programs and presentations.	○	○	○	○	○
I do NOT think I benefit much from CPD programs or presentations.	○	○	○	○	○
The personal benefits of CPD programs or presentations are clear to me.	○	○	○	○	○

Please feel free to make additional comments.

Survey Powered By Qualtrics

NEXT >>

Instructional Materials Motivation Survey: Relevance Items

English | Español

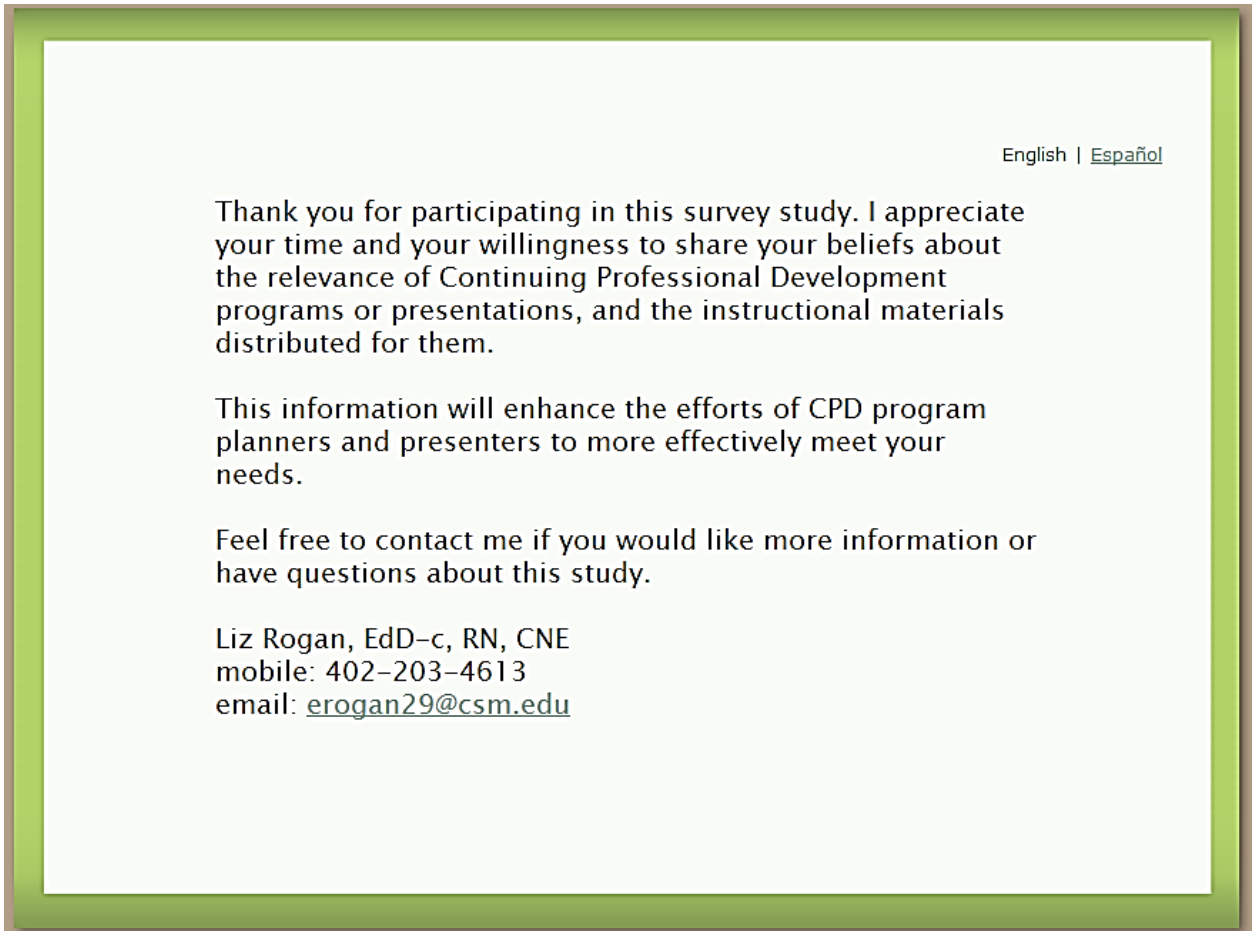
Consider your overall or general experience with Continuing Professional Development. Please respond to the following statements by selecting one of the 5 responses (Not True, Slightly True, Moderately True, Mostly True, or Very True).

Not True (1)	Slightly True (2)	Moderately True (3)	Mostly True (4)	Very True (5)
It is clear to me how the content of CPD program or presentation materials relate to things I already know.				
There are stories, pictures, or examples in CPD program or presentation learning materials that show me how the materials could be important to some people.				
Completing a CPD program or presentation lesson or activity successfully is important to me.				
The content of CPD program or presentation learning material is relevant to my interests.				
There are explanations or examples of how the information in CPD program or presentation learning materials was used.				

Not True (1)	Slightly True (2)	Moderately True (3)	Mostly True (4)	Very True (5)
The content and style of writing of the CPD program or presentation learning materials convey the impression that its content is worth knowing.				
CPD programs or presentations are not relevant to my needs because I already know most of the information.				
I can relate the content of CPD programs or presentations to things that I have seen, done or thought about.				
The content of CPD program or presentation activities or lessons will be useful to me.				

Please feel free to make additional comments.

End of Survey Message



Appendix F

Relevance Items: Course Interest Survey

Item #	Item Text
Item 2	The things I learn in CPD programs or presentations will be useful to me.
Item 5	CPD presenters make their subject matter seem important.
Item 8	I do not see how the content of CPD programs or presentations relates to anything I already know.
Item 13	In CPD programs or presentations, I try to set and achieve high standards of excellence.
Item 22	The attendees of a CPD program or presentation actively participate in CPD programs or presentations.
Item 23	To accomplish my goals, it is important that I do well in CPD programs and presentations.
Item 25	I do not think I benefit much from CPD programs or presentations.
Item 28	The personal benefits of CPD programs or presentations are clear to me.

Appendix G

Relevance Items: Instructional Materials Motivation Survey

Item #	Item Text
Item 6	It is clear to me how the content of CPD program or presentation materials relate to things I already know.
Item 9	Many of the pages of CPD program or presentation learning materials have so much information that it is difficult to pick out and remember the important points.
Item 10	CPD program or presentation learning materials are eye-catching.
Item 16	There are stories, pictures, or examples in CPD program or presentation learning materials that show me how the materials could be important to some people.
Item 18	Completing a CPD program or presentation lesson or activity successfully is important to me.
Item 23	The quality of writing in CPD program or presentation learning materials held my attention.
Item 26	CPD program or presentation lessons or activities are so abstract that it is difficult to keep my attention on them.
Item 30	As I participate in CPD programs and presentations, I am confident that I can learn the content.
Item 33	I enjoy CPD programs and presentations so much that I want to know more about the topic.

Appendix H

Institutional Review Board (IRB) Approval Letter

December 9, 2013

Dear Ms. Rogan,

Congratulations! The Institutional Review Board at College of Saint Mary has granted approval of your study titled *Nurse Educators' beliefs About the Relevance of Continuing Professional Development.*

Your CSM research approval number is **CSM 1308**. It is important that you include this research number on all correspondence regarding your study. Your study is in effective through January 1, 2015. If your research extends beyond that date, please submit a "Change of Protocol/Extension" form which can be found in Appendix B at the end of the College of Saint Mary Application Guidelines posted on the IRB Community site.

Please submit a closing the study form (Appendix C of the IRB Guidebook) when you have completed your study.

Good luck with your research! If you have any questions or I can assist in any way, please feel free to contact me.

Sincerely,
Vicky Morgan
Dr. Vicky Morgan
Director of Teaching and Learning Center
Chair, Institutional Review Board * irb@csm.edu

7000 Mercy Road • Omaha, NE 68106-2606 • 402.399.2400 • FAX 402.399.2341 • www.csm.edu

Appendix I

Investigator's NIH Ethics Training Certificate

Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Liz Rogan** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 03/05/2011

Certification Number: 648364

Appendix J

Recruitment Letter to Deans and Directors of Accredited Pre-Licensure Nursing Programs in the United States

Dear Dean or Director,

You are receiving this email as part of the recruitment process for a quantitative research study being conducted as part of the requirements of a doctoral program at the College of Saint Mary in Omaha, NE: *Nurse Educators' Beliefs of the Relevance of Continuing Professional Development.*

The purpose of this survey study is to explore the beliefs of nurse educators who teach in pre-licensure nursing programs about the relevance of Continuing Professional Development (CPD). For the purposes of this study, CPD refers to formal and informal, live and online professional development, including the instructional materials used in CPD.

I respectfully request that you forward this email and its attachments to the nurse educators in your department or program so that they can determine whether they would like to participate in the study by completing the online survey.

Thank you in advance for your consideration of this request.

I appreciate your time and look forward to sharing the results of the study with you and other nurse educators.

Sincerely,

Liz Rogan, MA, MSN, RN
Doctoral Candidate
College of Saint Mary, Omaha

e//erogan29@csm.edu
m//402-203-4613

Appendix K

Online Informed Consent Document, including Rights of Research Participants

15 January 2014

NURSE EDUCATORS' BELIEFS ABOUT THE RELEVANCE OF CONTINUING PROFESSIONAL DEVELOPMENT

IRB # CSM 1308

Dear Nurse Educator Colleague,

This email/letter is an invitation to participate in a dissertation study being conducted as part of the requirements of a Doctorate in Education program at College of Saint Mary, Omaha, NE. You have been contacted because you teach in an accredited pre-licensure nursing program in the United States.

The purpose of this survey study is to explore the beliefs of pre-licensure nursing programs nurse educators about the relevance to their nursing practice as educators of continuing professional development (CPD). For the purposes of this study, CPD refers to formal and informal, live and online professional development, including the instructional materials used in CPD.

You may receive no direct benefit from participating in this study, and there is no compensation for doing so. There is no cost to participation, with the exception of the time spent to complete the survey. The information from this study will benefit the individuals who plan and present CPD programs as well as the students with whom the educators work, the patients for whom those students provide care, and the community as a whole.

If you elect to participate in this study, you will complete an on-line survey which should take no more than five to 10 minutes of your time. Your responses to the survey items, or your decision not to participate in this study, will not affect your relationship with College of Saint Mary or any other entity. Your responses will be used for research purposes only and every effort will be made to maintain confidentiality for all respondents. No one at College of Saint Mary, including the investigator, will be able to associate your responses with your identity. The information from this study may be published in journals and presented at professional meetings.

Your completion and submission of the survey indicate your consent to participate in the study. You may withdraw at any time by exiting the online survey, but once the survey has been completed and submitted, the responses cannot be separated from others owing to there being no participant identifiers used. Please read *The Rights of Research Participants* information below. If you have questions about your rights as a research

participant, you may contact the Institutional Review Board at the College of Saint Mary, 7000 Mercy Road, Omaha, NE 68144; 402-399-2400.

Thank you for your consideration. If you have questions about the study or problems with the survey site, please contact the investigator.

If you are 19 years of age or older and agree to the above please proceed to (LINK TO SURVEY) and begin the survey.

Sincerely, Liz Rogan

Liz Rogan, EdD-c [MA, MSN], RN

Mobile Phone Number: 402-203-4613
Email Address: erogan29@csm.edu

THE RIGHTS OF RESEARCH PARTICIPANTS*

AS A RESEARCH PARTICIPANT AT COLLEGE OF SAINT MARY YOU HAVE THE RIGHT:

1. TO BE TOLD EVERYTHING YOU NEED TO KNOW ABOUT THE RESEARCH BEFORE YOU ARE ASKED TO DECIDE WHETHER OR NOT TO TAKE PART IN THE RESEARCH STUDY. The research will be explained to you in a way that assures you understand enough to decide whether or not to take part.

2. TO FREELY DECIDE WHETHER OR NOT TO TAKE PART IN THE RESEARCH.

3. TO DECIDE NOT TO BE IN THE RESEARCH, OR TO STOP PARTICIPATING IN THE RESEARCH AT ANY TIME. This will not affect your relationship with the investigator or College of Saint Mary.

4. TO ASK QUESTIONS ABOUT THE RESEARCH AT ANY TIME. The investigator will answer your questions honestly and completely.

5. TO KNOW THAT YOUR SAFETY AND WELFARE WILL ALWAYS COME FIRST. The investigator will display the highest possible degree of skill and care throughout this research. Any risks or discomforts will be minimized as much as possible.

6. TO PRIVACY AND CONFIDENTIALITY. The investigator will treat information about you carefully and will respect your privacy.

7. TO KEEP ALL THE LEGAL RIGHTS THAT YOU HAVE NOW. You are not giving up any of your legal rights by taking part in this research study.

8. TO BE TREATED WITH DIGNITY AND RESPECT AT ALL TIMES.

THE INSTITUTIONAL REVIEW BOARD IS RESPONSIBLE FOR ASSURING THAT YOUR RIGHTS AND WELFARE ARE PROTECTED. IF YOU HAVE ANY QUESTIONS ABOUT YOUR RIGHTS, CONTACT THE INSTITUTIONAL REVIEW BOARD CHAIR AT (402) 399-2400.

***ADAPTED FROM THE UNIVERSITY OF NEBRASKA MEDICAL CENTER, IRB WITH PERMISSION.**

Appendix L

Permission to Use Garreau (1981) Figure of 'Nine Nations of North America'

Find Someone My Site Options

Permission to use Figure in Dissertation

adriennegarreau@gmail.com on behalf of Adrien...

Wednesday, July 17, 2013 14:57

Liz

You have our permission to use the Nine Nations map referenced in your email. If your protocols require anything more formal than this email, let me know and I can send an official permissions letter on our letterhead.

Warmest

Adrienne Cook

Dear Dr. Garreau,

I am at present working on my dissertation in pursuit of my EdD and have elected to use the participants' geographic location as one of the demographic variables in one of the research questions.

The topic of the dissertation is an exploration of the manner in which nurse educators determine the relevance of information they are given or receive at continuing professional development events and I believe that there will be differences based on geographic location.

Long, long ago, when I was a traditional undergraduate student at Gustavus Adolphus College, I enjoyed reading The Nine Nations in a social geography course and will be using that model in my study. I am writing to request permission to use this figure (See below) to depict the geographic regions I plan to use.

Garreau's Nine 'Nations'

Thank you for your consideration. I appreciate your time.

Liz Rogan

Liz Rogan, MA, MSN, RN
Doctoral Candidate
EdD - Health Professions Education

"The ink of the scholar is more sacred than the blood of the martyr."
The Prophet Muhammad

Appendix N

Mean Scores for All Course Interest Survey Items by Demographic Category

Table N1

Mean Score for All Course Interest Survey Items by Gender

Gender	Male	Female
N	29	425
Item 2	3.97	4.02
Item 5	4.00	4.07
Item 8	4.44	4.70
Item 13	4.21	4.22
Item 20	3.72	3.90
Item 22	3.38	3.32
Item 23	3.83	3.80
Item 25	4.34	4.54
Item 28	3.72	3.99
Total Score	35.61	36.56
Mean Score	3.96	4.06

Table N2

Mean Score for All Course Interest Survey Items by Age

	26 to 30 Years	31 to 40 Years	41 to 50 Years	51 to 60 Years	61 to 70 Years	71+ Years
N	13	44	87	208	96	3
Item 2	3.96	4.09	3.98	3.99	4.16	4.50
Item 5	4.04	4.10	4.05	4.07	3.91	4.50
Item 8	4.50	4.55	4.59	4.67	4.80	4.50
Item 13	4.17	3.99	4.25	4.19	4.36	5.00
Item 20	3.67	3.81	3.92	3.87	4.01	4.50
Item 22	3.08	3.35	3.30	3.32	3.44	3.25
Item 23	3.79	3.75	3.80	3.80	3.89	4.50
Item 25	4.00	4.43	4.50	4.50	4.73	5.00
Item 28	3.83	3.98	3.76	3.99	4.14	4.75
Total Score	35.04	36.05	36.15	36.40	37.44	40.50
Mean Score	3.89	4.01	4.02	4.04	4.16	4.50

Table N3

Mean Score for All Course Interest Survey Items by Years of Nursing Experience

	< 1 to 5 Years	5.5 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
N	15	34	22	38	128	168	49
Item 2	3.80	3.86	3.74	3.78	3.94	4.07	4.12
Item 5	4.10	3.95	3.99	3.92	4.08	4.16	3.86
Item 8	4.38	4.51	4.49	4.57	4.66	4.74	4.85
Item 13	4.25	4.07	4.08	3.97	4.23	4.29	4.51
Item 20	3.50	3.66	3.79	3.74	3.82	4.03	4.01
Item 22	3.14	3.59	3.31	3.33	3.31	3.41	3.27
Item 23	3.45	3.73	3.86	3.69	3.90	3.87	3.90
Item 25	3.79	4.40	4.31	4.15	4.68	4.32	4.79
Item 28	3.83	3.83	3.89	3.75	3.94	4.06	4.02
Total Score	34.24	35.60	35.46	34.90	36.56	36.95	37.33
Mean Score	3.80	3.96	3.94	3.88	4.06	4.11	4.15

Table N4

Mean Score for All Course Interest Survey Items by Years of Teaching Experience

	< 1 Year	1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 25 Years	26 to 30 Years	31 to 40 Years	41+ Years
N	66	52	104	63	48	53	36	26	6
Item 2	4.19	3.98	3.81	4.15	4.07	4.04	4.06	3.90	3.88
Item 5	4.28	4.01	3.70	4.35	4.12	4.05	4.15	3.93	3.00
Item 8	4.19	4.51	4.37	4.92	4.57	4.87	4.82	4.89	4.63
Item 13	4.11	4.33	3.81	4.38	4.22	4.32	4.08	4.45	4.00
Item 20	3.64	3.83	3.56	4.03	3.82	4.04	3.86	3.88	3.88
Item 22	3.50	3.32	3.07	3.30	3.15	3.39	3.40	3.36	2.50
Item 23	3.81	3.99	3.23	3.92	3.67	3.79	3.77	3.93	3.38
Item 25	3.78	4.46	4.42	4.85	4.47	4.58	4.48	4.36	4.67
Item 28	3.81	4.02	3.61	4.16	3.91	4.10	4.18	3.71	3.75
Total Score	35.31	36.45	33.58	38.06	36.00	37.18	36.8	36.41	33.69
Mean Score	3.92	4.05	3.73	4.23	4.00	4.13	4.09	4.05	3.74

Table N5

Mean Score for All Course Interest Survey Items by State of Residence

State of Residence	N	Item 2	Item 5	Item 8	Item 13	Item 20	Item 22	Item 23	Item 25	Item 28	Total Score	Mean Score
Alabama	20	3.85	4.10	4.55	4.15	4.05	3.45	3.75	4.45	3.85	36.20	4.02
Arizona	6	3.67	4.17	5.00	4.33	3.83	3.17	3.33	4.83	3.83	36.16	4.02
Arkansas	4	4.00	4.00	3.50	4.25	4.00	3.25	4.00	3.75	4.25	35.00	3.89
California	24	3.96	4.00	4.75	4.54	4.04	3.04	3.92	4.50	3.92	36.67	4.07
Colorado	1	5.00	4.00	5.00	4.00	4.00	4.00	4.00	5.00	5.00	40.00	4.44
Connecticut	2	4.50	5.00	4.50	5.00	4.00	3.50	3.50	5.00	4.00	39.00	4.33
District of Columbia	1	4.00	5.00	5.00	4.00	5.00	4.00	3.00	5.00	5.00	40.00	4.44
Florida	8	4.13	4.38	4.88	4.25	4.25	3.50	4.38	4.75	4.25	38.77	4.31
Georgia	14	4.00	4.21	4.00	4.50	3.93	3.64	4.21	4.15	4.00	36.64	4.07
Idaho	3	4.33	5.00	5.00	4.67	4.00	3.33	4.00	5.00	4.67	40.00	4.44
Illinois	10	3.90	4.00	4.40	4.30	3.50	3.10	3.40	4.30	3.80	34.70	3.86
Indiana	14	4.14	4.29	4.86	4.07	3.86	3.36	3.71	4.64	4.29	37.22	4.14
Iowa	10	4.00	4.00	4.90	4.70	4.20	3.00	3.40	4.40	4.00	36.60	4.07
Kansas	13	4.31	4.08	4.77	4.69	4.08	3.38	4.38	4.62	4.15	38.46	4.27
Kentucky	6	4.17	4.00	4.50	3.83	3.67	3.50	3.50	4.50	3.83	35.50	3.94
Louisiana	4	3.75	3.75	4.75	4.25	3.25	3.25	3.50	4.15	3.50	34.15	3.79
Massachusetts	7	4.57	4.43	4.00	4.29	4.29	3.71	4.14	3.86	4.29	37.58	4.18
Michigan	17	4.00	4.24	4.88	4.00	3.94	3.47	3.71	4.59	3.94	36.77	4.09
Minnesota	11	4.00	4.55	4.91	4.18	3.91	3.55	3.91	4.45	4.18	37.64	4.18
Mississippi	9	4.00	3.56	4.44	4.00	3.44	2.89	3.89	4.44	4.00	34.66	3.85
Missouri	9	4.22	4.11	3.78	4.44	4.33	3.67	4.11	4.67	4.56	37.89	4.21
Montana	6	3.67	3.50	4.50	4.00	3.33	3.33	3.67	4.17	3.17	33.34	3.70
Nebraska	6	4.33	4.17	5.00	4.33	4.17	3.00	4.00	4.83	4.67	38.50	4.28
Nevada	5	3.60	3.80	4.80	4.60	3.40	3.20	3.60	4.00	3.60	34.60	3.84
New Hampshire	1	4.00	4.00	5.00	5.00	4.00	3.00	5.00	5.00	5.00	40.00	4.44
New Jersey	11	4.09	4.18	4.82	4.64	4.09	3.55	3.91	4.64	4.09	38.01	4.22
New Mexico	3	4.00	4.00	5.00	4.33	4.33	3.33	4.33	5.00	4.00	38.32	4.26
New York	28	4.14	3.89	4.79	4.11	3.79	3.32	3.75	4.89	4.18	36.86	4.10
North Carolina	7	4.14	4.00	4.71	4.00	3.86	3.00	3.43	4.71	3.71	35.56	3.95
North Dakota	4	4.00	3.75	4.75	4.25	3.75	3.25	4.00	4.13	4.25	36.13	4.01
Ohio	29	3.93	3.97	4.86	4.07	3.97	3.10	3.62	4.63	3.90	36.05	4.01
Oklahoma	18	3.89	4.11	4.56	3.89	3.61	3.22	3.56	3.83	4.00	34.67	3.85

State of Residence	N	Item 2	Item 5	Item 8	Item 13	Item 20	Item 22	Item 23	Item 25	Item 28	Total Score	Mean Score
Oregon	2	4.50	5.00	5.00	4.00	4.50	3.00	3.50	5.00	4.00	38.50	4.28
Pennsylvania	50	3.96	3.94	4.76	4.18	3.78	3.40	3.88	4.64	3.84	36.38	4.04
Rhode Island	1	4.00	4.00	4.00	4.00	4.00	3.00	4.00	4.00	4.00	35.00	3.89
South Carolina	8	3.75	4.00	4.50	4.25	3.75	3.50	4.13	4.88	4.00	36.76	4.08
South Dakota	4	4.25	4.00	5.00	4.25	4.00	4.00	3.00	4.75	4.25	37.50	4.17
Tennessee	13	4.00	4.15	4.38	4.00	3.92	3.46	3.92	4.62	3.92	36.37	4.04
Texas	20	4.25	4.20	4.65	4.55	4.15	3.40	3.95	4.60	4.15	37.90	4.21
Utah	7	3.86	3.57	4.57	3.71	3.57	3.14	3.00	4.57	3.43	33.42	3.71
Vermont	1	4.00	5.00	5.00	3.00	3.00	2.00	3.00	4.00	3.00	32.00	3.56
Virginia	4	4.25	3.75	4.50	4.50	4.25	3.25	4.25	4.00	4.00	36.75	4.08
Washington	11	3.91	4.00	4.55	4.18	3.91	3.45	4.00	4.91	3.55	36.46	4.05
West Virginia	7	3.86	4.29	4.86	4.43	3.86	3.57	3.71	4.14	4.00	36.72	4.08
Wisconsin	14	3.79	4.00	4.71	3.64	3.36	3.07	3.29	4.66	3.43	33.95	3.77
Wyoming	1	4.00	4.00	5.00	4.00	4.00	3.00	3.00	4.00	3.00	34.00	3.78

Table N6

Mean Score for All Course Interest Survey Items by Geographic Region

	The Breadbasket	Dixie	Ecotopia	The Empty Quarter	The Foundry	Mex-America	New England
N	113	81	13	23	135	53	12
Item 2	4.08	3.99	4.20	4.08	4.02	3.97	4.21
Item 5	4.10	4.09	4.50	3.98	4.04	4.09	4.49
Item 8	4.78	4.51	4.77	4.81	4.82	4.85	4.50
Item 13	4.25	4.19	4.09	4.16	4.20	4.44	4.26
Item 20	3.89	3.94	4.20	3.72	3.91	4.09	3.86
Item 22	3.33	3.40	3.23	3.33	3.37	3.24	3.04
Item 23	3.71	3.82	3.75	3.54	3.77	3.88	3.93
Item 25	4.46	4.54	4.85	4.46	4.68	4.73	4.37
Item 28	4.14	4.02	3.77	3.81	3.99	3.98	4.06
Total Score	36.74	36.50	37.36	35.89	36.80	37.27	36.72
Mean Score	4.08	4.06	4.15	3.99	4.09	4.14	4.08

Table N7

Mean Score for All Course Interest Survey Items by Type of Pre-Licensure Nursing Program

	Associate Degree	Baccalaureate Degree (Traditional or Accelerated)	Bridge Program (LPN/LVN to RN/BSN)	Diploma	LPN or LVN
N	185	200	12	28	29
Item 2	3.99	4.08	4.00	3.96	3.79
Item 5	4.07	4.11	3.92	3.89	3.93
Item 8	4.61	4.74	4.83	4.82	4.62
Item 13	4.24	4.24	4.42	4.18	3.97
Item 20	3.94	3.89	3.92	3.79	3.59
Item 22	3.39	3.31	3.00	3.32	3.17
Item 23	3.81	3.81	3.58	3.89	3.62
Item 25	4.49	4.58	4.58	4.64	4.31
Item 28	3.99	4.02	3.75	3.89	3.62
Total Score	36.53	36.78	36.00	36.38	34.62
Mean Score	4.06	4.09	4.00	4.04	3.85

Table N8

Mean Score for All Course Interest Survey Items by Geographic Area

	Urbanized Area (> 50,000 residents)	Urban Cluster (2,500 to 49,999 residents)	Rural (< 2,500 residents)
N	244	156	54
Item 2	3.98	4.09	3.94
Item 5	4.02	4.15	4.00
Item 8	4.70	4.66	4.65
Item 13	4.24	4.17	4.26
Item 20	3.86	3.89	3.96
Item 22	3.26	3.42	3.33
Item 23	3.72	3.88	3.89
Item 25	4.45	4.62	4.61
Item 28	3.94	4.01	3.96
Total Score	36.17	36.89	36.60
Mean Score	4.02	4.10	4.07

Table N9

Mean Score for All Course Interest Survey Items by Highest Academic Degree

	Associate Degree	Baccalaureate Degree	Master's Degree (Nursing or non-Nursing)	Doctoral Degree (Nursing or non-Nursing)
N	1	13	284	156
Item 2	3.00	4.08	4.03	3.99
Item 5	3.00	4.38	4.11	3.97
Item 8	5.00	4.85	4.65	4.73
Item 13	3.00	4.31	4.19	4.28
Item 20	2.00	4.00	3.90	3.85
Item 22	3.00	3.31	3.38	3.23
Item 23	2.00	3.85	3.86	3.69
Item 25	5.00	4.62	4.50	4.57
Item 28	2.00	4.08	4.00	3.91
Total Score	28.00	37.48	36.62	36.22
Mean Score	3.11	4.16	4.07	4.02

Table N10

Mean Score for All Course Interest Survey Items by Possession of Specialty Certification

	Yes	No
N	225	229
Item 2	4.08	3.96
Item 5	4.12	4.01
Item 8	4.72	4.64
Item 13	4.28	4.16
Item 20	3.94	3.83
Item 22	3.38	3.28
Item 23	3.87	3.72
Item 25	4.61	4.45
Item 28	4.03	3.91
Total Score	37.03	35.96
Mean Score	4.11	4.00

Appendix O

Mean Scores for All Instructional Materials Motivation Survey Items by Demographic Category

Table O1

Mean Score for All Instructional Materials Motivation Survey Items by Gender

	Male	Female
N	29	425
Item 6	3.66	3.90
Item 9	3.79	3.87
Item 10	4.10	4.18
Item 16	3.93	4.05
Item 18	3.69	3.73
Item 23	3.69	3.95
Item 26	4.17	4.40
Item 30	4.07	4.02
Item 33	3.97	3.99
Total Score	35.07	36.09
Mean Score	3.90	4.01

Table O2

Mean Score for All Instructional Materials Motivation Survey Items by Age

	26 to 30 Years	31 to 40 Years	41 to 50 Years	51 to 60 Years	61 to 70 Years	71+ Years
N	13	44	87	208	96	3
Item 6	3.65	3.87	3.84	3.85	4.04	4.00
Item 9	3.63	3.88	3.91	3.84	3.93	4.00
Item 10	3.77	4.10	4.19	4.19	4.30	4.25
Item 16	3.70	4.07	4.01	4.01	4.17	4.25
Item 18	3.65	3.56	3.69	3.69	3.85	3.75
Item 23	3.70	3.78	3.80	3.94	4.02	4.25
Item 26	4.18	4.34	4.36	4.38	4.50	4.75
Item 30	3.90	4.08	3.90	3.95	4.17	4.75
Item 33	3.70	4.10	3.99	3.91	4.20	4.75
Total Score	33.88	35.78	35.69	35.76	37.18	38.75
Mean Score	3.76	3.98	3.97	3.97	4.13	4.31

Table O3

Mean Score for All Instructional Materials Motivation Survey Items by Years of Nursing Experience

	< 1 to 5 Years	5.5 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
N	15	34	22	38	128	168	49
Item 6	4.16	3.93	3.75	3.75	3.79	3.90	3.89
Item 9	3.81	3.59	3.91	3.88	3.93	3.81	3.81
Item 10	4.22	4.04	4.30	3.98	4.21	4.17	4.20
Item 16	4.08	3.79	3.84	3.91	3.99	4.04	4.16
Item 18	3.68	3.74	3.76	3.51	3.72	3.70	3.97
Item 23	3.99	3.63	4.05	3.69	4.01	3.96	4.03
Item 26	3.57	4.61	4.34	3.99	4.42	4.49	4.49
Item 30	4.02	3.99	3.93	3.91	3.96	3.98	4.38
Item 33	3.91	3.82	4.04	3.90	3.92	3.98	4.17
Total Score	35.44	35.14	35.92	34.52	35.95	36.03	37.10
Mean Score	3.94	3.90	3.99	3.84	3.99	4.00	4.12

Table O4

Mean Score for All Instructional Materials Motivation Survey Items by Years of Teaching Experience

	< 1 Year	1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 25 Years	26 to 30 Years	31 to 40 Years	41+ Years
N	66	52	104	63	48	53	36	26	6
Item 6	4.03	3.88	3.61	3.91	3.78	4.06	4.08	4.03	3.88
Item 9	3.72	3.76	3.51	3.48	3.80	3.97	3.95	4.11	3.88
Item 10	4.69	4.25	3.94	4.33	4.25	4.24	4.05	4.26	4.25
Item 16	4.25	3.97	3.80	4.04	4.08	4.04	4.09	4.34	4.38
Item 18	3.86	3.77	3.57	3.71	3.57	3.80	3.82	3.64	4.13
Item 23	3.86	3.77	3.91	3.70	4.08	3.90	4.16	3.92	3.88
Item 26	3.92	4.44	4.10	4.50	4.11	4.42	4.34	4.68	4.75
Item 30	4.22	3.96	3.74	4.27	4.02	4.04	4.17	4.02	4.50
Item 33	4.22	4.07	3.78	4.23	4.07	4.04	3.95	3.97	4.00
Total Score	36.77	35.87	33.96	36.17	35.76	36.51	36.61	36.97	37.65
Mean Score	4.09	3.99	3.77	4.02	3.97	4.06	4.07	4.11	4.18

Table O5

Mean Score for All Instructional Materials Motivation Survey Items by State of Residence

State of Residence	N	Item 6	Item 9	Item 10	Item 16	Item 18	Item 23	Item 26	Item 30	Item 33	Total Score	Mean Score
Alabama	20	4.10	4.10	4.30	4.10	3.90	3.85	4.00	4.15	4.00	36.50	4.06
Arizona	6	4.00	3.83	3.67	4.00	3.67	4.17	3.83	3.83	3.67	34.67	3.85
Arkansas	4	3.75	4.25	4.25	4.25	4.00	3.75	4.00	3.75	3.50	35.50	3.94
California	24	4.04	4.00	4.50	4.17	3.75	3.92	4.50	4.25	4.00	37.13	4.13
Colorado	1	3.00	4.00	4.00	4.00	4.00	5.00	5.00	3.00	5.00	37.00	4.11
Connecticut	2	4.00	4.50	5.00	5.00	5.00	4.00	5.00	5.00	5.00	42.50	4.72
District of Columbia	1	4.00	5.00	4.00	4.00	5.00	5.00	5.00	4.00	4.00	40.00	4.44
Florida	8	3.38	4.13	4.63	4.38	4.00	4.50	4.75	4.25	4.63	38.65	4.29
Georgia	14	3.57	3.86	4.14	4.00	3.64	3.86	3.93	3.71	3.64	34.35	3.82
Idaho	3	4.00	3.33	4.67	4.33	4.00	3.67	4.67	4.67	5.00	38.34	4.26
Illinois	10	3.20	3.30	4.20	3.90	3.20	3.80	4.20	3.80	4.00	33.60	3.73
Indiana	14	4.00	3.79	4.14	4.07	3.71	4.07	4.79	4.14	4.07	36.78	4.09
Iowa	10	3.80	3.30	3.90	4.10	3.80	4.00	4.10	3.80	3.80	34.60	3.84
Kansas	13	4.00	3.92	4.23	4.08	4.00	3.92	4.46	3.92	4.08	36.61	4.07
Kentucky	6	4.00	4.00	4.00	4.00	3.83	3.67	4.50	3.83	3.67	35.50	3.94
Louisiana	4	4.00	3.75	3.75	3.50	3.75	4.00	4.50	3.75	3.75	34.75	3.86
Massachusetts	7	4.14	4.29	4.29	4.57	3.71	4.14	4.86	4.43	4.29	38.72	4.30
Michigan	17	4.06	4.12	4.35	4.06	3.88	4.18	4.41	4.12	4.00	37.18	4.13
Minnesota	11	4.18	4.00	4.18	4.00	3.91	4.45	4.45	4.36	4.36	37.89	4.21
Mississippi	9	3.89	3.89	4.11	4.00	3.33	3.89	4.58	4.00	4.00	35.69	3.97
Missouri	9	4.33	3.78	4.78	4.22	3.89	4.44	4.67	4.33	4.44	38.88	4.32
Montana	6	3.33	3.67	3.83	3.33	3.50	3.50	4.83	3.50	3.33	32.82	3.65
Nebraska	6	3.67	3.83	4.17	4.17	3.83	4.00	4.33	4.17	4.33	36.50	4.06
Nevada	5	4.40	4.40	4.00	4.40	4.20	3.60	4.00	4.20	3.80	37.00	4.11
New Hampshire	1	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	45.00	5.00
New Jersey	11	4.09	3.82	4.36	4.27	3.82	4.00	4.17	4.27	4.09	36.89	4.10
New Mexico	3	4.00	3.67	4.00	4.00	3.33	3.67	4.67	4.00	4.00	35.34	3.93
New York	28	3.79	4.00	4.32	4.00	3.75	4.00	4.75	4.00	3.93	36.54	4.06
North Carolina	7	3.71	3.71	3.71	3.71	3.86	3.57	4.57	3.57	4.00	34.41	3.82
North Dakota	4	4.25	3.75	3.75	4.25	3.00	3.75	4.00	3.75	3.75	34.25	3.81
Ohio	29	3.86	3.83	4.24	3.93	3.79	3.90	4.66	4.03	4.03	36.27	4.03
Oklahoma	18	4.00	3.67	4.17	4.11	3.72	3.72	4.17	4.06	4.00	35.62	3.96

State of Residence	N	Item 6	Item 9	Item 10	Item 16	Item 18	Item 23	Item 26	Item 30	Item 33	Total Score	Mean Score
Oregon	2	4.00	4.00	4.00	4.50	3.50	4.00	4.00	4.00	4.00	36.00	4.00
Pennsylvania	50	3.72	3.82	4.26	3.96	3.70	3.94	4.40	3.94	3.96	35.70	3.97
Rhode Island	1	4.00	3.00	4.00	4.00	3.00	4.00	5.00	3.00	3.00	33.00	3.67
South Carolina	8	4.00	3.88	4.00	4.00	3.38	3.88	4.50	3.88	4.00	35.52	3.95
South Dakota	4	4.25	3.75	3.75	4.00	3.50	3.50	4.50	4.25	3.75	35.25	3.92
Tennessee	13	3.85	4.00	4.23	3.92	3.85	4.00	4.38	3.85	4.00	36.08	4.01
Texas	20	4.10	4.00	4.15	4.25	3.65	4.15	4.65	4.25	4.25	37.45	4.16
Utah	7	3.43	3.43	3.29	3.57	3.43	3.29	3.86	3.57	3.29	31.16	3.46
Vermont	1	4.00	3.00	3.00	3.00	2.00	4.00	5.00	4.00	3.00	31.00	3.44
Virginia	4	4.00	3.75	4.50	4.50	4.00	3.75	4.50	4.25	4.50	37.75	4.19
Washington	11	3.64	3.45	4.00	3.82	3.36	3.64	4.36	4.00	3.73	34.00	3.78
West Virginia	7	4.14	4.00	4.14	4.29	3.71	3.86	4.14	4.00	3.86	36.14	4.02
Wisconsin	14	3.79	3.71	3.57	3.64	3.50	3.64	4.19	3.71	3.64	33.39	3.71
Wyoming	1	3.00	3.00	4.00	4.00	4.00	4.00	2.00	4.00	4.00	32.00	3.56

Table O6

Mean Score for All Instructional Materials Motivation Survey Items by Geographic Region

	The Breadbasket	Dixie	Ecotopia	The Empty Quarter	The Foundry	Mex-America	New England
N	113	105	13	23	135	53	12
Item 6	3.95	3.88	3.82	3.53	3.90	4.04	4.23
Item 9	3.71	4.02	3.73	3.64	3.92	3.88	3.96
Item 10	4.08	4.14	4.00	3.96	4.31	4.08	4.26
Item 16	4.05	4.05	4.16	3.94	4.04	4.10	4.31
Item 18	3.64	3.87	3.43	3.85	3.79	3.60	3.74
Item 23	3.94	3.97	3.82	3.84	4.00	3.98	4.23
Item 26	4.36	4.41	4.18	4.06	4.44	4.41	4.73
Item 30	4.03	3.92	4.00	3.82	4.07	4.08	4.29
Item 33	4.02	3.96	3.86	4.07	4.00	3.98	4.06
Total Score	35.78	36.22	35.00	34.71	36.47	36.15	37.81
Mean Score	3.98	4.02	3.89	3.86	4.05	4.02	4.20

Table O7

Mean Score for All Instructional Materials Motivation Survey Items by Type of Pre-Licensure Nursing Program

	Associate Degree	Baccalaureate Degree (Traditional or Accelerated)	Bridge Program (LPN/LVN to RN or BSN)	Diploma	LPN or LVN
N	185	200	12	28	29
Item 6	3.85	3.93	4.17	3.79	3.83
Item 9	3.89	3.86	3.67	3.86	3.83
Item 10	4.14	4.23	4.00	4.21	4.14
Item 16	4.02	4.09	4.08	4.00	3.83
Item 18	3.72	3.74	3.75	3.75	3.69
Item 23	3.92	3.95	4.17	3.93	3.83
Item 26	4.37	4.41	4.75	4.39	4.10
Item 30	4.01	4.05	4.25	4.00	3.86
Item 33	3.97	4.01	4.17	4.00	3.83
Total Score	35.89	36.27	37.01	35.93	34.94
Mean Score	3.99	4.03	4.11	3.99	3.88

Table O8

Mean Score for All Instructional Materials Motivation Survey Items by Geographic Area

	Urbanized Area (> 50,000 residents)	Urban Cluster (2,500 to 49,999 residents)	Rural (< 2,500 residents)
N	244	156	54
Item 6	3.90	3.90	3.80
Item 9	3.83	3.95	3.74
Item 10	4.10	4.29	4.20
Item 16	4.02	4.06	4.07
Item 18	3.68	3.81	3.69
Item 23	3.93	3.97	3.87
Item 26	4.32	4.48	4.41
Item 30	3.99	4.08	3.96
Item 33	3.95	4.02	4.04
Total Score	35.72	36.56	35.78
Mean Score	3.97	4.06	3.98

Table O9

Mean Score for All Instructional Materials Motivation Survey Items by Highest Academic Degree

	Associate Degree	Baccalaureate Degree	Master's Degree (Nursing or non-Nursing)	Doctoral Degree (Nursing or non-Nursing)
N	1	13	284	156
Item 6	3.00	3.85	3.88	3.92
Item 9	4.00	3.69	3.88	3.85
Item 10	3.00	4.38	4.18	4.17
Item 16	3.00	4.00	4.05	4.04
Item 18	2.00	3.54	3.77	3.67
Item 23	2.00	4.15	3.94	3.91
Item 26	3.00	4.38	4.39	4.38
Item 30	3.00	4.23	4.02	4.01
Item 33	3.00	4.08	3.99	3.98
Total Score	26.00	36.30	36.10	35.93
Mean Score	2.89	4.03	4.01	3.99

Table O10

Mean Score for All Instructional Materials Motivation Survey Items by Possession of Specialty Certification

	Yes	No
N	225	229
Item 6	3.95	3.83
Item 9	3.92	3.81
Item 10	4.23	4.13
Item 16	4.08	4.00
Item 18	3.80	3.66
Item 23	4.00	3.87
Item 26	4.37	4.39
Item 30	4.03	4.01
Item 33	4.01	3.97
Total Score	36.39	35.67
Mean Score	4.04	3.96

Appendix P

Additional Comments related to the Course Interest Survey Section of the Online Survey

All comments have been replicated verbatim with no corrections for grammar, spelling, or punctuation.

- Your survey switches from positive to negative. It's a little confusing
- regarding active participation, I think it is dependant upon the type of presentation, unless you mean active participation is active listening.
- I have learned that, after 20 years of teaching or 34 years of nursing, it is ok that I don't come away from CPD opportunities with a "I learned so much" or "that blew me away" or "I have never heard of these ideas". I realize if I am reading and studying as I should between CPD experiences, it is a good sign I know most of what being presented. It is enough that I always learn something- and it is good to add the "nugget" of information to my knowledge base.
- These are tough questions because some CPD's are excellent and some not so much. Very dependent on the presenter. Some excellent and some are not good.
- When I attend or do Continuing Education programs that are in my field of education and I can use them, they are very helpful.
- When I attend a CPD program and it turns out that I already know what they are talking about, rather than look at it as a waste of time I look at it from the perspective as confirmation that what I know is still current and that I'm still on the right track.

- I select and attend programs that will meet my professional goals. Programs that I am not interested in or will not enrich me professionally in some way I try to avoid.
- I prefer nursing related professional development activities. My employer requires teaching-related activities that are generic to apply to all teachers. These generally aren't as interesting to me.
- CPD can be inspiring and stimulating. Creativity in teaching is strengthened through application of new ideas.
- Since many CPD programs are done by for-profit entities, there are times when the brochure is misleading and I have been to offerings that amount to an infomercial. That is deceptive and frustrates me.
- Much depends on the quality of the program or presentation. A knowledgeable presenter who engages the class is always preferred to someone reading power-points.
- Most of the nursing related CPD programs do not cover the education portion and tend to concentrate on nursing specifically. I have found that most of the faculty here have plenty of knowledge but little to no idea how to design and deliver effective education. More nursing knowledge is not the issue, lack of knowledge about the educational process and theory is. Therefore, I find most nursing content related CPD to be a waste of my time and I do it for the benefit of accreditation only. If I want to know something I can really use, I look for education related learning activities and CPD opportunities outside of nursing.

- The above are answered from the perspective of attending CPD, not as a presenter of CPD
- CDE programs and presentations are important. I like live in-person sessions better than live, interactive webinars...another area of study to explore!
- Professional Development is an important aspect of gaining further knowledge in your field of specialty. To not take advantage of offerings for PD is a disservice to the people one serves.
- I love to learn and can benefit from anything which provokes thoughtful reflection and looking toward future goals. I choose my programs and presentations carefully. I try to find out about presenters etc. to make an informed choice. Expense is a concern because I have to pay for myself. My institution has little money to support career development. For example, they pay a stipend of $2500. per year for an earned doctorate and no support for course work when you are taking courses, etc.
- I choose my CPD very carefully and there are vendors I will no longer use
- Because of my reading and consistently updating, I often know the info presented. I am going to CPD programs to earn enough CEUs to maintain my certification.
- I choose continuing professional educational opportunities which are interesting to me and which relate to my profession or speciality.
- I beleive that ongoing education as well as national certifications are a key elements in maintaining our knowledge base to be current and evidence based. i am proud to hold certifications in all specialy areas in which I have worked (CCRN, CPHQ, and CEN)

- CPD programs or presentations are most effective and have the most value when I am able to choose content instead of it being assigned to me.
- I usually select CPD programs that are of particular interest in what I am currently doing so I do find them helpful.
- My answers to the above statements would vary based on the specific CPD program being evaluated. My responses as noted above are based on an "average" of the CPD programs I have attended.
- I have not seen a question related to on-line or independent study versus live presentations. I like both and each has its place. Live presentation have the added advantage of networking with others present.
- The majority of CPD programs are related to clinical expertise topics, and very few are offered to improve my educator development.
- Most of the time I choose my own programs to attend. That's why they match my goals.
- Generally, I think the attendee gets as much out of the CPD programs as he or she puts into it. I know if I'm paying money to attend a program, I try to choose carefully and pay attention.
- CPD is important, those who feel otherwise are misguided. It does need to be made interesting though to keep the attention of the overwhelmed and short attention of us seasoned multitaskers. Grab me and make me want to listen, not because I have to.
- I love to learn and keep up with my career. I am involved also in working at the bedside several days a month.

- Missouri does not have any continuing education requirements to maintain nursing licensure. However, to maintain practice competence, continuing education is essential. For most professionals I know, it is also a personally driven goal.
- The professional benefits of CPD programs are largely related to content of the program.
- The concept of CPD is very broad. My comments may be different if this were presented in more focused categories.
- Continuing Professional Development is very important to me as I consider myself a life-long learner.
- Nurses have a responsibility to select pertinent educational opportunities.
- I am currently in my 2nd year of doctoral school, so the value of CPD is of utmost importance to me. However, it is difficult to attend faculty development conferences with current faculty workloads and budgetary constraints (even for those faculty not in school) from the university setting that are trickled down from the state level. For our dean to approve travel to faculty development conferences or online webinars that require registration fees and such, we must have an approved poster presentation or be a program presenter for the event. Yet, we are required to have some kind of faculty development opportunity noted our yearly evaluations.
- I am working on my PhD as well so have not been attending CPD recently. While not in school, I attended at least one major conference each year, alternating years between education programming and nursing programming.

- I feel that CPD programs should address the audience as far as level of content.
- CPD is vital to advance the science of nursing education.
- It is very much dependent on the program as some are well developed and thought out or relevant and others are not.
- Mandatory programs quite often relate the least to what my needs and goals are.
- It is important to mention that some CPD programs are more beneficial than others. Additionally, there are times I find that content isn't as relevant as I thought it would be. However, I am usually able to take something away that impacts my teaching/nursing practice.
- It is confusing as to which area you are asking the questions for CPD as an educator or CPD as a nurse or both. Because I attend more CPD as a nurse than I do as an educator. Also are you only talking about programs and presentations I attend or that I present when you are referring to setting high standards and when accomplishing my goals.
- much depends on the quality of the individual CPD program
- In order to make mandatory CPD truly worthwhile, the participant must attend programs in their primary practice focus rather than the geographic location/environment of the program. What agency is going to oversee this? What we see many time in CPD is nurses attending programs because they are in warm climates when the participant is from a snowy/cold climate, etc.
- None
- I often find new topics that are presented at CPD programs and a new twist to content I already know. I enjoy the ability to network.

- Yes, they are very important to me. Access is a key factor; more and more time constraints prevent my attending most available inservices.
- Questions are too global or unclear. Some CPD programs I choose to participate in. Others I am mandated to attend. My feelings between the two will vary significantly. Also, my responses vary based on the program. For example, some presenters may make their subject matter seem improtant where others don't. Also, some CPD program attendees actively participate, while others do not. These questions are not equally or easily generalizable.
- some are relivant and good, some are not
- I have none.
- Some of these questions relate to me as an attendee, but others seem to relate to when I am the presenter. This problem makes it very difficult to know how to answer the questions. So here is what my opinion is: I have to have CEU credits to relicense, so it is often true that I attend just to get those credits rather than to fulfill my own learning needs. Most of my own learning needs are filled through extensive library work, which fortunately is now available all online. I also attend a lot of programs that have no CEUs because they are not in nursing, but are things I need to know for my teaching or research. When I give presentations on my area of expertise, I work very hard to make them relevant and useful to attendees and place a high value on the quality I provide out of respect for my audience.
- The more a Continuing Professional Development presentation matches my expectations and goals, the more satisfied I am!! It engages me and excites me!

- My presentations have been in our nursing department. I mostly utilize online personal and professional development programs, university offerings, and nearby city development offerings with attending few major travel or regional offerings in the last 5 years.
- our program development programs are specific to our needs as a faculty
- At our college we can earn Professional Development Units (PDU's) for inservices, etc. or even related work experience. These can move us horizontally along the pay scale. So besides the useful knowledge, we can increase our salary. Our Faculty Teaching and Learning Center (FTLC) hold some inservices or workshops that also pay a stipend besides being eligible for PDU's. I great incentive as well.
- Strongly believe in life long learning and CPD--it's what keeps life interesting.
- I have encouraged my peers at the college to participate in some of the programs I have attended.
- CPDs are usually no big deal to complete, and easy to pass to get CEUs. I take real classes when I want to learn things.
- I chose certifications which related to the unit in which I worked (after encouragement from other peers or managers or educators.) Once I found out about the PCCN certification, I thought it was a good idea and very relevant to what I did. It helped me become a better nurse. Starting that process was also the beginning of trying to advance my education- I went on to obtain a masters degree in an ACNP/CCNS program. It was necessary that we had certification prior to matriculating or within the first year.

- "To accomplish my goals, it is important that I do well in CPD programs and presentations"-- are you referring to me as a participant or presenter? I assumed participant.
- It is somewhat difficult to answer some of your questions as the answers are program or presentation dependent. For example question #6 depending on the program could be answered as NOT TRUE and another program with a more dynamtic presenter the answer could be VERY TRUE. I have given you my answers based on an overall perspective. Wish you all the best.
- Because I am certified in a specialty area, I am required to take more than the standard amount of CPDs required by certifying agency in order to maintain my certification and all of the classes must center around a certain topic/specialty. Because of this, I must take the activities seriously, and they are of interest to me.
- For nurses to current to meet the needs of our diverse society, we need to continue with professional development that is related to their field of practice. Thereby, i agree CPD is benificial.
- I am in the process of obtaining my MSN in nursing education online and find the content reflects what I want my students to know about the future of nursing and how important it is to continue with their education and not to wait till they are my age to pursue higher education.
- I find CPD more beneficial if I can select which to attend as opposed to my employer mandating certain CPD. Many of the topics presented in mandated CPD are not applicable to my role as a nursing educator therefore I do not glean much, if any, information I can use in my role.

- i select DPD according to my goals and interests. I am a globel thinker and can relate most information obtained to some facet of my professional development. My goal is to obtain the best value for my money. I do not skip sessions and find interest in areas outside my specalty. I want to stay abreast of nursing trends and opportunities.
- Thanks.
- If the programs are of my choosing, they are more valuable to me. If it is institutional lead, there tends to be less value (This is sad!).
- At this point in time I am leading more CPD programs rather than participating. i find many programs too basic but realize this is because of my advanced expertise & avid scholarly persuites
- My participation in CPD programs is driven by: licensure requirements, annual raise requirements, and certification requirements.
- There has not yet been much availability or opportunity to participate in CPD programs, but those I have attended have been helpful.

Appendix Q

Additional Comments related to the Instructional Materials Motivation Survey Section of the Online Survey

All comments have been replicated verbatim with no corrections for grammar, spelling, or punctuation.

- These questions and response choices are somewhat vague and I believe that it is very much the personal and deliberate choices of the nurse educator as to the degree of benefit achieved from CPD sessions. I'm selective about the sessions I choose and the selection of the concepts or information that I select to use, investigate further and retain. There are sessions that I will not attend at a conference as I can see from the description or the level of presenter that the information is unlikely to add to what I know - or is not applicable to the role I hold or the expectations I have for myself for professional development.
- The longer I teach, the less interest they hold for me. In the beginning all were useful.
- These are very odd questions considering the vast variety of CPD offerings. If this was directed at something more specific the questions would be more meaningful.
- In this survey it is hard to answer these questions for all the CPD programs I have attended over the years. some of good and some not so good. These questions are best answered for a particular program.

- After 30 years of practice both at bedside and classroom, there is rarely a CPD that is entirely new information. I attend them for updates. When I teach a CPD I consider my audience and try to format the learning based on life learning.
- Some of the above questions on this page are so generic that they are difficult to answer. I attend many types of continuing professional programs over the course of a year to stay clinically current and maintain my clinical certification, so to ask about stories and pictures is a question difficulty to answer. I am not sure what you are getting at and how useful the answer will be. I read many articles that have CEUs attached that may have case studies attached or a derm article that may have a picture or group of photos.....
- I feel the need for ongoing training in teaching skills.
- I mostly attend CPD programs at our yearly convention.
- I believe that you can always learn a new perspective, even if you are familiar with the content.
- Most of CPD I attend are selected by me, so therefore they are automatically something that interested me or an area I want to improve.
- I choose programs carefully and usually get what I pay for.
- All the questions in this study are broad and general ... but CPD courses are very content specific. I decided to answer the questions in the study based on "the majority" of the CPD courses I have taken ... but I admit, there have been some CPD courses that were a waste of my time. But there is no way to include that in any of these questions. Since I get to chose the topics I want to take for CPD,

many of the questions in this study are not very relevant since I would only chose topics I want to learn more about.

- Because I am able to select CPD programs that I choose based upon my interests, I am able to avoid ones that aren't relevant to my practice or in which I am not interested. It is difficult to broadly answer your questions related to specific presentations and their materials, as each one differs significantly depending upon who is presenting and what their pedagogical approach might be.
- no additional comments.
- The topic of CPD will largely determine the application - it may be personal growth, professional knowledge or content to inform or enhance my teaching.
- Selecting programs that are relevant to one's needs is important. Those individuals who merely attend to fulfil a requirement are missing valuable information and "growth" experiences.
- I choose my programs wisely and my expectations are that I will take away 2-3 things that I can put into practice immediately. That is a successful CPD to me.
- I am a life long learner!
- Many of these questions are very hard to answer since I have been to a variety of CPD programs. Some of which were very relevant for me and others that had little to no relevance.
- Most of the programs relate directly to my needs.
- It depends upon a specialist fic program/ presentation
- I do not understand the intent behind these questions at all. The questions seem rather frivilous, no less not able to be generalizable once again.

- I have none
- Again, some CPD programs are fabulous and about them, I would answer Very True to all the questions, but the ones I do just to fulfill relicensure requirements are often a waste of my time.
- I choose CPD programs carefully considering topics covered, personal interests and learning needs, current issues in nursing education. I am frustrated that there are so few face-to-face programs in the summers when faculty have time to attend. Although I enjoy and learn well from online programs, the socialization and networking that occurs at conferences and other face-to-face programs in invaluable!
- I have attended may CPD programs for nursing faculty on curriculum development, exam item writing, NLN ACES, etc.
- The attitude one has toward a CPD program has much to do with the program one chooses to attend and the purpose for attending the program.
- CPDs are chosen for newbies, I'm not a newbie, so if I want to advance, I will take a class; I'm in the process of earning my doctoral degree, so there is my learning. I do CPDs for the CEUs and they are easy.
- When I am thinking of CPD, I am not thinking of every employers mandatory OSHA and HIPPA training. These are very tedious and painful, and I definitely do know everything. I am speaking about other classes or certifications on the side.

- I have been able to revamp some of the content with new power point and quiz and presently searching for an economical format that will replace the ancient VHS on IV's and IV fluids.
- I try to choose programs that are of specific interest to me. In areas that I feel that I need updated/additonal information

Appendix R

Correlations between Demographic Variables and Course Interest Survey Items

Table R1

		Item 2	Item 5	Item 8	Item 20	Item 22	Item 25	Item 28	Total & Mean Scores
Respondent's Age	Pearson Correlation	.037	.015	.126**	.062	.011	.091	.087	.098*
	Sig. (2-tailed)	.439	.759	.007	.186	.816	.053	.065	.038
	N	451	451	451	451	451	451	451	451
State of Residence	Pearson Correlation	-.015	-.079	.045	-.092	-.003	.029	-.078	-.060
	Sig. (2-tailed)	.757	.094	.334	.050	.956	.535	.098	.203
	N	454	454	454	454	454	454	454	454
Program Type	Pearson Correlation	.098*	.069	.048	.074	-.009	.061	.077	.080
	Sig. (2-tailed)	.037	.141	.309	.117	.847	.191	.099	.087
	N	454	454	454	454	454	454	454	454
Geographic Area	Pearson Correlation	.019	.034	-.032	.040	.061	.083	.022	.052
	Sig. (2-tailed)	.689	.465	.497	.401	.193	.078	.639	.270
	N	454	454	454	454	454	454	454	454
Faculty Status	Pearson Correlation	.054	.050	.049	.078	.014	.029	-.002	.050
	Sig. (2-tailed)	.255	.285	.299	.095	.764	.540	.960	.285
	N	454	454	454	454	454	454	454	454
No. Years Nursing Experience	Pearson Correlation	.029	-.035	.157**	.043	-.031	.136**	.077	.092
	Sig. (2-tailed)	.540	.458	.001	.356	.510	.004	.103	.051
	N	454	454	454	454	454	454	454	454
No. Years Nurse Educator	Pearson Correlation	.000	-.091	.130**	.022	-.035	.044	.057	.030
	Sig. (2-tailed)	.999	.052	.006	.641	.451	.348	.222	.524
	N	454	454	454	454	454	454	454	454

		Item 2	Item 5	Item 8	Item 20	Item 22	Item 25	Item 28	Total & Mean Scores
Highest Academic Degree	Pearson Correlation	-.014	-.107*	.027	-.016	-.070	.021	-.031	-.031
	Sig. (2-tailed)	.773	.023	.566	.736	.138	.649	.508	.515
	N	454	454	454	454	454	454	454	454
Specialty Certification	Pearson Correlation	-.090	-.084	-.057	-.070	-.062	-.093*	-.065	-.111*
	Sig. (2-tailed)	.055	.072	.224	.137	.186	.049	.169	.018
	N	454	454	454	454	454	454	454	454

Note. N=451 for Respondent's Age because 3 respondents declined to answer.

Appendix S

Correlations between Demographic Variables and Instructional Materials Motivation Survey Items

Table S1

		Item 6	Item 9	Item 16	Item 18	Item 23	Item 26	Item 30	Item 33	Total & Mean Scores
Respondent's Age	Pearson Correlation	.062	.003	.065	.036	.117*	.044	.049	.028	.069
	Sig. (2-tailed)	.192	.943	.166	.441	.013	.352	.295	.555	.143
	N	451	451	451	451	451	451	451	451	451
State of Residence	Pearson Correlation	-.026	-.079	-.087	-.098*	-.079	.028	-.066	-.053	-.088
	Sig. (2-tailed)	.587	.091	.063	.037	.093	.553	.157	.260	.061
	N	454	454	454	454	454	454	454	454	454
Program Type	Pearson Correlation	.067	-.012	.088	.012	.052	.079	.075	.062	.070
	Sig. (2-tailed)	.155	.794	.061	.801	.267	.091	.111	.189	.137
	N	454	454	454	454	454	454	454	454	454
Geographic Area	Pearson Correlation	-.030	.003	.030	.033	-.007	.059	.018	.046	.038
	Sig. (2-tailed)	.520	.957	.528	.483	.885	.206	.708	.328	.415
	N	454	454	454	454	454	454	454	454	454
Faculty Status	Pearson Correlation	-.034	.025	-.007	.000	.023	.044	.014	-.009	.013
	Sig. (2-tailed)	.475	.588	.879	.992	.628	.354	.759	.848	.777
	N	454	454	454	454	454	454	454	454	454

		Item 6	Item 9	Item 16	Item 18	Item 23	Item 26	Item 30	Item 33	Total & Mean Scores
No. Years Nursing Experience	Pearson Correlation	.028	-.038	.049	.013	.084	.101*	.057	.006	.054
	Sig. (2-tailed)	.549	.420	.293	.777	.073	.032	.222	.892	.254
	N	454	454	454	454	454	454	454	454	454
No. Years Nurse Educator	Pearson Correlation	.093*	.037	.112*	.037	.036	.044	.062	.041	.071
	Sig. (2-tailed)	.048	.437	.017	.434	.441	.345	.190	.384	.133
	N	454	454	454	454	454	454	454	454	454
Highest Academic Degree	Pearson Correlation	.037	-.002	.014	-.018	-.015	.013	-.011	-.001	.001
	Sig. (2-tailed)	.436	.961	.762	.695	.746	.785	.816	.987	.978
	N	454	454	454	454	454	454	454	454	454
Specialty Certification	Pearson Correlation	-.082	-.069	-.057	-.093*	-.084	.010	-.010	-.030	-.075
	Sig. (2-tailed)	.082	.145	.223	.048	.074	.826	.832	.520	.111
	N	454	454	454	454	454	454	454	454	454

Note. N=451 for Respondent's Age because 3 respondents declined to answer.

Appendix T

Full List of Correlations between the Respondents' Age and Course Interest Survey Items

Table T1

		Less than 30 Years	31 to 40 Years	41 to 50 Years	51 to 60 Years	61 to 70 Years	70+ Years
	N	13	57	87	352	96	3
CIS_2	Pearson Correlation	.318	-.068	-.063	-.006	.026	1.000**
	Sig. (2-tailed)	.290	.616	.564	.914	.798	.000
CIS_5	Pearson Correlation	.170	-.091	-.162	.031	-.327**	1.000**
	Sig. (2-tailed)	.579	.502	.134	.563	.001	.000
CIS_8R	Pearson Correlation	.210	-.001	-.031	.087	-.112	.[b]
	Sig. (2-tailed)	.491	.992	.775	.102	.275	.
CIS_20	Pearson Correlation	.183	-.007	-.035	.031	.009	1.000**
	Sig. (2-tailed)	.550	.960	.749	.563	.927	.000
CIS_22	Pearson Correlation	.020	.011	-.156	-.017	-.063	.866
	Sig. (2-tailed)	.948	.932	.148	.754	.540	.333
CIS_25R	Pearson Correlation	.407	.023	.058	.041	.025	.[b]
	Sig. (2-tailed)	.167	.864	.594	.446	.808	.
CIS_28	Pearson Correlation	.011	.063	.010	.054	.032	.500
	Sig. (2-tailed)	.971	.640	.929	.314	.756	.667
Total Score CIS	Pearson Correlation	.109	-.036	-.113	.057	-.056	.961
	Sig. (2-tailed)	.723	.790	.296	.289	.588	.179

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix U

Full List of Correlations between the Respondents' Age and Instructional Materials Motivation Survey Items

Table U1

		Less than 30 Years	31 to 40 Years	41 to 50 Years	51 to 60 Years	61 to 70 Years	70+ Years
	N	13	57	87	352	96	3
Item 6	Pearson Correlation	.249	.000	.028	.025	-.056	1.000**
	Sig. (2-tailed)	.413	.998	.795	.644	.588	.000
Item 9	Pearson Correlation	.439	.041	-.185	-.038	-.021	1.000**
	Sig. (2-tailed)	.133	.763	.086	.481	.840	.000
Item 16	Pearson Correlation	.510	.058	-.085	.029	.061	.866
	Sig. (2-tailed)	.075	.668	.434	.581	.553	.333
Item 18	Pearson Correlation	.363	-.127	-.026	-.027	.041	.945
	Sig. (2-tailed)	.223	.348	.809	.609	.692	.212
Item 23	Pearson Correlation	.444	-.080	.001	.080	-.110	.866
	Sig. (2-tailed)	.128	.553	.994	.133	.288	.333
Item 26	Pearson Correlation	-.206	-.123	.056	.034	-.168	.500
	Sig. (2-tailed)	.499	.361	.603	.521	.102	.667
Item 30	Pearson Correlation	.312	-.026	.006	-.038	.142	.500
	Sig. (2-tailed)	.299	.847	.957	.482	.167	.667
Item 33	Pearson Correlation	.365	.040	-.100	-.052	.003	.500
	Sig. (2-tailed)	.220	.765	.355	.332	.977	.667
	Sig. (2-tailed)	.213	.886	.652	.868	.364	.044

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Appendix V

Full List of Correlations between the Respondents' Years of Nursing Experience and Course Interest Survey Items

Table V1

		1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
	N	10	34	22	38	237	168	49
Item 2	Pearson Correlation	.434	.215	.150	-.039	-.041	-.097	-.105
	Sig. (2-tailed)	.211	.221	.504	.818	.527	.211	.474
Item 5	Pearson Correlation	.390	.231	.125	.220	-.101	-.092	-.414**
	Sig. (2-tailed)	.265	.189	.581	.184	.123	.235	.003
Item 8	Pearson Correlation	.019	.111	.010	.187	.046	.122	-.014
	Sig. (2-tailed)	.958	.530	.964	.262	.483	.115	.923
Item 20	Pearson Correlation	-.427	.238	.135	-.130	.033	-.068	-.080
	Sig. (2-tailed)	.218	.176	.548	.435	.611	.380	.586
Item 22	Pearson Correlation	-.406	.184	.031	.048	-.106	.074	-.206
	Sig. (2-tailed)	.245	.299	.890	.773	.102	.342	.156
Item 25	Pearson Correlation	.048	.187	.220	.217	.182**	.101	.093
	Sig. (2-tailed)	.894	.289	.325	.191	.005	.192	.524
Item 28	Pearson Correlation	-.327	.268	.161	.059	.033	-.055	-.222
	Sig. (2-tailed)	.357	.125	.475	.724	.611	.483	.126

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix W

Full List of Correlations between the Respondents' Years of Nursing Experience and Instructional Materials Motivation Survey Items

Table W1

		1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
	N	10	34	22	38	237	168	49
Item 6	Pearson Correlation	-.335	.118	-.136	.032	-.042	-.067	-.550**
	Sig. (2-tailed)	.345	.508	.545	.851	.519	.390	.000
Item 9	Pearson Correlation	-.129	.197	-.195	.134	.003	-.037	-.369**
	Sig. (2-tailed)	.723	.265	.385	.423	.965	.636	.009
Item 16	Pearson Correlation	-.478	.269	.187	.180	-.027	.043	-.172
	Sig. (2-tailed)	.162	.124	.405	.281	.679	.580	.238
Item 18	Pearson Correlation	-.634*	.126	-.086	.078	.024	-.037	-.341*
	Sig. (2-tailed)	.049	.477	.702	.640	.713	.636	.017
Item 23	Pearson Correlation	-.511	.300	-.440*	.229	.049	-.011	-.474**
	Sig. (2-tailed)	.131	.085	.040	.167	.450	.884	.001
Item 26	Pearson Correlation	.599	-.073	-.076	.186	.092	.004	.176
	Sig. (2-tailed)	.067	.681	.736	.264	.156	.958	.225
Item 30	Pearson Correlation	-.321	.186	.176	.075	-.041	-.026	-.252
	Sig. (2-tailed)	.366	.293	.433	.653	.527	.742	.080
Item 33	Pearson Correlation	-.575	.188	.014	.134	-.020	-.049	-.070
	Sig. (2-tailed)	.082	.287	.950	.423	.763	.530	.635

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix X

Full List of Correlations between the Respondents' Years of Experience as Nurse Educator and Course Interest Survey Items

Table X1

		Less than 1 Year	1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
	N	13	104	104	63	48	89	26	6
Item 2	Pearson Correlation	-.061	.098	-.046	.017	-.182	.072	-.041	-.097
	Sig. (2-tailed)	.843	.321	.641	.898	.216	.501	.841	.855
Item 5	Pearson Correlation	.199	.140	.025	.059	-.131	-.023	.112	-.746
	Sig. (2-tailed)	.514	.156	.798	.647	.373	.829	.586	.088
Item 8	Pearson Correlation	-.175	.171	-.028	-.006	-.158	-.089	.023	-.739
	Sig. (2-tailed)	.568	.082	.777	.965	.283	.406	.912	.094
Item 20	Pearson Correlation	-.171	.090	-.041	.052	.242	-.144	.127	-.571
	Sig. (2-tailed)	.575	.366	.680	.688	.098	.179	.538	.237
Item 22	Pearson Correlation	.144	-.025	-.070	.287*	.132	.010	.169	-.831*
	Sig. (2-tailed)	.639	.804	.478	.022	.369	.926	.409	.040
Item 25	Pearson Correlation	-.202	.205*	-.008	.026	.249	.009	-.090	-.739
	Sig. (2-tailed)	.507	.037	.935	.841	.088	.937	.661	.094
Item 28	Pearson Correlation	.010	.088	-.069	.425**	.287*	.057	-.059	-.713
	Sig. (2-tailed)	.974	.375	.483	.001	.048	.599	.776	.112

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix Y

Full List of Correlations between the Respondents' Years of Experience as Nurse Educator and Instructional Materials Motivation Survey Items

Table Y1

		Less than 1 Year	1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
	N	13	104	104	63	48	89	26	6
IMMS_6	Pearson Correlation	.384	.163	-.054	.217	.202	-.024	.023	-.657
	Sig. (2-tailed)	.195	.099	.586	.088	.169	.822	.911	.156
IMMS_9	Pearson Correlation	.174	.129	-.004	.033	.202	-.019	-.034	-.140
	Sig. (2-tailed)	.571	.193	.966	.800	.169	.862	.868	.792
IMMS_16	Pearson Correlation	.141	.041	-.006	.201	-.093	-.053	-.051	-.326
	Sig. (2-tailed)	.645	.683	.955	.114	.528	.622	.805	.528
IMMS_18	Pearson Correlation	.460	.139	.095	.083	.053	.128	.014	.082
	Sig. (2-tailed)	.114	.160	.335	.519	.718	.233	.945	.878
IMMS_23	Pearson Correlation	.106	-.032	-.004	.167	.167	.010	.133	-.261
	Sig. (2-tailed)	.730	.744	.965	.192	.258	.926	.517	.617
IMMS_26R	Pearson Correlation	-.280	-.025	.035	.013	.088	.022	.000	.000
	Sig. (2-tailed)	.354	.798	.725	.917	.552	.841	1.000	1.000
IMMS-30	Pearson Correlation	.368	.073	.113	.119	-.078	.109	.156	.000
	Sig. (2-tailed)	.216	.462	.252	.351	.598	.310	.446	1.000

		Less than 1 Year	1 to 5 Years	6 to 10 Years	11 to 15 Years	16 to 20 Years	21 to 30 Years	31 to 40 Years	41 to 50 Years
	N	13	104	104	63	48	89	26	6
IMMS_33	Pearson Correlation	.260	.043	.082	.101	-.008	.049	.078	.000
	Sig. (2-tailed)	.390	.668	.407	.430	.957	.649	.705	1.000
Total Score IMMS	Pearson Correlation	.315	.085	-.046	.150	.020	-.043	-.019	-.174
	Sig. (2-tailed)	.294	.393	.641	.242	.891	.687	.925	.742

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).