PARALEGAL STUDENTS' AND PARALEGAL INSTRUCTORS' PERCEPTIONS OF SYNCHRONOUS AND ASYNCHRONOUS ONLINE PARALEGAL COURSE EFFECTIVENESS: A COMPARATIVE STUDY

Shelley Kristine Farmer, B.B.A., M.S.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

December 2018

APPROVED:

Jeff M. Allen, Major Professor
Karen Johnson, Co-Major Professor
Peter Pincemin Johnstone, Minor Professor
Cathie Norris, Chair of the Department of Learning Technologies
Kinshuk, Dean of the College of Information
Victor Prybutok, Vice Provost for Graduate Education and Dean of the Toulouse Graduate School

Farmer, Shelley Kristine. *Paralegal Students' and Paralegal Instructors' Perceptions of Synchronous and Asynchronous Online Paralegal Course Effectiveness: A Comparative Study*. Doctor of Philosophy (Applied Technology and Performance Improvement), December 2018, 120 pp., 16 tables, 2 figures, 3 appendices, references, 100 titles.

To improve online learning pedagogy within the field of paralegal education, this study investigated how paralegal students and paralegal instructors perceived the effectiveness of synchronous and asynchronous online paralegal courses. Survey results were analyzed using independent samples t-test and correlational analysis, and indicated that overall, paralegal students and paralegal instructors positively perceived synchronous and asynchronous online paralegal courses. Paralegal instructors reported statistically significant higher perceptions than paralegal students: (1) of instructional design and course content in synchronous online paralegal courses; and (2) of technical assistance, communication, and course content in asynchronous online paralegal courses. Instructors also reported higher perceptions of the effectiveness of universal design, online instructional design, and course content in synchronous online paralegal courses than in asynchronous online paralegal courses. Paralegal students reported higher perceptions of asynchronous online paralegal course effectiveness regarding universal design than paralegal instructors. No statistically significant differences existed between paralegal students' perceptions of the effectiveness of synchronous and asynchronous online paralegal courses. A strong, negative relationship existed between paralegal students' age and their perceptions of effective synchronous paralegal courses, which were statistically and practically significant. Statistically significant relationships existed between paralegal instructors' perceptions of effective synchronous online paralegal course

and the number of courses taught by the paralegal instructor. Lastly, this study provided practical applicability and opportunities for future research.

ACKNOWLEDGEMENTS

The dissertation process is unlike anything I have ever experienced. It was a journey peppered with challenges and frustrations, which yielded bright moments of clarity and confidence. It was a collaborative yet often lonely experience. Still, I was never without the support of my faculty advisor, dissertation committee, colleagues, family, and friends, to whom I owe a debt gratitude and appreciation.

I am indebted to Dr. Jeff Allen, who graciously agreed to serve as my major professor and faculty advisor. For the past five years, I've experienced first-hand the unending nurture and care he devotes to his doctoral students. I most valued his sage advice, encouragement, and advocacy. Words are inadequate to express the depth of gratitude I feel for his generosity, patience, and time investment in me. Thank you.

Towards the end of my coursework, I stumbled upon Professor Peter Johnstone's criminal justice course entitled, Law and Policy in Campus Public Safety. A few semesters later, I enrolled in his seminar on Law, Crime, and Punishment in England and Colonial America, which focused on the benefit of clergy. There, I found a love of criminal justice, especially of ecclesiastical legal history, and an appreciation for the beauty of the footnote. I offer my deepest appreciation to Professor Johnstone for his willingness to take on a doctoral candidate, for encouraging my interest in sanctuary, and for the opportunity to experience travel abroad through the CJUS international field trip program. I was particularly privileged to serve as his teaching assistant for the past year.

I am especially appreciative of Dr. Karen Johnson, who recently joined my dissertation committee, and who kindly served as my co-major professor.

My interest a pursuing a doctoral degree began while a master's student enrolled in a research seminar course where I first learned to conduct independent research. My classmates were both masters and doctoral students. Those classmates are the gold standard by which one should measure a successful doctoral journey. My thanks to Dr. David Bonner, Dr. Donnie Kirk, Dr. Megan Riley-McKee, Dr. Joanne Hix, and Dr. Mariya Gavrilova Aguilar for being sources of inspiration to me—whether they knew it or not.

This year marks the 100th anniversary of the Applied Technology & Performance Improvement program in the Department of Learning Technologies. It is a privilege to count myself among its doctoral alumni. I wish to express my thanks to my fellow ATPI classmates: Dr. Stanley Adjabeng, Dr. Chih-hung Chung, Dr. Shelby Danks, Dr. Laura Pasquini, Dr. John Turner, Dr. Tekeisha Zimmerman, and future Drs.—Erik Wright, Kathleen Park, Kristin Petrunin, and Kerry Romine, each of whom made learning much more enjoyable.

I have amazing, beautiful, brilliant, and funny girlfriends. Each of them, in their own way, helped me to maintain my sanity, focus, and resolve. To my Rochester sister, Susan Kavanagh, who put up with extraordinarily long periods of complete silence from me; thank you for being an adoring and long-suffering friend. To my trial sister in the trenches, my colleague, and fellow band geek, Penelope Gamer, JD, who listened with a never-ending supply of patience to my successes and failures both throughout my masters and doctoral journeys; thank you for your wise counsel, wicked sense of humor, and brilliant and wonderfully cynical mind. To my sweet friend and choir sister, Donna Blackstock, with whom I have so much in common, including living on the same street, going to the same elementary, middle, and high schools (more than a decade apart), and band geekiness, whose unshakeable faith and belief in

God kept me looking at life through a positive, spiritual, and Biblical lens. Thank you for welcoming me into your life and your family, and for unlocking my love of games.

As a first-generation college graduate, I am confident that my late father, George Farmer, and my late maternal grandparents, Pearlie and Bill Walker, are infinitely proud of this accomplishment. I owe my deep understanding of human resource management and performance improvement to my father—a labor union business agent and collective bargaining/contract negotiator his entire career. My father and grandparents embodied a tireless and inspiring work ethic, which they passed along to me. I never would have accomplished this goal without it.

This dissertation is dedicated to my mother, Vickie Farmer, and to my brother, Jason Farmer. My mother's unshakeable faith in my ability to "get this done" was the foundation on which I stood for these past seven years. My brother has the uncanny ability to keep me grounded, humble, and laughing; now that my time as the perpetual student comes to a close, he's going to have to find something else to tease me about. I love and admire you both. Thank you for your patience, support, encouragement, understanding, and most especially for allowing me to disappear—for weeks on end—without complaint.

"Learning is not attained by chance, it must be sought for with ardor
and attended to with diligence." ~ Abigail Adams

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CHAPTER 1

INTRODUCTION

This study replicated the 2007 study by Tung entitled, *Perceptions of Students and Instructors of Online and Web-enhanced Course Effectiveness in Community Colleges*, for his doctoral dissertation at the University of Kansas (2007). This study employed the same survey instruments used by Tung (2007) but adapted them to paralegal students and paralegal instructors in the United States across all types of institutions and degrees to understand how they perceived synchronous and asynchronous online paralegal course effectiveness. The purpose of this study was to measure the perceptions of paralegal students and paralegal instructors toward the effectiveness of synchronous and asynchronous online paralegal courses. The next sections outline the need for the study, theoretical framework, and purpose of the study. Limitations and delimitations are also identified within this chapter.

Need for the Study

Paralegals play a significant role in the delivery of legal services in common law jurisdictions, including the United States, England, Wales, and Australia. The paralegal profession in Australia is still in its infancy, less developed as a profession than its counterparts in England, Wales, and United States (Cowley, 2004). Furthermore, Australia lacks a national professional association or a specified classification for paralegals within the government. For those reasons, fewer opportunities for paralegal education and training exist in Australia (Cowley, 2004).

Conversely, the paralegal profession has a long, respected history in England and Wales, and traces its beginnings to the 1800s (Johnstone & Flood, 1982). Paralegal exercise a wide

range of duties and responsibilities in England and Wales, they operate under many different job titles, including legal executive, trainee legal executive, legal assistant, and clerk/general clerk (Sidaway & Punt, 1997). Nevertheless, the most common term "paralegal" was "imported from the US, and is widely used" (Sidaway & Punt, 1997, p. 1). The duties performed by paralegals depend on the skill and education of the individual (Sidaway & Punt, 1997). Paralegals work in solicitors' offices and perform legal duties, some of which, according to Cowley (2004), would be prohibited in the United States and classified as the "practice of law" (p. 66).

The Institute of Legal Executives (ILEX) provides most paralegal education in England and Wales and is recognized as an equal with the General Council of the Bar and the Law Society (Cowley, 2004). ILEX has developed education and training throughout the country through Further and Higher Educational facilities in the traditional face-to-face format, or through online education programs, offered by many institutions, including CILEx Law School, Cardiff College, Guildford College, Heart of Worcestershire College, and the Law Academy, among others (ILEX, 2017).

Although still a young profession by comparison, the formal creation of the paralegal profession in the United States occurred in the late 1960s (McCabe, 2007). In 1976, the National Federation of Paralegal Associations (NFPA) formed as the first national paralegal association. Since that time, the paralegal profession has grown to approximately 280,000 paralegal jobs in the United States (Bureau of Labor Statistics, 2016-17). With the exception of those employed in California, paralegals are not regulated in the United States; paralegals are not required to hold a license or certification. Furthermore, no minimum educational

requirement exists for entry into the profession (American Bar Association, 2017). Yet, as observed by the Department of Labor, most entry-level paralegals hold an associate's degree (Bureau of Labor Statistics, 2016-17).

The present study focused on the paralegal profession within the United States, where the American Bar Association (ABA) has identified over 1000 institutions that offer paralegal education programs (ABA, 2017). Nonetheless, paralegal education programs are not standardized and range from associate's degree, baccalaureate degrees, master's degrees, and certificate programs (AAfPE, 2017). These programs vary in both length and format, and are offered by public and private institutions of higher education. Some programs offer courses only in the traditional, face-to-face format, while others offer fully online paralegal programs. Still others offer courses both in traditional and online formats.

The ABA, through its Standing Committee on Paralegals, established a voluntary approval process for paralegal programs. As stated in its Guidelines for the Approval of Paralegal Education Programs, the ABA "adheres to the philosophy of promoting and recognizing quality in many different kinds of educational offerings" with the "goal of assisting attorneys in utilizing paralegals to improve the delivery of legal services and the American system of justice" (ABA Guidelines, 2013, p. 1). Many institutions strive to obtain and maintain ABA approval of their paralegal program in order to promote quality paralegal education. Those colleges and universities participate in a rigorous approval process. Once they obtain ABA approval, those institutions undergo a seven-year review cycle consisting of interim reporting and site team visits by peer paralegal program directors, attorneys, and paralegals to ensure their continued commitment to improving the delivery of legal services and maintaining

a high level of quality education. One key component of the ABA Guidelines requires that paralegal programs must require that students take at least ten semester credits of paralegal courses through traditional classroom instruction (ABA Guidelines, 2013). Consequently, while some colleges and universities offer paralegal courses in synchronous or asynchronous online format, no ABA-approved program may offer its program solely online.

The specialized status of professional education affects how it is conceptualized, studied, and practiced. Despite the longevity and continued growth of the paralegal profession, there is a little empirical literature related to the paralegal profession, and to paralegal education.

Growth of online enrollment across colleges and universities in the United States now surpasses traditional, face-to-face enrollment (Rich & Dereshiwsky, 2011). As technology has evolved, distance learning has exploded. Some instructors deliver online synchronous lectures in real-time (Pullen, 2000). Other instructors leverage technology to engage students in synchronous instruction, such as audio and video teleconferencing, virtual classrooms, and instant messaging (Ruiz, Mintzer, & Leipzig, 2006).

As a result, distance learning and online education is becoming a standard of practice in higher education (Bernard et al., 2009). In 2013, 7.1 million college students had enrolled in at least one online course, or 33.5% of overall student enrollment (Allen & Seaman, 2014). These online courses may be in the form of synchronous or asynchronous environments or may be a blended combination of both, all of which may supplement traditional face-to-face courses. While educators have many forms of synchronous instructional tools available to them, the fast

growth of online learning has surpassed the field's knowledge of it, thus a paucity of empirical exists that examines the world of synchronous learning (Shi, Bonk, Tan, & Mirshra, 2008).

As noted in the Tung study, online courses have dramatically increased in the United States. Indeed, 90.3% of institutions agree that online education is part of their long-term strategy (Allen & Seaman, 2014). Given this growth and importance of online course delivery, there have been significant changes with the advancement and leveraging of changing technology. There are more opportunities to employ new features in online course delivery. And, there are more media, more interactivity, and community publishing in delivery of course content (Tung, 2007). Learning effectiveness generally "fall[s] into three board categories: (a) students' outcomes, focused on test scores and grades; (b) student attitudes about learning; and (c) overall student satisfaction with online learning" (Robinson & Hullinger, 2008, p. 101). Yet, few studies evaluate faculty and student perceptions of the overall effectiveness of the online course (e.g., Cherry & Flora, 2017; Otter et al. 2013; Seok, Kinsell, DaCosta, & Tung, 2010; Tanner, Noser, & Totaro, 2009; Wilkes, Simon, & Brooks, 2006).

In order to improve online learning pedagogy within the field of paralegal education, studies of perceptions of course effectiveness by paralegal students and paralegal instructors are needed to inform instructors and course developers on ways to increase the effectiveness of web-based learning in online paralegal courses.

Theoretical Framework

This study relies on constructivist theory as its primary theoretical framework, with the model of Community of Inquiry as a supporting framework. Within web-based learning literature in general, the theory of constructivism has been tested in studies related to the

method by which students process and create information (Fox, 2001; Nie & Lau, 2009). Constructivist theory was developed by theorists such as Piaget (1973), Vygotsky (1978), and Dewey (1916), and can be used as a theoretical framework to support the use of online synchronous instruction (Almala, 2006; Fox, 2001; Gordon, 2008; Knowlton, 2000). Further, Driscoll (2000) describes constructivist theory as one that presumes that learners construct knowledge of a subject through a formative process. This process includes the information conveyed by the instructor, the text, or other sources coupled with the way the learner relates to that content based on their own frame of reference, including their prior understanding, knowledge, and involvement. Social constructivism stresses that learning, therefore, depends on the "interactions, collaboration, and social exchanges that occur in that learning context" (Ward, Peters, & Shelley, 2010, p. 4).

The community of inquiry (CoI) framework provides a collaborative constructivist model that deems online courses as successful when students engage both in a collaborative and individual "search for meaning and understanding" (Akyol, Garrison, & Ozden, 2009, p. 66; Garrison, Anderson, & Archer, 2000). The work of John Dewey forms the foundation of the CoI framework and is "consistent with constructivist approaches to learning in higher education" (Garrison & Arbaugh, 2007, p. 158). Together, instructor and students form a community of online learning encompassing three elements: cognitive presence, social presence, and teaching presence (see Figure 1) (Garrison, Anderson & Archer, 2000, pp. 88-89). This community of learning also includes categories and indicators that explain each presence and suggest qualitative coding (see Figure 2) (Garrison, Anderson & Archer, 2000, pp. 88-89).

Cognitive presence means "the extent to which the participants in any particular configuration of community of inquiry are able to construct meaning through sustained communication" (Garrison, Anderson, & Archer, 2000, pp. 89-90). Social presence is the "ability of the participants in the community of inquiry to project their personal characteristics into the community, thereby representing themselves as 'real people'" while teaching presence involves two functions—the design of the educational experience as well as facilitation (Garrison, Anderson, & Archer, 2000, pp. 89-90).

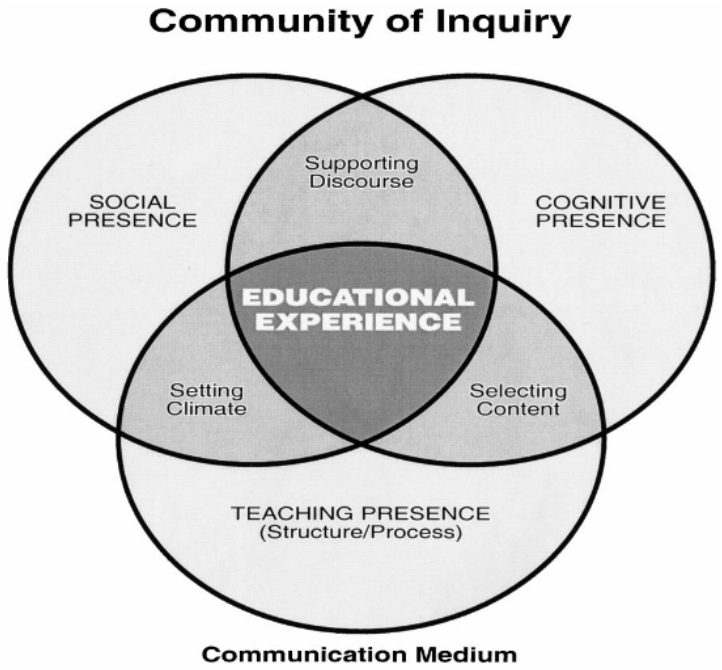


Figure 1. Community of inquiry framework[1]

[1] From "Critical Inquiry in a Text-Based Conference in Higher Education," by D. Randy Garrison, Terry Anderson, and Walter Archer, (1999), *The Internet and Higher Education*, *2*, pp. 88-89, Copyright (1999) by Elsevier. Reprinted with permission.

ELEMENTS	CATEGORIES	INDICATORS (examples only)
Social Presence	Open Communication Group Cohesion Affective Expression	Risk-free expression Encourage collaboration Emoticons
Cognitive Presence	Triggering Event Exploration Integration Resolution	Sense of puzzlement Information exchange Connecting ideas Apply new ideas
Teaching Presence	Design & Organization Facilitating Discourse Direct Instruction	Setting curriculum & methods Sharing personal meaning Focusing discussion

Figure 2. Community of inquiry elements, categories, and indicators[2]

The CoI framework dovetails with paralegal online learning and online course effectiveness. Cognitive presence is key to critical thinking (Tung, 2007). According to the American Association for Paralegal Education, "Paralegal Core Competencies" (2013), critical thinking is the top-most listed core competency in a paralegal education curriculum. Indeed, logical argument and higher levels of thinking are components of cognitive development and constructivism (Leahey & Harris, 2000), and as such, form a foundation for paralegal education and online paralegal courses.

Social presence is vital in the online paralegal classroom. In this context, a student's sense of belonging in the course as well as the ability to engage with other students and the instructor are fundamental to learning, especially in the online classroom where the mode of communication are email and online discussions. As Tung (2007) noted, "the social community is one of the most important aspects of online learning" (p. 35).

[2] *Ibid*.

Faculty perceptions of online course effectiveness includes instructor presence (Lockee, Burton, & Potter, 2010; Sheridan & Kelly, 2010). Further, instructor presence is crucial in the online classroom, as observed by Liu, Gomez, and Yen (2009), who found that instructor presence has a positive impact on student learning and motivation in the online classroom. Faculty presence in the online classroom serves to build rapport with students (Glazier, 2016). Anderson (2001) argued that teaching presence occurs prior to the first day of classes, and includes, as related to this study, course design, facilitation, and the cognitive and social processes for understanding of learning outcomes.

For these reasons, this study was conducted through the lens of a constructivist theory and the community of inquiry framework to learning specifically in the online paralegal learning environment.

Purpose of the Study

Several factors supported the purpose of this study. First, the growth of online enrollment in the United States where one-third of college students are enrolled in at least one online course (Allen & Seaman, 2014). Second, the lack of current empirical studies related to online learning pedagogy within the field of paralegal education in the United States. Third, the ABA's guideline necessitating that paralegal programs must require their paralegal students to take ten semester credits of paralegal courses through traditional classroom instruction in order to become or maintain ABA-approval—the impact of which means ABA-approved schools cannot offer exclusively online programs. Taken together, this study fills the literature gap related to the effectiveness of online paralegal education.

Thus, this study measures the perceptions of paralegal students and paralegal instructors toward the effectiveness of synchronous and asynchronous online paralegal courses. This study employed eleven dependent variables each for paralegal students and paralegal instructors, respectively, to ascertain their respective perceptions of online course effectiveness using the following subscales: flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content.

This study investigated whether significant difference existed in the participants' perceptions of course effectiveness between paralegal students and paralegal instructors. It also investigated whether participants perceived differences in the effectiveness between synchronous and asynchronous online paralegal courses. Further, this study assessed how independent variables of gender, age, native language, educational level, technology skills, and course experience with synchronous and asynchronous online paralegal courses affected dependent variables of the participants' perceptions of online course effectiveness. The variables in this study dovetail within the CoI framework by testing cognitive, social, and teaching presence. It is anticipated that the findings of this study may inform paralegal instructors and course developers to better understand of how to design, deliver, and evaluate effective online course instruction in the field of paralegal studies.

Research Questions

The following research questions guided this study:

Research Question 1: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal course effectiveness?

Research Question 2: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of asynchronous online paralegal course effectiveness?

Research Question 3: Are there significant differences in paralegal students' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

Research Question 4: Are there significant differences in paralegal instructors' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

Research Question 5: Are there significant relationships between paralegal students' perceptions of synchronous online paralegal course effectiveness subscales and students' demographic characteristics?

Research Question 6: Are there significant relationships between paralegal students' perceptions of asynchronous online paralegal course effectiveness subscales and students' demographic characteristics?

Research Question 7: Are there significant relationships between paralegal instructors' perceptions of synchronous online paralegal course effectiveness subscales and instructors' demographic characteristics?

Research Question 8: Are there significant relationships between paralegal instructors' perceptions of asynchronous paralegal course effectiveness subscales and instructors' demographic characteristics?

Limitations

Several limitations may have affected the study, including the following:

1. Response rates may have been dependent on the researcher's ability to identify, contact, and obtain responses from paralegal instructors and paralegal students.
2. The opinions of barriers perceived by participants may have been limited to the respondent's willingness, honesty, comfort level, and stress of the participants at the time the questionnaire was answered.

3. The data may have been limited by biases resulting from the use of a self-reporting questionnaire. Self-reporting instruments measuring both dependent and independent variables often raise the issue of validity for many reasons, most notably the response bias of the participants (Razavi, 2001). Similar to response bias, respondents may not have accurately perceived, recalled, and reported their communication behaviors in the survey instruments measuring factors such as flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content.
4. Random selection and assignment were not used, and therefore, external validity may have been affected.
5. The results may have been limited by the variation of each participant's definition of each item in the Likert scale, or the lack of granularity in those scales.

Delimitations

The study was delimited by the following:

1. The number of respondents as the population of this study was delimited to paralegal students and paralegal instructors in the United States who had previously or were currently taking or teaching, respectively, online paralegal courses, and even further limited by those who choose to complete the questionnaire.
2. This study did not consider any other disciplines other than paralegal studies.

3. Whereas previous studies have not shown significant differences among instructor perceptions based on age and gender, the results may be restricted by the degree to which the results could be generalized to other disciplines.

Definition of Terms

Several key definitions within the literature related to synchronous and asynchronous online learning relate to the current study. To that end, the following definitions explain these key terms as well as clarify the specific variables used in this study.

Asynchronous learning describes the use of the internet for access to a learning environment at times and locations to suit the user (Mason & Ronnie, 2006).

Paralegal, according to the American Bar Association, is defined as "a person, qualified by education, training or work experience who is employed or retained by a lawyer, law office, corporation, governmental agency or other entity and who performs specifically delegated substantive legal work for which a lawyer is responsible" (ABA, 2013, pp. 171-72).

Synchronous learning is a real-time, instructor-led online learning event, in which all the participants are logged on at the same time and communicate directly with each other (Roffe, 2004).

Summary

This chapter identified the need to examine paralegal students' and instructors' perceptions of synchronous and asynchronous online paralegal course effectiveness. The chapter provided background on the paralegal profession, web-based learning and pedagogy as well as the constructivist approach to learning specifically in the online learning environment and the community of inquiry model as the theoretical framework for this study. The research

questions were shared as the foundation of the study. Chapter 2 presents a review of existing literature relevant to the study.

CHAPTER 2

LITERATURE REVIEW

This study measured how paralegal instructors and paralegal students perceived the effectiveness of synchronous and asynchronous online paralegal courses. The review of literature includes studies that address the independent variables of gender, age, native language, educational level, technology skills, and course experience with synchronous and asynchronous online paralegal courses and dependent variables of paralegal instructors and paralegal students respective perceptions of online course effectiveness using the following subscales: flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content. However, this literature review does not cover the broader scope of online or web-based education nor its history and growth. The examination of seminal and current literature across multiple disciplines laid the foundation for the research questions related to paralegal instructors, paralegal students, and the purpose of this study.

Paralegal Education

Few studies have examined online paralegal courses in the United States. A literature search for this current study revealed one empirical, peer-reviewed article that assessed student outcomes data from online paralegal courses (Taggart & Bodle, 2003), an informational journal article related to computer assisted instruction in paralegal education (Johnson & Taggart, 1996), and a primer on distance education in paralegal studies (Myers, 2002). Because the research topic for this study and the informational articles are unrelated, and because of the small sample size (*n* = 41) for the Taggart and Bodle (2003) study, the results are unlikely to

apply to all online paralegal courses in the United States, leaving a paucity of empirical studies on the effectiveness of online paralegal education. To this researcher's knowledge, no national study of paralegal students' and paralegal instructors' perceptions of online paralegal course effectiveness has been conducted.

Online Course Effectiveness

Many studies already examine the literature relating to online course effectiveness across varying disciplines (Cherry & Flora, 2017). For this study, review of relevant literature focused on subscales used in this investigation.

Studies have found online courses to be a practical and flexible option, especially for those students who have time, distance, family, career, or language constraints (Astani, Ready, & Duplaga, 2010; Bailey & Card, 2009; Liu, Gomez, Khan, & Yen, 2007; Simonson, Smaldino, & Albright, 2009; Steiner & Hyman, 2010; Tanner, Noser, & Tottaro, 2009; Wilkes, Simon, & Brooks, 2006). Further, online learning management systems such as Blackboard, Canvas, Moodle, Desire2Learn, are virtually ubiquitous in their use by colleges and universities in the United States (Rubin, Fernandes, & Avgerinou, 2013) and most provide wireless internet access across their campuses.

Ensuring that online students have adequate and timely technical support is essential. For many students, the online learning environment may be new and unfamiliar. A review of the literature in this area revealed that learning both the course content, as well as the technical aspects of online courses, including course management systems, forms a part of the learning process (Harrell, 2008). Without essential technical support, online students feel frustrated or dissatisfied with the online environment, or worse, fall behind in the timely

submission of coursework (Harrell, 2008; Lowerison, Sclater, Schmid, & Abrami, 2006; Thurmond, Wambach, Connors & Frey, 2010), which also negatively affects instructors' level of satisfaction (Simonson, Smaldino, Albright, & Zvacek, 2009). Student and instructor dissatisfaction may also influence course evaluation. Consequently, providing students with the necessary technical support can impact the overall online course effectiveness.

Instructional design is crucial for effective online learning (Lockee, Burton, & Potter, 2010; Song, Singleton, Hill, & Koh, 2004). Research shows that when a course design is unorganized, online students' level of "perplexity and nervousness" increases (Yang & Cornelius, 2004). Further, online students are less likely to experience a transfer of knowledge when the online instructor employs only textbooks or discussion posts (Yang & Cornelius, 2004). Similarly, when the institution offers appropriate support for instructional design, research reveals that instructors feel more satisfied with online teaching (Wasilik & Bollinger, 2009). Finally, students expect meaningful and well-developed courses from their online instructors of the same high quality as traditional face-to-face courses (Jones, 2012).

Perceptions of Online Course Effectiveness

Perception is the "process of creating meaning by selecting, organizing, and interpreting information" (Otter et al., 2013, p. 27). And, perceptions can significantly influence decisions and behaviors (Otter et al., 2013; Reimman & Bechara, 2010). Perceptions of quality of instruction, of the instructor, and of other students' motivations to take online courses can have a positive impact on a student's decisions to enroll in online courses (Mayes, 2001; Otter et al., 2013). For this study, perceptions of course effectiveness were measured related to

paralegal students' and paralegal instructors' gender, age, native language, educational level, technology skills, and synchronous or asynchronous online course experience.

Student Perceptions of Online Course Effectiveness

Researchers have found that students perceive online courses as beneficial, though not all of those benefits are knowledge related (Yang & Cornelius, 2004). Indeed, students' positive perceptions of the quality of online courses include flexibility, cost-effectiveness, and ease of internet connection to be positive online course experiences (e.g., Astani, Ready, & Duplaga, 2010; Liu, Gomez, Khan, & Yen, 2007; Steiner & Hyman, 2010; Tanner, Noser, & Tottaro, 2009; Wilkes, Simon, & Brooks, 2006; Yang & Cornelius, 2004), while negative perceptions include an instructor's lack of technical support, tedious and uninteresting instructional methods, as well as poorly designed course content (Yang & Cornelius, 2004). Unsurprisingly, Harrell (2008) urged that providing technical support is vital and argued that it is "imperative that students are provided with adequate support structures to assist them" in online courses (p. 40).

Astani, Ready, and Duplaga (2010) conducted a study of business students in the fields of business administration, human resource management, and information systems, and found that "compared to traditional classes, online courses offer more flexibility" (p. 16) and that "online courses provide better opportunity to use technology" (p. 19). Similarly, Wilkes et al. (2006), in a study of undergraduate business students revealed that students valued schedule flexibility when taking online courses. Likewise, the flexibility and convenience of online courses are beneficial to adult learners (Yukselturk & Bulut, 2007). Notably, in a study of learner-oriented community college online course dropout framework, Liu et al. (2007), found that technological factors, including technology efficacy, influenced course dropout rate.

Strikingly, a high positive correlation exists between student perceived overall course value and assignment practicality (r = .808) and course materials' usefulness and relevance (r = .787), of student perceptions of effective online teaching. This effectiveness includes valuing instructors who develop their online courses with thoughtful organization and careful structure, ensuring that course content and materials are practical, relevant, and presented articulately (Jones, 2012).

Age and Gender

Age has been found to have no significant effect on academic performance in online courses across disciplines. To be sure, Colorado and Eberle (2010), in a study of student demographics and success in online learning environments, found that the age of students did not significantly affect performance in online courses, $F(2, 167) = 1.46$, $p = 0.235$. In a study of business law students, Dutcher et al. (2015) did not find that gender and age, among other demographics, had significant impact on student satisfaction of online courses. In a study of predictors of student success in online courses, Yukselturk and Bulut (2007) revealed that the effects of gender and age on student success were inconclusive, as those characteristics did not contribute significantly to the variance in student success. Similarly, as identified by Tung (2007), a study of community college students revealed no statistically significant difference in student perceptions of course effectiveness across students' gender, and further, found no statistically significant relationship between students' age and course effectiveness.

Dutcher, Epps, and Cleaveland (2015) reported that 62% of students in online business courses were female and 76% were between the ages of 18 and 34, while in an online marketing course, 55% of the students were female (Ganesh, Paswan & Sun, 2015). Two years

earlier, Otter et al. (2013) reported that the number of male and female students was split equally at 50% and that 95% of students in online courses across disciplines were between the ages of 18 and 34. Nevertheless, the study found a significant difference between male and female students' positive perceptions of the effectiveness of online course content, where the mean of female students was statistically higher (M = 4.2, SD = .61) than the mean of the male group (M = 3.7, SD = .72) (Seok, DaCosta, Kinsell, & Tung, 2010).

Technology Skills and Online Course Experience

Students deficient in the requisite technological skills for web-based learning may fear enrolling in online courses. Lowerison, Sclater, Schmid, and Abrami (2006) argued that "technology should not be an 'add on' but should offer the learner increased opportunities for learning" (p. 403).

Indeed, a student's previous technological experience affects their attitudes surrounding technology overall (Martins & Kellermanns, 2004; Stoel & Lee, 2003). And, technological difficulties rather than content focus can adversely affect student satisfaction in online courses (Harrell, 2008; Lowerison et al., 2006; Thurmond, Wambach, Connors & Frey, 2010; Vodanovich & Piotrowski, 2000).

Similarly, students without any previous experience worried about many features of online learning and unsure of expectations while experienced students felt satisfied and would recommend online courses to other students (Astani, Ready, & Duplaga, 2010). But, in a study of business faculty and students, those students who had no previous online course experience felt the technology skills needed for an online course improved the educational experience (Lowerison, Sclater, Schmid, & Abrami, 2006; Tanner, Noser, & Totaro, 2009). Finally, graduate

students across disciplines felt their experience with technology influenced their perceptions of how useful the technology was for online learning (Song et al., 2004).

Instructor Perceptions of Online Course Effectiveness

Faculty perceptions of online course effectiveness not only included instructional design, but also instructor presence (Lockee, Burton, & Potter, 2010; Sheridan & Kelly, 2010). It also includes technological self-efficacy, years of teaching online, and the number of online courses taught (Cherry & Flora, 2017; Tanner, Noser, & Totaro, 2009). And, similar to students' perceptions, positive perceptions of the quality of online courses include flexibility, user interface, navigation, course management, technical support, universal design, and course content (Bailey & Card, 2009; Inman, Kerwin, & Mayes, 1999; Otter et al. 2013; Seok, Kinsell, DaCosta, & Tung, 2010; Wilkes, Simon, & Brooks, 2006).

According to Wingard (2004), in a study of university faculty experienced in online instruction, a significant number of faculty advocated that web-enhanced technologies such as those leveraged in online courses contributed to student engagement and active learning. And, Vodanovich (2000), found that university psychology faculty favored incorporating technology in the classroom for instructional purposes, and perceived technology as an "effective educational tool" (p. 254).

Age and Gender

One study investigating student perceptions of online instruction revealed no significant difference between courses taught by male instructors ($\bar{x}$ = 4.29) or by female instructors ($\bar{x}$ = 4.26) (Shook, Greer & Campbell, 2013). Similarly, faculty perceptions of online course effectiveness were not found to be significantly affected by faculty age, $r(213) = —.013$, P =

.854 (Cherry & Flora, 2017). As identified by Tung (2007), a study of community college faculty revealed no statistically significant difference in faculty perceptions of course effectiveness across faculty gender.

Seok et al. (2010) found that female instructors had statistically significant higher perceptions of online course effectiveness than male instructors. Notably, instructors who were younger and possessed less teaching experience were found to be more likely to embrace online learning than their older, more experienced colleagues (Myers, Bennett, Brown, & Henderson, 2004). Indeed, in a study of online college faculty, Shea (2007) discovered that women under 45 years of age working at community colleges were most motivated to teach online courses.

Technology Skills and Online Course Experience

Online course instructors underscored the importance of developing appropriate technical competencies and leveraging that technology to effectively deliver course content (Bailey & Card, 2009). The relationship of faculty perceptions of course effectiveness to years of teaching online courses was found to be a statistically significant relationship with the perception of course effectiveness increasing both with the increased number of years teaching online courses $r(214) = .209$, $p = .002$, and with the increased number of online courses taught, $r(213) = .282$, $p < .001$ (Cherry & Flora, 2017).

Faculty without any experience teaching online courses believed the quality was inferior to traditional face-to-face courses (Inman, Kerwin, & Mayes, 1999). Similar to their student counterparts, faculty with little to no experience in the delivery of online courses perceived this lack of experience to be a barrier to teaching online courses compared to those instructors who

had more online course development and teaching experience (Lloyd, Byrne, & McCoy, 2012). As observed by Seok et al. (2010), having advanced technology skills and experience likely effect instructors' perceptions of online course effectiveness.

Research in Other Disciplines

While a number of studies examine online course effectiveness, much of that literature focused on disciplines outside the area of paralegal studies. Many researchers have conducted studies of online learning experiences and best practices, including variables such as student satisfaction, faculty satisfaction, quality of online learning experiences, and student success in the online classroom. These studies were found in disciplines including undergraduate business school learning (DiRienzo & Lilly, 2014; Tanner, Noser, & Totaro, 2009), business law, economics, finance, and management courses (Horspool & Lange, 2012; Terry, Macy, Clark, & Sanders, 2015), accounting (Rich & Dereshiwsky, 2011), marketing research course (Astani, Ready, & Duplaga, 2010; Steiner & Hyman, 2010), business statistics (Simmons, 2014), computer programming (Yukselturk & Bulut, 2007), educational leadership (Ward, Peters, & Shelley, 2010), English composition courses (Finlay, Desmet, & Evans, 2004), and radiography (Cherry & Flora, 2017). Yet, none of these studies have included paralegal studies.

Summary

The present study examined the perceptions of paralegal instructors and paralegal students toward the effectiveness of synchronous and asynchronous online paralegal courses (flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content). This chapter presented an overview of the available literature outlining

the research on paralegal education, online course effectiveness, students' perceptions of online course effectiveness, instructors' perceptions of online course effectiveness related to the independent variables of gender, age, native language, educational level, technology skills, and course experience This study filled the gap in the literature regarding paralegal students' and paralegal instructors' perceptions of synchronous and asynchronous online paralegal course effectiveness. Chapter 3 presents the methods used in this research.

CHAPTER 3

METHODOLOGY

This study measured how paralegal students and paralegal instructors perceived the effectiveness of synchronous and asynchronous online paralegal courses, studying the subscales of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content. This chapter includes details about the research design, the population, and sampling. Additionally, data collection and data analysis procedures are specified.

Research Design

This study used a nonexperimental quantitative research design utilizing independent samples *t*-tests and correlational analysis of data obtained through two self-reported survey instruments from paralegal students and paralegal instructors, respectively. According to Salkind (2008), independent samples *t*-test is appropriate "when two or more means are being compared" (p. 378), such as the means of paralegal students' perceptions and paralegal instructors' perceptions. Correlational analysis measures the relationship between variables, and specifically, "how the value of one variable changes when the value of another variable changes" (Salkind, 2008, p. 74). For this study, correlational analysis was used to measure the relationships between paralegal students' perceptions and the students' demographic variables and between paralegal instructors' perceptions and the instructors' demographic variables and the relationships.

This study used a multicourse and multiversity strategy, which provided statistical benefits (Robinson & Hullinger, 2008). The researcher drew conclusions about two populations using samples drawn from those two specific populations using quantitative research methodologies (Gall, Borg, & Gall, 1996), appropriate for this investigation. Additionally, descriptive statistics are presented of the demographic information of the sample populations.

Eleven dependent variables each for paralegal students and paralegal instructors, respectively, to ascertain their respective perceptions of online course effectiveness using the following subscales: flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content. Further, this study assessed the independent variables of gender, age, native language, educational level, technology skills, and course experience with synchronous and asynchronous online paralegal courses to determine whether these variables were significant factors in dependent variables of the participants' perceptions of online course effectiveness.

Challenges to experimental validity were considered and attempts to control them were made in this research design. Plausible threats to internal validity included nonresponse bias, volunteer bias, and instrumentation bias (McMillan, 2008). Nonresponse and volunteer bias may have occurred in this study because data collection was conducted through a web-based survey in which participants could avoid responding (Alreck & Settle, 2004). Thus, in order to control for these related threats to internal validity, the researcher maximized the response rate through data collection procedures including repeated contact attempts through reminder emails scheduled at effective time intervals. This study attempted to avoid bias by using an

instrument with demonstrated evidence of validity and score reliability in the literature (Popham, 2000).

Two threats to external validity were of primary concern. First, selecting participants almost exclusively from the United States AAfPE membership population may have limited generalizability to the broader population of paralegal instructors. Due to the popularity of AAfPE membership among paralegal educators (AAfPE, 2017), this is not anticipated to be a major threat to external validity. Nevertheless, this is noted as a delimitation of the study to be considered further. Second, with the volunteer nature of the sample, the study captured and evaluated sample characteristics to ensure that they matched the defined population. Along with previously discussed measures to control for volunteer/nonresponse bias, this was expected to reduce limitations on generalizability (Alreck & Settle, 2004; McMillan, 2008).

Population

According to the National Center for Education Statistics, 674 paralegal programs awarded bachelor's degrees, master's degrees, or post-baccalaureate certificates in paralegal studies across the United States from July 1, 2015 to June 30, 2016 (National Center for Education Statistics, 2017). On average, between one to five instructors taught within those paralegal programs, which equates to approximately 1,700 full-time and adjunct paralegal instructors teaching traditional, face-to-face paralegal courses, synchronous paralegal courses, asynchronous paralegal courses, or a combination thereof. Based on a best estimate approach, approximately one-third of these paralegal instructors ($N \approx 570$) have taught a synchronous or asynchronous online paralegal course during their teaching tenure (AAfPE, 2017).

According to descriptive data maintained by the National Center for Education Statistics, approximately 9,600 students who earned bachelor's degrees, master's degrees, or post-baccalaureate certificates in paralegal studies across the United States from July 1, 2015 to June 30, 2016 (National Center for Education Statistics, 2017). Based on a best estimate approach, approximately one-third of those paralegal students ($N \approx 3{,}200$) were enrolled in a synchronous or asynchronous online paralegal course during their paralegal studies program (Allen, Seaman, Poulin, & Straut, 2016).

For these reasons, the target populations for this study include paralegal instructors ($N \approx 570$) and paralegal students ($N \approx 3{,}200$), who were currently teaching or taking, respectively, synchronous or asynchronous online paralegal courses, or who previously taught or completed a synchronous or asynchronous online paralegal course. Further, these paralegal faculty and students came from institutions of higher learning across the United States. Through the use of multicourse and multi-institution sampling, this researcher increased the sample sizes, thus providing a more complete picture as well as increased external validity and statistical power, which aided in the ability to generalize the findings (Arbaugh & Hiltz, 2005).

Sampling

The sampling approach for this study was a convenience sampling. With more than 400 members, the American Association for Paralegal Education (AAfPE) is the only association of its kind in the United States. AAfPE members consist of paralegal educators from four-year institutions offering baccalaureate degrees in paralegal studies as well as instructors from two-year colleges that offer associate's degrees and certificates (AAfPE, 2017). AAfPE, with its tenure and influence as an organization, provides a membership that serves as a valuable

source of potential data for this study. This researcher utilized the AAfPE private listserv as well as its LinkedIn group to gather participants. Paralegal instructors were informed of the study through discussion posts through AAfPE's private listserv and on the AAfPE LinkedIn group's webpage. Group members interested in participating were asked to clicked a link embedded in the discussion post to continue to the survey website and begin the survey. To increase the response rate, paralegal educators were emailed individual invitations to participate in this study. Further, these paralegal instructors were asked to invite their paralegal students to participate in this study via email or by posting the link to the survey in their online classrooms.

Following sample size tables developed by Krejcie and Morgan (1970), the sample size representative of the defined population of paralegal instructors ($X \approx 570$) who were teaching, or have previously taught, synchronous or asynchronous online paralegal courses was 226. Similarly, the sample size representative of the defined population of paralegal students ($X \approx 3{,}200$) who were currently enrolled in, or have previously been enrolled in, synchronous or asynchronous online paralegal courses was 341. In an effort to meet the representative sample, paralegal instructors who were members of the American Association for Paralegal Education were invited to participate in the study.

A minimum of 128 total participants, or 64 paralegal instructors and paralegal students, was recommended through the G-Power analysis to provide enough statistical power to support statistical significance. Using GPower 3.1.0, a statistical power analysis was conducted to increase the probability that the tests would find statistically significant differences (Faul, Erdfelder, Lang, & Buchner, 2007). The α error of probability was set to .05 with a power ($1-\beta$ error probability) of .8, and the effect size was set at .25. According to Cohen (1988), .30-.50

effect size defines a moderate to medium effect. The projected power was set at .80, indicating an 80% or greater chance of finding statistically significant results when, in fact, there was one. These parameters were used to calculate the sample size of 128, or 64 for each group, which is considered acceptable. A graphical representation of the GPower analysis is found at Appendix A.

The University of North Texas Institutional Review Board (IRB) approved the current study and its sample. The approval documentation for this study, IRB# 17-461, is located in Appendix B.

Instrumentation

This study used survey research as its selected method and employed two validated survey questionnaires used in the Tung study to collect and measure paralegal instructors' and students' perceptions toward synchronous and asynchronous online paralegal course effectiveness in online learning and teaching. Each survey questionnaire contained two sections: (1) perceptions of course effectiveness section; and, (2) personal data section.

The first section of the survey was identical for paralegal students and paralegal instructors and consisted of 99 questions relating to the perception of course effectiveness and used a 5-point Likert-type scale. A Likert-type scale consists of a series of declarative statements. Five levels were used to record the responses: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree. These questionnaires were positively worded statements. Subjects were asked to indicate whether they agreed or disagreed with each statement. An open-ended question was included at the end of survey to collect additional

comments about synchronous and asynchronous online paralegal course effectiveness in learning and teaching.

The second section collected personal data, which was tailored specifically to each group of paralegal students and paralegal instructors. For paralegal students, this section asked for the student's gender, year of birth, current state of residence, native language, paralegal education level, general education level, technology skills, synchronous online paralegal courses completed, and asynchronous online paralegal courses completed. Similarly, for paralegal instructors, this section asked for the instructor's gender, year of birth, current state of residence, native language, paralegal education level, general education level, technology skills, synchronous online paralegal courses taught, and asynchronous online paralegal courses taught.

The survey questionnaires focused on participants' perception in the following areas of online course effectiveness: flexibility, user interface, navigation, getting started, technical assistance, course management, universal design, communication, instructional design, and content. The following lists each subscale and the number of items for each, for a total of 99 items: the flexibility variable used 6 items (Questions 1, 2, 3, 4, 5, and 6); user interface uses 9 items (Questions 7, 8, 9, 10, 11, 12, 13, 14, and 15); navigation used 6 items (Questions 16, 17, 18, 19, 20, and 21); getting started used 6 items (Questions 22, 23, 24, 25, 26, and 27); technical assistance used 4 items (Questions 28, 29, 30, and 31); course management (instructor) used 10 items (Questions 32, 33, 34, 35, 36, 37, 38, 39, 40, and 41); course management (student) used 7 items (Questions 42, 43, 44, 45, 46, 47, and 48); universal design used 7 items (Questions 49, 50, 51, 52, 53, 54, and 55); communication used 8 items (Questions 56, 57, 58, 59, 60, 61, 62,

and 63); online instructional design used 22 items (Questions 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, and 85); and content used 14 items (Questions 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, and 99). The following descriptive statistics were used: gender, age, current state of residence, native language, paralegal education level, education level, technology skills, synchronous online paralegal courses completed or taught, asynchronous online paralegal courses completed or taught (Questions 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, respectively). An open-ended question was included at the end of survey to collect additional comments about synchronous and asynchronous online paralegal course effectiveness in learning and teaching (Question 110).

As in the Tung study, the measurements of perceptions of course effectiveness were adapted from a validated instrument. As reported by Tung, (2007), two Subject Matter Experts (SMEs), professors at a research university and affiliated with a research and development (R&D) unit within their own institutions validated the survey instruments. Cronbach's coefficient alphas were used to compute internal consistency estimates of reliability for each subscale (flexibility, user interface, navigation, getting started, technical assistance, course management, universal design, communication, instructional design, and content) of the measure instrument. Tung (2007) noted that the alpha coefficient ranges in value from 0 to 1, which describes the reliability of factors extracted from dichotomous and/or multi-point formatted questionnaires or scales. The higher the score, the more reliable the generated scale (Santos, 1999). Nunnaly (1978) indicated 0.7 to be an acceptable reliability coefficient. With an internal consistency estimate of reliability, individuals were administered a measure with multiple parts on a single occasion (Green & Salkind, 2005). No items needed to be reverse-

scaled because all survey questions were presented in positively worded statements. All items shared the same metric since the response scale for all items is 1 = strongly disagree to 5 = strongly agree. Reliability and validity remained consistent compared to Tung's (2007) original instrument. All subscales in this study had alpha levels greater than 0.7, indicating acceptable reliability.

Data Collection

Data were collected in two phases. The first phase included data collection from paralegal instructors to ascertain their perceptions of synchronous and asynchronous online paralegal course effectiveness along with demographic data. The second phase included data collection from paralegal students to ascertain their perceptions of synchronous and asynchronous online paralegal course effectiveness as well as demographic data.

Phase I: Data Collection from Paralegal Instructors

Paralegal instructors were invited to participate in this study via the AAfPE members' only listserv, the AAfPE LinkedIn Group, and by individual email (subsumed within Appendix B). The survey data were collected using UNT's Qualtrics Survey Software. An anonymous link to this UNT-housed survey was sent to the participants to access the online consent form. Upon selecting the survey questionnaire link, the participants were presented with a webpage that explained the informed consent statement associated with the study. Subjects were informed that participation in this study was voluntary, that their responses were anonymous, and that their names and emails would not be associated with the research findings. Participants were then expected to continually answer survey questions after submitting the consent form online. The survey link was available for two months from February 22, 2018 until April 22, 2018.

Phase II: Data Collection from Paralegal Students

Paralegal students were asked to participate in this study by their instructors either by email or by posting the survey link in an announcement in their online classroom (subsumed within Appendix B). The survey data was collected using UNT's Qualtrics Survey Software. An anonymous link to this UNT-housed survey was sent to the participants to access the online consent form. Upon selecting the survey questionnaire link, the participants were presented with a webpage that explains the informed consent statement associated with the study. Subjects were informed that participation in this study was voluntary, that their responses would be anonymous, and that their names and email addresses would not be associated with the research findings, and that the study's findings would be reported in aggregate. Participants were then expected to continually answer survey questions after submitting the consent form online. The survey link was available for two months from February 22, 2018 until April 22, 2018.

According to the research of the timing of the web-based survey and the impact of reminders on web-based survey responses (Munoz-Leiva, Sanchez-Fernandez, Montoro-Rios, & Ibanez-Sapata, 2010; Paraschiv, 2013; Van Mol, 2017), participants received the initial invitation to participate in the study, followed by one reminder within the subsequent week, and a notice of the final date for participation. Crawford, Cooper, and Lamias (2001) found that sending reminders two days subsequent to the initial invitation rather than five days increased response rates. Further, Paraschiv (2013) reported that respondents were more likely to accept the invitation to participate on Friday, followed by Thursday and then Saturday, respectively. And, Paraschiv's (2013) research also revealed that the time interval between 4:00 p.m. and 8:00

p.m., followed by the time interval of 12:00 p.m. and 4:00 p.m., garnered the most number of clicks on the survey link.

To that end, participants were sent the invitation to participate on the first Thursday of the data collection period at approximately 4:00 p.m. A single reminder was sent the following Saturday, at approximately 2:00 p.m. A notice was sent on the Friday before the final date of participation at approximately 3:00 p.m.

During the time in which the surveys were available between February 22, 2018 and April 22, 2018, the researcher sent approximately 100 individual emails to paralegal program directors and paralegal instructors inviting them to participate in the study as well as requesting that they post the link to the paralegal students' survey in their online paralegal courses to further increase the response rate by both paralegal instructors and paralegal students.

Each participant in Phase I and Phase II took the survey only one time. After the participant completed the survey, the data was stored in Qualtrics to be reviewed and analyzed.

An incentive program was used to further encourage participation. Paralegal instructor participants who completed the survey were offered the opportunity to participate in a drawing to win 1 of 10 Amazon gift cards. Similarly, paralegal students who completed the survey were offered the opportunity to participate in a drawing to win 1 of 10 iTunes or Google Play gift cards. Participation in the drawing was voluntary and required a valid email address for contact in case of winning a prize. The researcher entered that contact information into a spreadsheet sorted in alphabetical order by email address for each group. A web-based random number generator (www.Random.org) generated ten numbers for each group at random to determine

the winners of the ten Amazon gift cards and ten iTunes or Google Play gift cards, respectively. The drawing took place, and winners were notified, on May 15, 2018.

Data Analysis

The data were analyzed to determine the answers to each of the research questions using SPSS 25.0 (Statistical Package for Social Sciences) for statistical analyses. An alpha level of .05 was used for all research questions to determine statistical significance, while a moderate to medium effect size of .30-.50 (Cohen, 1988), was used to determine practical significance.

Several statistical assumptions were made before employing the independent samples *t*-test, a statistical technique to determine differences between two groups, and the Pearson correlation coefficient, a statistical technique to explore the strength of the relationship between two variables (Field, 2009). To control statistical errors, Levene's test for equality of variances tested whether the variance of scores of the two groups, respectively, was the same. The outcome of the Levene's test determined which *t*-values should be used. Before performing the Pearson correlation coefficient, scatterplots were generated to check for violations of the assumptions of linearity and homoscedasticity, and to better understand the nature of the relationship between the variables.

For Research Questions 1, 2, 3, and 4, independent samples *t*-tests were conducted to evaluate whether the paralegal instructors' perceptions of online paralegal course effectiveness subscales (flexibility, user interface, navigation, getting started, technical assistance, course management, universal design, communication, instructional design, and content) were significantly different across the dependent variables of gender, age, native language, paralegal education level, education level, technology skills, number of synchronous and asynchronous

online paralegal courses taught or taken. Because each of the variables constructed contained multiple items, composite means were computed for each of the variables' constructs.

Research Question 1: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal course effectiveness?

Research Question 2: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of asynchronous online paralegal course effectiveness?

Research Question 3: Are there significant differences in paralegal students' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

Research Question 4: Are there significant differences in paralegal instructors' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

The researcher used the Pearson correlation coefficient analysis to test Research Questions 5, 6, 7, and 8. Because each of the variables' constructed contained multiple items, composite means were computed for each of the variables' constructs.

Research Question 5: Are there significant relationships between paralegal students' perceptions of synchronous online paralegal course effectiveness subscales and students' demographic characteristics?

Research Question 6: Are there significant relationships between paralegal students' perceptions of asynchronous online paralegal course effectiveness subscales and students' demographic characteristics?

Research Question 7: Are there significant relationships between paralegal instructors' perceptions of synchronous online paralegal course effectiveness subscales and instructors' demographic characteristics?

Research Question 8: Are there significant relationships between paralegal instructors' perceptions of asynchronous paralegal course effectiveness subscales and instructors' demographic characteristics?

The demographic data was analyzed using descriptive statistics in SPSS. The results from the open-ended question appear in Appendix C to provide anecdotal information about the participants' perceptions of synchronous and asynchronous online paralegal effectiveness.

Summary

This chapter discussed the research design, population, sample, instrumentation, data collection, and data analysis procedures required to answer the research questions for this study. Results for all analyses are reported in Chapter 4 following data collection. Chapter 4 discusses descriptive, inferential, and quantitative analyses, and evaluation of the research questions.

CHAPTER 4

FINDINGS

Overview

This study examined how paralegal students and paralegal instructors perceive of synchronous and asynchronous online paralegal course effectiveness. This study intended to improve online learning pedagogy within the field of paralegal education, and to fill the literature gap related to the effectiveness of online paralegal education. It also informed paralegal instructors and course developers of how to design, deliver, and evaluate effective online course instruction in the field of paralegal studies.

This chapter provides the results of the research analysis of the eight research questions as outlined in Chapter 3. The first research question asked whether significant differences existed between paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal course effectiveness. The second research question asked whether significant differences existed between paralegal students' perceptions and paralegal instructors' perceptions of asynchronous online paralegal course effectiveness. The third research question asked whether significant differences existed in paralegal students' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses. The fourth research question asked whether significant differences existed in paralegal instructors' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses. The fifth research question asked whether significant relationships existed between paralegal students' perceptions of synchronous online paralegal course effectiveness subscales and students' demographic characteristics. The sixth research question asked whether significant

relationships existed between paralegal students' perceptions of asynchronous online paralegal course effectiveness subscales and students' demographic characteristics. The seventh research question asked whether significant relationships existed between paralegal instructors' perceptions of synchronous online paralegal course effectiveness subscales and instructors' demographic characteristics. And the eighth and final research question asked whether significant relationships existed between paralegal instructors' perceptions of asynchronous paralegal course effectiveness subscales and instructors' demographic characteristics. In the sections that follow, descriptive statistics analysis was performed to report sample characteristics; tests of normality to ensure normality and homoscedasticity; instrument analysis to report the reliability and validity of the survey instruments; and analysis using independent samples *t*-test and correlation analysis to report the results of the research questions.

Data Validation and Descriptive Statistics

This section discusses the sample size of the study, descriptive statistics of the participants to the study, and discusses data distribution and normality.

Sample Size

Survey questions and item data were collected by the online survey instrument (Qualtrics) and stored immediately upon the individual participant's survey submission. Participant data were collected for 165 total survey submissions. All participants had taken or taught at least one online paralegal course. Nine participants did not complete the survey and were removed from the study. Therefore, the resulting sample size totaled 156, with 89 valid responses from paralegal students and 67 valid responses from paralegal instructors, which

exceeded the required minimum sample size of 128. Table 1 lists the number of paralegal instructors and paralegal students who completed the online survey questionnaire by state.

Table 1

Number of Participants by State Who Completed the Survey

Educational Institution by State	Participants (Paralegal Instructors) by State	Participants (Paralegal Students) by State	Total by State
Alaska	1	0	1
Arkansas	4	14	18
Arizona	1	0	1
California	5	3	8
Delaware	1	0	1
Florida	6	6	12
Georgia	2	0	2
Hawaii	1	0	1
Illinois	4	0	4
Indiana	1	1	2
Kentucky	2	15	17
Louisiana	1	0	1
Massachusetts	2	3	5
Maryland	1	18	19
Minnesota	1	0	1
Mississippi	1	1	2
North Carolina	2	1	3
New Jersey	4	0	4
New York	2	0	2
Ohio	4	6	10
Oklahoma	2	1	3
Pennsylvania	4	0	4
Tennessee	4	2	6
Texas	6	15	21
Virginia	1	0	1
Washington	1	1	2
Wisconsin	2	0	2
No Response	1	2	3
Totals	67	89	156

Descriptive Statistics

Paralegal Students' Descriptive Demographics and Perceptions

Of the valid survey completions, 78% of the paralegal student respondents were female and 92% were native English speakers. Respondents' year of birth determined a respondent's generational cohort group. Across the generational cohorts, 6% were Baby Boomers, born between 1946 and 1964; 15% were Generation Xers, born between 1965 and 1976; 58% were Millennials, born between 1977 and 1995; and, 22% were members of the Generation Z cohort, born after 1996. For highest educational level, 6% had master's degrees, 29% had bachelor's degrees, 22% had associate's degrees, 37% had some taken some college courses, and 6% had a high school diploma or GED. For technology skills, 69% had advanced technology skills, 30% had intermediate technology skills, and 1% had beginner technology skills. The average number of synchronous online paralegal courses taken was 1 (*SD* = 3). The average number of asynchronous online paralegal courses taken were 4 (*SD* = 3). Table 2 lists the descriptive statistics results of the paralegal students' perceptions subscales.

Table 2

Paralegal Students' Perceptions of Online Paralegal Course Effectiveness by Subscales

	N	Mean	Std. Deviation
Flexibility	89	4.44	.48
User Interface	89	4.19	.55
Navigation	89	4.19	.62
Getting Started	89	4.23	.62
Technical Assistance	89	3.86	.75
Course Management (Instructor)	89	4.22	.55
Course Management (Student)	89	4.39	.50
Universal Design	89	4.08	.59
Communication	89	4.32	.55
Online Instructional Design	89	4.08	.53
Content	89	4.28	.50

Paralegal Instructors' Descriptive Demographics and Perceptions

Of the valid survey completions, 73% of the paralegal instructor respondents were female and 100% were native English speakers. Respondents' year of birth determined a respondent's generational cohort group. Across the generational cohorts, 56% were Baby Boomers, born between 1946 and 1964; 38% were Generation Xers, born between 1965 and 1976; 6% were Millennials, born between 1977 and 1995. No respondents were members of the Generation Z cohort, born after 1996. For highest educational level, 80% had doctoral or professional terminal degree (e.g., juris doctor), 18% had master's degrees, and 2% had bachelor's degrees. For technology skills, 79% had advanced technology skills and 21% had intermediate technology skills. The average number of synchronous online paralegal courses taught were 4 (*SD* = 16). The average number of asynchronous online paralegal courses taught were 19 (*SD* = 25*)*. Table 3 lists the descriptive statistics results of the paralegal instructors' perceptions subscales.

Table 3

Paralegal Instructors' Perceptions of Online Paralegal Course Effectiveness by Subscales

	N	Mean	Std. Deviation
Flexibility	67	4.46	.46
User Interface	67	4.25	.43
Navigation	67	4.09	.45
Getting Started	67	4.13	.58
Technical Assistance	67	4.30	.85
Course Management (Instructor)	67	4.27	.46
Course Management (Student)	67	4.46	.41
Universal Design	67	3.95	.52
Communication	67	4.61	.43
Online Instructional Design	67	4.24	.45
Content	67	4.64	.44

Data Distribution and Normality

The assumptions of normality were deemed acceptable to continue with parametric analysis. This researcher used both quantitative and visual (observational) methods to evaluate normality. A variable is considered reasonably normal if its skewness and kurtosis have values between -1.0 and +1.0 based on supporting research literature (Field, 2009). In this study, skewness for each of the course effectiveness subscales ranged from -1.74 to 0.20; kurtosis ranged from -.94 to 3.21 (see Tables 4 and 5). Q-Q plots also supported the assumption of normal data. Namely, observation data were distributed closely around the resulting linear regression line.

Table 4

Descriptive Statistics: Variable Normality for Paralegal Students' Perceptions of Online Paralegal Course Effectiveness by Subscales

	Mean	Std. Deviation	Variance	Skewness	Kurtosis
Flexibility	4.44	.48	.229	-.249	-.936
User Interface	4.19	.55	.306	-.403	.067
Navigation	4.19	.62	.381	-.122	-.606
Getting Started	4.23	.62	.389	-.342	-.488
Technical Assistance	3.86	.75	.562	-.205	-.517
Course Management (Instructor)	4.22	.55	.301	-.009	-.771
Course Management (Student)	4.39	.50	.248	-.251	-.860
Universal Design	4.08	.59	.351	.011	-.615
Communication	4.32	.55	.300	-.323	-.272
Online Instructional Design	4.08	.53	.281	.043	-.074
Content	4.28	.50	.246	.090	-.780

Table 5

Descriptive Statistics: Variable Normality for Paralegal Instructors' Perceptions of Online Paralegal Course Effectiveness by Subscales

	Mean	Std. Deviation	Variance	Skewness	Kurtosis
Flexibility	4.46	.46	.212	-.645	-.011
User Interface	4.25	.43	.182	-.251	.871
Navigation	4.09	.45	.202	.198	.772
Getting Started	4.13	.58	.336	-.573	1.237
Technical Assistance	4.30	.85	.720	-.258	.607
Course Management (Instructor)	4.27	.46	.215	-.577	.624
Course Management (Student)	4.46	.41	.168	-.690	.571
Universal Design	3.95	.52	.273	-.328	.117
Communication	4.61	.43	.181	-1.737	2.848
Online Instructional Design	4.23	.45	.207	-.619	-.013
Content	4.64	.44	.190	-1.730	3.205

However, deviation from normality was indicated but given the skewness, kurtosis, and visual Q-Q Plots, this researcher determined that the level of normality was acceptable for continuing with parametric testing as outlined by the study's methodology. Deviation from normality, including additional data analysis and support from previous research literature, and supporting continuance with parametric testing are discussed below.

Deviation from normality was indicated by the Shapiro-Wilks statistic. Analysis performed between paralegal instructors and the subscales of Communication and Content indicated violations on the assumption of equal variance. As a result of the potential threats to non-normality, additional tests were performed to demonstrate equal variance (i.e., homoscedasticity) between Communication and Content for paralegal instructors. Evidence of normality was demonstrated by Levene's tests, indicating nonsignificance to unequal variances, demonstrating support for continuing with parametric testing. This also precluded the need to perform log transformation of the data.

Both *t* and *F* tests' robustness to certain violations of normality correspond to long-standing research literature. Boneau (1960) stated that *t* tests maintain robustness to certain violations of non-normality and further stated that, "since the t and F tests of analysis of variance are intimately related, it can be shown that many of the statements referring to the t test can be generalized quite readily to the F test" (p. 63). Box (1953), and Boneau (1960) have also investigated the effects of normality violations, and drew the general conclusion that, "for equal sample sizes, violating assumption of homogeneity of variance produces very small effects" (Howell 2007, p. 203). Additional research supporting the use of parametric analysis without performing log transformation was discussed in the reliability section below.

Instrument Analysis

The two survey instruments gathered data on the eleven dependent variables of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content. Composite means were computed for each of the eleven constructs, and each were measured on a 5-point Likert scale. Reliability and validity were also evaluated.

Reliability

Consistent with the Tung study (2007), analysis showed acceptable reliability as measured by Cronbach's alpha. Specifically, Cronbach's alpha scores for paralegal students' perceptions of course effectiveness subscales ranged from .84 for flexibility to .95 for content, and Cronbach's alpha scores for paralegal instructors' perceptions of course effectiveness subscales ranged from .75 for course management (student) to .94 for content (see Tables 6 and 7). Nunnaly (1978) has indicated 0.7 to be an acceptable reliability coefficient, and the higher the score, then the more reliable the generated scale (Santos, 1999). This reliability

analysis of the eleven subscales paralleled the reliability analysis as reported by Tung (2007) using the same two survey instruments and subscales.

Table 6

Reliability Statistics for Internal Consistency for Paralegal Students' Perceptions of Online Paralegal Course Effectiveness by Subscales

Subscale	Cronbach's Alpha	N of items
Flexibility	.84	6
User Interface	.90	9
Navigation	.90	6
Getting Started	.89	6
Technical Assistance	.89	4
Course Management (Instructor)	.94	10
Course Management (Student)	.90	7
Universal Design	.90	7
Communication	.92	8
Online Instructional Design	.95	22
Content	.95	14

Table 7

Reliability Statistics for Internal Consistency for Paralegal Instructors' Perceptions of Online Paralegal Course Effectiveness by Subscales

Subscale	Cronbach's Alpha	N of items
Flexibility	.76	6
User Interface	.83	9
Navigation	.76	6
Getting Started	.84	6
Technical Assistance	.76	4
Course Management (Instructor)	.84	10
Course Management (Student)	.75	7
Universal Design	.79	7
Communication	.86	8
Online Instructional Design	.91	22
Content	.94	14

The next section discusses the data analyses performed to examine participant responses and provides specific analysis for each of the eight research questions.

Data Analysis

This study used independent samples *t*-test and the Pearson correlation coefficient to examine how paralegal students' and paralegal instructors' perceived synchronous and asynchronous online paralegal course effectiveness. Data were examined for eight research questions (see Table 8), and the results of each research question appear below.

Table 8

Research Questions Analyses and Results

Research Question	Result	Measure	Coefficient	Sig.
RQ 1	Yes	Independent Samples *t*-test	*t*	$p < .05$ $p < .001$
RQ 2	Yes	Independent Samples *t*-test	*t*	$p < .05$
RQ 3	No	Independent Samples *t*-test	*t*	$p > .05$
RQ 4	Yes	Independent Samples *t*-test	*t*	$p < .05$
RQ 5	Yes	Pearson Correlation Coefficient	*r*	$p < .05$
RQ 6	No	Pearson Correlation Coefficient	*r*	$p > .05$
RQ 7	Yes	Pearson Correlation Coefficient	*r*	$p < .05$
RQ 8	Yes	Pearson Correlation Coefficient	*r*	$p < .05$

Research Question 1: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal course effectiveness?

Independent samples *t*-tests compared paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal courses subscales of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, online instructional design, and content. No significant differences in scores were found for paralegal students' perceptions and paralegal instructors' perceptions for the following subscales, and the magnitude of the differences in means for each was minimal: flexibility, user interface,

navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, and communication (see Table 9).

However, statistically significant differences for the subscale of online instructional design appeared between paralegal students' perceptions (M = 4.03, SD = .50; and paralegal instructors' perceptions (M = 4.41, SD = .26); (t (29) = 2.41, p < .05). The magnitude of the difference in the means (mean difference = .39, 95% CI: .06 to .72) represented a medium-size effect (r = 0.41).

And, statistically significant differences occurred between paralegal students' perceptions (M = 4.19, SD = .46) and paralegal instructors' perceptions (M = 4.84, SD = .17) for the subscale of content (t (29) = 5.63, p < .001). The magnitude of the difference in the means (mean difference = .65, 95% CI: .41 to .89) represented a large-size effect (r = 0.74).

Therefore, paralegal instructors tended to report higher perceptions of effective synchronous online course instructional design and course content than paralegal students.

Table 9

Results of t-Tests and Descriptive Statistics for Paralegal Students' and Paralegal Instructors' Perceptions of Synchronous Online Course Effectiveness Subscales

Outcome	Group						95% CI for Mean Difference	t	df
	Paralegal Students			Paralegal Instructors					
	M	*SD*	*N*	*M*	*SD*	*N*			
Flexibility	4.32	.38	20	4.42	.34	11	-.17, .39	.78	29
User Interface	4.28	.56	20	4.18	.35	11	-.42, .24	-.56	28.49[a]
Navigation	4.30	.65	20	4.08	.32	11	-.58, .13	-1.28	29
Getting Started	4.28	.65	20	4.20	.50	11	-.52, .35	-.41	25.72[a]
Technical Assistance	3.88	.78	20	4.07	.78	11	-.40, .79	.66	29
Course Management (instructor)	4.14	.50	20	4.25	.38	11	-.24, .48	.69	29
Course Management (student)	4.40	.53	20	4.38	.39	11	-.40, .35	-.13	29
Universal Design	4.04	.58	20	4.27	.44	11	-.18, .64	1.15	29
Communication	4.35	.53	20	4.61	.46	11	-.13, .65	1.38	29
Online Instructional Design	4.03	.50	20	4.41	.26	11	.06, .72	2.41*	29
Content	4.19	.46	20	4.84	.17	11	.41, .89	5.63**	26.58[a]

Note: [a] Degrees of freedom are adjusted to account for not meeting the homogeneity of variance assumption.

* indicates significance at the p < .05 level

** indicates significance at the p < .001 level

Research Question 2: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of asynchronous online paralegal course effectiveness?

Independent samples *t*-tests compared paralegal students' perceptions and paralegal instructors' perceptions of asynchronous online paralegal course subscales of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, online instructional design, and content. No statistically significant differences appeared in scores of paralegal students' perceptions and paralegal instructors' perceptions of the following subscales, and the magnitude of the differences in means for each was minimal: flexibility, user interface, navigation, getting started, course management (instructor), course management (student), and online instructional design (see Table 10).

However, there were statistically significant differences for the subscale of technical assistance between paralegal students' perceptions (M = 3.86, SD = .75) and paralegal instructors' perceptions (M = 4.31, SD = .84); (t (122) = 3.21, $p < .05$). The magnitude of the difference in the means (mean difference = .46, 95% CI: .18 to .74) represented a small-size effect (r = 0.28).

Statistically significant differences also appeared between paralegal students' perceptions (M = 4.09, SD = .60) and paralegal instructors' perceptions (M = 3.88, SD = .52) of the subscale of universal design (t (122) = 321, $p < .05$). The magnitude of the difference in the means (mean difference = -.21, 95% CI: -.41 to -.00) represented a small-size effect (r = 0.18).

There also were statistically significant differences between paralegal students' perceptions (M = 4.31, SD = .56) and paralegal instructors' perceptions (M = 4.61, SD = .43) of

the subscale of communication (t (122) = 3.30, $p < .05$). The magnitude of the difference in the means (mean difference = .30, 95% CI: .12 to .48) represented a small-size effect (r = 0.29).

Statistically significant differences occurred between paralegal students' perceptions (M = 4.31, SD = .50) and paralegal instructors' perceptions (M = 4.60, SD = .46) of the subscale of content (t (122) = 3.23, $p < .05$). The magnitude of the difference in the means (mean difference = .28, 95% CI: .11 to .46) represented a small-size effect (r = 0.28). Therefore, paralegal students reported higher perceptions of effective asynchronous online universal design than paralegal instructors. Conversely, paralegal instructors reported higher perceptions of effective asynchronous online course communication and course content than paralegal students.

Table 10

Results of t-tests and Descriptive Statistics for Paralegal Students' and Paralegal Instructors' Perceptions of Asynchronous Online Course Effectiveness Subscales

Outcome	Group						95% CI for Mean Difference		
	Paralegal Students			Paralegal Instructors					
	M	*SD*	*N*	*M*	*SD*	*N*		*t*	df
Flexibility	4.48	.50	69	4.46	.49	55	-.19, .15	-.20	122
User Interface	4.16	.55	69	4.25	.44	55	-.89, .27	1.00	122
Navigation	4.15	.61	69	4.08	.47	55	-.26, .12	-.72	121.93[a]
Getting Started	4.22	.62	69	4.14	.57	55	-.29, .14	-.67	122
Technical Assistance	3.86	.75	69	4.31	.84	55	.18, .74	3.21*	122
Course Management (instructor)	4.24	.56	69	4.28	.48	55	-.15, .22	.38	121.26[a]
Course Management (student)	4.39	.49	69	4.46	.41	55	-.86, .24	.93	121.68[a]
Universal Design	4.09	.60	69	3.88	.52	55	-.41, -.00	-2.01*	122
Communication	4.31	.56	69	4.61	.43	55	.12, .48	3.30*	122
Online Instructional Design	4.10	.54	69	4.19	.48	55	.09, .28	1.00	122
Content	4.31	.50	69	4.60	.46	55	.11, .46	3.23*	122

Note: [a] Degrees of freedom are adjusted to account for not meeting the homogeneity of variance assumption.
* indicates significance at the $p < .05$ level

Research Question 3: Are there significant differences in paralegal students' perceptions of course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

Independent samples *t*-tests compared paralegal students' perceptions of synchronous and asynchronous online paralegal courses across all subscales of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, online instructional design, and content. There were no significant differences in scores for paralegal students' perceptions of any of the subscales (see Table 11), and the resulting magnitude of the differences in means for each subscale was very small. Therefore, on average, no statistically significant differences existed between paralegal students' perceptions of synchronous and asynchronous online course effectiveness.

Table 11

Results of t-Tests and Descriptive Statistics for Paralegal Students' Perceptions of Synchronous and Asynchronous Online Course Effectiveness Subscales

Outcome	Group						95% CI for Mean Difference		
	Synchronous Paralegal Students			Asynchronous Paralegal Students					
	M	*SD*	*N*	*M*	*SD*	*N*		*t*	df
Flexibility	4.32	.38	20	4.47	.50	69	-.40, .07	-1.34	87
User Interface	4.28	.56	20	4.16	.55	69	-.17, .39	.79	87
Navigation	4.30	.65	20	4.15	.61	69	-.16, .46	.93	87
Getting Started	4.28	.65	20	4.22	.62	69	-.25, .38	.43	87
Technical Assistance	3.88	.78	20	3.86	.75	69	-.36, .40	.10	87
Course Management (instructor)	4.14	.50	20	4.24	.56	69	-.38, .17	-.76	87
Course Management (student)	4.40	.53	20	4.39	.49	69	-.24, .27	.10	87
Universal Design	4.04	.58	20	4.09	.60	69	-.35, .25	-.31	87
Communication	4.35	.53	20	4.30	.56	69	-.24, .32	.29	87
Online Instructional Design	4.03	.50	20	4.10	.54	69	-.34, .20	-.54	87
Content	4.19	.46	20	4.31	.50	69	-.38, .12	-1.00	87

Research Question 4: Are there significant differences in paralegal instructors' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

Independent samples *t*-tests were conducted to compare paralegal instructors' perceptions of synchronous and asynchronous online paralegal courses across all subscales of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, online instructional design, and content. There were no significant differences in scores for paralegal instructors' perceptions of the subscales for flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), and communication (see Table 12), and the resulting magnitude of the differences in means for each of those respective subscales was very small. Therefore, on average, no statistically significant differences existed between paralegal instructors' perceptions of synchronous and asynchronous online course effectiveness for flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), and communication.

However, statistically significant differences appeared for the subscale of universal design between paralegal instructors' perceptions of synchronous online courses (M = 4.24, SD = .44) and asynchronous online courses (M = 3.88, SD = .52); (t (65) = 2.19, p < .05). The magnitude of the difference in the means (mean difference = .35, 95% CI: .03 to .68) represented a small-size effect (r = 0.26).

There also were statistically significant differences for the subscale of online instructional design between paralegal instructors' perceptions of synchronous online courses

(*M* = 4.44, *SD* = .27) and asynchronous online courses (*M* = 4.19, *SD* = .48); (*t* (28.81) = 2.53, *p* < .05). The magnitude of the difference in the means (mean difference = .25, 95% CI: .05 to .46) represented a medium-size effect (*r* = 0.43).

And, there were statistically significant differences for the subscale of online course content between paralegal instructors' perceptions of synchronous online courses (*M* = 4.85, *SD* = .17) and asynchronous online courses (*M* = 4.60, *SD* = .46); (*t* (48.96) = 3.21, *p* < .05). The magnitude of the difference in the means (mean difference = .26, 95% CI: .10 to .42) represented a medium-size effect (*r* = 0.42).

Therefore, paralegal instructors reported higher perceptions of effective synchronous online universal design, online instructional design, and course content than asynchronous courses.

Table 12

Results of t-tests and Descriptive Statistics for Paralegal Instructors' Perceptions of Synchronous and Asynchronous Online Course Effectiveness Subscales

Outcome	Group						95% CI for Mean Difference		
	Synchronous Paralegal Instructors			Asynchronous Paralegal Instructors					
	M	*SD*	*N*	*M*	*SD*	*N*		*t*	df
Flexibility	4.44	.34	12	4.46	.49	55	-.26, .23	-.14	22.42[a]
User Interface	4.23	.37	12	4.25	.44	55	-.30, .25	-.17	65
Navigation	4.13	.35	12	4.08	.47	55	-.25, .33	.28	65
Getting Started	4.07	.65	12	4.14	.57	55	-.44, .30	-.39	65
Technical Assistance	4.23	.93	12	4.31	.84	55	-.63, .46	-.31	65
Course Management (instructor)	4.23	.37	12	4.28	.48	55	-.34, .25	-.29	65
Course Management (student)	4.43	.41	12	4.46	.41	55	-.30, .23	-.26	65
Universal Design	4.23	.44	12	3.88	.52	55	.03, .68	2.19*	65
Communication	4.63	.44	12	4.61	.43	55	-.26, .29	.12	65
Online Instructional Design	4.44	.27	12	4.19	.48	55	.05, .46	2.53*	28.81[a]
Content	4.85	.17	12	4.60	.46	55	.10, .42	3.21*	48.96[a]

Note: [a] Degrees of freedom are adjusted to account for not meeting the homogeneity of variance assumption.
* indicates significance at the *p* < .05 level

Research Question 5: Are there significant relationships between paralegal students' perceptions of synchronous online paralegal course effectiveness subscales and students' demographic characteristics?

The Pearson correlation coefficient measured the relationship between paralegal students' perceptions of synchronous online paralegal course effectiveness and the paralegal students' demographic characteristics of gender, age, highest education level, technology skills, and the number of synchronous courses taken (see Table 13). Preliminary analyses were performed to ensure no violation of the assumption of normality, linearity, and homoscedasticity. The results indicated that there were no statistically significant relationships between paralegal students' gender, education level, technology skills, or the number of synchronous courses taken and their perceptions of synchronous online paralegal course effectiveness related to the subscales of flexibility, navigation, getting started, technical assistance, course management (instructor), course management (student), and communication. There were strong, negative correlations between paralegal students' age and the paralegal students' perceptions of synchronous online paralegal course effectiveness for the subscales of user interface (r = -.50, n = 20, p < .05 level (2-tailed)), navigation (r = -.48, n = 20, p < .05 level (2-tailed)), universal design (r = -.52, n = 20, p < .05 (2-tailed)), and online instructional design (r = -.62, n = 20, p < .001 level (2-tailed)).

Practical significance can be determined by the effect size of the correlation, or the coefficient of determination, as represented by r^2. The coefficient of determination varies from 0 to 1.00 and indicates that the proportion of variance in the scores can be predicted from the relationship between variables. In this study, the coefficient of determination was .25 for user interface, .23 for navigation, .27 for universal design, and .38 for online instructional design,

which means that 25% of the variation in the mean of user interface, 23% for navigation, 27% for universal design, and 38% for online instructional design, respectively, can be predicted from paralegal students' age.

For the behavioral sciences, correlation coefficients of .10, .30, and .50 irrespective of positive or negative are, by convention, interpreted as small, medium, and large coefficients, respectively (Green & Salkind, 2005).

Table 13

Pearson Correlation Coefficient (r) for Paralegal Students' Perceptions of Synchronous Online Paralegal Course Effectiveness by Subscales

	Gender	Age	Education Level	Technology Skills	Number of Synchronous Courses Taken
Flexibility	.27	-.37	-.04	.29	.16
User Interface	.17	-.50*	.16	.31	-.09
Navigation	.05	-.48*	.10	.16	-.06
Getting Started	-.19	-.20	-.34	.11	.05
Technical Assistance	.00	-.41	-.21	.02	-.18
Course Management (Instructor)	.16	-.41	-.23	.13	.14
Course Management (Student)	.33	-.30	.09	.12	.17
Universal Design	.24	-.52*	-.11	.14	-.14
Communication	.31	-.24	.17	.44	-.02
Online Instructional Design	.42	-.62**	-.16	.12	.21
Content	.15	-.42	-.17	.27	.14

*. Correlation is significant at the 0.05 level (two-tailed).
** . Correlation is significant at the 0.01 level (two-tailed).

Research Question 6: Are there significant relationships between paralegal students' perceptions of asynchronous online paralegal course effectiveness subscales and students' demographic characteristics?

The Pearson correlation coefficient measured the relationship between paralegal students' perceptions of asynchronous online paralegal course effectiveness and the paralegal students' demographic characteristics of gender, age, highest education level, technology skills, and the number of asynchronous courses taken (see Table 14). Preliminary analyses were

performed to ensure no violation of the assumption of normality, linearity, and homoscedasticity. The results indicated that there were no statistically significant relationships between paralegal students' gender, age, education level, technology skills, or the number of asynchronous courses taken and their perceptions of asynchronous online paralegal course effectiveness related to any of the subscales of flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, online instructional design, or content.

Table 14

Pearson Correlation Coefficient (r) for Paralegal Students' Perceptions of Asynchronous Online Paralegal Course Effectiveness by Subscales

	Gender	Age	Education Level	Technology Skills	Number of Asynchronous Courses Taken
Flexibility	.04	-.10	.16	-.11	-.08
User Interface	.11	-.09	.06	-.14	-.13
Navigation	.14	.03	-.10	-.06	.08
Getting Started	.01	.02	-.09	-.10	.01
Technical Assistance	.11	.18	-.09	-.21	-.08
Course Management (Instructor)	.11	.11	-.09	-.14	-.02
Course Management (Student)	-.01	-.03	.01	-.13	-.06
Universal Design	.14	.11	-.10	-.16	-.01
Communication	-.00	.03	.13	-.05	-.03
Online Instructional Design	.17	.13	.02	-.07	.01
Content	.09	.20	-.05	-.10	-.07

Research Question 7: Are there significant relationships between paralegal instructors' perceptions of synchronous online paralegal course effectiveness subscales and instructors' demographic characteristics?

The Pearson correlation coefficient measured the relationship between paralegal instructors' perceptions of synchronous online paralegal course effectiveness and the paralegal instructors' demographic characteristics of gender, age, highest education level, technology

skills, and the number of synchronous online paralegal courses taught (see Table 15). Preliminary analyses were performed to ensure no violation of the assumption of normality, linearity, and homoscedasticity. The results indicated that there were no statistically significant relationships between paralegal instructors' gender, education level, or technology skills and their perceptions of synchronous online paralegal course effectiveness related to the subscales of flexibility, navigation, getting started, course management (instructor), universal design, or communication.

There was a strong, negative correlation between paralegal instructors' age and their perceptions of effective synchronous online paralegal course content (r = -.73, n = 11, p < .05). There also was a strong, positive correlation between paralegal instructors' education level and their perceptions of effective synchronous online paralegal course content (r = .67, n = 11, p < .05). As mentioned above, practical significance was calculated based on the effect size of the correlation. In this study, the coefficient of determination for perceptions of effective synchronous online paralegal course content was .53, which means that 53% of the variation in the mean of online paralegal course content can be predicted from paralegal instructors' age. Similarly, the coefficient of determination for perceptions of effective synchronous online paralegal course content was .45, which means that 45% of the variation in the mean of online paralegal course content can be predicted from paralegal instructors' education level.

And, there was a strong positive correlation between the number of synchronous online paralegal courses taught by paralegal instructors' and their perceptions of effective synchronous online paralegal user interface (r = .63, n = 12, p < .05), technical assistance (r = .69, n = 12, p < .05), course management (student) (r = .65, n = 12, p < .05), and online instructional design (r = .61, n = 12, p < .05).

As mentioned above, practical significance was calculated based on the effect size of the correlation. In this study, the coefficient of determination for perceptions of effective synchronous online paralegal user interface was .40, paralegal technical assistance was .48, course management (student) was .42, and online instructional design was .37, which means that 40% of the variation in the mean of online paralegal user interface, 42% of the variation in the mean of technical assistance, 37% of the variation in the mean of course management (student), and 37% of the variation in the mean of online instructional design can be predicted from the number of synchronous online paralegal courses taught by the paralegal instructors.

For the behavioral sciences, correlation coefficients of .10, .30, and .50 irrespective of positive or negative are, by convention, interpreted as small, medium, and large coefficients, respectively (Green & Salkind, 2005).

Table 15

Pearson Correlation Coefficient (r) for Paralegal Instructors' Perceptions of Synchronous Online Paralegal Course Effectiveness by Subscales

	Gender	Age	Education Level	Technology Skills	Number of Synchronous Courses Taught
Flexibility	-.41	.44	-.30	-.54	.37
User Interface	-.35	-.15	.30	-.16	.63*
Navigation	-.44	-.14	.30	-.15	.48
Getting Started	-.10	.10	.08	-.29	-.38
Technical Assistance	-.35	-.04	.13	-.13	.69*
Course Management (Instructor)	-.16	.14	.10	-.35	.08
Course Management (Student)	-.24	-.10	.25	-.08	.65*
Universal Design	.14	-.19	.44	-.11	.04
Communication	-.10	-.14	.26	.12	.21
Online Instructional Design	-.07	-.36	.49	.00	.61*
Content	.27	-.73*	.67*	.48	.35

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

Research Question 8: Are there significant relationships between paralegal instructors' perceptions of asynchronous paralegal course effectiveness subscales and instructors' demographic characteristics?

The Pearson correlation coefficient measured the relationship between paralegal instructors' perceptions of asynchronous online paralegal course effectiveness and the paralegal instructors' demographic characteristics of gender, age, highest education level, technology skills, and the number of asynchronous online paralegal courses taught (see Table 16). Preliminary analyses were performed to ensure no violation of the assumption of normality, linearity, and homoscedasticity. The results indicated that there were no statistically significant relationships between paralegal instructors' gender, education level, technology skills, or the number of asynchronous online paralegal courses taught and their perceptions of asynchronous online paralegal course effectiveness related to the subscales of flexibility, user interface, navigation, technical assistance, course management (instructor), course management (student), communication, online instructional design, or content.

There was a negative correlation between paralegal instructors' age and their perceptions of asynchronous online paralegal course effectiveness related to the subscale of getting started (r = -.30, n = 55, p < .05). As mentioned above, practical significance was calculated based on the effect size of the correlation. In this study, the coefficient of determination for the effective asynchronous online paralegal course subscale of getting started was .09, which means that only 9% of the variation in the mean of asynchronous online course effectiveness for getting started can be predicted from the paralegal instructors' age.

There also was a positive correlation between paralegal instructors' technology skills and their perceptions of effective asynchronous online paralegal course universal design (r = .27, n = 55, p < .05).

As mentioned above, the practical significance was calculated based on the effect size of the correlation. In this study, the coefficient of determination for the effective asynchronous online paralegal course subscale of universal design was .07, which means that only 7% of the variation in the mean of asynchronous online course effectiveness for universal design can be predicted from the paralegal instructors' technology skills.

For the behavioral sciences, correlation coefficients of .10, .30, and .50 irrespective of positive or negative are, by convention, interpreted as small, medium, and large coefficients, respectively (Green & Salkind, 2005).

Table 16

Pearson Correlation Coefficient (r) for Paralegal Instructors' Perceptions of Asynchronous Online Paralegal Course Effectiveness by Subscales

	Gender	Age	Education Level	Technology Skills	Number of Asynchronous Courses Taken
Flexibility	.18	-.03	-.07	.26	.05
User Interface	.11	-.16	.13	.15	.10
Navigation	.03	-.14	.09	.16	.14
Getting Started	-.01	-.30*	.03	.13	.02
Technical Assistance	-.11	-.19	.09	-.15	.07
Course Management (Instructor)	.03	-.03	.00	.09	-.15
Course Management (Student)	.05	-.12	.01	.18	.20
Universal Design	.17	.01	-.20	.27	-.17
Communication	-.03	-.13	-.02	-.01	-.07
Online Instructional Design	.11	-.11	.01	.26	-.03
Content	-.09	-.09	.08	.11	-.02

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

Summary

This chapter provided the results from the data collected and the statistical tests performed for the eight research questions. The analyses validated the instrumentation, data, and methodology used to answer the study's research questions. Methods included reliability and validity analysis, independent samples *t*-test, and correlation analysis. Findings discussed the statistically significant differences and relationships of the eight research questions outlined in the previous chapters. Chapter 5 provides a summary of the study, discussion of findings, and recommendations for future research.

CHAPTER 5

SUMMARY, IMPLICATIONS, AND RECOMMENDATIONS

Overview

This chapter summarizes findings, implications for the field and inferences drawn from the results, and recommendations for future research. The summary provides an overview of the findings that helped answer the study's research questions. Next, implications for the field are discussed and inferences are drawn that have practical, academic, and theoretical significance. Lastly, recommendations are provided for future research opportunities.

Summary of Findings

A driving premise for this study was the dearth of empirical studies within the field of paralegal studies, as well as its exclusion within the broader scope of online and distance learning education literature. To improve online learning pedagogy within the field of paralegal education, instructors and course developers needed to understand how paralegal instructors and paralegal students perceived the effectiveness of web-based learning in online paralegal courses. The purpose of this study was to measure the perceptions of paralegal instructors and paralegal students toward the effectiveness of synchronous and asynchronous online paralegal courses (flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content).

The study comprised 89 paralegal students and 67 paralegal instructors who were taking or teaching, or had previously taken or taught, synchronous or asynchronous online paralegal courses. Data were collected with an online questionnaire in the areas of the eleven

dependent variables as noted above, each for paralegal instructors and paralegal students, respectively, to ascertain how they perceived online course effectiveness. Of the participants, 78% of the paralegal student and 73% of paralegal instructor respondents were female, a representative sample of gender demographics for paralegals when compared to the U. S. Department of Labor Statistics (2017) reflecting that 84% of paralegals were female.

The data were then analyzed using independent samples *t*-test (research questions 1, 2, 3, and 4) and correlational analysis (research questions 5, 6, 7, and 8). The results indicated that overall, paralegal students and paralegal instructors positively perceived synchronous and asynchronous online paralegal courses. Results also found statistically significant differences in the way paralegal students and paralegal instructors perceived synchronous online paralegal course instructional design and course content, where paralegal instructors reported more positive perceptions than paralegal students.

There were statistically significant differences in paralegal instructors' perceptions of technical assistance, communication, and course content; paralegal instructors had higher perceptions than paralegal students. Paralegal students reported higher perceptions of asynchronous online paralegal course effectiveness regarding universal design than paralegal instructors. Notably, no statistically significant differences existed between paralegal students' perceptions of the effectiveness of synchronous and asynchronous online paralegal courses, whereas paralegal instructors perceived greater effectiveness of synchronous online paralegal courses regarding universal design, online instructional design, and course content than the effectiveness of those subscales in asynchronous online paralegal courses.

Results also found no statistically significant relationships between paralegal students' perceptions of synchronous online paralegal course effectiveness and gender, educational level, technology skills, and the number of synchronous courses taken. The results indicated a strong, negative relationship between paralegal students' age and paralegal students' perceptions of effective synchronous paralegal course user interface, navigation, universal design, and online instructional design, which were both statistically and practically significant. Results also found no statistically significant relationships between paralegal students' perceptions of asynchronous online paralegal course effectiveness and gender, age, educational level, technology skills, or the number of asynchronous courses taken.

With regard to paralegal instructors' perceptions of synchronous online paralegal course effectiveness and paralegal instructor demographics, results found no statistically significant relationships between paralegal instructors' gender or technology skills. There were statistically significant relationships between paralegal instructors' perceptions of effective synchronous online paralegal course content, on the one hand, and paralegal instructors' age and education level, respectively, on the other hand. Results also found statistically significant relationships between paralegal instructors' perceptions of effective synchronous online paralegal course user interface, technical assistance, course management (student), and universal design and the number of synchronous courses taught by the paralegal instructor.

Finally, results found no statistically significant relationships between paralegal instructors' perceptions of asynchronous online paralegal course effectiveness and paralegal instructors' gender, education level, or asynchronous courses taught. There were statistically significant relationships between paralegal instructors' perceptions of effective synchronous

online paralegal course subscale of getting started and paralegal instructors' age, and paralegal instructors' perceptions of effective asynchronous online paralegal course universal design and paralegal instructors' technology skills. However, neither of those relationships was found to be practically significant.

These results corresponded with previous research literature (Bailey & Card, 2009; Inman, Kerwin, & Mayes, 1999; Harrell, 2008; Jones, 2012; Lowerison, Sclater, Schmid, & Abrami, 2006; Sheridan & Kelly, 2010; Thurmond, Wambach, Connors & Frey, 2010). The results also supported previous research involving student and instructor perceptions of online course effectiveness performed by Astani, Ready, and Duplaga (2010), Bailey and Card (2009), Cherry and Flora (2017), Dutcher, Epps, and Cleaveland (2015), Horspool and Lange (2012), Otter et al. (2013), and Seok, Kinsell, DaCosta, and Tung (2010), Tanner, Noser, and Totaro (2009), Ward, Peters, and Shelley (2010), and Wilkes, Simon, and Brooks (2006).

The results of this study refuted previous research performed by Colorado and Eberle (2010) and refuted, in part, the research by Tung (2007) and Cherry and Flora (2017), in which both studies found no statistically significant differences between both instructors' age and students' age, respectively, and course effectiveness.

This study was consistent with the Tung study (2007) in which he found no statistically significant differences in student perceptions of online course effectiveness and students' gender and extends the body of research to paralegal students.

Analysis showed acceptable reliability as measured by Cronbach's alpha, consistent with the Tung study (2007). Specifically, Cronbach's alpha scores for paralegal instructors' perceptions of course effectiveness subscales ranged from .75 for course management

(student) to .94 for content; and, Cronbach's alpha scores for paralegal students' perceptions of course effectiveness subscales ranged from .84 for flexibility to .95 for content (see Tables 6 and 7). Nunnaly (1978) has indicated 0.7 to be an acceptable reliability coefficient, and the higher the score, then the more reliable the generated scale (Santos, 1999).

Discussion and Conclusions from Findings

This study examined eight research questions to examine paralegal students' and paralegal instructors' perceptions of synchronous and asynchronous online paralegal course effectiveness. The research questions and findings focused on eleven course effectiveness subscales to evaluate perceptions of online course effectiveness and paralegal students' and instructors' gender, age, education level, technology skills, and the number of synchronous and asynchronous courses taken or taught. Additional discussion includes the practical significance of the findings.

Research Question 1: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal course effectiveness?

The first research question addressed the differences between paralegal student perceptions' and paralegal instructors' perceptions of synchronous online paralegal courses and found no significant differences in scores for paralegal students' perceptions and paralegal instructors' perceptions with regard- to flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, and communication. Paralegal instructors reported higher perceptions of effective synchronous online course instructional design and course content than paralegal students.

The study added to the body of knowledge in the context of positive perceptions of the quality of online courses that include flexibility, user interface, navigation, course management, technical support, and universal design (Bailey & Card, 2009; Inman, Kerwin, & Mayes, 1999; Otter et al., 2013; Seok, Kinsell, DaCosta, & Tung, 2010; Wilkes, Simon, & Brooks, 2006), and extended the research to the field of paralegal studies. This study also added to the body of knowledge in the context of instructor and student perceptions of instructional design (Lockee, Burton, & Potter, 2010; Song, Singleton, Hill, & Koh, 2004), reflecting that instructional design is crucial for effective online learning. And, this study further supported the research of Tung (2007) as the results found that paralegal instructors' perceptions were higher than paralegal students' regarding effective synchronous online course instructional design and content.

Finally, these findings supported the research of Ward, Peters, and Shelley (2010), who suggested to an instructor who was reluctant "to employ online learning" that paralegal students' perceive that "it is possible to achieve levels of effectiveness in an online instructional format similar to those that are realized in face-to-face delivery" (p. 16).

Research Question 2: Are there significant differences between paralegal students' perceptions and paralegal instructors' perceptions of asynchronous online paralegal course effectiveness?

The second research question addressed the differences between paralegal students' and paralegal instructors' perceptions of asynchronous online paralegal course effectiveness, and found that there were no statistically significant differences in scores of paralegal students' perceptions and paralegal instructors' perceptions regarding flexibility, user interface, navigation, getting started, course management (instructor), course management (student), and online instructional design. Paralegal students reported higher perceptions of effective

asynchronous online universal design than paralegal instructors while paralegal instructors reported higher perceptions of effective asynchronous online course communication and course content than paralegal students.

These findings supported studies conducted by Bailey and Card (2009) and Inman, Kerwin, & Mayes (1999) on how instructors perceived online courses and instructor and student attitudes towards distance learning. The research of Tanner, Noser, and Totaro (2009), found some differences in perception about online learning between students and instructors. The results also suggested that in some instances, paralegal students perceive effective asynchronous online course universal design more highly. Paralegal students also had lower perceptions of effective asynchronous course communications and content, consistent with the research performed by Wilkes, Simon, and Brooks (2006) and by Yang and Cornelius (2004). These results also supported the research of Seok, DaCosta, Kinsell, and Tung (2010), who found that instructors had statistically higher perceptions of the effectiveness of online courses than did students.

Research Question 3: Are there significant differences in paralegal students' perceptions course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

The third research question addressed the differences between paralegal students' perceptions of the effectiveness of synchronous and asynchronous online paralegal courses; results revealed no significant differences in paralegal students' perceptions of synchronous and asynchronous online paralegal course effectiveness. The findings suggested diverse modes of online learning may have become universal. The findings also supported the research of

Astani, Ready, and Duplaga (2010) and Otter et al. (2013), who investigated how students perceived online learning. They found that the quality and rigor of online courses to be the same with other modes of instruction, and specifically found that "online courses are excellent, challenging, and provide opportunity for interaction" (p. 19). These results also supported the findings of Harrington (1999), Summers et al. (2005), and York (2008), where the results indicated no significance difference in the modes of instruction.

This study's results were also congruent with the research of Dutcher, Epps, and Cleaveland (2015), who found that students' learning perceptions were not statistically different between modes of instruction. These results were, however, inconsistent with a previous study conducted by Ward, Peters, and Shelley (2010), who showed that students perceived asynchronous online learning as inferior to synchronous online learning specifically with regard to instructional quality.

Research Question 4: Are there significant differences in paralegal instructors' perceptions of course effectiveness between synchronous online paralegal courses and asynchronous online paralegal courses?

The fourth research question addressed the differences between paralegal instructors' perceptions of online course effectiveness between synchronous and asynchronous online paralegal courses; results found no significant differences in scores for paralegal instructors' perceptions of the subscales for flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), and communication. However, statistically significant differences existed between how paralegal

instructors perceived effective synchronous universal design, online instructional design, and course content than asynchronous courses.

The findings suggested that paralegal instructors perceived that synchronous and asynchronous online paralegal courses were equally effective with regard to flexibility, user interface, navigation, getting started, technical assistance, course management, and communication. Those results refuted the findings of Tung (2007), whose research found that instructors had statistically higher perceptions of course effectiveness specifically with regard to getting started, technical assistance, course management, and communications. The results of this study extended the prior research of Tung (2007) in the area of perceptions of online course effectiveness across multiple disciplines to paralegal instructors, who reported higher perceptions of synchronous online paralegal courses in terms of universal design, instructional design, and course content than asynchronous courses.

Research Question 5: Are there significant relationships between paralegal students' perceptions of synchronous online paralegal course effectiveness subscales and students' demographic characteristics?

The fifth research question addressed the relationship between paralegal students' perceptions of synchronous online paralegal course effectiveness and student demographic characteristics, where results indicated no statistically significant relationships between paralegal students' gender, education level, technology skills, or the number of synchronous courses taken and their perceptions of synchronous online paralegal course effectiveness related to the subscales of flexibility, navigation, getting started, technical assistance, course management (instructor), course management (student), and communication.

The results found strong, negative correlations between paralegal students' age and how they perceived synchronous online paralegal course effectiveness for the subscales of user interface, universal design, and online instructional design, all of which were practically significant. Students' perceptions of the effectiveness of user interface, universal design, and online instructional design decreased with each generational cohort. In other words, Baby Boomers' perceptions of course effectiveness for these subscales were higher than that of Gen X, whose perceptions were higher than that of Millennials', whose perceptions, in turn, were higher than that of their Gen Z. These findings refuted previous research conducted by Colorado and Eberle (2010), who found that the age of students did not significantly affect student performance in online courses. It further refuted the research of Dutcher et al. (2015), who did not find that age significantly impacted students' satisfaction of online courses. Notably, these findings also refuted the findings of Tung (2007), who found no statistically significant relationship between students' age and course effectiveness.

Research Question 6: Are there significant relationships between paralegal students' perceptions of asynchronous online paralegal course effectiveness subscales and students' demographic characteristics?

The sixth research question determined whether a statistically significant relationship existed between paralegal students' perceptions of asynchronous online paralegal course effectiveness and their demographic characteristics; results indicated no statistically significant relationships between paralegal students' gender, age, education level, technology skills, or the number of asynchronous courses taken and how they perceived asynchronous online paralegal course effectiveness related to the subscales of flexibility, user interface, navigation, getting

started, technical assistance, course management (instructor), course management (student), universal design, communication, online instructional design, or content. Counter to the previous research question related to synchronous online course effectiveness, these findings support the studies conducted by Colorado and Eberle (2010), who found that the age of students did not significantly affect student performance in online courses. It further refuted the research of Dutcher et al. (2015), who did not find that age had significant impact on students' satisfaction of online courses. These findings also supported the findings of Tung (2007), who found no statistically significant relationship between students' age and online course effectiveness.

Research Question 7: Are there significant relationships between paralegal instructors' perceptions of synchronous online paralegal course effectiveness subscales and instructors' demographic characteristics?

The seventh research question determined whether a statistically significant relationship existed between paralegal instructors' perceptions of synchronous online paralegal course effectiveness and their demographic characteristics; results indicated no statistically significant relationships between paralegal instructors' gender, education level, or technology skills and how they perceived synchronous online paralegal course effectiveness related to the subscales of flexibility, navigation, getting started, course management (instructor), universal design, or communication.

Results also indicated a strong, negative correlation between paralegal instructors' age and their perceptions of effective synchronous online paralegal course content. This statistically significant relationship had practical significance, with 53% of the variation of the

mean of online paralegal course content can be predicted from paralegal instructors' age. These findings suggested that as the paralegal instructors' generational cohort moves from the Baby Boomer generation to the Millennial generation, their perceptions of effective synchronous online course effectiveness decreased.

The results also found a strong, positive correlation between paralegal instructors' education level and their perceptions of effective synchronous online paralegal course content, indicating that the paralegal instructors with higher education levels perceived synchronous online course effectiveness more highly. This statistically significant relationship also had practical significance, with 45% of the variation in the mean of online paralegal course content can be predicted from paralegal instructors' education level.

Finally, the results found a strong positive correlation between the number of synchronous online paralegal courses taught by paralegal instructors' and their perceptions of effective synchronous online paralegal user interface, technical assistance, course management (student), and online instructional design. This statistically significant relationship was also practically significant, where 40% of the variation in the mean of online paralegal user interface, 42% of the variation in the mean of technical assistance, 37% of the variation in the mean of course management (student), and 37% of the variation in the mean of online instructional design was predicted from the number of synchronous online paralegal courses taught by the paralegal instructors.

The results were consistent with research performed by Cherry and Flora (2017), who found that the relationship of faculty perceptions of course effectiveness and years of teaching online courses were statistically significant with the perception of course effectiveness

increased with the number of courses taught. The findings also support previous research conducted by Seok et al. (2010), who found that having advanced teaching experience likely affects how instructors perceive online course effectiveness.

Given the strength of the relationship between the number of synchronous courses taught and the paralegal instructors' perceptions of online course effectiveness, findings suggest that the more experienced the instructor, the more effective online course user interface, technical assistance, course management (student), and instructional design will be compared to a paralegal instructor who has taught fewer online courses.

Research Question 8: Are there significant relationships between paralegal instructors' perceptions of asynchronous paralegal course effectiveness subscales and instructors' demographic characteristics?

The eighth and final research question determined whether a statistically significant relationship existed between paralegal instructors' perceptions of asynchronous online course effectiveness and their demographic characteristics; results indicated no statistically significant relationships existed between paralegal instructors' gender, education level, technology skills, or the number of asynchronous online paralegal courses taught and how they perceived asynchronous online paralegal course effectiveness related to the subscales of flexibility, user interface, navigation, technical assistance, course management (instructor), course management (student), communication, online instructional design, or content.

Similar to perceptions of synchronous online course effectiveness, the results found a negative correlation between paralegal instructors' age and how they perceived asynchronous online paralegal course effectiveness related to the subscale of getting started. Although the

results indicated a statistically significant relationship, the coefficient of determination for the effective asynchronous online paralegal course subscale of getting started was .09, which meant that only 9% of the variation in the mean of asynchronous online course effectiveness for getting started was predicted from the paralegal instructors' age. These findings suggested that as the paralegal instructors' age within generational cohort moves from the Baby Boomer generation down through the Millennial generation, their perceptions of online asynchronous course effectiveness decreased.

The results also found a positive correlation between paralegal instructors' technology skills and their perceptions of effective asynchronous online paralegal course universal design. But, the coefficient of determination for the effective asynchronous online paralegal course subscale of universal design was .07, which meant that only 7% of the variation in the mean of asynchronous online course effectiveness for universal design was predicted from the paralegal instructors' technology skills and was therefore not practically significant.

These results supported previous research conducted by Bailey and Card (2009), which underscored that instructors must develop appropriate technical competencies and leverage that technology to effectively design online courses. These results were congruent with the research by Seok et al. (2000), who found that having advanced technology skills likely affects instructors' perceptions of online course effectiveness.

Implications

This section provides the implications of the study beginning with its limitations and followed by practical implications that can be taken from the study.

Limitations to the Study

Several limitations to this study affected the generalizability of the findings. The response rates may have depended on the researcher's ability to identify, contact, and obtain responses from paralegal instructors and paralegal students. Although the response rate reached the minimum sample size needed to achieve statistical significance so as to avoid Type I and Type II statistical errors, the sample size relative to the population was small. Because of the snowball effect of the collection method, some of the potential participants' contact information was unknown, therefore the researcher was unable to send reminder emails. The inability to reach each and every potential respondent contributed to the small sample size.

The opinions of barriers perceived by participants may have limited the respondent's willingness, honesty, comfort level, and stress at the time they answered the questionnaire. Because the study employed self-reporting questionnaires, the data may have been limited by biases resulting from their use. Self-reporting instruments measuring both dependent and independent variables often raise the issue of validity, most notably the response bias of participants (Razavi, 2001). Similar to response bias, respondents may not have accurately perceived, recalled, and reported their communication behaviors in the survey instruments measuring factors such as flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content.

Because random selection and assignment were not used, external validity may have been affected. The results also may have been limited by the variation of each participant's definition of each item in the Likert scale, or the lack of granularity in those scales.

Practical Application

Although this study cannot generalize to the greater population of all paralegal students, paralegal instructors, and all synchronous and asynchronous online paralegal courses, several practical applications can be drawn from the results of the study.

There were no statistically significant differences between paralegal instructors' and paralegal students' perceptions of the effectiveness of synchronous and asynchronous online paralegal courses as that perception related to flexibility, user interface, navigation, getting started, course management (instructor), and course management (student). Both paralegal students and instructors in both the synchronous and asynchronous online setting perceived all of the course effectiveness subscales favorably.

This study underscored how paralegal students and instructors perceived the effectiveness of both synchronous and asynchronous paralegal courses. Paralegal instructors perceived that *synchronous* online paralegal courses were more effective than *asynchronous* online paralegal courses regarding universal design, online instructional design, and course content. Institutions of higher learning offering paralegal courses should leverage these perceptions of online course effectiveness and offer additional synchronous paralegal courses to broaden the scope of the course offerings within their paralegal programs. This study provides evidence that the paralegal profession should embrace the advances in technology and consider eliminating any requirement for traditional face-to-face paralegal courses by allowing synchronous online courses to serve as valid and acceptable alternatives to traditional paralegal courses. This will expand paralegal programs, potentially meeting the needs of smaller, more rural communities, and improve the delivery of quality legal services. This will

also serve a growing, diverse student population with different educational goals, social skills, learning styles, self-discipline, and time or geographic constraints.

Paralegal instructors should be provided professional development training to bolster their abilities to create effective synchronous and asynchronous online paralegal courses. Paralegal instructors and instructional designers should understand the differences found in this study between paralegal student perceptions and paralegal instructor perceptions related to technical assistance, instructional design, communication, and course content— those areas in which instructors' perceptions were higher than those of students. Practically, course effectiveness in these areas are ripe for improvement. Improved course effectiveness may mean an embedded technical assistance guide in each course instead of a single point of technical assistance available to all online students for all courses or greater consideration of overall course design. As online instructors likely realize, differences exist between learning in the traditional classroom and learning in the online environment. To that end, online instructors should apply instructional design techniques that facilitate participation, interaction, and engagement to promote higher student perceptions of online course effectiveness. Course design should include student-to-student, student-to-instructor, and student-to-content participation, interaction, and engagement.

Paralegal instructors should recognize that the online classroom mimics the kind of virtual or remote teams often found in law firms, corporations, and other employers of paralegals; they should respond to the results of this survey by integrating innovation and technology into their courses and assignments. The online classroom provides paralegal instructors a prime opportunity to give their students a sense for how virtual or remote teams

operate in the law firm or corporate law department environment to better prepare them to communicate, receive assignments, and respond to and collaborate with their teams. Paralegal instructors and instructional designers can provide active learning situations to give paralegal students the ability to interact with each other, their instructor, and the course content just as in the face-to-face classroom through the use of social media, such as texting, showing videos, photos, or other multimedia, and by other means of online social interaction and connection. Paralegal instructors can be just as effective in the online classroom as they are in the traditional classroom by adopting technological competencies. The social presence construct of the community of inquiry framework supports the use of these social media technologies to improve students' perceptions of the effectiveness of online course instructional design.

Paralegal instructors should take the results of this study to mean that paralegal students want more *effective* communication, rather than just more communication. Timely and constructive feedback influences how students perceive effectiveness of online courses. Practical suggestions for improving online courses include providing substantive feedback to all students after completion and grading of each content module, or more substantial grading feedback to each student for each assignment. The paralegal instructor should consider incorporating synchronous aspects of online communication within the asynchronous classroom, such as live blogging or maintaining synchronous online office hours available to students, depending on students' needs and demands while balancing instructor availability. The challenge with asynchronous online courses often lack the immediacy available in traditional courses. By utilizing online chats or other synchronous means of communications, the paralegal instructor can satisfy the students' desire for immediate feedback. Using

synchronous communication would mostly affect the part-time lecturer or adjunct instructor who is not required to maintain set office hours, but would increase contact with students. Paralegal instructors can improve how students perceive the effectiveness of online courses by using a myriad of instructional strategies and feedback loops.

Substantive, meaningful, and timely course content directly influences how paralegal students perceive online course effectiveness. As inferred from the results of this study, course content should be of immediate, relevant, and real-life value to paralegal students. Course content should consist of current, relevant, and rich materials consistently updated to reflect paralegal students' needs and to embrace evolving learning technologies. Paralegal instructors should consider augmenting textbooks and course materials with personal stories and, current events available through online videos and blogs, which will improve how paralegal students perceive effectiveness course content. Merely using PowerPoint presentations provided by the publisher does not equate to meaningful or timely course content.

This study found a strong negative relationship between paralegal students' age and their perceptions of effective synchronous online course instructional design, universal design, navigation, and user interface. In other words, synchronous online paralegal courses are not being designed towards the needs of Millennial or Generation Z students, but rather Generation X and Baby Boomers students, likely because current paralegal instructors belong predominantly in the Baby Boomer and Gen X generational cohorts. In this study, 94% of paralegal instructor respondents fell within these two generational cohorts. The continued success of the paralegal profession is contingent upon paralegal instructors finding ways to engage the Millennial and Gen Z paralegal students. The online environment provides

instructors with the ability to leverage the Millennial and Generation Z's pervasive use of technology as a meaningful way to better engage them.

This study indicated that instructional design, user interface, navigation, and universal design of the courses need improvement. Paralegal instructors should design their synchronous and asynchronous courses with an eye towards the end user—the Millennial and the Gen Z student. Practically, this could mean employing varying avenues of social media, using current events as examples to underscore course content, or using both synchronous and asynchronous features founds within learning management systems beyond the discussion board, such as wikis, blogs, journals, instant messenger, linking YouTube videos, or media galleries. Or, this could also include using collaborative teaching methods in which students learn from each other through the use of peer assessments, or submission of group e-portfolios of substantive coursework, all of which leverage the technology available thereby providing substantive course content and increased perceptions of online course effectiveness.

Recommendations for Future Research

Several areas of additional research are warranted considering the results of this study and the questions left unanswered. Future researchers are encouraged to consider these suggestions as opportunities to add to the body of knowledge on the subject of synchronous and asynchronous online paralegal course effectiveness as perceived by paralegal students and paralegal instructors, as well as to the field of paralegal studies generally.

Research in the Field of Paralegal Studies

1. This study did not focus on the satisfaction of paralegal students or instructors with online courses or student success in the online learning environment. Future

research should explore the broader topics of assessing satisfaction and success of both synchronous and asynchronous online paralegal course environments and its intersection with paralegal students' and paralegal instructors' demographic characteristics.

2. There is also a need to examine the roles technology and instructor innovation play in online paralegal courses, especially through the lens of student success, satisfaction, and performance. It should also address how student innovativeness may influence student success, satisfaction, and performance.
3. Future studies into online paralegal education should explore the effects of students' critical thinking skills, knowledge construction, time management, motivation, commitment, problem-solving abilities, learning autonomy, and student expectations of course effectiveness and efficiency as they relate to the quality and effectiveness of the online learning environment.
4. This study did not undertake any analysis regarding learning outcomes. Future research should also investigate student performance in the online classroom as well as student perceptions of learning in both the synchronous and asynchronous environments. Any research undertaking the assessment of performance and perceptions of learning should go beyond simply measuring the final course grade or online course evaluations but should instead investigate performance across varying types of assignments and assess learning at different times throughout the course. Future studies along these lines might involve one of an experimental design to test student learning outcomes of the same assignments given in the same paralegal

course during the same semester but using three different delivery methods of traditional face-to-face, synchronous online, and asynchronous online.

5. The results of this study revealed that students' age was negatively correlated to students' perceptions of effective synchronous online courses. Future studies should examine differences in online learning outcomes of paralegal courses between the generational cohorts of Baby Boomers, Generation X, Generation Y (Millennials), and Generation Z, especially as related to the same generational cohorts of paralegal instructors.
6. This study examined online paralegal course effectiveness for paralegal courses offered in the United States. Future research should compare and assess the online paralegal course offerings in other countries of common law, such as the ILEX program in the United Kingdom, to the paralegal programs in the United States, including online course effectiveness, student and instructor satisfaction, student success, and student learning.
7. The primary theoretical framework for this study was constructivist theory, with the model of community of inquiry as a supporting framework. Future studies should examine the role of teaching presence, social presence, and cognitive presence in the online paralegal classroom using the CoI survey instrument (Akyol & Garrison, 2008) to predict learning processes and learning outcomes from a paralegal studies program-wide perspective.

Research Design

1. Several aspects of the research design posed challenges to the validity of this study. As a result, the following are key recommendations for future research designed to address these opportunities to improve the validity of future results. The first recommendation is to modify the study to require a larger sample size by group. Because of the infancy in the use of synchronous online paralegal courses across institutions of higher education, not as many paralegal instructors responded to the survey through the lens of instructor perceptions of a synchronous online paralegal course. As more paralegal programs begin to offer both synchronous and asynchronous courses, the estimated number of paralegal instructors teaching in the online environment will increase. This increase will also translate to an increased number of paralegal students enrolled in both synchronous and asynchronous online paralegal courses. Therefore, an advisable sample size by group could be between 300 to 500 participants.
2. Although the AAfPE LinkedIn group appeared to be a convenient and logical recruitment pool, the response rate was low, and it was difficult to ensure that group members had a chance to see the invitation. Future researchers should consider using a source of participants other than LinkedIn groups, including paper surveys and/or in-person data collection events. Increasing the sample size requirement with support through additional recruitment options and time for data collection would provide an opportunity for researchers to better understand the true effects in the population and reduce response bias.

3. This study used a nonexperimental quantitative research design. Future studies should be conducted using qualitative research methods to gain a deeper understanding of paralegal students' and instructors' perceptions of online learning. Through the use of interviews, observations, focus studies, and case studies, researchers likely will gain a different level of understanding than the quantitative method this study has provided.
4. This study examined paralegal students at a single point in time. Future studies should include the use of longitudinal research design to examine paralegal students' perceptions of synchronous and asynchronous course effectiveness at the conclusion of their first online paralegal course, then again at the conclusion of their last paralegal course, then again between three to six months following their last paralegal course, and finally between three to six months after their employment as a paralegal, enabling the researcher to measure any changes over time regarding perceived differences and relationships conducted in this study.

Instrumentation

Using improved instrumentation should be a priority for any researcher. The instrumentation used in this study was modified from a valid and reliable survey of online course effectiveness to be specifically related to online paralegal courses. Due to the lack of granularity in the scales (i.e., a five-point Likert scale from "strongly disagree" to "strongly agree") does now allow respondents to more accurately gauge their response to each item. By using an alternative means for response rating, such as a numeric sliding scale, the responses

may allow for a finding of statistical significance between the dependent and independent variables.

Summary

A driving premise for this study was the dearth of empirical research within the field of paralegal studies its exclusion within the broader scope of online and distance learning education literature. To improve online learning pedagogy within the field of paralegal education, instructors and course developers needed studies of perceptions of course effectiveness by paralegal instructors and paralegal students to understand how to increase the effectiveness of web-based learning in online paralegal courses. This study measured the perceptions of paralegal instructors and paralegal students toward the effectiveness of synchronous and asynchronous online paralegal courses (flexibility, user interface, navigation, getting started, technical assistance, course management (instructor), course management (student), universal design, communication, instructional design, and content). The study intended to improve online learning pedagogy within the field of paralegal education, and to fill the literature gap related to the effectiveness of online paralegal education. This study also intended to inform paralegal instructors and course developers how to better design, deliver, and evaluate effective online course instruction in the field of paralegal studies.

The results indicated that overall, paralegal students and paralegal instructors positively perceived synchronous and asynchronous online paralegal courses. Results also found statistically significant differences between paralegal students' perceptions and paralegal instructors' perceptions of synchronous online paralegal course instructional design and course content, where paralegal instructors reported higher perceptions than paralegal students.

The results demonstrated statistically significant differences in paralegal instructors' perceptions of technical assistance, communication, and course content, with paralegal instructors reporting higher perceptions than paralegal students. Paralegal students reported higher perceptions of asynchronous online paralegal course effectiveness regarding universal design than paralegal instructors. Notably, no statistically significant differences existed between paralegal students' perceptions of the effectiveness of synchronous and asynchronous online paralegal courses, whereas paralegal instructors reported higher perceptions of the effectiveness of synchronous online paralegal courses regarding universal design, online instructional design, and course content than the effectiveness of those subscales in asynchronous online paralegal courses.

The results also demonstrated no statistically significant relationships between paralegal students' perceptions of synchronous online paralegal course effectiveness and gender, educational level, technology skills, and the number of synchronous courses taken. The results indicated a strong, negative relationship between paralegal students' age and paralegal students' perceptions of effective synchronous paralegal course user interface, navigation, universal design, and online instructional design, which were found to be both statistically and practically significant. Results also found no statistically significant relationships between paralegal students' perceptions of asynchronous online paralegal course effectiveness and gender, age, educational level, technology skills, or the number of asynchronous courses taken.

The results found no statistically significant relationships between paralegal instructors' gender or technology skills and paralegal instructors' perceptions of synchronous online paralegal course effectiveness and paralegal instructor demographics. There were statistically

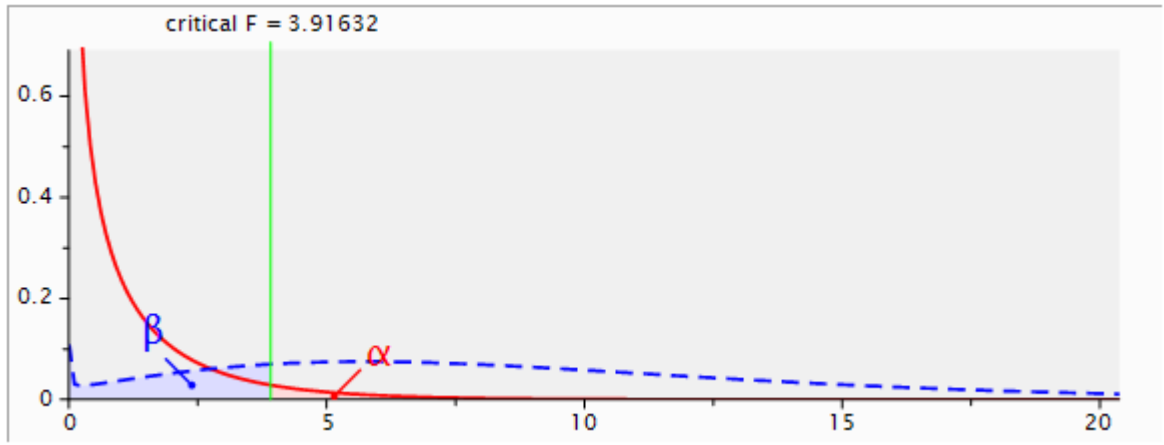
significant relationships between paralegal instructors' perceptions of effective synchronous online paralegal course content, on the one hand, and paralegal instructors' age and education level, respectively, on the other hand. Results also found statistically significant relationships between paralegal instructors' perceptions of effective synchronous online paralegal course user interface, technical assistance, course management (student), and universal design and the number of synchronous courses taught by the paralegal instructor.

Finally, results found no statistically significant relationships between paralegal instructors' perceptions of asynchronous online paralegal course effectiveness and paralegal instructors' gender, education level, or asynchronous courses taught. There were statistically significant relationships between paralegal instructors' perceptions of effective synchronous online paralegal course subscale of getting started and paralegal instructors' age, and paralegal instructors' perceptions of effective asynchronous online paralegal course universal design and paralegal instructors' technology skills. However, neither of those relationships was found to be practically significant.

Additional research is recommended to extend the results provided by this study to the larger paralegal studies population.

APPENDIX A

G*POWER ANALYSIS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APPENDIX B

UNIVERSITY OF NORTH TEXAS INSTITUTIONAL REVIEW BOARD (IRB)

UNT
EST. 1890

THE OFFICE OF RESEARCH AND INNOVATION
Research and Economic Development

October 24, 2017

Dr. Jeff Allen
Student Investigator: Kristine Farmer
Department of Learning Technologies
University of North Texas

RE: Human Subjects Application No. 17-461

Dear Dr. Allen:

In accordance with 45 CFR Part 46 Section 46.101, your study titled "Paralegal Instructors' and Paralegal Students' Perception of the Effectiveness of Synchronous and Asynchronous Online Paralegal Courses" has been determined to qualify for an exemption from further review by the UNT Institutional Review Board (IRB).

Enclosed are the consent documents with stamped IRB approval. Since you are conducting an online study, **please copy the approved language and paste onto the first page of your online survey. You may also use the enclosed stamped document as the first page of your online survey.**

No changes may be made to your study's procedures or forms without prior written approval from the UNT IRB. Please contact The Office of Research Integrity and Compliance at 940-565-4643 if you wish to make any such changes. Any changes to your procedures or forms after 3 years will require completion of a new IRB application.

We wish you success with your study.

Sincerely,

Chad Trulson, Ph.D.
Professor
Chair, Institutional Review Board

CT:jm

UNIVERSITY OF NORTH TEXAS®
1155 Union Circle #310979 Denton, Texas 76203-5017
940.369.4643 940.369.7486 fax www.researchunt.edu

PARALEGAL INSTRUCTORS' PERCEPTIONS OF SYNCHRONOUS AND ASYNCHRONOUS ONLINE PARALEGAL COURSES

University of North Texas Institutional Review Board

Informed Consent Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: Paralegal Instructors' and Paralegal Students' Perception of the Synchronous and Asynchronous Online Paralegal Courses: A Comparative Study

Student Investigator: S. Kristine Farmer, University of North Texas (UNT) Department of Learning Technologies. **Supervising Investigator**: Dr. Jeff Allen

Purpose of the Study: You are being asked to participate in a research study that involves paralegal instructors' and students' perceptions of synchronous and asynchronous online paralegal course effectiveness.

Study Procedures: You will be asked to out an online survey that will take less than 25 minutes of your time.

Foreseeable Risks: No foreseeable risks are involved in this study.

Benefits to the Subjects or Others: This study is not expected to be of any direct benefit to you, but we believe that the information obtained from this study may help to inform paralegal instructors and course developers gain a better understanding of how to evaluate, design, and deliver effective online instruction.

Compensation for Participants: None

Procedures for Maintaining Confidentiality of Research Records: . Your responses will be confidential and we do not collect identifying information such as your name, email address, or IP address. We will do our best to keep your information confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the survey will not contain information that will personally identify you. Data will be maintained securely, evaluated anonymously, and reported in aggregate. The confidentiality of your individual information will be maintained in any publications or presentations regarding this study. Confidentiality will be maintained to the degree possible given the technology and practices used by the online survey company. Your participation in this online survey involves risks to confidentiality similar to a person's everyday use of the internet.

Additionally, you will be asked to provide the names of other potential student recruits, but you have the right to decline to provide this information. We will maintain the confidentiality when you suggest paralegal students for inclusion in this research study.

Questions about the Study: If you have any questions about the study, you may contact Kristine Farmer at kristine.farmer@unt.edu or Dr. Jeff Allen at jeff.allen@unt.edu.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-4643 with any questions regarding the rights of research subjects.

Research Participants' Rights:

Your participation in the survey confirms that you have read all of the above and that you agree to all of the following:

- Kristine Farmer has explained the study to you and you have had an opportunity to contact him/her with any questions about the study. You have been informed of the possible benefits and the potential risks of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- Your decision whether to participate or to withdraw from the study will have no effect on your grade or standing in this course.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You understand you may print a copy of this form for your records.

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:

- you have read the above information
- you voluntarily agree to participate If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

- ○ I agree
- ○ I disagree

PARALEGAL STUDENTS' PERCEPTIONS OF SYNCHRONOUS AND ASYNCHRONOUS ONLINE PARALEGAL COURSES

University of North Texas Institutional Review Board

Informed Consent Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

Title of Study: Paralegal Instructors' and Students' Perception of the Effectiveness of Synchronous and Asynchronous Online Paralegal Courses: A Comparative Study

Student Investigator: S. Kristine Farmer, University of North Texas (UNT) Department of Learning Technologies. **Supervising Investigator**: Dr. Jeff Allen

Purpose of the Study: You are being asked to participate in a research study that involves paralegal instructors' and students' perceptions of synchronous and asynchronous online paralegal course effectiveness.

Study Procedures: You will be asked to out an online survey that will take less than 25 minutes of your time.

Foreseeable Risks: No foreseeable risks are involved in this study.

Benefits to the Subjects or Others: This study is not expected to be of any direct benefit to you, but we believe that the information obtained from this study may help to inform paralegal instructors and course developers gain a better understanding of how to evaluate, design, and deliver effective online instruction.

Compensation for Participants: None

Procedures for Maintaining Confidentiality of Research Records: . Your responses will be confidential and we do not collect identifying information such as your name, email address, or IP address. We will do our best to keep your information confidential. All data is stored in a password protected electronic format. To help protect your confidentiality, the survey will not contain information that will personally identify you. Data will be maintained securely, evaluated anonymously, and reported in aggregate. The confidentiality of your individual information will be maintained in any publications or presentations regarding this study. Confidentiality will be maintained to the degree possible given the technology and practices used

by the online survey company. Your participation in this online survey involves risks to confidentiality similar to a person's everyday use of the internet.

Questions about the Study: If you have any questions about the study, you may contact Kristine Farmer at kristine.farmer@unt.edu or Dr. Jeff Allen at jeff.allen@unt.edu.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-4643 with any questions regarding the rights of research subjects.

Research Participants' Rights:

Your participation in the survey confirms that you have read all of the above and that you agree to all of the following:

- Kristine Farmer has explained the study to you and you have had an opportunity to contact him/her with any questions about the study. You have been informed of the possible benefits and the potential risks of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- Your decision whether to participate or to withdraw from the study will have no effect on your grade or standing in this course.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You understand you may print a copy of this form for your records.

ELECTRONIC CONSENT: Please select your choice below.

Clicking on the "agree" button below indicates that:

- you have read the above information
- you voluntarily agree to participate If you do not wish to participate in the research study, please decline participation by clicking on the "disagree" button.

- ○ I agree
- ○ I disagree

APPENDIX C

SELECTED EXCERPTS FROM PARALEGAL STUDENT AND PARALEGAL INSTRUCTOR SURVEYS

Participant	Feedback Excerpts
Paralegal Student	I have truly enjoyed taking my paralegal courses via online and both in the traditional classroom. I find however that I seem to learn more when I don't have the teacher readily available to answer all of my questions etc. I am forced to do more thorough research before I seek help from the professor.
Paralegal Student	The online self-paced courses have really been beneficial to me since I also have a full time job. I could go at my own pace no matter what time if day. It was extremely helpful. The online experience totally depends on the professor setting up the system. Some professors use only a few functions which streamlines things very well while others utilize many tabs which makes finding the assignments, then the links then the submission then the group chat then the..... a bit confusing.
Paralegal Student	I do appreciate the ability to work at my own pace, but I'd like the opportunity to engage in activities outside the online realm from time to time. Meeting at a law library to see research books up close would be nice.
Paralegal Student	I like to take online classes that are asynchronous. Being able to work at my own pace within a deadline is helpful for me since I work full time. I still like going to class because I feel like I learn more and it doesn't feel like I have as much work as an online class.
Paralegal Student	My professor required me to obtain multiple textbooks that were extremely helpful and relevant to issues current. She also frequently made us listen to podcasts pertaining to the topic of the week that were always interesting.
Paralegal Student	My professor has been incredible at conveying information to me that does not necessarily apply to my major!
Paralegal Student	My professor uploads videos of her going through the content, as she would do if she were teaching it in class and that helps a lot. She also uploads all of our coursework on the Monday of

Participant	Feedback Excerpts
	each week, so I know when to expect it, and typically have until the following week to finish it. This ensures that I can have a lot of time to do my assignments and to do them specifically when I want to do them and have time too.
Paralegal Student	Providing links to podcasts, websites, and videos along with our weekly readings has helped my learning experience. Posting lecture videos has also helped.
Paralegal Student	I prefer asynchronous courses over all others, including traditional classroom courses.
Paralegal Student	I personally enjoy taking the online courses because they are easy to follow along, my instructor is well organized so I retain more information, and it has proven convenient with my other classes and work schedule along with other activities. The only part that may be tricky is remembering to do the work on time, but I make sure to keep track of my due dates in a planner and fit time during the week to work on my web classes. The classes are just as, or maybe more effective than my experience with traditional in person classes because of the flexibility it allows me with my time to where I won't procrastinate because I can schedule any convenient time for me.
Paralegal Student	The thing I value the most about this course has been the feedback to all written assignments. It really helps gage what the professor expects.
Paralegal Student	I found classes with discussion questions helpful. The least helpful classes were those that required the questions at the end of the textbook chapters to be finished and then discussed, since there are usually only one right answer to each question so the discussion responses get extremely repetitive.
Paralegal Student	Some teachers do a better job than others in grading our work timely. Some were very slow in posting grades.
Paralegal Student	I think that the biggest thing that has aided me in my paralegal learning experience is that the

Participant	Feedback Excerpts
	instructors were able to give me enough instruction on what they needed from me and were good at relating the importance of the information that they gave to me about the profession. I learned easily due to the excellent way that they have delivered the information to me about this profession and how it will be in the 'real world'. Another factor is that they made me feel I could ask them about anything within the course and they would be more than willing to help with it.
Paralegal Instructor	Online courses offer some advantages for individual instruction over traditional in-class courses. In a classroom some students get to "hide." They seldom engage in discussion, so the instructor has less opportunity to track the students understanding of a topic. When the students do comment, for the most part, the instructor's response must be a public one. This can be embarrassing and discouraging for many students. In online courses, students' participation in discussion forums is mandatory and easily tracked. The instructor can respond to postings with a public comment intended to benefit all students or contact the student privately to clarify misunderstanding without embarrassing the student in front of the student's peers. The instructor can more easily work with individual students who are struggling.
Paralegal Instructor	Many of us teach in blended synchronous/asynchronous or blended residential/online or accelerated/flipped modalities that rely heavily on online modules - it was hard to answer the questions without making that distinction. Also hard to quantify the two questions above. Having some synchronous elements in an online class makes a world of difference in terms of student-teacher interaction. My courses are still largely under my control. I am not an instructor of a canned, ready-prepared course - I still retain development control and modification access to all the courses I teach. This can be overwhelming (online development is hard) but it's also the key to maintaining a good teacher-student relationship and knowing that the content in your course is accurate, current, and in a pedagogical style that suits the faculty member. It would be great to see schools adopt a mode that still prioritizes that.
Paralegal Instructor	Important that courses are updated continuously so that they remain relevant. Links must be checked to insure they are functional to avoid student frustration. Use an Announcement

Participant	Feedback Excerpts
	Board to actively update and supplement material throughout the Course.
Paralegal Instructor	Timely and meaningful feedback to student questions, discussion, assignments, projects and tests is essential. When students upload an assignment, like a worksheet, I will provide the answers in individual feedback so students can see where they missed the mark. I like to recap a lesson where students struggled with concepts (how to derive a holding from case law) or practical skills (citing a statute or case correctly). All of my "lectures" are narrated PowerPoints or videos. This gives the students the feeling of really interacting with the instructor and they can pick up on the nuances of body language or tone of voice that is absent from reading text. I also like to host a couple of real-time synchronous video chat sessions throughout the semester. Student can interact with each other and the instructor in a more personal environment than a discussion thread. Students can ask specific questions and get an immediate answer. I also use the video chat to explain in more detail some of the concepts students struggle with.
Paralegal Instructor	Online students need to be strongly advised about the level of self-discipline and motivation necessary to succeed in online courses.
Paralegal Instructor	Quite frankly, I don't like online instruction as much as the traditional classroom instruction. I do not do it for the 1st year course, so at least students generally know one another in the online paralegal courses. However, I feel the spontaneity is gone as well as the communication between students is less. It is also harder to do specific skill building assignments. it is much easier to do online quizzes and tests.
Paralegal Instructor	Online courses are best for self-motivated students. My courses are not designed for individual self-study as they require students to keep to a weekly schedule and interact with other students for completion of group assignments and discussion responses. Online courses require greater preparation and refinement than face-to-face courses. The benefit is that they force the professor to be more prepared and precise. They also expand opportunities for students and faculty to learn from and with different people.

Participant	Feedback Excerpts
Paralegal Instructor	I have taught an updated and current version of the same online course 25 times over the past 13 years. The course effectiveness characteristics that have been most valuable to my teaching experience have been (1) providing ample opportunities for students to communicate with their peers and with me before technology and content challenges become problems; (2) reaching out to students who do not log in multiple times during each week; taking advantage of in-service training on learning platform tools and upgrades offered by instructional designers in the college's academic technology department.
Paralegal Instructor	One of the biggest challenges is ensuring that all learner needs, traditional and nontraditional, are met. This means having an understand of how adult learn and engage in technology.
Paralegal Instructor	By providing students with hypothetical case scenarios, this allows students to apply critical thinking skills. This promotes discussion as to two sides of an issue. The case scenarios also lend to researching case statutes and applying knowledge. Students lead others by example.
Paralegal Instructor	I prefer teaching in the classroom. We are offering online classes because of student demand.
Paralegal Instructor	My College uses Quality Matters guidelines to review online courses. Faculty must take a course offered by my College before teaching online or hybrid.
Paralegal Instructor	I think students miss put on personal contact and experiences from the professor and other students in an asynchronous class.
Paralegal Instructor	I think the most effective online experience is to have a list of objectives and assignments for each week's module. I also think the most effective experience is had when the course is designed very linearly, so that students can see up front and close exactly what is coming. It is important to have some discussions, but my groups are always small, so I don't give them weekly discussions. To be consistent and try not to "rearrange the furniture". Giving them formative feedback on their assignments is also important. Students want to know why they got

Participant	Feedback Excerpts
	things right as much as why they got things wrong.
Paralegal Instructor	Group work can be challenging in the asynchronous setting but yet still important, especially when our students will probably work in teams or groups in their law firms or companies. We need to find ways to overcome this challenge.
Paralegal Instructor	I really find that it often depends on the actual student as to how well they will do. The courses are laid out very organized and they can do their assignments and discussions weekly. If they do not do that, they do not do well.
Paralegal Instructor	I believe online courses are just as effective as on land ones -- like any class, it depends on what the instructor and the students put into it. I enjoy online teaching -- I make assignments more valuable than test scores, since I believe, after many years of teaching experience, that students learn more by doing the work than by taking the exams. I also believe I hear from EVERY student online -- on land classes tend to favor the more outspoken student.
Paralegal Instructor	Every student has an adjustment period when they take their first online class. Some students adjust quickly; others take longer to adjust and a few never do. The ideal web site design allows 1) students who need to be "led" through the course to have ample directions and explanations and 2) students who want to take short cuts to do only what needs to be done for a grade. Most students do well in the online environment and progress easily through the course. I am no less confident in our online graduates than I was about our classroom graduates. Collaboration is a great objective to have in an online course, but it does not fit every learning environment. I have built it into one course that requires students to do small group practical projects as if they were working on an actual case for a client. Some students actually despise group projects and I understand why, but it is a "real world experience" both for the tasks at hand and also to have the often-disappointing experience of working with others - procrastinators, slackers and silent, non-communicative persons who may or may not actually do their share of the work in the time allowed. Many students have commented on it being a

Participant	Feedback Excerpts
	great learning experience. I wish I could do it in every course, but I have yet to accomplish that. Despite an ideal web site design there are always some students who blame the technology for their shortcomings. Examples: no internet connection (your connection is the only one town?); "the dog ate my internet cord" (really); Canvas, Blackboard, Web CT, etc. "knocked me out", "locked me out", "would not let me submit my assignment"; "I submitted it, but now it's disappeared", etc. Fortunately, they are a minority. The instructor has to be careful that they do not become a disruptive influence in the class or cause other students to distrust the technology. There is a loss of personal connection in online teaching which can be a lonely pursuit for both instructor and student. It is difficult to cultivate personal relationships with students in large classes. Twelve to fifteen students should be the maximum course size. Most students seem to prefer the comfort of their surroundings while hiding behind the screen during class; it is very difficult to get students to use their microphone and webcam (which takes up bandwidth and may degrade their audio/video connection). Even in social media, texting seems to be the preferred method of contact, not audio-visual. The technology is awesome! Getting students to use it to its full capability is the challenge. There is no limit to online capabilities in education. It is the future of education; but it is also very much the now of education! It is a win-win for students, for educators and for educational institutions. Personally, I love it because it frees me to teach from where I happen to be come class time whether I am home or on vacation. It also works well with the large majority of students, too.

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