2020

Determinants of Professional Practice Experience Satisfaction in Health Information Management Students

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Determinants of Professional Practice Experience Satisfaction in Health Information Management Students

by
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A dissertation submitted to the faculty of Bethel University
in partial fulfillment of the requirements for the degree of
Doctor of Education.

Saint Paul, MN
2020

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Abstract

The purpose of this quantitative, nonexperimental, correlational study was to determine the degree to which factors of a high-quality professional practice experience (PPE) in undergraduate health information management (HIM) programs relate to HIM student PPE satisfaction. This study utilized a web-based PPE satisfaction survey of HIM students who completed a PPE from an accredited undergraduate HIM program during the 2016/2017, 2017/2018, 2018/2019, and 2019/2020 school years. Data analysis involved descriptive statistics for survey Likert scale items, the use of Pearson correlation to determine the relationship between the independent variables and student PPE satisfaction, Cronbach alpha for the full PPE scale reliability and the reliability of several subscales, and exploratory multiple regression was used to generate two models to see which scale items best predicted overall student PPE satisfaction. The PPE experience factors that were significant predictors of overall student PPE satisfaction were (a) preceptor developed a schedule, (b) PPE provided me with marketable job experience, (c) preceptor was willing to answer my questions (negative correlation), (d) preceptor functioned as a true mentor, and (e) PPE gave me a better understanding of academic concepts. This study emphasizes the factors that contribute to a quality, satisfactory PPE for HIM students and serves as a guide for undergraduate HIM programs in developing effective PPE programs and measuring HIM student PPE satisfaction.

Dedication

This work is dedicated to my husband, Ryan, our girls, Nora and Macy, and all of my loved ones who have supported me on this journey. Your support and patience have been a blessing throughout this process.

Acknowledgements

I would like to acknowledge the work of my dissertation committee members, Dr. Craig Paulson, Dr. Joel Frederickson, and Dr. John Addleman. Thank you for all of the guidance and support throughout the development of this dissertation. I would also like to acknowledge my colleagues, Dr. Brooke Palkie, Dr. Danika Brinda, Dr. David Marc, Pam Oachs, RHIA, Eric Nordgren, Beth Fait, Madonna LeBlanc, RHIA, Janelle Wapola, RHIA, and Dr. Amy Watters for their support and guidance as well.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

AHIMA: American Health Information Management Association

CAHIIM: The Commission on Accreditation for Health Informatics and Information Management

CHEA: Council for Higher Education Accreditation

CITI: Collaborative Institutional Training Initiative

CSA: Component State Association

ELT: Experiential Learning Theory

HIM: Health Information Management

HIMR: HIM Reimagined

HIMSS: Healthcare Information and Management Systems Society

IRB: Institutional Review Board

PPE: Professional Practice Experience

RHIA: Registered Health Information Administrator

RHIT: Registered Health Information Technician

SPSS: Statistical Package for the Social Sciences

Chapter 1: Introduction

David Kolb (1984) stated "that learning is the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping experience and transforming it" (p. 41). Experiential learning (e.g., internships, clinicals, apprenticeships, and service learning) is an integral component of many programs in higher education and many studies have examined the determinants of student satisfaction with their internships (Beard & Morton, 1998; D'Abate, Youndt, & Wenzel, 2009; Dabke, 2015; Kipreos & Dimitropoulos, 2016; Sasnett & Ross, 2016; Zopiatis & Constanti, 2012). Accredited associate and baccalaureate health information management (HIM) programs in the United States require students to complete a professional practice experience (PPE), also known as an internship. As an educator and academic coordinator of PPEs for a baccalaureate HIM program, I wonder what the determinants are for PPE satisfaction? This question interests me and drives me to explore the determinants of a quality PPE and how those determinants correlate to HIM student PPE satisfaction.

Research has shown some common factors that correlate to internship quality and student satisfaction, such as (a) the student's academic preparedness for the internship; (b) whether the internship offered professional growth; (c) opportunities for networking; (d) a job offer; and (e) positive interaction between the student and the college, the student and the college internship coordinator, and the student and their PPE preceptor (Beard & Morton, 1998; Dabke, 2015; Kipreos & Dimitropoulos, 2016; Sasnett & Ross, 2016). While these factors may be taken into consideration by HIM program directors as they develop, implement, and execute their PPE programs, the factors have not been empirically researched to determine their applicability to the field of HIM. The internship is a major component of many college programs (Sasnett & Ross,

2016), including undergraduate HIM programs (Commission on Accreditation for Health Informatics and Information Management Education [CAHIIM], 2020a), and a need exists to research the factors contributing to a quality internship and the degree to which those factors correlate to student satisfaction.

This was a quantitative, nonexperimental, correlational study that utilized an electronic PPE satisfaction survey tool to determine the degree to which factors of a quality PPE related to student PPE satisfaction. This study looked at the correlation between the factors of a quality PPE and a student's satisfaction with their PPE. This research study was comprised of three phases: (a) a field study, (b) a pilot study, and (c) the full-scale research project. The researcher conducted the field study by requesting feedback from undergraduate HIM program directors on the survey tool they created. The pilot study was conducted by electronically surveying students currently enrolled in an undergraduate HIM program in the Upper Midwest region of the United States. These students have completed a PPE or they have graduated from a baccalaureate HIM program in 2017/2018 or 2018/2019. The full-scale research project utilized snowball sampling by sending the electronic survey tool to each program director of an accredited associate and baccalaureate HIM degree program in the United States. They were asked to distribute the survey to their current 2019/2020 students who completed a PPE and to the graduates from the 2017/2018 and 2018/2019 school years. The guiding research question of this study was: Does academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, PPE financial compensation, the relevance of the PPE project, learning during the PPE, and the PPE's connection to student career relate to student satisfaction with their PPE? For each factor listed in the guiding research study, a corresponding research question was developed to address it.

The remainder of this chapter will provide the background and context for the research study and introduce the reader to the theoretical and conceptual framework of the study. The problem statement and the purpose of the study follow, then the overarching research question is shared along with subsequent research questions for each independent variable. A null and alternative hypothesis is provided for each research question, then information on the significance of this research study on the field of education. The definition of terms follows and concludes with a summary that lays out the organization of the remainder of the study.

Background, Context, and Framework

Experiential learning is a requirement of accredited associate and baccalaureate HIM degree programs in the United States. CAHIIM (2018a, 2018b) has implemented two standards to ensure compliance with the experiential learning requirement: (a) "each student must complete a minimum of 40 hours of externally supervised activity prior to graduation," and (b) "The externally supervised activity PPE must relate to higher level competencies and result in a learning experience for the student and/or a deliverable to a practice site" (p. 9). These standards are necessary and have served HIM undergraduate programs for many years; however, they do not go far enough to ensure PPEs are quality, satisfactory experiences. HIM program directors take many more variables into account when placing a student with a PPE preceptor at a host organization. They consider the student's previous HIM experience, GPA, prior learning, personality, and goals. On the host side, considerations include the organization's willingness to take interns, the PPE preceptor's ability to host a student, the PPE preceptor's position, education, and past experience as a PPE preceptor, and the list goes on. David Kolb's (1984) experiential learning theory (ELT) can serve as the foundation for PPE programs and a tool to be used by program directors to ensure students receive a quality PPE. Kolb's (1984) ELT

encompasses “a holistic, integrative perspective on learning that combines experience, perception, cognition, and behavior” (p. 21). Sasnett and Ross (2016) clearly tackled the issue of student internship value and satisfaction in their 2015 study on maximizing internship value by comparing student satisfaction and program competencies. “Successful internships should be the culmination of high-quality education, faculty should be clear in formulating their programs, know what skills will be required in the work force, and effectively deliver information and skills in the classroom” (Sasnett & Ross, 2016, p. 6). Sasnett and Ross (2016) recommend the development of detailed standards to direct student internship conduct and ensure internship preceptors understand the goals of the experience. CAHIIM’s 2018 accreditation standards for associate and baccalaureate HIM degree programs lack the detailed standards to ensure quality, satisfactory PPEs. Before establishing detailed standards for internship programs, it is important to understand the factors that contribute to a quality internship and the degree to which those relate to student PPE satisfaction.

In order to ensure the development of detailed standards and a strong PPE program, HIM program directors can apply Kolb’s ELT to their PPEs. Kolb’s ELT forms the theoretical framework and basis for this research study.

> The experiential learning model pursues a framework for examining and strengthening the critical linkages among education, work, and personal development. It offers a system of competencies for describing job demands and corresponding educational objectives and emphasizes the critical linkages that can be developed between the classroom and the “real world” with experiential learning methods. It pictures the workplace as a learning environment that can enhance and supplement formal education and can foster personal development through meaningful work and career-development opportunities. And it

> stresses the role of formal education in lifelong learning and the development of individuals to their full potential as citizens, family members, and human beings. (Kolb, 1984, p. 4)

HIM program directors can also apply Narayanan, Olk, and Fukami's (2010) internship effectiveness model to their PPE programs (see Figure 1). This model considers personnel and knowledge transfer literature, previous research on internships, and the key stakeholders involved in an internship (Narayanan et al., 2010). Through this model, the internship process is broken into three distinct components: (a) antecedents, (b) process, and (c) outcome (Narayanan et al., 2010). Narayanan et al.'s internship effectiveness model served as the conceptual framework for this research study (see Appendix A for permission to use internship effectiveness model). The identified experience factors (independent variables) in this research study can be placed into the internship effectiveness model (Narayanan et al., 2010). For this research study, the antecedent phase encompasses experience factors of academic preparedness and the placement process. The process phase includes (a) experience factors of the PPE coordinator/university mentor, (b) PPE preceptor (onsite mentor), (c) learning during the PPE, (d) impact on future career, and (e) financial compensation. The outcome process covers the experience factor of PPE project/work relevance to industry and potential utilization of the project/work outcome(s) by the PPE site.

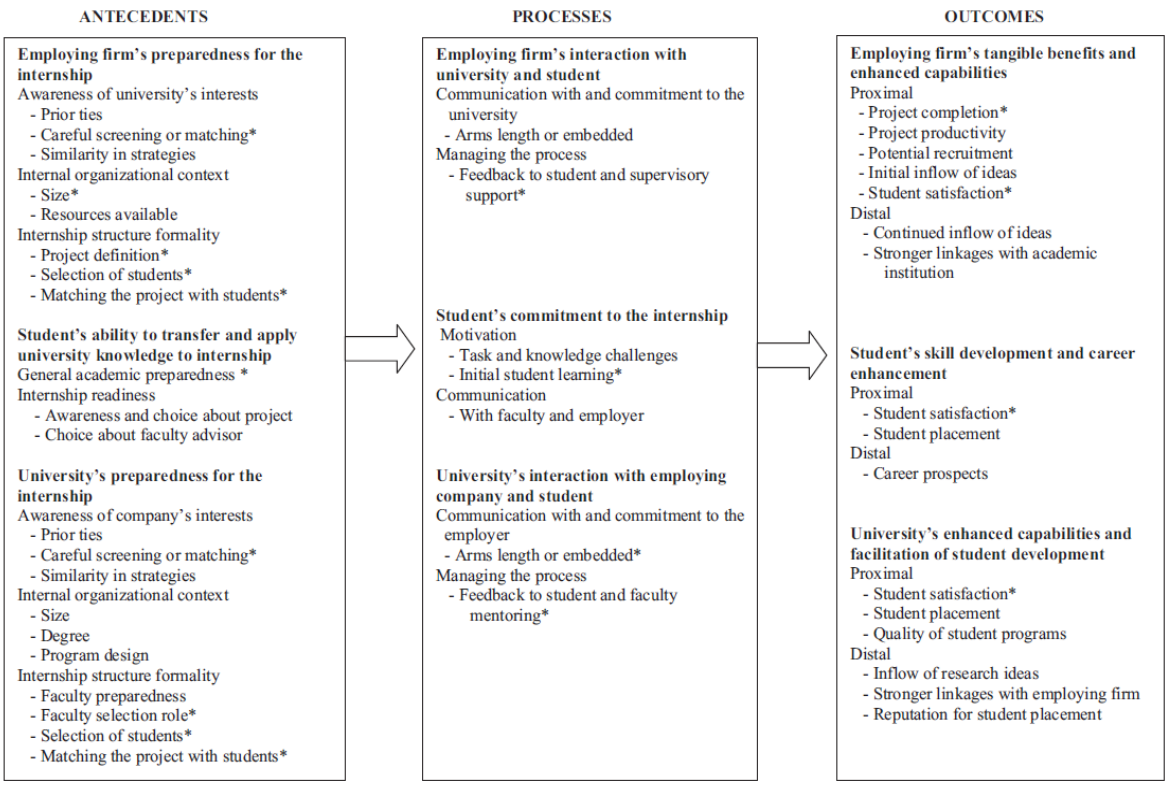

Figure 1. Internship effectiveness model. Adapted from "Determinants of Internship Effectiveness: An Exploratory Model," by V. K. Narayanan, P. M. Olk, and C. V. Fukami, 2010, *Academy of Management Learning & Education*, 9(1), p. 65. Copyright 2010 by Academy of Management. Reprinted with permission.

Internship satisfaction research has been conducted in many other fields; however, no empirical evidence has been established to assess how the factors of a quality PPE relate to HIM student PPE satisfaction. In order to identify the degree to which quality PPE experience factors relate to HIM student PPE satisfaction, the researcher has chosen to conduct a quantitative, nonexperimental, correlational study that utilized an electronic PPE satisfaction survey tool to collect data. This research study could inform the development of PPE standards by CAHIIM and provide colleges and universities, HIM program directors, HIM faculty, and PPE preceptors

with information on the predictors of quality, satisfactory PPEs to support student learning. The information from this study could also drive future HIM curriculum requirements. Lastly, by applying the information from this study to develop PPE programs that ensure quality, satisfactory PPEs, graduating undergraduate HIM students could be more effectively prepared and more marketable to employers.

Statement of the Problem

When students begin college, they have the expectation that they will graduate with the necessary knowledge and skills to enter the workforce and secure a job in their chosen field (Rosenberg, Heimler, & Morote, 2012). Employers expect college graduates to enter the workforce with the employability skills necessary to perform their jobs (Rosenberg et al., 2012). In 2009, the National Association of Colleges and Employers found that 76.3% of the employers responding to their survey preferred to hire students who had experience (as cited in Gault, Leach, & Duey, 2010). The field of HIM is much like other industries. An HIM industry study by Jackson, Lower, and Rudman (2016) found "more employers than academics identify a gap between skills acquired through academic preparation and skills required to work in the market" (p. 3). A quality internship can bridge the gap between the classroom and the workplace, and allow students to gain the necessary experience employers are seeking (Coco, 2000). Beyond providing the student with the practical experience needed in the workplace, Eyler (2009) explained that internships help students gain a deeper understanding of their field of study, apply their critical thinking skills and knowledge in complex situations, and "the ability to engage in lifelong learning, including learning in the workplace" (p. 26). When an internship is poorly structured, student learning is compromised and the value of an internship is underscored (Eyler, 2009). Eyler (2009) stated that "in order to justify the inclusion of work or community service as

part of the liberal arts curriculum, attention needs to be paid to ensuring the quality of the intellectual as well as the work experience" (p. 30). It is important to create guidelines for quality internships to ensure students are able to transfer their learning to new contexts (Eyler, 2009) and to gain the experience and employability skills they need to enter the workforce (Gault et al., 2010).

CAHIIM (2020a) establishes accreditation standards and accredits these programs. CAHIIM accreditation is a voluntary, peer-reviewed process and serves as the "benchmark by which students and employers determine the integrity of health informatics and information management education" (CAHIIM, 2018a, 2018b, p. 3). When a student graduates from a CAHIIM accredited HIM program, they are eligible to obtain professional certifications through the American Health Information Management Association (AHIMA) to enhance their careers (CAHIIM, 2020a).

> Students in the HIM discipline are expected to have working knowledge in six major domains: (1) data content, structure and standards, (2) information protection: access, disclosure, archival, privacy and security, (3) health information technologies, (4) revenue management, (5) compliance, and (6) leadership. (CAHIIM, 2018a, 2018b, p. 3)

While providing education in all six domains, the educational programs must offer an internship to integrate and complement the didactic component of the curriculum through an externally supervised internship (CAHIIM, 2018a, 2018b). HIM baccalaureate and associate degree programs accredited by CAHIIM require students to "complete a minimum of 40 hours of externally supervised activity prior to graduation" (CAHIIM, 2018a, 2018b, p. 9). In the field of

HIM, the "externally supervised activity prior to graduation" is called a PPE (CAHIIM, 2018a, 2018b, p. 9).

The problem relating to the PPE (also known as an internship) in the field of HIM is the lack of standards and requirements designed to provide quality PPEs. The degree to which factors of a high-quality PPE relate to student PPE satisfaction is unknown. This problem has a great impact on the key stakeholders involved in a PPE: the students, the HIM program directors and faculty, and the host organization and PPE preceptor (Maertz, Stoeberl, & Marks, 2014). The primary stakeholders affected by this problem are the students enrolled in associate and baccalaureate HIM degree programs throughout the United States. This research study identified what factors best predict PPE satisfaction. Since PPEs are a required component of the HIM program, it is important to understand which aspects of the PPE correlate to a satisfactory experience for the HIM student. Much research has been done in other fields of study on internship satisfaction and the contributing factors to internship satisfaction (D'Abate et al., 2009; Dabke, 2015; Gupta, Burns, & Schiferl, 2010; Sasnett & Ross, 2016); however, no empirical research has been conducted on HIM student PPE satisfaction. Undergraduate HIM programs lack quality standards surrounding the PPE requirement. As it stands, there are seven accreditation standards related to the PPE, and none of them specifically address the experience factors that should be present in all PPE programs to ensure a quality, satisfactory PPE. The standards include:

> Professional practice experiences (PPE) must be designed and supervised to reinforce didactic instruction and must include program-coordinated experience at professional practice sites. The program must describe how the PPE (e.g., clinical practicum, directed practice experience) is designed, supervised and evaluated, and name the objectives to be

achieved in each PPE course. The PPE is a credit-based course, which applies toward degree completion, and requires tuition, fees and costs as normally occurs according to institutional policy. The PPE does not prohibit a paid internship.

Each student must complete a minimum of 40 hours of externally supervised activity prior to graduation. The externally supervised activity PPE must relate to higher level competencies and result in a learning experience for the student and/or a deliverable to a practice site.

Simulation activities designed to replicate PPEs are permitted but cannot totally replace the required 40 hours minimum of an externally supervised activity PPE. The program must describe how simulation activities are designed, supervised, and evaluated, and what objectives are to be achieved by using simulation activities.

PPE onsite preparation. The health and safety of patients, students, and faculty associated with educational activities must be adequately safeguarded according to the health and safety practices of both the sponsoring educational institution and the professional practice site. The responsibilities of the college, PPE site and students must be documented for externships or professional practice experiences. Either a formal contract or memorandum of understanding (MOU) will suffice, if in accordance with institutional practice. Health, safety, and security policies and requirements must be outlined in the agreement or MOU, and students must be informed of these in advance of the PPE. (CAHIIM, 2018a, 2018b, pp. 9-10)

This study researched how the factors of a quality PPE may relate to student satisfaction with their PPE. This study was the first of its kind in the field of HIM and the results of this research identified the most important factors in ensuring a satisfactory PPE. This is a critical

time in the HIM profession given the high rate of change in health care — the PPE is a more essential component of the HIM program curriculum than ever. The HIM profession is in a constant state of change due to innovation in the technologies used to collect, access, analyze, and maintain health information, changes in healthcare organization ownership and structure, and constantly evolving health-related policies (Abrams et al., 2017). In order to stay relevant in the dynamic healthcare environment, HIM education programs need to keep pace. Ensuring that the most up-to-date HIM practices are being taught in the classroom and then ensuring students have a quality PPE to apply their knowledge is crucial to ensuring HIM students receive an education that prepares them for their professional career. The data from this research study could be used by associate and baccalaureate HIM degree programs and PPE preceptors and organizations to structure PPEs in a way to ensure quality experiences and student satisfaction. AHIMA and CAHIIM can use the data to work together on establishing additional PPE standards and guidelines.

Purpose of the Study

The ever-changing healthcare landscape, the gap between skills acquired through HIM programs and the skills required to work in the healthcare industry, and the required PPE bridging the gap between the two, call for exploration of the factors relating to a student's satisfaction with their PPE. The purpose of this quantitative correlational study is to determine the degree to which factors of a high-quality PPE in undergraduate HIM programs relate to HIM student PPE satisfaction. The independent variables are generally defined as the experiential factors and elements affecting student PPE satisfaction. The dependent variable is generally defined as the HIM student level of satisfaction.

The population being examined by this research study consists of HIM students currently enrolled in an accredited associate or baccalaureate degree program who have completed their PPE, and HIM graduates who have completed a PPE at an accredited associate or baccalaureate degree program during the 2017/2018, 2018/2019, and 2019/2020 school years. The factors related to overall HIM student PPE satisfaction have not been researched in the field of HIM. This research study provides an analysis on the degree to which factors of a quality PPE relate to HIM student PPE satisfaction.

This study had three phases: (a) a field study, (b) a pilot study, and (c) the full-scale research project. Three phases were necessary in order to develop a comprehensive and reliable measurement scale for this study. The measure of PPE student satisfaction has not been previously studied, and there is not a reliable scale that will measure all of the experience factors involved in a PPE. The field study was used to gather general feedback on the survey tool being used to collect the data. The draft survey tool was emailed to four HIM program directors selected by the researcher for feedback. The pilot study was used to validate and determine reliability of the survey tool. The pilot study survey (see Appendix B) was distributed to a convenience sample of current HIM students enrolled in an undergraduate HIM program in the Upper Midwest of the United States who have completed a PPE, and to 2017, 2018, and 2019 undergraduate HIM graduates from the same program. The full-scale research project was distributed to an entire population of undergraduate program directors. All accredited associate degree and baccalaureate degree HIM program directors in the United States received the electronic survey link via email. Through snowball sampling, the program directors distributed the survey to recent graduates and current students who have already completed their PPE.

Research Questions

A central research question is a broad question that aims to explore the central theory in the study (Creswell, 2014). The central research question in this study is: Does academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, PPE financial compensation, the relevance of the PPE project, learning during the PPE, and the PPE's connection to student career relate to student satisfaction with their PPE?

In order to answer the central research question and understand the degree to which factors of a quality PPE relate to student satisfaction with their PPE, a subset of research questions was developed. This study includes eight independent variables that were examined for their relationship to PPE satisfaction. The eight independent variables are (a) academic preparedness, (b) the PPE placement process (college/university placement versus student self-search), (c) the PPE coordinator/college mentor, (d) the PPE preceptor/onsite mentor, (e) PPE financial compensation, (f) PPE project/work relevance to industry and potential utilization of the project/work outcome(s) by the PPE site, (g) learning during the PPE, and (h) PPE impact on student career. A research question was developed for each independent variable.

ResQ1: To what degree is academic preparedness associated with student PPE satisfaction?

ResQ2: What are the differences in PPE satisfaction between students whose PPE site placement was arranged by the college and those whose college required the student to self-search and set up their own PPE site?

ResQ3: To what degree is PPE coordinator/college mentor support associated with student PPE satisfaction?

ResQ4: To what degree is the PPE preceptor/onsite mentor support associated with student PPE satisfaction?

ResQ5: To what degree is student financial compensation associated with student PPE satisfaction?

ResQ6: To what degree is PPE project relevance to industry and its potential utilization by the practice site associated with student PPE satisfaction?

ResQ7: To what degree is student attainment of new skills and/or further understanding of HIM concepts associated with student PPE satisfaction?

ResQ8: To what degree does the student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience relate to student PPE satisfaction?

Hypotheses

Creswell (2014) explained how variables are connected in order to answer a research question or to make hypotheses about "what the researcher expects the results to show" (p. 53). For the eight research questions, the following null and alternative hypotheses were developed for this study based on the eight independent variables and their associated research questions.

$H1_o$: The degree of academic preparedness is not positively associated with student satisfaction with the PPE.

$H1_a$: The degree of academic preparedness is positively associated with student satisfaction with the PPE.

$H2_o$: PPE satisfaction with the PPE will not be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

$H2_a$: PPE satisfaction with the PPE will be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

$H3_o$: PPE coordinator/college mentor support is not positively associated with student satisfaction with the PPE.

$H3_a$: PPE coordinator/college mentor support is positively associated with student satisfaction with the PPE.

$H4_o$: Onsite PPE preceptor/onsite mentor support is not positively associated with student satisfaction with the PPE.

$H4_a$: Onsite PPE preceptor/onsite mentor support is positively associated with student satisfaction with the PPE.

$H5_o$: Financial compensation for the student is not positively associated with student satisfaction with the PPE.

$H5_a$: Financial compensation for the student is positively associated with student satisfaction with the PPE.

$H6_o$: PPE project relevance to industry and potential utilization by the PPE site is not positively associated with student satisfaction with the PPE.

$H6_a$: PPE project relevance to industry and potential utilization by the PPE site is positively associated with student satisfaction with the PPE.

$H7_o$: Student attainment of new skills and/or additional understanding of HIM concepts are not positively associated with student satisfaction with the PPE.

$H7_a$: Student attainment of new skills and/or additional understanding of HIM concepts are positively associated with student satisfaction with the PPE.

$H8_o$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are not positively associated with student satisfaction with the PPE.

$H8_a$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are positively associated with student satisfaction with the PPE.

Significance of the Study

The study of the degree to which factors of a high-quality PPE in undergraduate HIM programs relate to HIM student PPE satisfaction is important to accredited institutions of higher education with HIM programs, the directors of the accredited HIM programs, HIM students, employers of HIM professionals, PPE preceptors, and AHIMA and CAHIIM. The information from this study can be used by accredited institutions of higher education with HIM programs to ensure their HIM programs have a PPE program that delivers quality, satisfactory experiences for their students. It could be used as a marketing tool for the institution's HIM program; a well-structured program that guarantees a quality, satisfactory experience would be worth touting. The information generated from this research study can help accredited HIM programs develop quality PPE programs in alignment with Kolb's ELT and Narayanan et al.'s internship effectiveness model, and ensure all of the factors of a quality, satisfactory PPE are addressed. HIM program directors and PPE coordinators can use the information to thoroughly orient PPE preceptors to how they can provide a quality, satisfactory PPE for students. The data can provide information to students who are in the process of selecting an accredited HIM program. With this added information they can ask informed questions about the HIM program's PPE program. This information could assist any professional who is mentoring a student as an internship preceptor,

and especially those mentoring HIM students on PPEs. This information could also demonstrate what these professionals can do as preceptors to assure their mentor students will be satisfied with their PPEs. Lastly, the information could assist CAHIIM in establishing guidelines and structure around the PPE as part of their accreditation requirements.

Definition of Terms

Academic preparedness. The student's ability to transfer and apply university knowledge to the internship, such as the coursework the student has taken prior to the internship and the student's readiness for the internship experience (Narayanan et al., 2010).

Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Is an accrediting organization which has independent authority in all actions pertaining to accreditation of educational programs in health informatics and HIM. CAHIIM (2018a, 2018b) is recognized by the Council for Higher Education Accreditation (CHEA).

Factor. An element that influences the quality of an internship or PPE (Marinaș, Goia, Igreț, & Marinaș, 2018).

Health information management (HIM). "The practice of acquiring, analyzing, and protecting digital and traditional medical information vital to providing quality patient care, a combination of business, science, and information technology" (CAHIIM, 2018a, 2018b, p. 3).

Internship. "A short-term work experience that provides the opportunity to explore an area of career interest, an occupation, or an industry" (Perri, 2006, p. 410).

Practice site. The location of the PPE or internship program-coordinated experience (CAHIIM, 2018a, 2018b).

Professional practice experience (PPE). A required credit-based internship course in all CAHIIM accredited associate and baccalaureate HIM programs (CAHIIM, 2018a, 2018b). The PPE must be a minimum of 40 hours of externally supervised activity prior to graduation and "must relate to higher level competencies and result in a learning experience for the student and/or a deliverable to the practice site" (CAHIIM, 2018a, 2018b, p. 9).

Preceptor. An experienced HIM professional whose job is to mentor and teach the intern, challenge the student with a variety of tasks and experiences, and allow the student to shadow them while performing their job (Constable, 1998).

Conclusion

Chapter 1 introduced the reader to the current state of the HIM industry and the role internships or PPEs play in supporting HIM students preparing to enter the workforce by confirming that they possess the skills necessary to succeed. The reader was also introduced to the problem being researched and the purpose of the study. The problem is the lack of standards and requirements related to PPEs, and that the degree to which factors of a high-quality PPE relate to student PPE satisfaction are unknown. The purpose was to determine the degree to which factors of a high-quality PPE influence HIM student PPE satisfaction. The central research question, subsequent research questions, the null and alternative hypotheses for the research questions, and an overview of the research study were also introduced. Definitions of important terms and concepts were provided.

The following chapters include Literature Review (Chapter 2), Methodology (Chapter 3), Data Analysis and Results (Chapter 4), and Discussion and Recommendations (Chapter 5). The Literature Review provides studies on internships, shares Kolb's ELT, introduces Narayanan et al.'s internship effectiveness model, informs the reader about the HIM industry and the role of

internships, and establishes the value of an internship. The Methodology chapter explains the research methodology used in the study and the rationale for selecting that methodology. Chapter 4, Data Analysis and Results, will summarize the data collected by the survey tool, explain how it was analyzed, and present the results. The final chapter, Chapter 5, will provide a comprehensive summary of the research study and the implications of the study.

Chapter 2: Literature Review

Introduction

The literature review will present the conceptual theory and framework for this study. The history of Kolb's ELT is shared and the experiential learning model explained. It will explore how Kolb's ELT can be applied to an internship program and explain Kolb's four learning styles as they fit into the experiential learning model. The different forms of experiential learning in higher education are also explored. Then, internships become the focus with the value of an internship explained for the major stakeholders in an internship: the student, the institution of higher education, and the host organization. The costs of an internship for the three stakeholders is discussed. The field of HIM is introduced along with an explanation of the required PPE in HIM undergraduate programs. The factors and elements of a quality internship are shared. The literature review concludes with an introduction of Narayanan et al.'s internship effectiveness model, which forms the conceptual framework for the research study.

Experiential Learning Models and Theory

Kolb (1984) defined experiential learning as "the process whereby knowledge is created through the transformation of experience" (p. 38). Lewis and Williams (1994) defined experiential learning as "learning from experience or learning by doing" (p. 5). The authors went on to explain that, "Experiential education first immerses adult learners in an experience and then encourages reflection about the experience to develop new skills, new attitudes, or new ways of thinking" (Lewis & Williams, 1994, p. 5). Cantor (1995) described experiential learning as both "a process of learning and a method of instruction" (p. 1). Janet Eyler (2009) defined experiential learning as "a process whereby the learner interacts with the world and integrates

new learning into old constructs" (p. 24). Though there are many definitions of experiential learning, one must look to history and the founder of ELT.

Kolb (1984) credited John Dewey as the most influential educational theorist of the twentieth century, and provided the guiding principles for programs of experiential learning in higher education. Kolb (1984) went on to develop the ELT based on the Lewinian experiential learning model, Dewey's model of learning, and Piaget's model of learning and cognitive development. The Lewinian experiential learning model focuses on active learning and is based "In the techniques of action research and the laboratory method, learning, change, and growth are seen to be facilitated best by an integrated process that begins with here-and-now experience followed by collection of data and observations about that experience" (Kolb, 1984, p. 21). Following data analysis, conclusions are sent back to the individuals in the experience in order to modify their behavior and to choose new experiences (Kolb, 1984). Within the Lewinian model, learning is seen as a four-stage cycle beginning with concrete experience, then observations and reflections, then formation of abstract concepts and generalizations, and lastly testing implications of concepts in new situations (Kolb, 1984). Dewey's model of learning is very similar to the Lewinian model; however, learning is grounded in experience, and "he makes more explicit the developmental nature of learning implied in Lewin's conception of it as a feedback process by describing how learning transforms the impulses, feelings, and desires of concrete experience into higher-order purposeful action" (Kolb, 1984, p. 22). In Piaget's model of learning and cognitive development, experience and concept, reflection, and action are the dimensions for development of adult thought (Kolb, 1984). The "learning lies in the mutual interaction of the process of accommodation of concepts or schemas to experience in the world into existing concepts and schemas" (Kolb, 1984, p. 23). Piaget places the focus "on the

interaction between person and environment on intelligence" ("David Kolb's Learning Cycle," n.d., n.p.).

According to Kolb (1984), one must understand that ELT is fundamentally different than traditional educational methods and acknowledge the key role experience plays in learning. One needs to look at the relationship between "learning, work, and other life activities, and the creation of knowledge itself" differently (Kolb, 1984, p. 20). Kolb (1984) integrated the work of John Dewey, William James, Kurt Lewin, Carl Jung, Paulo Freire, Carl Rogers, Jean Piaget, and others to develop six characteristics of experiential learning.

Six characteristics of experiential learning.

Learning is best conceived as a process, not in terms of outcome. In experiential learning, ideas are "formed and reformed through experience" and experience always intervenes in thoughts, thus "no two thoughts are ever the same" (Kolb, 1984, p. 26).

Learning is a continuous process grounded in experience. "Knowledge is continuously derived from and tested out in the experiences of the learner" (Kolb, 1984, p. 27).

The process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world. In the models of Dewey, Lewin, and Piaget, "learning describes conflicts between opposing ways of dealing with the world, suggesting that learning results from resolution of these conflicts" (Kolb, 1984, p. 29).

Learning is a holistic process of adaptation to the world. Learning is a holistic concept that "seeks to describe the emergence of basic life orientation as a function of dialectic tensions between basic modes of relating to the world" (Kolb, 1984, p. 31). Learning "involves the integrated functioning of the total organism – thinking, feeling, perceiving, and behaving" (Kolb, 1984, p. 31).

Learning involves transactions between the person and the environment. In ELT, "the transactional relationship between the person and the environment is symbolized in the dual meanings of the term experience – one subjective and personal, referring to the person's internal state, as in *the experience of joy and happiness*, and the other objective and environmental, as in, *He has 20 years of experience on this job*. These two forms of experience interpenetrate and interrelate in very complex ways" (Kolb, 1984, p. 35).

Learning is the process of creating knowledge. "Knowledge is the result of the transaction between social knowledge and personal knowledge. The former, as Dewey noted, is the civilized objective accumulation of previous human cultural experience, whereas the latter is the accumulation of the individual person's subjective life experiences. Knowledge results from the transaction between these objective and subjective experiences in a process called learning" (Kolb, 1984, pp. 36-37).

Four modes of experiential learning. Kolb's (1984) ELT model demonstrated the four different kinds of abilities that learners must possess in order to learn effectively from experiences. The four abilities or modes are:

1. Concrete experience abilities – when they fully immerse themself in new experiences without bias
2. Reflective observation abilities – reflecting on and observing one's experiences from many different perspectives
3. Abstract conceptualization abilities – applying theory to one's observations and experiences
4. Active experimentation abilities – using reflection and theories to make decisions and solve problems. (Kolb, 1984, p. 30)

The four modes are often represented as a cycle "whereby concrete experience leads to reflective observation, abstract conceptualization, and active experimentation, ultimately returning to concrete experience" (Callan & Landers, 2012, p. 309). A visualization of Kolb's learning cycle depicting the four modes of experiential learning is presented in Figure 2. However, Kolb explained that an individual must go through all four modes in order to receive the most effective learning, and that learning flexibility can be attained by constantly going through the cycle ("Experiential Learning," 2008). A person can enter the cycle at any point; however, consistently entering the cycle at the same point could signify one's preference for grasping or transforming information ("Experiential Learning," 2008).

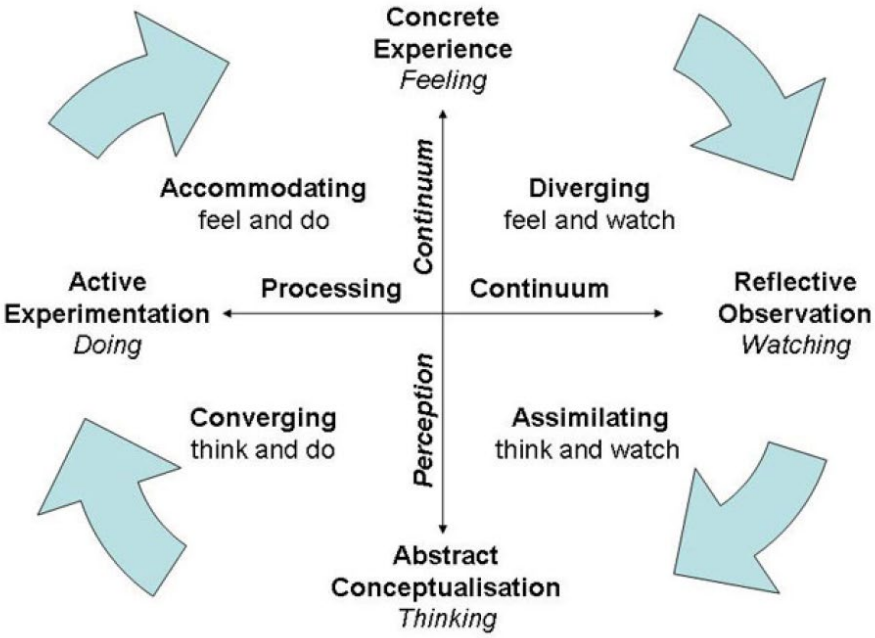

Figure 2. Illustration of David Kolb's experiential learning cycle. Adapted from "Kolb's Learning Styles and Experiential Learning Cycle," by S. A. McLeod, 2017, *Simply Psychology*, https://www.simplypsychology.org/learning-kolb.html. Copyright 2017.

Kolb, Rubin, and McIntyre (1971) pointed out several important observations about the experiential learning cycle. The first observation is that individuals are continuously moving through the experiential learning cycle: "all learning is re-learning and all education is re-education" (Kolb et al., 1971, p. 28). An individual's experiences are guided by their goals; they interpret experiences based on their goals, and form and test ideas relevant to their goals (Kolb et al., 1971). Lastly, one's learning style is individualized in terms of direction and process because they are guided by their goals (Kolb et al., 1971).

Applying Kolb's experiential learning model to an internship program. According to Eyler (2009), feedback and reflection are the most critical factors for achieving learning outcomes from experiential learning programs. "Challenging, continuous, context-appropriate reflection turns work experience into learning experience" (Eyler, 2009, p. 30). David Kolb's experiential learning cycle demonstrates this movement from concrete experience to reflective observation and abstract conceptualization and then back to active experimentation (experience) (Eyler, 2009; Kolb, 1984). One can see this actively applied to an internship program by looking at the work of Zopiatis and Constanti (2012).

Zopiatis and Constanti (2012) reviewed a number of studies related to student internship satisfaction and established a framework based on Kolb's experiential learning model. They went on to make practical recommendations that could be applied to hospitality internship practices to ensure a quality internship experience. Prior to the study, Zopiatis and Constanti (2012) asserted that the majority of hospitality educators focused their internship preparations on the actual internship experience, active experimentation, and neglected the other three stages in Kolb's cycle. Their proposed framework, if applied to a hospitality internship, would allow the

student intern to move through all four stages of Kolb's experiential learning cycle (Zopiatis & Constanti, 2012).

The first recommendation involves engaging in the actual hospitality internship and would be take place just prior to the active experimentation phase in Kolb's experiential learning cycle (Zopiatis & Constanti, 2012). During this phase, the intern's employment status should be clarified and an intern job description developed by the organization to clarify the tasks and responsibilities of the student. Along with a job description, the authors recommend internship supervisors provide a consistent orientation to the organization, consistent feedback on performance throughout the internship, and an evaluation at the conclusion of the internship. Faculty should visit the internship organization during the internship as way for all stakeholders to evaluate the internship based on program goals, discuss issues, and develop plans to mitigate and resolve any issues that arise. In an effort to keep the student focused on the internship, a journal or logbook should be used by the student to document their experiences. Lastly, interns should be given a mentor to support them throughout the internship (Zopiatis & Constanti, 2012).

The second recommendation is to allow the student "to reflect on their actual experience and identify the effects on both their personal and professional development as it relates to their pre-internship learning intentions" (Zopiatis & Constanti, 2012, p. 48). Upon completion of the internship, students should engage in a post-internship seminar with the goal of evaluating the overall internship experience and sharing their experience with other students. It is important to invite students who are enrolled in the program but have yet to complete an internship to listen to the sharing sessions. The student should develop a reflection paper that allows them to critique their performance while on the internship, their personal thoughts on the experience, and to

connect their experience to their previous classroom learning. Lastly, the student should complete an evaluation where they can assess their performance, the internship organization, and the support they received from faculty and the institution of higher education (Zopiatis & Constanti, 2012).

The third recommendation is assimilation (Zopiatis & Constanti, 2012). It is during this phase that the student intern attempts

> to integrate hospitality academic "classroom" theories with the knowledge gained during their internship in order to identify the relevance or discrepancies between theory and practice. The complementary relationship between theory and practice reinforces students' commitment towards the hospitality industry by instilling confidence in their future hospitality endeavors. (Zopiatis & Constanti, 2012, p. 49)

Due to the uniqueness of each internship organization, this can be challenging for students, and the authors propose revising curriculum to more closely meet the students' experience during their internships. They propose the development of in-class activities that will bridge the differences between industry and curriculum (Zopiatis & Constanti, 2012).

The final recommendation is for the educational program to develop a formal internship plan to inform all stakeholders involved in the internship (Zopiatis & Constanti, 2012). This plan should address the mission, purpose, and objectives for the internship. The authors advise that these components should be realistic, address the needs of all stakeholders, and work to preserve the academic integrity of the educational program. The elements that should be addressed in the internship plan include (a) a definition of the internship practice; (b) explanation of how the student can fulfill the internship credit requirement; (c) internship prerequisites and eligibility requirements in order to participate in the internship; (d) a syllabus that serves as the contract

between the school, student, and internship organization; (e) an appropriate evaluation tool for the internship supervisor to measure performance, commitment, and contribution of the student intern; (f) quality assurance review by the educational program of the internship organization; (g) policies and procedures to guide all stakeholders; and (h) students should participate in a pre-internship seminar to prepare the student to participate in the internship (Zopiatis & Constanti, 2012).

Kolb's four learning styles. As previously mentioned, an individual may develop a preference for one mode depicted in Kolb's learning cycle and skip other modes ("Experiential Learning," 2008). If a learner goes through all four modes in Kolb's learning cycle, they will have experienced a "well-rounded learning experience" ("Experiential Learning," 2008, p. 489). According to Kolb (1984), certain tendencies are indicators of one's learning style. The indicators are the formation of a preference for one mode over the others, the removal of the other modes, and development of preferences for how they learn and understand knowledge as they age ("Experiential Learning," 2008). The elements that influence these preferences are the result of two variables or choices (McLeod, 2017). Kolb (1984) identified these two variables as axes within the experiential learning cycle. The horizontal axis (depicted in the experiential learning cycle in Figure 1) represents the processing continuum of how we approach a task, and the vertical axis is the perception continuum that represents how one feels about the task (McLeod, 2017).

Kolb (1984) identified four learning styles: diverging, assimilating, converging, and accommodating. Each learning style has its own set of defining characteristics (Kolb, 1984). Someone with the diverging learning style prefers concrete experience, reflection, views things and issues from different perspectives, and is sensitive to other's feelings ("Experiential

Learning," 2008; Kolb, 1984; McLeod, 2017). In his 1984 book on experiential learning, Kolb associates learning styles to the Myers-Briggs Type Indicators. In the case of the diverging learning style, it is "associated with the personality type having introversion and feeling as the dominant process" (Kolb, 1984, p. 83). An individual with the assimilating learning preference tends to plan things out and organize information, gather information to seek out clarity and understanding, and have high standards for their work ("Experiential Learning," 2008; McLeod, 2017). These individuals are "characterized by the introverted intuitive type" (Kolb, 1984, p. 84). Individuals who prefer the converging learning style tend to choose technical tasks, enjoy solving problems through experimentation, and prefer to go beyond understanding a problem or situation – they want to act ("Experiential Learning," 2008; McLeod, 2017). Someone with the converging learning style aligns with the "extraverted thinking style" (Kolb, 1984, p. 84). Lastly, an individual who prefers the accommodating learning style engages in concrete experience, relies on intuition versus logical analysis, look to others for information, and focuses on getting things done ("Experiential Learning," 2008; McLeod, 2017). Individuals with the accommodating learning style have "extraverted sensing" as their dominant personality type (Kolb, 1984, p. 83).

Forms of Experiential Learning in Higher Education

Experiential learning in higher education can take on many forms such as role playing, student-run radio stations, reenactments, working in community-based organizations and clinics as a form of service learning, laboratories, practicums, clinicals, school-based fieldwork, and internships (Cantor, 1995). Simulations and role playing are forms of experiential learning often used to train healthcare professionals such as nurses (Jeffries, 2005). According to Barrow and Feltovich (as cited in Jeffries, 2005), a realistic clinical simulation exercise offers little

information about the situation initially. The student should be permitted to freely investigate and ask questions, and additional clinical information about the situation should be given to the student over time. A study was conducted in New Zealand with first-year nursing students who participated in a new simulation program designed to prepare them for their first clinical placement (McNamara, 2015). The school took this approach due to the ever-changing healthcare industry, nursing shortages, faculty shortages, and decreased budgets that resulted in a decrease in the number available clinical placements (McNamara, 2015). In this study, McNamara (2015) used Kolb's ELT as the theoretical framework. The components of the program were broken down into concrete experience, active reflection, abstract conceptualization, and active experimentation. The simulation activity provided concrete experience; observations and reflections derived from the concrete experience. Active reflection took place during simulation debriefing sessions, and the reflections allowed students to develop abstract concepts that they could actively test to create new knowledge (McNamara, 2015). In this study, the areas of learning basic skills and clinical documentation and collaborative care showed significant learning, and all of the respondents (100%) recommended that they continue the simulation program (McNamara, 2015).

In the 1970s, service learning emerged as a form of experiential learning and has continued to grow in popularity (Eyler, 2009). Bringle and Hatcher (1996) define service learning as

> a credit-bearing educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility. (p. 222)

Many students on college campuses across the United States are members of student organizations or campus-based religious groups and partake in community service activities as members of these groups (Bringle & Hatcher, 1996). While participating in community service as a member of a student club is meaningful, faculty who use service learning in the classroom have found many additional benefits for their students and course outcomes (Bringle & Hatcher, 1996). Bringle and Hatcher (1996) found that this provides another way to reach learning objectives and brings renewed energy to the classroom, improves performance in traditional methods of learning, raises student interest in the subject matter, teaches new problem-solving skills, and makes teaching more pleasurable.

According to Janet Eyler (2009), two of the most common forms of experiential learning are cooperative education and internships. Cooperative education allows a student to split their time between school and paid work (Eyler, 2009). In the case of Northeastern University in Boston, MA, cooperative education is going strong after 100 years (Ambrose & Poklop, 2015). Northeastern University has approximately 8,000 students working for six-month periods of full-time employment with about 2,900 different employers each year. This cooperative education allows the student to earn money while expanding and enhancing the curriculum in a way that cannot be duplicated in the classroom (Ambrose & Poklop, 2015). While the cooperative education program at Northeastern University is going strong, according to Eyler (2009), cooperative education programs have decreased and internships are increasing.

The Value of an Internship

Upon entering a college or university, students have the expectation that they will gain the necessary knowledge and skills to enter the workforce, and upon graduation they expect that they will possess the skills necessary to perform a job in their chosen field (Rosenberg et al.,

2012). An internship is one way that students can gain added knowledge and skills in their field and incorporate work-related experience into their college education (Gault et al., 2010). Internships are a component of many higher education programs (Eyler, 2009). Internships began to appear in the 1960s, though it wasn't until the 1980s that business schools really began to utilize internships within their programs (Spradlin, 2009). An internship allows a student to gain *real world* experience and to apply what they have learned from their college coursework. Many college and university programs offer experiential learning or internships as a way for students to develop the skills needed to transition to the workforce and increase their employability (Helyer, & Lee, 2014; Sasnett & Ross, 2016). Experiential learning allows students to engage with their field of study in the real world with a practitioner providing guidance and an instructor providing oversight for college credit (Sosland & Lowenthal, 2017). The intent of an internship is to provide students with the opportunity to grow personally and professionally while interacting with and learning from professionals in their field of study.

Internships involve three distinct groups of stakeholders: the student, the institution of higher education, and the employer (Sauder et al., 2019). Many studies on student internship satisfaction have considered all three stakeholder groups in their research (Hoyle & Goffnett, 2013; Maertz et al., 2014; Narayanan et al., 2010; Vélez & Giner, 2015; Zopiatis & Constanti, 2012). The benefits of an internship for the students, the institutions of higher education, and employers have been widely studied in many fields (Maertz et al., 2014; Tepper & Holt, 2015; Weible & McClure, 2011). Giles and Ryan (2004) shared the intended benefits or goals most universally discovered through an internship. The benefits and goals include:

- Engaging the intern in the discipline or major
- Causing interaction with a variety of individuals, systems, and organizations

- Improving self confidence
- Using a variety of learning styles and frequently challenging participants to use new ways of learning and thinking
- Improving skills in research, communication in groups, interpersonal communication, and observation
- Improving critical thinking and problem-solving skills
- Personalizing learning, giving it relevance and meaning
- Putting learning into context to improve understanding and retention of concepts
- Providing networking and mentoring opportunities
- Conditioning the participant to adapt to change
- Frequently challenging attitudes and beliefs, which often change
- Helping a participant grow emotionally and learn from failure and success
- Helping an intern become a more motivated life-long learner. (Giles & Ryan, 2004, p. 1325)

Ultimately, the value of an internship is different for the student, the institution of higher education, and the employer (Coco, 2000).

Value of an internship to students. Students often seek out internships in order to be exposed to the practical side of their field of study, gain experience, improve their job skills, and possibly receive a job offer from the internship organization (Tepper & Holt, 2015). Coco (2000) explained that an internship is a "short-term reward and an experience-building activity, as well as a permanent life experience" (p. 42). Internships provide a pathway for the major transition from the college or university to the workplace (Coco, 2000; Hurst, Thye, & Wise, 2014; Maertz

et al., 2014). Gault, Redington, and Schlager (2000) found that students who took part in an internship and gained employment after graduation earned an average of $2,240 (9.23%) more than entry-level salaries for non-interns (Gault et al., 2000). The study revealed that it took an average of 1.98 months for those who took part in an internship to obtain their first position and 4.34 months for non-interns to obtain their first position (Gault et al., 2000). Lastly, interns were found to have higher job satisfaction and a higher promotion rate to positions with more responsibility compared to non-interns (Gault et al., 2000).

When employment is not a guarantee, students still expect to network with professionals at the internship site to obtain valuable contacts and professional references for future employment (Tepper & Holt, 2015). Clarification on career choice is another benefit of an internship (Neapolitan, 1992). In 1992, Jerry Neapolitan conducted a research study on the ability of sociology students to gain clarification of their career choice during an internship. While this was a rather small mixed methods study, Neapolitan (1992) found that after the internship, the students were less anxious about entering and working in their preferred career, had an increased awareness of their abilities, and were more certain of their career choice. Interns are able to identify their professional desires and do not want to get out of a career earlier on in the job search (Maertz et al., 2014). As Coco (2000) described, the internship could be viewed as a probationary period by the student, allowing them to check out the job, the employer, and the work environment. Having this knowledge early on allows the student to determine their compatibility with an organization and the job (Coco, 2000; Maertz et al., 2014). Many students find themselves undecided about a direction for their career, and an internship could trigger a new interest or a new career path (Coco, 2000).

Value of an internship to faculty and the institution of higher education. Cantor (1995) had a very strong perspective on the need to form relationships between businesses and community and institutions of higher education in order to promote economic development. Cantor (1995) stated that faculty were responsible for ensuring a service mission through outreach to businesses and the community, and that they should provide realistic learning opportunities to create new knowledge. Weible and McClure (2011) found that faculty and institutions of higher education did not benefit from internships as much as students and hosting organizations did. They did note in their research that there were limited benefits of an internship on faculty teaching methods; however, there was a positive effect on classroom discussion (Weible & McClure, 2011). Weible and McClure's (2011) study focused on internships in business schools, and they found that those internships led to stronger connections between the business schools and the business community. The study found internships promote an increased number of business school students being hired by small businesses (Weible & McClure, 2011).

Weible and McClure's (2011) study found that student recruiting is positively impacted by the student internship program. This was supported by Gault et al.'s (2000) study on the relationship between business internships and career success. An internship program is an avenue that the institution of higher education can use to recruit students, as internships are seen as a value-added advantage to the program being offered (Gault et al., 2000). Internship programs can be a method for institution fundraising. Gault et al. (2000) explained that the internship program "increases the number of personal connections with the university, thereby enhancing the potential to secure corporate funding for research and other university development initiatives" (p. 51).

Value of an internship to host organizations. Coco (2000) identified many benefits to host organizations that include access to competent, highly motivated individuals without the costs of employing an individual full-time, the ability to allow full-time staff a break from everyday tasks, and the opportunity to evaluate the student as a potential employee. Internships could allow employers to have first choice of the best students, depending on the type of internship program (Coco, 2000; Gault et al., 2000). An internship could lead to better hiring decisions, as the organization is able to fully evaluate a student's performance (Coco, 2000). An internship is a "low-cost, low-risk opportunity for employers to evaluate interns as prospective employees" (Maertz et al., 2014, p. 131). Cost savings could be attributed to internships in that the organization could spend less on recruitment efforts (Maertz et al., 2014).

The internship preceptor or mentor can learn from the intern, as they bring new perspectives and fresh ideas to the work being performed at the organization (Sosland & Lowenthal, 2017). Internships allow the internship mentor to give back to the field; as a college student they may have had similar internship opportunities that helped them succeed, so they want to provide that opportunity to others (Sosland & Lowenthal, 2017). In fact, the AHIMA (2019) code of ethics states that its members have an obligation to "recruit and mentor students, peers and colleagues to develop and strengthen professional workforce" (para. 7). The institution of higher education benefits from internships by improving the relationship between the institution and the business community and organizations providing internships (Gault et al., 2000; Tepper & Holt, 2015). These relationships can pay off by the institution attracting prospective students who desire to have a real-world experience as part of their education (Gault et al., 2000). This relationship can lead to the business seeking out the institution's students for future internship opportunities and employment (Tepper & Holt, 2015). Employers can use the

internship as a recruitment tool and as a method to evaluate the student's work ethic without hiring them (Sasnett & Ross, 2016). Employers realize the benefit of having a source of future qualified employees (Gault et al., 2000).

Costs of an Internship

With the many benefits of an internship, there are also costs. The primary cost to schools is the compensation of the faculty, staff and administration providing the internship oversight (Maertz et al., 2014). Faculty, staff, and administration who oversee an internship program must (a) ensure that internships meet the needs of interns and employers and the goals of the program; (b) communicate with and foster relationships with the internship sites and their internship supervisors; and (c) maintain accurate records for all the participants in the internship program, such as contact information for the internship site and legal agreements between the school and the internship site (Maertz et al., 2014).

There are costs associated with an internship for employers (Maertz et al., 2014). Aside from potentially paying the intern, there are expenses associated with dedicating human resources to plan the internship, mentor and supervise the student, and then evaluate the intern's performance (Maertz et al., 2014). In all cases, the supervisor must dedicate time to spend with the intern, and in some cases, this is considerable if the student needs constant supervision "due to lack of knowledge, skills, and abilities, confidence, or initiative" (Maertz et al., 2014, p. 131). It can be challenging for a supervisor to find small work assignments due to the supervisor's own responsibilities and the type of work performed by the supervisor (Maertz et al., 2014). Lastly, the supervisor is being taken away from their typical day-to-day work, meaning that their work may not get completed or another employee may need to cover their work (Maertz et al., 2014).

The Field of Health Information Management

In 2017, AHIMA developed HIM Reimagined (HIMR), an initiative that addresses the future of the HIM profession while making recommendations to sustain the vitality of the profession in an ever-changing healthcare industry (2017). The healthcare industry is moving towards a data-driven and quality outcome-focused system with the next phase of information management being information governance (AHIMA, 2017). The trend shows that with this movement towards patient-driven healthcare there will be an even greater flow of information requiring collaboration and customization, requiring HIM professionals to provide support and stay educated on these topics (AHIMA, 2017). Preventive medicine is a significant trend requiring HIM professionals' data analytics skills and providing the opportunity to work with the public health segment of the industry (AHIMA, 2017). The healthcare industry is changing rapidly, and the health information field needs to evolve with all of the governmental programs and regulations driving the change (The Caviart Group, 2015). The Bureau of Labor Statistics (U.S. Department of Labor, 2019) projected an 11% growth in employment of medical record and health information technicians between 2018 to 2028. In their *2019 Leadership & Workforce Survey*, the Healthcare Information and Management Systems Society (HIMSS, 2019) found that 59% of provider offices and 81% of healthcare IT vendors expect an increase in demand for information and technology resources over the course of 2019. The survey found that hospitals are struggling with shortages in their health IT workforce, with 63% of respondents reporting open positions to fill (HIMSS, 2019). With the need to fill the workforce shortage, HIM programs across the United States need to meet this need by verifying that their graduates possess entry-level competencies and achieve the program learning outcomes (Bates et al., 2014).

Professional Practice Experience in Field of Health Information Management

In the field of HIM, associate, baccalaureate, and master's programs are accredited through CAHIIM. The accreditation for associate and baccalaureate degree programs requires students to complete a PPE (CAHIIM, 2018a, 2018b). The PPE is the *internship* for an HIM program, and according to AHIMA (2011), a

> PPE is an opportunity for students to reinforce skills and competencies learned in the classroom through real world application. The PPE is designed to provide students with practical work experience in the HIM competencies and domains that focus on skill building and practical application of theory. (p. 6)

The PPE "must be designed and supervised to reinforce didactic instruction and must include program-coordinated experience at professional practice sites" (CAHIIM, 2018a, 2018b, p. 9). CAHIIM (2018a, 2018b) requires "a minimum of 40 hours of externally supervised activity prior to graduation" (p. 9) for both the baccalaureate and associate degree programs. Lastly, the "externally supervised activity PPE must relate to higher level competencies and result in a learning experience for the student and/or a deliverable to a practice site" (CAHIIM, 2018a, 2018b, p. 9).

The number of PPEs and the length of PPEs may vary by program, but the goal is always the same: to provide HIM students with a hands-on experience where they can apply what they have learned in the classroom (Dimick, 2009). Like other industry internships, according to Melanie Brodnnik, PhD, RHIA (as cited in Dimick, 2009), the HIM PPE

> makes students more employable; they can point to their PPEs as experience they have gained in the field. The PPE can also be an extended interview. It is common for students to complete their PPE and get offered a job by their PPE host. (p. 42)

Students are able to discern the type of work they like, step outside their comfort zone, and broaden their knowledge base (Dimick, 2009).

Factors and Elements of a Quality Internship

The factors that contribute to a quality internship have been identified by many researchers (Coco, 2000; Maertz et al., 2014; Marinaş et al., 2018; Narayanan et al., 2010). Eyler (2009) identified a set of guidelines for establishing a high-quality experiential education program that includes:

- work or service clearly related to the academic goals of the course or program;
- well-developed assessments that provide evidence of the achievement of academic objectives;
- important responsibilities for the student;
- site supervisors who understand the learning goals for the student and partner with the academic supervisor to provide continuous monitoring and feedback;
- an academic supervisor or instructor who pays close attention to the students' work in the field and partners with the site supervisor to provide continuous monitoring and feedback;
- attention to preparing students for both the practical challenges of their placements and for learning from experience;
- continuous, well-structured reflection opportunities to help students link experience and learning throughout the course of their placements. (p. 30)

Vélez and Giner (2015) found the predictors of internship effectiveness to include "greater autonomy during the internship, challenging assignments, students' positive attitudes, and mentoring" (p. 127).

Dedicated academic supervisor/faculty mentor. Kim, Kim, and Bzullak (2012) and Cutting and Hall (2008) recommended a dedicated academic supervisor for student interns. They are able to monitor student growth, assist with solving problems, and facilitate a relationship with the internship site supervisor (Kim et al., 2012). An internship preceptor and a faculty coordinator are crucial to a successful internship program, as they are able to help build the intern's self-confidence and assist the intern with applying what they learned in the classroom to the real-world setting (Gault et al., 2000). Maertz et al. (2014) identified that scheduling meetings between the student intern and the faculty mentor will help to maximize the benefits of an internship. These dedicated faculty mentors are also key to the process of "planning, implementing, and evaluating the learning outcomes of intern assignments" (Maertz et al., 2014, p. 136). Zopiatis and Constanti (2012) explained that the faculty mentor or internship coordinator should also be responsible for ensuring interns understand the goals and objectives of their internship.

Dedicated internship preceptor. It is also imperative to have a dedicated PPE preceptor who serves as a true mentor to the student intern (Gault et al., 2000). In D'Abate et al.'s (2009) research, the authors classified an internship preceptor as a *work environment characteristic* along with learning opportunities, career development opportunities, coworker support, and organization satisfaction. Their findings showed that there was a strong relationship between these characteristics, taken together, and internship satisfaction (D'Abate et al., 2009). Narayanan et al. (2010) regarded the internship preceptor relationship with the other stakeholders, the student and the college or university, as needing a high level of communication. The internship preceptor needs to provide supervisory support, mentoring, and feedback to the student intern throughout the internship. Narayanan et al. (2010) went on to assert that "the more

involved the mentor the better the internship outcome" (p. 66). Beard and Morton (1998) also classified *quality of worksite supervision* as a predictor of a successful field experience. Sauder et al. (2019) looked at the different perceptions of the three primary internship stakeholders. They found that students rated the items on their scale higher than the other stakeholder groups, meaning "that students have the highest expectations for what internships should provide to them" (Sauder et al., 2019, p. 113). This study also showed that students and preceptors responded significantly different on all but one of the scale items, which indicated a clear disconnection between expectations in terms of what preceptors offer and what interns expect to gain. This disconnection could lead interns to perceive their internship in a negative or unsatisfactory light (Sauder et al., 2019).

Internship compensation. Beard and Morton (1998) suggested that compensation is a predictor of internship success. Based on their review of the literature, any compensation, even token payment, appears to influence internship success. Their findings show that compensation for the internship helps the student (a) view the internship as a job; (b) demonstrates commitment from the host organization in that the internship is meaningful; (c) supplements the income the intern lost by attending the internship; and (d) serves as a justification for the internship experience to the intern's parents, who are often the ones paying for college or university tuition. Sauder et al. (2019) found that host organizations prefer to have interns at the site on a full-time basis; however, it did not mean that they supported paying the intern for their time and work. The study found that students and faculty had an expectation that the intern would be paid, whereas, the host organization rated that item as neutral on their scale.

Task significance. D'Abate et al. (2009) researched internship satisfaction by looking through a job satisfaction lens. They looked at job characteristics, work environment

characteristics, and contextual factors. Their research surrounding job characteristics and their relation to job satisfaction was based on Hackman and Oldham's job characteristics model (as cited in Taylor, 2015). The job characteristics model suggests that skill variety, task identity, task significance, autonomy, and feedback from the job all impact an individual's job satisfaction (D'Abate et al., 2009). Skill variety is related to how varied the tasks are that need to be completed, and task significance is the impact a task has on other people in the organization (D'Abate et al., 2009). D'Abate et al.'s (2009) study found that job characteristics were positively related to a student's internship satisfaction. Rothman (2007) also found that student interns desired significant work to complete while on their internships. They wanted quality projects that challenged them.

New skills. The internship can serve as a transitional experience from college to the workplace (Maertz et al., 2014). This is where a student learns job-related skills, applies knowledge learned in the classroom to the *real-world* setting, networks with professionals, and learns about different careers in the field. Dabke's (2015) research study on internship satisfaction in management education students found a positive correlation between learning during the internship and student satisfaction. Vélez and Giner (2015) conducted a systematic review of the literature to determine the effects of business internships on students. They found that the quantitative studies provided "evidence of the effectiveness of business internships in improving students' chances of employment in a career-oriented job after graduation; enhancing their job and social skills; and assisting them in deciding their career paths" (Vélez & Giner, 2015, p. 127). D'Abate et al. (2009) classified learning new skills as a work environment characteristic along with supervisor support, career development opportunities, coworker

support, and organization satisfaction. Through their research study they found a positive correlation between work environment characteristics and student internship satisfaction.

Narayanan, Olk, and Fukami's Internship Effectiveness Model

Narayanan et al. (2010) found there to be a lack of information on the impact of internships on students, the internship organization, and faculty and/or institution of higher education. The authors went on to review 22 empirical research studies on internships and found that the studies primarily centered on internship design and internship outcomes and that there was not one consistent conceptual approach used in studying internships (Narayanan et al., 2010). They found that not all of the studies considered the three major stakeholders involved in an internship: (a) the student, (b) the internship organization, and (c) faculty and/or institution of higher education. After these findings, the authors looked for another option to guide the development of a cohesive internship model. To start, their knowledge allowed them to see the similarities between an internship and the literature on personnel transfer and interorganizational learning as it relates to knowledge transfer (Narayanan et al., 2010). From there, they used that information to set up their conceptual framework: "Personnel and knowledge transfers involve multiple actors, and these transfers should be conceptualized as a process rather than as an event" (Narayanan et al., 2010, p. 64). The similarities between these two concepts and internships were very clear. In personnel transfer there is a sender, receiver, and carrier, just as in an internship there is the institution of higher education, the internship organization, and the student intern. The literature on personnel transfer explained that each stakeholder has unique objectives and is pursuing different outcomes, and that the sender and receiver have different organizational cultures (Narayanan et al., 2010). They concluded that "each stakeholder is likely to enter the internship with different goals, and the extent to which those goals are aligned leads to positive

outcomes for each party" (Narayanan et al., 2010, pp. 64-65). Lastly, based on their review of empirical research, they found that personnel and knowledge transfer include antecedents or inputs, processes, and outcomes (Narayanan et al., 2010).

From the information described above, Narayanan et al. (2010) developed an internship model that pulls together the stakeholders, the antecedents, processes, outcomes, and each stakeholder's activities. In the antecedent column they propose that the main relationship concern is how prepared the internship organization is to host an intern, and propose that it is comprised of three factors – awareness of institution of higher education interests, internal organizational context, and the procedures associated with internships (Narayanan et al., 2010). The educational institution's activities during the antecedent phase include developing awareness of the internship organization's interests, establishing its own internal organizational context, and reviewing their preparedness for the internship. For the student, the antecedent phase includes developing their general academic preparedness and internship readiness. In the processes phase it is essential for the internship organization and the institution of higher education to focus on their relationship, where the internship organization and the institution of higher education communicate effectively with each other and demonstrate commitment to each other's goals and processes. It is during this phase that the student demonstrates their commitment to the internship and their motivation for the experience. It is crucial for the student to communicate effectively with both the institution of higher education and the internship organization. During the outcomes phase, the internship organization may see the results of a completed project, go through the potential hiring of the student intern, and participate in the sharing of ideas and knowledge from the student and institution of higher education. Outcomes for the student include the development of skills and the possibility of being hired by the internship organization. The

student's satisfaction with the experience, possibility of being hired, and being more prepared for working in the industry may be immediate outcomes. For the institution of higher education, the student's employment and satisfaction would be outcomes (Narayanan et al., 2010).

Conclusion

This review of literature reveals the many different forms of experiential learning in higher education where Kolb's ELT serves as the foundation. An internship is one of the most common forms of experiential learning and allows the learner to move through all the stages of Kolb's experiential learning cycle. The literature demonstrates how valuable an internship can be to students in higher education, and the PPE in the field of HIM is no different. There are many factors that could contribute to a quality, satisfactory PPE in the field of HIM. Narayanan et al. (2010) established an internship effectiveness model that, when applied to internships, can help to ensure a quality, satisfactory internship. The literature provides a foundation to develop a study that examines which factors of a high-quality PPE relate to student PPE satisfaction in the hopes that associate and baccalaureate HIM programs might be able to apply those factors to their PPEs.

Chapter 3: Methodology

Introduction

This chapter explains the research methods used to gather and generate the data in this study. The methodology chapter will provide an overview of the procedures and outcomes of the field test, pilot study, and the full-scale research study phases of the study. This is followed by the conceptual framework used and its applicability to this study, research design, the survey instrument, sampling design, data collection and analysis procedures, and finally, limitations and ethical considerations.

In the field of HIM, accredited associate and baccalaureate degree programs require students to complete a PPE, also known as an internship. While there has been research on internship satisfaction in fields such as marketing, accounting, business administration, hospitality, and management, there has been no research on this topic in the field of HIM. The purpose of this quantitative survey study is to determine the degree to which factors of a high-quality PPE in undergraduate HIM programs relate to HIM student PPE satisfaction.

Research Questions, Variables, and Hypotheses

The central overarching research question in this study is: Does academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, PPE financial compensation, the relevance of the PPE project, learning during the PPE, and the PPE's connection to student career relate to student satisfaction with their PPE? In order to answer the central research question and understand the degree to which factors of a quality PPE relate to student satisfaction with their PPE, a subset of research questions was developed.

Research questions.

ResQ1: To what degree is academic preparedness associated with student PPE satisfaction?

ResQ2: What are the differences in PPE satisfaction between students whose PPE site placement was arranged by the college and those whose college required the student to self-search and set up their own PPE site?

ResQ3: To what degree is PPE coordinator/college mentor support associated with student PPE satisfaction?

ResQ4: To what degree is the PPE preceptor/onsite mentor support associated with student PPE satisfaction?

ResQ5: To what degree is student financial compensation associated with student PPE satisfaction?

ResQ6: To what degree is PPE project relevance to industry and its potential utilization by the practice site associated with student PPE satisfaction?

ResQ7: To what degree is student attainment of new skills and/or further understanding of HIM concepts associated with student PPE satisfaction?

ResQ8: To what degree does the student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience connect to student PPE satisfaction?

Variables. The dependent variable in this study is the student's overall satisfaction with their PPE. The independent variables were defined as experience factors: the factors that impact student satisfaction with their PPE. This study includes eight independent variables that will be examined for their relationship to PPE satisfaction. Each independent variable is an experience

factor, the factors of a quality PPE that impact student satisfaction. See Table 1 for a list of experience factors (independent variables). Each experience factor has one or more elements that comprise the experience factor. Table 1 provides the experience factor relationship with associated elements. In order to answer the research questions, the experience factor elements were transformed into items on the survey tool. The survey participants were asked to identify the degree to which they agree (strongly agree – strongly disagree) with the statement about the experience factor element on a 5-point Likert scale. An example of this is the first statement on the survey tool: *My degree program's PPE orientation coursework/PPE preparatory coursework was valuable in preparing me to succeed in my PPE*.

Hypotheses. For the eight research questions, the following null and alternative hypotheses were developed for this study based on the eight independent variables and their associated research questions.

$H1_o$: The degree of academic preparedness is not positively associated with student satisfaction with the PPE.

$H1_a$: The degree of academic preparedness is positively associated with student satisfaction with the PPE.

$H2_o$: PPE satisfaction with the PPE will not be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

$H2_a$: PPE satisfaction with the PPE will be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

Table 1

Experience Factor and Element Table

Experience Factors (Independent Variables)	Elements of the Factor
Academic Preparedness	Pre-PPE coursework Knowledge acquired prior to the PPE
Placement Process (college/university placement versus student self-search)	PPE placement handled by university and/or PPE coordinator
PPE Coordinator/University Mentor	Appropriate PPE internship site/match Development of learning goals and objectives for the PPE Development of learning activities to support goals/objectives Concern for learning Performance evaluation
PPE Preceptor (PPE onsite mentor)	PPE preceptor was a strong mentor Access and insight PPE preceptor orientation PPE preceptor planning for student experience PPE preceptor availability
Learning During the PPE	Learning new things (skills, technology, etc.) Understanding of concepts
Impact on Future Career	Career options Job experience
Financial Compensation	Hourly wage
PPE Project/Work Relevance to Industry and Potential Utilization of the Project/Work Outcome(s) by the PPE Site	Meaningful project Meaningful work (day-to-day tasks)

$H3_o$: PPE coordinator/college mentor support is not positively associated with student satisfaction with the PPE.

$H3_a$: PPE coordinator/college mentor support is positively associated with student satisfaction with the PPE.

$H4_o$: Onsite PPE preceptor/onsite mentor support is not positively associated with student satisfaction with the PPE.

$H4_a$: Onsite PPE preceptor/onsite mentor support is positively associated with student satisfaction with the PPE.

$H5_o$: Financial compensation for the student is not positively associated with student satisfaction with the PPE.

$H5_a$: Financial compensation for the student is positively associated with student satisfaction with the PPE.

$H6_o$: PPE project relevance to industry and potential utilization by the PPE site is not positively associated with student satisfaction with the PPE.

$H6_a$: PPE project relevance to industry and potential utilization by the PPE site is positively associated with student satisfaction with the PPE.

$H7_o$: Student attainment of new skills and/or additional understanding of HIM concepts are not positively associated with student satisfaction with the PPE.

$H7_a$: Student attainment of new skills and/or additional understanding of HIM concepts are positively associated with student satisfaction with the PPE.

$H8_o$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are not positively associated with student satisfaction with the PPE.

$H8_a$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are positively associated with student satisfaction with the PPE.

Research Methodology

This was a quantitative, nonexperimental, correlational study that utilized an electronic PPE satisfaction survey tool to determine the degree to which factors of a quality PPE related to student PPE satisfaction. This study looked at the correlation between the factors of a quality PPE and a student's satisfaction with their PPE. In order to gather the survey participants' degree of satisfaction, measured, predictor variables were identified (Fallon, 2016) through deductive and inductive methods by the researcher (Morgado, Meireles, Neves, Amaral, & Ferreira, 2018). The target population for this study was current HIM students enrolled in an accredited associate degree or baccalaureate degree HIM program who had completed a PPE and HIM students who completed a PPE from an accredited undergraduate HIM program during the 2016/2017, 2017/2018, 2018/2019, and 2019/2020 school years. A survey was the instrument selected to capture the data for this research because it "provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population" (Creswell, 2014, p. 155). The survey scale items were developed in a three-step process based on research conducted by Morgado et al. (2018). The first step in the process is to generate items through deductive and inductive methods. The researcher developed scale items by researching high-quality experiential learning programs and the factors that make them valuable, satisfactory experiences, and internship satisfaction surveys. The researcher also considered her own experiences with PPE placements and experiences over the years in an undergraduate HIM program in the Upper Midwest region of the United States. The key experiential factors were

identified, along with the elements that make up each factor. Each experiential factor became an independent variable in the study, the predictor variables. The full-scale research study survey can be found in Appendix C.

In order to determine the degree to which each factor related to the students' PPE satisfaction, survey statements and questions were developed that could be answered on a Likert scale: yes/no or multiple choice. The draft survey was developed in Microsoft Word and distributed to four program directors in a field study, which was the second step in the scale development process, through theoretical analysis (Morgado et al., 2018). Once feedback was received from the field study, the researcher began phase three of the scale development process, psychometric analysis through a pilot study. In the psychometric analysis phase, the researcher is able to determine whether "the new scale has construct validity and reliability" (Morgado et al., 2018, p. 2). The scale items were built in Qualtrics^{XM} and the link to the survey was distributed to the pilot study population via email. At the conclusion of the pilot study and after the survey was validated and determined to be reliable, the full-scale research study commenced, and again the survey was distributed via Qualtrics^{XM} by sharing the electronic survey link.

It was challenging to reach the target population for this research study. In order to gather the contact information for all undergraduate HIM students enrolled in an HIM program at the time of the survey who had completed a PPE, program directors needed to be contacted. In order to survey students who completed a PPE during the 2017/2018, 2018/2019, and 2019/2020 school years, the snowball sampling method was chosen. The rationale for this decision was somewhat complex. The researcher considered the ways in which one could track HIM program graduates. One method would be to identify all the individuals who recently sat for the registered health information administrator (RHIA) and registered health information technician (RHIT)

AHIMA credentialing exams by requesting the names and contact information from AHIMA. When students graduate from an accredited associate HIM degree program, they are eligible to take the RHIT exam in order to earn the RHIT credential. Similarly, students graduating from an accredited baccalaureate HIM degree program are eligible to take RHIA exam in order to earn the RHIA credential. While it is typical for new graduates to take the certification exams before or closely after graduating from their program, individuals may wait to take the exam and some graduates never sit for the certification exam. Graduates could wait many years, and upon passing the exam at a later date there is no guarantee that they would remember their PPE experience. This method was ruled out due to the factors described above, and the snowball sampling method was chosen for this population as well. HIM program directors track the graduates of their programs and typically follow up with them after graduation to distribute programmatic surveys and gather career information for their CAHIIM accreditation. They would know which individuals graduated between 2017 and 2020 and could distribute the electronic survey link to these individuals. For these reasons, the snowball sampling method through HIM program directors was used to distribute the electronic survey link to the targeted population.

Research Design

This quantitative study made use of the nonexperimental correlational survey research method. According to Orcher (2014), a correlational study is a form of nonexperimental research which examines "the relationship between two or more sets of scores" (p. 52). The purpose of this survey research was to identify the factor(s) that best predicts students' overall PPE satisfaction. According to Orcher (2014), a questionnaire is the most economical and popular form of collecting data in a survey. Surveys are less labor-intensive and are widely used to

measure attitudes and opinions (Orcher, 2014). A survey is a method used to describe the current situation, but not to explain why there is a current situation (Orcher, 2014). In this study, it was important to understand whether the identified experiential factors truly impacted student PPE satisfaction and to understand what happened during HIM program PPEs.

This survey was cross-sectional in that it captured data in order to make inferences about the student PPE satisfaction and took place at one point in time ("Cross-Sectional Survey Design," 2008). This research study had three phases: (a) a field study, (b) a pilot study, and (c) the full-scale research project. The field study gathered feedback from accredited HIM program directors on the survey tool. The purpose of the field study was to gather insight and feedback on the survey tool, its usability, and how well it related to their PPE program. The feedback gathered from the field study was used to clarify questions, add questions, and modify response scales. The pilot study gathered data about student PPE satisfaction in order to produce generalizable knowledge. The purpose of the pilot study phase of this research was to determine the internal consistency reliability of the survey tool and test the usability of the survey as a data collection tool. The full-scale research study is the final phase of the study where the survey was sent to all program directors of CAHIIM accredited associate and baccalaureate degree programs in the United States.

Sampling Design

The target population for this study was HIM students enrolled in an accredited associate or baccalaureate degree program during the 2019/2020 school year who had completed their PPE, and HIM graduates of accredited associate or baccalaureate degree programs during the 2017/2018, 2018/2019, and 2019/2020 school years. The researcher's goal was to utilize an unbiased sample by giving every CAHIIM accredited associate and baccalaureate degree

program director in the United States an equal opportunity to be included in the sample (Patten, 2013). The researcher could ensure equal opportunity by accessing the CAHIIM program directory to document every program director and their contact information. As of March 4, 2020, there were 252 CAHIIM accredited associate HIM degree programs and 70 CAHIIM accredited HIM baccalaureate degree programs in the United States (CAHIIM, 2020b). The researcher did not have access to the contact information for all the students who were enrolled in these programs or the graduates of these programs who were required to complete a PPE as part of their accredited program. The only way to gather feedback on their PPE satisfaction was through the program director of the program in which they were enrolled. CAHIIM provides a program directory that lists all accredited associate and baccalaureate degree programs in the United States. This directory provides the name and contact information for each program director. Due to the need to gain access to the students in these programs or those who have graduated from these programs through each program's director, the researcher employed the snowball method of sampling. According to Patten (2013), snowball sampling is a method that can be helpful when it is difficult to locate participants. Snowball sampling is defined as "a sampling method used by researchers to generate a pool of participants for a research study through referrals made by individuals who share a particular characteristic of research interest with the target population" (Crouse & Lowe, 2018, p. 1531).

The *2019 CAHIIM Annual Program Assessment Report* (CAHIIM, 2019) enrollment data were analyzed. The report provided the total number of graduates from each associate HIM degree program and baccalaureate degree program in 2017, 2018, and 2019. Due to CAHIIM's accreditation requirements, we can be assured that if a student graduated from one of these programs they completed a PPE. In order to determine the necessary sample size for this

population, the number of HIM associate degree and HIM baccalaureate degree program total graduates for 2017, 2018, and 2019 were compiled. Then the average number of graduates was calculated, and the average number of graduates was compared to Patten's (2013) *Table of Recommended Sample sizes (n) for Populations (N) with Finite Sizes*. The results of these calculations can be found in Table 2.

Table 2

Sample Size Compilation for 2017, 2018, and 2019 HIM Associate and Baccalaureate Degree Program Graduates

	Associate Degree Total Graduates	Baccalaureate Degree Total Graduates
Year 2017	5,097	1,254
Year 2018	4,592	1,274
Year 2019	4,164	1,475
Average Number of Graduates	4,617	1,334
Recommended sample size	354	278

Note. Adapted from *Understanding Research Methods: An Overview of the Essentials* (9th ed.), by M. L. Patten, 2013, Philadelphia, PA: Routledge. Copyright 2013 by Routledge.

Field Study and Pilot Study

A field study was conducted through personal email over the course of one week in March 2020. The researcher emailed a draft of the survey tool to four HIM program directors to solicit feedback. The field study resulted in minor modifications to the tool. One program director suggested adding a question about the number of hours the individual spent on their PPE. Another suggested modifying the statement about overall satisfaction and changing the scale used to capture overall satisfaction. Instead of using the same Likert scale as the other

items, the Likert scale for overall satisfaction goes from *Extremely Dissatisfied* to *Extremely Satisfied*. The other suggestions centered on rewriting survey items to clarify for better understanding by participants.

After the field study concluded and the modifications were made to the survey tool, the pilot study survey (see Appendix B) was developed in the Qualtrics system. The pilot study survey is comprised of 29 items and three sections. The first section (Questions 1 through 20) of the survey was comprised of statements related to the experiential factors contributing to a high-quality PPE. Questions 1 through 17, 19, and 20 were measured on a 5-point Likert scale ranging from *Strongly Disagree* to *Strongly Agree*. Question 18 asked the participant to identify whether or not they were compensated for their PPE, and requires a yes/no answer. The second section contained one question (Question 21) that related to the student's overall satisfaction with their PPE. This question was measured on a 5-point Likert scale ranging from *Extremely Dissatisfied* to *Extremely Satisfied*. The third section of the survey consisted of demographic elements that included gender, GPA, school location region, course delivery format, degree program type, length of PPE, and HIM experience.

The survey utilized in both the pilot study and the full-scale research project phases of the study is titled PPE satisfaction survey (see Appendix B and Appendix C). The survey was designed for this research study by the researcher, who identified the factors contributing to a high-quality PPE through the review of prior research in the marketing, accounting, business administration, hospitality, and management fields. Previous experience as the academic coordinator of PPEs at a college in the Upper Midwest of the United States was taken into consideration and applied to the survey.

The researcher worked with the administrative assistant of the undergraduate HIM program in the Upper Midwest to identify the 2017/2018 and 2018/2019 undergraduate graduates and the students who completed a PPE during the 2019/2020 school year. Both traditional (face-to-face) and online program graduates and students were included. The PPE satisfaction survey (see Appendix C) was distributed to 122 individuals in the pilot study. There were 49 graduates from 2017/2018, 39 from 2018/2019, and 34 students who completed a PPE during the 2019/2020 school year. The HIM administrative assistant added personal and college emails to a spreadsheet containing each student's name and the year they graduated. The researcher then completed an Institutional Review Board (IRB) application for the college. This was submitted to the college's IRB on March 5, 2020, and approval was received on March 16, 2020. The college's IRB approval letter for the pilot study can be found in Appendix D. The researcher built the survey in Qualtrics^{XM}, and the link to the survey was distributed on March 17, 2020 to the 2017/2018 and 2018/2019 undergraduate HIM graduates and students who completed a PPE during the 2019/2020 school year. The pilot study was closed on March 31, 2020, and the data were analyzed to determine reliability of the survey tool.

Validity and Reliability

The survey tool was developed through the review of empirical research on student internship satisfaction, the framework for effective internships by Narayanan et al. (2010), and the researcher's own personal reflection on her own student PPEs and their satisfaction. Empirical research was conducted to determine what factors impact student internship satisfaction. Table 3 provides the factors identified by four research studies conducted on student internship satisfaction.

Table 3

Research Studies That Identify Factors Impacting Student Internship Satisfaction

Effects of Internship Predictors on Successful Field Experience (Beard & Morton, 1998)	"Determinants of Internship Satisfaction in Management Education Students" (Dabke, 2015)	"Academic Internship and Students' Satisfaction: Evidence from Greece" (Kipreos & Dimitropoulos, 2016)	"Maximizing Internship Value by Comparing Student Satisfaction and Program Competencies" (Sasnett & Ross, 2016)
Academic preparedness	Helpfulness of management studies	Host organization cooperativeness	Internship objectives (e.g., provided opportunity to apply concepts learned in my courses)
Proactivity/ aggressiveness	Industry mentor support	Scientific level of internship was at high standards	Skills (e.g., perception of student's skills while on internship, i.e., oral communication, problem solving, etc.)
Positive attitude	Faculty support	The knowledge gained from department of sport management proved useful during internship	Preceptor responsibilities (e.g., preceptor provided adequate orientation, provided specific and clear instructions)
Quality of worksite supervision	Learning during summer internship program	Gained significant experiences which will help with future employment possibilities	Faculty coordination (e.g., faculty coordinator was available to help, available and provided answers to my questions during my internship)
Organizational practices and policies	Project utility likelihood	Personal contacts with professionals from host organization will help with future employment	Quality of internship (e.g., the internship promoted career awareness, enhanced marketable skills, allowed student to job network)
Compensation	Overall satisfaction with internship	Completion of the department's internship is important for completion of studies	

While reviewing the studies listed in Table 3, the researcher identified key factors that have impacted the PPEs she has facilitated. The factors identified through reflection were:

- Academic preparedness
- Placement process (college/university placement versus student self-search)
- PPE coordinator/University mentor
- PPE preceptor (PPE onsite mentor)
- Learning during the PPE
- Financial compensation
- Impact on future career
- PPE project/work relevance to industry and potential utilization of the project by the PPE site

The researcher then applied the key factors to the conceptual framework of Narayanan et al.'s internship effectiveness model. The internship effectiveness model has identified the three stages of knowledge transfer (antecedent, process, and outcome) and the key stakeholders involved in the internship process and their impact on student satisfaction (Narayanan et al., 2010). Narayanan et al. (2010) went on to provide suggestions for the actions each of the key stakeholders can take to enhance internship effectiveness. The researcher took that model and preliminarily identified how each factor identified aligned with the internship effectiveness model stages (see Table 4).

Table 4

Factors Applied to Internship Effectiveness Model Phases

Antecedent	Process	Outcome
• Academic preparedness • Placement process	• PPE coordinator/ university mentor • PPE preceptor (PPE onsite mentor) • Learning during the PPE • Financial compensation	• Impact on future career • PPE/work relevance to industry and potential utilization of the project by the PPE site

After determining alignment with the internship effectiveness model stages, the researcher identified the elements that could impact each factor or make up a factor. The elements were derived from further review of the empirical research shown in Table 3 and, once again, researcher reflection on the PPEs she has facilitated. This process resulted in determining that the factors would be called *experience factors* and the factors would be comprised of elements. Experience factors and the elements of each factor can be seen in Table 5.

Once the experience factors and the elements were identified, the researcher developed statements and questions to create the survey tool. In order to answer the central question and the subsequent research questions, a question or statement was developed for each factor element. In order to determine whether there was one key experience factor or element that could predict overall PPE satisfaction, a question was added about overall PPE satisfaction. In order to provide the research audience with more information about the survey participants in the sample, demographic questions were added (Patten, 2013). The first draft of the survey statements and questions were developed and the field study was completed over the course of one week; then changes were applied to the survey tool based on field study recommendations. The pilot study

survey tool can be found in Appendix B. The IRB application form was completed, approval received, and the pilot study kicked off. After two weeks the pilot study concluded.

Table 5

Experience Factor and Factor Element Table

Experience Factor	Elements of the Factor
Antecedent Academic preparedness	Pre-PPE coursework Knowledge acquired prior to PPE
Antecedent Placement process (college/university placement versus student self-search)	PPE placement handled by university and/or PPE coordinator
Process PPE Coordinator/University Mentor	Appropriate PPE internship site/match Development of learning goals and objectives for the PPE Development of learning activities to support goals/objectives Concern for learning Performance evaluation
Process PPE Preceptor (PPE onsite mentor)	PPE preceptor was a strong mentor Access & insight PPE preceptor orientation PPE preceptor planning for student experience PPE preceptor availability
Process Learning during the PPE	Learning new things (skills, technology, etc.) Understanding of concepts
Process Financial compensation	Hourly wage
Process Impact on future career	Career options Job experience
Outcome PPE project/work relevance to industry and potential utilization of the project/ work outcome(s) by the PPE site	Meaningful project Meaningful work

Once the experience factors and the elements were identified, the researcher developed statements and questions to create the survey tool. In order to answer the central question and the subsequent research questions, a question or statement was developed for each factor element. In order to determine whether there was one key experience factor or element that could predict overall PPE satisfaction, a question was added about overall PPE satisfaction. In order to provide the research audience with more information about the survey participants in the sample, demographic questions were added (Patten, 2013). The first draft of the survey statements and questions were developed and the field study was completed over the course of one week; then changes were applied to the survey tool based on field study recommendations. The pilot study survey tool can be found in Appendix B. The IRB application form was completed, approval received, and the pilot study kicked off. After two weeks the pilot study concluded.

The data from the pilot study was then transferred to the Statistical Package for Social Sciences (SPSS) software application. Within SPSS, the researcher was able to measure internal consistency of the survey tool for items 1 through 17 and 19 through 21 (see Appendix B for scale items) using Cronbach's alpha (Muijs, 2010). There were 64 cases included in the analysis and 3 cases were excluded due to missing values; the total number of valid cases for the pilot study was 61. According to Muijs (2010), "Cronbach's alpha will vary between 0 and 1, with 1 being a perfect relationship between the variables that make up the scale, and 0 no relationship at all" (p. 217). The scale items had high covariances or a high level of internal consistency as determined by a Cronbach's alpha of 0.915.

Data Collection Procedures

The full-scale research project phase commenced after modifications were made to the survey tool using results of the pilot study to calculate internal consistency reliability and after

approval by the university IRB (see Appendix E). Once approved by the IRB, the survey was distributed to the program directors of CAHIIM accredited HIM associate and baccalaureate degree programs. In order to identify all of the accredited undergraduate HIM program directors in the United States, access to the CAHIIM (2020b) program directory located on the CAHIIM website was necessary. The directory allowed the user to filter by institution, program level, state, and program delivery method. To identify all the accredited associate HIM degree programs, the researcher left the institution field blank, selected *Health Information Management: Associate Degree*, included all states, and selected both *Campus Based* and *Online* as program delivery methods. In order to identify all the accredited baccalaureate, HIM degree programs, the user left the institution field blank, selected *Health Information Management: Baccalaureate Degree* and *Health Information Management: Baccalaureate Degree (Certificate of the Degree Definition)*, included all states, and selected both *Campus Based* and *Online* as the program delivery methods. This search resulted in a complete list of accredited associate and baccalaureate degree programs in the United States. From there, an Excel spreadsheet was created to document institution name, the name of the program director, and their email address. The survey was built in Qualtrics^{XM} and distributed electronically to each program director identified through the searches described above, using the Excel spreadsheet that was created from the directory. A copy of the email request to HIM program directors to participate in the distribution of the survey can be found in Appendix F.

Data Analysis

This study utilized human subjects and therefore had to go to the university IRB. Once permission was granted from the university IRB, the data collection procedure began. The full-scale research project survey was distributed electronically via Qualtrics^{XM} to all CAHIIM

accredited associate and baccalaureate HIM degree program directors. The data were obtained through the snowball sampling method by enlisting the help of CAHIIM accredited associate and baccalaureate degree HIM program directors to distribute a survey. The data were collected and then the survey was closed in Qualtrics^{XM}. The eight research questions were addressed by conducting multivariate analyses through multiple linear regression. This allowed the researcher to discover the significance of the factor variables in contributing to the dependent variable. Data regarding the dependent variable and the eight independent experience factor variables were compiled and entered into the SPSS software program in order to perform the multiple linear regression analysis.

Limitations of Methodology

Limitations are unavoidable in all research methodologies. According to Ross and Bibler Azidi (2019), "Study limitations represent weaknesses within a research design that may influence outcomes and conclusions of the research" (p. 261). It is important for researchers to thoroughly describe the research limitations of their study to help the reader understand and to support future research (Ross & Bibler Azidi, 2019).

Limitations. While nonresponse bias is an ethical consideration, the researcher believed it would be a limitation for this study. The researcher equally distributed the survey to all CAHIIM accredited associate and baccalaureate degree program directors; however, that did not mean that they would participate and forward the survey on to the students who completed a PPE in their program. Because of their potential refusal to distribute the survey to their students and graduates, the researcher understood that they would not receive an equal number of responses from students in all programs, which is an example of nonresponse bias ("Nonresponse Bias," 2008). The impact of this was in the study's low sample size.

The alternatives to the snowball sampling method would be to work with AHIMA to obtain a listing of student members or to ask program directors for a listing of student email addresses. Working through AHIMA to obtain a listing of student members was not selected because there is no way to know if the student member has already completed a PPE. This research study was reliant on the HIM student or graduate already having participated in a PPE. The reason the researcher did not approach program directors for student email addresses is due to the amount of time it would take to request, collect, and then follow up with program directors to gather email addresses. It was also likely that program directors may be hesitant to share student email addresses with a person outside of the college or university to conduct research.

Another limitation in this study was that all the data being collected were self-reported data. "Self-reported data is limited by the fact that it rarely can be independently verified" (USC Libraries, 2020, para. 12). Self-reported data can lead to bias through a participant's selective memory, telescoping, attribution, and exaggeration (USC Libraries, 2020). In the case of a PPE, the student or graduate may not remember all of the events that took place during their PPE. One way the researcher chose to mitigate this limitation was to limit sampling to those students or graduates who completed their PPE within three years of the survey distribution – 2017/2018, 2018/2019, and 2019/2020 school years. In some cases, students who are enrolled in a baccalaureate HIM program may have been enrolled in an associate degree program. If the associate degree program was accredited, then the student would have completed a PPE during their time in that program. This could potentially lead to telescoping. Telescoping is recalling events that happened during a different time in one's life and not during the time in which you are seeking information (USC Libraries, 2020). Attribution bias could have impacted participants as they reflected on their PPE in order to answer the survey questions. Turner and Hewstone

(2010) described attribution bias as when someone methodically over- or underuse the available information when explaining their own behavior and that of others. Attributional bias causes individuals to favor the ingroup versus the other groups, where the ingroup is their own group (Turner & Hewstone, 2010). An example of this would be a student who had a negative experience with their PPE preceptor: that negative experience is only attributed to the PPE preceptor and not their own role in that experience. The last potential bias that could be caused by self-reporting data is exaggeration. Exaggeration is where someone embellishes events and represents them as more significant than they actually were (USC Libraries, 2020). This could have led to a survey participant answering the survey based off an exaggerated positive or negative experience.

Ethical Considerations

Researchers must consider and anticipate ethical issues throughout the research process. Informed consent, beneficence, respect for confidentiality and anonymity, and respect for privacy were all taken into consideration as this study was carried out. The researcher conducted the pilot study and full-scale research study in accordance with the *Belmont Report* of ethical principles in order to protect human subjects participating in the study (U.S. Department of Health & Human Services, 1979). This study was also conducted in accordance with the AHIMA code of ethics which calls on its members to

> 9.4. Engage in evaluation and research that ensures the confidentiality of participants and of the data obtained from them by following guidelines developed for the participants in consultation with appropriate institutional review boards.
>
> 9.5. Report evaluation and research findings accurately and take steps to correct any errors later found in published data using standard publication methods.

9.6. Design or conduct evaluation or research that is in conformance with applicable federal or state laws. (AHIMA, 2019, para. 4-6)

The pilot study was assessed and approved by the IRB at the college in the Upper Midwest of the United States in which the pilot study took place. The full-scale research study was assessed and approved by the IRB at the university in the Upper Midwest of the United States in which the researcher was enrolled. Researcher bias was another ethical consideration taken into account for the pilot and full-scale research study. In order to minimize researcher bias, the researcher completed Collaborative Institutional Training Initiative (CITI) training in ethical research practice, the research was overseen by a dissertation committee, and the pilot and full-scale research studies were approved by the IRB at the college and the university located in the Upper Midwest of the United States.

Beneficence. According to the *Belmont Report* (U.S. Department of Health & Human Services, 1979), beneficence is made up of two constructs, "(1) do not harm and (2) maximize possible benefits and minimize possible harms" (p. 5). Every attempt was made to determine the possibility of any harm and/or benefits to study participants. No risks or discomforts were anticipated for participants taking part in the study, and their voluntary participation was respected. If participants felt uncomfortable with a question, they could skip that question or withdraw from the study altogether. If a participant decided to quit before finishing the survey, their answers were not recorded. There was no participation bias as all associate and baccalaureate HIM program directors were contacted and provided with the internet link to the Qualtrixs^{XM} survey. There was no direct benefit of the research study to the participants in this proposed study. The associate and baccalaureate HIM program directors did have the benefit of receiving a copy the aggregate survey results for their program. This would allow for HIM

programs to make changes and improvements to their PPE programs based on the data. This study could benefit human or scientific knowledge by analyzing data that has never been collected in a scientific study for the field of HIM. These data could assist the CAHIIM in establishing guidelines and structuring around the PPE as part of their accreditation requirements. HIM program directors and PPE coordinators at colleges and universities can use the information to orient PPE preceptors on what they can do to ensure a satisfactory PPE. Lastly, this information could assist any professional who is mentoring a student as an internship preceptor, but especially those mentoring HIM students. This information could demonstrate what these professionals can do as preceptors to ensure the student they are mentoring is satisfied with their PPE.

Informed consent. The researcher was able to mitigate many of the ethical concerns laid out in the *Belmont Report* (U.S. Department of Health & Human Services, 1979). In order to minimize the risk of harm, the researcher implemented and obtained an informed consent from participants. The informed consent laid out (a) the purpose of the study; (b) an explanation of what the survey asks of participants; (c) the benefits of the study; (d) risks or discomforts; (e) confidentiality; (f) decision to quit at any time; (g) how the findings would be used; and (h) contact information for the principal investigator, IRB chair, dean, department chair, and dissertation advisor. Participants demonstrated their understanding and consent to participate in the research by beginning the survey.

Anonymity and confidentiality. Participant anonymity and confidentiality was explained to participants in the informed consent process (see Appendix B and Appendix D) for both the pilot and full-scale research study. IP addresses were not collected with survey

responses as a way to protect participant confidentiality and to ensure anonymity. Only the researcher saw individual survey responses, and results were reported in aggregate form.

In order to carry out the pilot study, the researcher needed to identify the 2017/2018 and 2018/2019 undergraduate graduates and the students who completed a PPE during the 2019/2020 school year at the college in the Upper Midwest of the United States. A list of email addresses was generated by the college. The list of email addresses used to solicit the participants was stored electronically in a password protected folder; a hard copy was be stored in a locked filing cabinet. Once data collection concluded, the list of email addresses was destroyed.

When carrying out the full-scale research study, the researcher utilized public email addresses listed on the CAHIIM program directory for associate and baccalaureate HIM program directors. Program directors were then provided with the internet link to the Qualtrixs^{XM} survey that they passed along to current students and alumni of their program who fell into the parameters laid out for participation in the study. The snowball method inherently allowed for participant anonymity and confidentiality as the researcher had no way of knowing to whom the program director sent the survey link. The data collected from the pilot and full-scale research study were stored on the secure, password protected laptop of the single researcher, and there was no identifying information collected or stored with the data.

Chapter 4: Data Analysis and Results

Introduction

As stated in Chapter 3, this study was conducted through the dissemination of a survey to undergraduate HIM program directors. Through the snowball sampling method, the survey was then distributed to students who completed a PPE from an accredited undergraduate HIM program during the 2016/2017, 2017/2018, 2018/2019, and 2019/2020 school years. A summary of the data collected, data analysis, and the results of the study will be presented in this chapter. This chapter presents information on the validity of the survey tool, the overarching research question, research questions and hypotheses, and begins with a description of the population and sample.

Population

The population for this survey consisted of HIM students enrolled in an accredited associate degree or baccalaureate degree HIM program who completed a PPE during the 2019/2020 school year and HIM students who had graduated from an accredited undergraduate HIM program during the 2016/2017, 2017/2018, 2018/2019, and 2019/2020 school years. In order to survey this population, the snowball sampling method was initially used. All associate degree and baccalaureate HIM program directors were contacted via an email message that contained a hyperlink to the PPE satisfaction survey (see Appendix F). That email message was sent to approximately 322 program directors. The email was essentially an invitation to distribute the survey to their alumni and current students who had completed a PPE. The email introduced the researcher, explained the research study, design, purpose, and survey tool, explained the snowball sampling method, and identified the population who should receive the survey.

Sample

Snowball sampling returned a smaller sample than anticipated with 101 survey responses. The researcher then revised the initial IRB request for the full-study survey to include distribution of the survey via Facebook and LinkedIn social media platforms. The revised IRB approval for the full study can be found in Appendix G. The researcher posted the survey on her personal profile within LinkedIn and on the HIMSS LinkedIn profile page. AHIMA does not allow surveys to be posted on the AHIMA LinkedIn profile page. Next, the researcher emailed and/or Facebook messaged each AHIMA component state association (CSA) that had a Facebook page. Of the CSAs that had Facebook pages, 15 allowed the researcher to post a message and survey link on their Facebook page. The additional effort to reach those in the population resulted in another 85 survey responses from either social media or those who responded to a program director's request.

Participants consisted of 186 graduate or current undergraduate HIM students from the 2016/2017, 2017/2018, 2018/2019, or 2019/2020 school years who had completed a PPE through an accredited PPE program. A majority of the participants were female (86%); 11% were male. The majority of the participants graduated during the 2019/2020 school year (38%), 24% graduated during the 2018/2019 school year, 13% graduated during the 2017/2018 school year, and 20% graduated during the 2016/2017 school year. The majority of respondents also had high GPAs with 87% reporting a GPA between 3.0 to 4.0. A majority of participants were enrolled in an associate degree HIM program (54%), and 41% were enrolled in a baccalaureate degree HIM program. Program delivery method was more evenly dispersed with 40% of participants being enrolled in a fully online program, 34% were enrolled in a hybrid program where there is a combination of online and campus/seated courses, and 24% were enrolled in an

on campus/seated program. The majority of participants had PPEs between 41 and 79 hours (24%) or 80 and 119 hours (24%), with the next highest PPE length being 40 hours or less at 17%. Lastly, just over half (53%) of the participants reported that they had no HIM work experience prior to beginning their most recent PPE. See Appendix H for frequency distributions for all items on the survey.

Descriptive Statistics

The two scale items with the highest means were *the PPE preceptor was willing to answer my questions about the work setting and my specific tasks* ($M = 4.33$, $SD = 1.16$) and *my PPE improved my knowledge of the industry and possible career options* ($M = 4.25$, $SD = 1.21$). The two items with the lowest means were *the project(s) I completed while on my PPE was useful and meaningful for the organization and/or department* ($M = 3.89$, $SD = 1.33$) and *the general, day-to-day tasks I completed while on the PPE were meaningful for the organization and/or department* ($M = 3.92$, $SD = 1.26$). See Table 6 for means and standard deviations of all Likert scale items.

Hypothesis 1

$H1_o$: The degree of academic preparedness is not positively associated with student satisfaction with the PPE.

$H1_a$: The degree of academic preparedness is positively associated with student satisfaction with the PPE.

As predicted, there was a significant positive relationship between ratings of academic preparedness for PPE and the overall satisfaction ratings of the student's PPE, $r\,(181) = .52$, $p < .001$. The more the student thought their coursework prepared them to succeed in their PPE, the higher their overall ratings of their PPE. The null hypothesis was rejected.

Table 6

Descriptive Statistics for Survey Likert Scale Items

	N	Mean	Std. Deviation
Orientation coursework	186	4.22	1.089
Site placement	186	4.14	1.392
Mentor helpful in identifying PPE site	185	4.05	1.372
Mentor developed clear PPE learning goals and objectives	186	4.20	1.185
Mentor developed learning activities	185	4.06	1.245
Mentor concerned about my learning	186	4.08	1.307
Mentor followed up with me and my PPE preceptor to review my performance	184	4.14	1.211
Preceptor functioned as a true mentor	185	3.97	1.397
Preceptor provided me with access and insight	186	4.05	1.262
Preceptor was well oriented	186	4.01	1.336
Preceptor developed a schedule	186	4.03	1.273
Preceptor was willing to answer my questions	186	4.33	1.156
PPE taught me things not learned in the classroom	186	4.10	1.332
PPE gave better understanding of academic concepts	186	4.10	1.244
PPE improved knowledge of the industry and career options	186	4.25	1.214
PPE provided me with marketable, practical job experience	186	3.94	1.304
The project(s) I completed useful for the organization	186	3.89	1.333
Day-to-day tasks were meaningful for the organization	186	3.92	1.263
Overall satisfaction with my PPE	183	4.07	1.225

Hypothesis 2

$H2_o$: PPE satisfaction with the PPE will not be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

$H2_a$: PPE satisfaction with the PPE will be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

A Pearson correlation was used to determine the relationship between site placement and overall PPE satisfaction. There was a significant positive correlation between the two variables, $r(181) = 0.23$, $p = .002$. This means that students whose PPE site coordinator set up their placements were more satisfied with their PPE. The null hypothesis was rejected.

Hypothesis 3

$H3_o$: PPE coordinator/college mentor support is not positively associated with student satisfaction with the PPE.

$H3_a$: PPE coordinator/college mentor support is positively associated with student satisfaction with the PPE.

For hypothesis three, five items from the survey were used to create the PPE mentor support subscale (see Table 7 for the list of items and item statistics). The Cronbach alpha for this 5-item scale was strong at $\alpha = .88$. Then a Pearson correlation coefficient was used to examine the relationship between the 5-item PPE mentor support scale and overall PPE satisfaction. There was a significant positive correlation between the two variables, $r(181) = .56$, $p < .001$. This means that the higher the student's satisfaction with their PPE mentor support, the higher the overall satisfaction with their PPE. The null hypothesis was rejected.

Table 7

Item-Total Scale Statistics for the PPE Mentor Support Subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My PPE coordinator/university mentor was helpful in identifying an appropriate PPE site suited to academic development and my needs and interests	16.49	17.097	.734	.855
My PPE coordinator/university mentor developed clear PPE learning goals and objectives	16.34	17.820	.810	.838
My PPE coordinator/university mentor developed learning activities to be done during my PPE that allowed me to meet the PPE learning goals and objectives	16.45	18.205	.729	.856
My PPE coordinator/university mentor was concerned about my learning while at the PPE site	16.46	18.184	.666	.871
My PPE coordinator/university mentor followed up with me and my PPE preceptor to review my performance	16.40	18.878	.667	.869

Hypothesis 4

$H4_o$: Onsite PPE preceptor/onsite mentor support is not positively associated with student satisfaction with the PPE.

$H4_a$: Onsite PPE preceptor/onsite mentor support is positively associated with student satisfaction with the PPE.

To answer hypothesis four, five items from the overall scale were used to create the PPE preceptor support subscale (see Table 8 for the list of items and item statistics). The Cronbach

alpha for this 5-item scale was also strong, α = .92. This high of an alpha is more than sufficient to demonstrate the internal consistency of the scale. There was a significant positive relationship between PPE preceptor support subscale scores and overall PPE satisfaction ratings, r (181) = .67, $p < .001$. The null hypothesis was rejected.

Table 8

Item-Total Scale Statistics for the PPE Preceptor Support Subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
My PPE Preceptor (onsite mentor) functioned as a true mentor by providing guidance, motivation, emotional support, and role modeling	16.46	19.391	.808	.903
My PPE Preceptor provided me with access and insight into a variety of important professional situations that contributed to my learning	16.38	20.476	.806	.903
My PPE Preceptor was well oriented on what was expected by the university or needed by the student	16.41	20.525	.753	.913
The PPE preceptor developed a schedule that allowed me to meet the learning goals and objectives established by my college or university	16.38	20.216	.839	.896
The PPE preceptor was willing to answer my questions about the work setting and my specific tasks	16.10	21.440	.792	.906

Hypothesis 5

$H5_o$: Financial compensation for the student is not positively associated with student satisfaction with the PPE.

$H5_a$: Financial compensation for the student is positively associated with student satisfaction with the PPE.

There were not enough students who received financial compensation for their PPE (n = 5, 2.7% of the sample) to test this hypothesis.

Hypothesis 6

$H6_o$: PPE project relevance to industry and potential utilization by the PPE site is not positively associated with student satisfaction with the PPE.

$H6_a$: PPE project relevance to industry and potential utilization by the PPE site is positively associated with student satisfaction with the PPE.

To test hypothesis 6, two items from the overall survey were used to create the meaningful activities subscale (see Table 9 for the list of items and item statistics). The Cronbach alpha for this 2-item scale was very high, $\alpha = .95$. This strong of an alpha is more than sufficient for the internal consistency of the scale. There was a significant positive relationship between the meaningful activities subscale scores and overall PPE satisfaction ratings, $r\,(181) = .61$, $p < .001$. The null hypothesis was rejected, indicating that there was a significant relationship between engaging in meaningful activities and overall PPE satisfaction.

Table 9

Item-Total Scale Statistics for the Meaningful Activities Subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
The project(s) I completed while on my PPE was useful and meaningful for the organization and/or department	3.92	1.594	.907
The general, day-to-day tasks I completed while on the PPE were meaningful for the organization and/or department	3.89	1.776	.907

Hypothesis 7

$H7_o$: Student attainment of new skills and/or additional understanding of HIM concepts are not positively associated with student satisfaction with the PPE.

$H7_a$: Student attainment of new skills and/or additional understanding of HIM concepts are positively associated with student satisfaction with the PPE.

To test hypothesis seven, two items from the overall survey were used to create the new skills subscale (see Table 10 for the list of items and item statistics). The Cronbach alpha for this 2-item scale was very high, $\alpha = .93$. This strong of an alpha is more than sufficient for the internal consistency of the scale. There was a significant positive relationship between the new skills subscale scores and overall PPE satisfaction ratings, $r\ (181) = .68$, $p < .001$. The null hypothesis was rejected, indicating that there was a significant relationship between the development of new skills in PPE and overall PPE satisfaction.

Table 10

Item-Total Scale Statistics for the New Skills Subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
My PPE taught me things that I would never have been able to learn in the classroom	4.10	1.547	.878
My PPE has allowed me to have a better understanding of academic concepts I learned in the classroom	4.10	1.774	.878

Hypothesis 8

$H8_o$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are not positively associated with student satisfaction with the PPE.

$H8_a$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are positively associated with student satisfaction with the PPE.

To test hypothesis eight, two items from the overall survey were used to create the practical skills subscale (see Table 11 for the list of items and item statistics). The Cronbach alpha for this 2-item scale was good, $\alpha = .84$. This strong of an alpha is more than sufficient for the internal consistency of the scale. There was a significant positive relationship between the practical skills subscale scores and overall PPE satisfaction ratings, $r\ (181) = .69$, $p < .001$. The null hypothesis was rejected, indicating that there was a significant relationship between the development of practical skills in PPE and overall PPE satisfaction.

Table 11

Item-Total Scale Statistics for the Practical Skills Subscale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
My PPE improved my knowledge of the industry and possible career options	3.94	1.699	.723
My PPE provided me with marketable, practical job experience	4.25	1.474	.723

Full PPE Scale Reliability

Taken together as a total scale, the PPE scale items proved once again that they had high covariances or a high level of internal consistency as determined by Cronbach's alpha. All 19 of the Likert items on the PPE scale were included in the Cronbach alpha analysis. The yes/no item for whether the student had a paid internship was excluded. The 19 items had very high internal consistency, creating a Cronbach alpha of $\alpha = .96$ (see Table 12). Additionally, the corrected item total correlations were all quite high, most ranging from .60 to .86 (see Table 13). The lowest item total correlation, for the item on site placement, was still strong at .46.

Table 12

Reliability and Item-Total Scale Statistics for the Full PPE Scale

Reliability Statistics	
Cronbach's Alpha	N of Items
.962	19

Table 13

Item-Total Statistics for the PPE Scale

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Orientation coursework	73.56	317.053	.786	.960
Site placement	73.62	324.517	.460	.964
Mentor helpful in identifying PPE site	73.69	312.917	.717	.961
Mentor developed clear PPE learning goals and objectives	73.58	315.071	.764	.960
Mentor developed learning activities	73.69	315.188	.742	.960
Mentor concerned about my learning	73.68	319.111	.601	.962
Mentor followed up with me and my PPE preceptor to review my performance	73.62	316.996	.712	.961
Preceptor functioned as a true mentor	73.79	308.969	.780	.960
Preceptor provided me with access and insight	73.71	311.268	.817	.959
Preceptor was well oriented	73.73	311.482	.770	.960
Preceptor developed a schedule	73.73	312.222	.786	.960
Preceptor was willing to answer my questions	73.44	316.594	.752	.960
PPE taught me things not learned in the classroom	73.69	308.774	.819	.959
PPE gave better understanding of academic concepts	73.68	309.560	.856	.959
PPE improved knowledge of the industry and career options	73.52	313.223	.790	.960
PPE provided me with marketable, practical job experience	73.84	308.683	.833	.959
The project(s) I completed useful for the organization	73.89	312.848	.724	.961
Day-to-day tasks were meaningful for the organization	73.83	313.615	.755	.960
Overall satisfaction with my PPE	73.70	317.250	.703	.961

Exploratory Analysis

Multiple regression exploratory model 1. Given that this PPE scale is new, an exploratory multiple regression was used to see which scale items best predicted overall satisfaction with PPE. Eighteen items were used as independent variables. Table 14 reveals that this exploratory model produced a robust adjusted $R^2 = .604$. An examination of the coefficients table revealed that the following six items had *p* values less than .10: (a) mentor helpful in identifying PPE site; (b) preceptor functioned as a true mentor; (c) preceptor developed a schedule; (d) preceptor was willing to answer my questions (negative correlation); (e) PPE gave better understanding of academic concepts; and (f) PPE provided me with marketable, practical job experience.

Table 14

Model 1 Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.802[a]	.644	.604	.763

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	169.223	18	9.401	16.156	.000[b]
	Residual	93.688	161	.582		
	Total	262.911	179			

a. Dependent Variable: overall satisfaction with my PPE

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.324	.275		4.820	.000
	Orientation coursework	-.059	.091	-.054	-.652	.515
	Site placement	-.051	.065	-.058	-.786	.433
	Mentor helpful in identifying PPE site	.157	.081	.175	1.935	.055
	Mentor developed clear PPE learning goals and objectives	-.144	.095	-.143	-1.521	.130
	Mentor developed learning activities	.097	.091	.098	1.062	.290
	Mentor concerned about my learning	.003	.062	.003	.042	.966
	Mentor followed up with me and my PPE preceptor to review my performance	-.062	.075	-.062	-.834	.406
	Preceptor functioned as a true mentor	.152	.082	.174	1.842	.067
	Preceptor provided me with access and insight	-.052	.090	-.054	-.577	.565
	Preceptor was well oriented	.107	.081	.117	1.319	.189
	Preceptor developed a schedule	.273	.092	.286	2.972	.003
	Preceptor was willing to answer my questions	-.306	.097	-.294	-3.167	.002
	PPE taught me things not learned in the classroom	-.104	.104	-.115	-1.001	.318
	PPE gave better understanding of academic concepts	.277	.116	.288	2.386	.018
	PPE improved knowledge of the industry and career options	.029	.091	.030	.323	.747
	PPE provided me with marketable, practical job experience	.290	.098	.316	2.944	.004
	The project(s) I completed useful for the organization	.033	.116	.036	.282	.779
	Day-to-day tasks were meaningful for the organization	.083	.124	.087	.672	.502

a. Dependent Variable: overall satisfaction with my PPE

Multiple regression exploratory model 2. For the second model, only six items that had betas with *p* values less than .10 were entered. This produced an adjusted R^2 = .606, slightly *better* than the first model with 18 independent variables (see Table 15). Five of the six items were significant predictors of overall PPE satisfaction (in order from strongest to weakest predictors): (a) preceptor developed a schedule, (b) PPE provided me with marketable job experience, (c) preceptor was willing to answer my questions (negative correlation), (d) preceptor functioned as a true mentor, and (e) PPE gave better understanding of academic concepts. The item *mentor helpful in identifying PPE site* was not a significant predictor of overall satisfaction in this model (*p* = .156).

Table 15

Model 2 Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.787[a]	.619	.606	.757

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	163.401	6	27.233	47.486	.000[b]
	Residual	100.363	175	.574		
	Total	263.764	181			

a. Dependent Variable: overall satisfaction with my PPE

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
2	(Constant)	1.177	.238		4.954	.000
	Mentor helpful in identifying PPE site	.077	.054	.086	1.424	.156
	Preceptor functioned as a true mentor	.178	.073	.205	2.427	.016
	Preceptor developed a schedule	.324	.077	.339	4.211	.000
	Preceptor was willing to answer my questions	-.324	.085	-.311	-3.834	.000
	PPE gave better understanding of academic concepts	.183	.083	.190	2.216	.028
	PPE provided me with marketable, practical job experience	.310	.076	.339	4.098	.000

a. Dependent Variable: overall satisfaction with my PPE

GPA and overall PPE satisfaction. There were 161 respondents who reported a GPA between 3.0 and 4.0 and 20 respondents who reported a GPA of less than 3.0 (see Table 16). There was no significant difference in overall PPE satisfaction between students with GPAs of 3.0 or higher and students with GPAs less than 3.0, $t(179) = -1.08$, $p = .281$ (see Table 17).

Table 16

Means and Standard Deviations for Overall PPE Satisfaction by GPA

Group Statistics

	My overall GPA is/was the following while enrolled in my most recent health information management (HIM) degree program.	N	Mean	Std. Deviation
I would rate my overall satisfaction with my PPE as:	3.0 - 4.0	161	4.04	1.254
	2.0 - 2.9	20	4.35	.875

Table 17

Independent Samples t Test for Overall PPE Satisfaction by GPA

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
I would rate my overall satisfaction with my PPE as:	Equal variances assumed	1.496	.223	-1.081	179	.281	-.313
	Equal variances not assumed			-1.426	29.708	.164	-.313

Associate versus baccalaureate degree programs. An independent samples *t*-test was used to examine the mean differences between those enrolled in associate versus baccalaureate degree programs. Levene's test for equality of variances was significant ($p = .009$), so the variances were not assumed to be equal and Welch's correction was used (see Tables 18 & 19).

Students in baccalaureate degree programs (M = 4.43, SD = .95) were significantly more satisfied with their PPE compared to students in associate degree programs (M = 3.85, SD = 1.30), $t(172.89) = -3.40$, $p = .001$, $d = -0.51$.

Table 18

Means and Standard Deviations for Overall PPE Satisfaction by Degree Program

	What type of degree program were you enrolled in while conducting your most recent PPE?	N	Mean	Std. Deviation
I would rate my overall satisfaction with my PPE as:	associate degree	100	3.85	1.298
	baccalaureate degree	75	4.43	.947

Table 19

Independent Samples t Test for Overall PPE Satisfaction by Degree Program

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
I would rate my overall satisfaction with my PPE as:	Equal variances assumed	6.974	.009	-3.252	173	.001	-.577
	Equal variances not assumed			-3.398	172.88	.001	-.577

Type of program delivery. There was no significant difference in PPE satisfaction between the three types of program delivery: online, on campus, and hybrid, $F(2,177) = 1.83$, $p = .295$. See Table 20 for means and standard deviations.

Table 20

Means and Standard Deviations for Overall PPE Satisfaction by Program Delivery

	N	Mean	Std. Deviation
Online	73	4.05	1.332
On campus/seated	44	4.30	1.112
Hybrid (combination of online and campus/seated courses)	63	3.92	1.154
Total	180	4.07	1.222

ANOVA

I would rate my overall satisfaction with my PPE as:

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.657	2	1.828	1.228	.295
Within Groups	263.543	177	1.489		
Total	267.200	179			

Hours worked at PPE. There was no significant difference in PPE satisfaction for the number of hours worked at the student's PPE, $F(2,178) = 0.99$, $p = .623$.

Table 21

Means and Standard Deviations for Overall PPE Satisfaction by Hours Worked at PPE

I would rate my overall satisfaction with my PPE as:			
	N	Mean	Std. Deviation
40 hours or less	31	4.10	1.044
41-79 hours	44	3.91	1.273
80-119 hours	44	4.30	1.002
120-159 hours	24	4.08	1.472
more than 160 hours	40	3.95	1.377
Total	183	4.07	1.225

Table 22

ANOVA for Overall PPE Satisfaction by Hours Worked at PPE

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.975	4	.994	.657	.623
Within Groups	269.238	178	1.513		
Total	273.213	182			

HIM experience. An independent samples t-test was used to compare the PPE satisfaction for those with no HIM experience versus those students with some HIM experience. There was no significant difference between the two groups, $t(181) = -0.91$, $p = .37$.

Table 23

Means and Standard Deviations for Overall PPE Satisfaction by HIM Experience

	HIM Experience	N	Mean	Std. Deviation
I would rate my overall satisfaction with my PPE as:	No experience	99	3.99	1.233
	Some experience	84	4.15	1.217

Table 24

Independent Samples t Test for Overall PPE Satisfaction by HIM Experience

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
I would rate my overall satisfaction with my PPE as:	Equal variances assumed	.121	.728	-.907	181	.366	-.165
	Equal variances not assumed			-.908	176.88	.365	-.165

Gender. There was no significant difference in overall PPE satisfaction between those who identified as women compared to those who identified as being men, $t(178) = 0.41$, $p = .68$.

Table 25

Means and Standard Deviations for Overall PPE Satisfaction by Gender Identification

	What is your gender?	N	Mean	Std. Deviation
I would rate my overall satisfaction with my PPE as:	Male	21	4.19	1.123
	Female	159	4.08	1.215

Table 26

Independent Samples t Test for Overall PPE Satisfaction by Gender Identification

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference
I would rate my overall satisfaction with my PPE as:	Equal variances assumed	.151	.698	.411	178	.681	.115
	Equal variances not assumed			.437	26.573	.666	.115

Summary

The results of this study showed that a PPE preceptor's willingness to answer a student's questions had the highest mean and that the participants' PPE mentors did a good job in this area. Overall, the PPEs that these participants experienced improved the students' knowledge of the HIM industry and possible career options. The scale items, *the project was useful and meaningful for the organization and/or department* and *the general day-to-day tasks I completed were meaningful for the organization and/or department*, had the lowest means and

demonstrated that in the cases of these respondents, the PPE projects and tasks could be more meaningful. This study had eight hypotheses and all eight null hypotheses were rejected. The full PPE scale items on the questionnaire proved to have a high level of internal consistency, thus demonstrating the validation of this scale for assessing HIM student PPE satisfaction. Based on two multiple regression models, it appears that five items can be considered predictors of PPE satisfaction. Those items were: (a) preceptor developed a schedule, (b) PPE provided me with marketable job experience, (c) preceptor was willing to answer my questions (negative correlation), (d) preceptor functioned as a true mentor, and (e) PPE gave a better understanding of academic concepts. Data for six demographic items were analyzed: (a) GPA, (b) program delivery, (c) associate versus baccalaureate degree program, (d) hours worked at the PPE, (e) HIM work experience, and (f) gender. The only variable that showed a significant difference in overall PPE satisfaction was associate versus baccalaureate degree programs in that those in baccalaureate degree programs had higher overall PPE satisfaction. Chapter 5 further summarizes the data as they relate to the research questions and provides conclusions, implications, and recommendations based on the results of this study.

Chapter 5: Discussion and Recommendations

Introduction and Summary of Study

The PPE is a CAHIIM accreditation requirement for associate and baccalaureate HIM degree programs. While the PPE is a requirement, research established a gap between the skills acquired through HIM programs and the skills required to work in the healthcare industry. An internship is one way to bridge that gap. Due to the importance of this bridge, the researcher felt that exploring the factors related to a student's satisfaction with their PPE was warranted.

The purpose of this quantitative correlational study was to determine the degree to which factors of a high-quality PPE in undergraduate HIM programs related to HIM student PPE satisfaction. The central, overarching research question in this study was: Does academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, PPE financial compensation, the relevance of the PPE project, learning during the PPE, and the PPE's connection to student career relate to student satisfaction with their PPE? To truly address the purpose of the study, the degree to which the factors of a high-quality PPE correlate to student PPE satisfaction, a subset of research questions was developed. This subset included:

ResQ1: To what degree is academic preparedness associated with student PPE satisfaction?

ResQ2: What are the differences in PPE satisfaction between students whose PPE site placement was arranged by the college and those whose college required the student to self-search and set up their own PPE site?

ResQ3: To what degree is PPE coordinator/college mentor support associated with student PPE satisfaction?

ResQ4: To what degree is the PPE preceptor/onsite mentor support associated with student PPE satisfaction?

ResQ5: To what degree is student financial compensation associated with student PPE satisfaction?

ResQ6: To what degree is PPE project relevance to industry and its potential utilization by the practice site associated with student PPE satisfaction?

ResQ7: To what degree is student attainment of new skills and/or further understanding of HIM concepts associated with student PPE satisfaction?

ResQ8: To what degree does the student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience connect to student PPE satisfaction?

The population examined by this study included students who at the time of answering the survey questions were currently enrolled in an accredited associate or baccalaureate degree program and who had completed their PPE. It also included HIM graduates who had completed a PPE at an accredited associate or baccalaureate degree program during the 2016/2017, 2017/2018, 2018/2019, and 2019/2020 school years. Snowball sampling was initially used to distribute the study survey to individuals in this population. Once it was deemed that snowball sampling was complete and that the initial survey response was low, the researcher engaged state HIM associations on Facebook to gain permission to post the survey link on their Facebook pages. The survey was also posted on the HIMSS LinkedIn profile page. The combination of snowball sampling and posting on social media sites produced a total of 186 responses. The results of this study were presented in Chapter 4.

Summary of Findings

PPE scale reliability. Scale reliability was not one of the research questions for this study; however, it is a very important aspect of this study. No research had been conducted on PPE student satisfaction, which meant there was no validated survey or construct to utilize for this study. Construct validity is crucial to research methodology in that it can ensure that the instrument being used measures the construct it was intended to measure (Beins, 2001). "If the measurements do not reflect the construct, then inferences based on those measurements will be suspect" (Beins, 2001, para. 1). Cronbach's alpha was used to determine internal consistency for both the pilot study and full-scale research study scale items. According to Morgado et al. (2018), the minimum acceptable alpha is 0.7 and an alpha between 0.8 and 0.9 is ideal. The pilot study and full-scale research study scale items had a high level of internal consistency with the pilot study having a Cronbach's alpha of 0.915 and the full-scale research study having a Cronbach's alpha of 0.96. These high levels of internal consistency demonstrate the validity of the scale items to measure student PPE satisfaction. HIM program directors can feel confident in utilizing the survey tool developed for the full-scale research study to measure their own student PPE satisfaction.

Research questions. As further discussion is had and recommendations are discussed, it is prudent to revisit the research questions and the null and alternative hypotheses of this study.

Research question 1. To what degree is academic preparedness associated with student PPE satisfaction?

$H1_o$: The degree of academic preparedness is not positively associated with student satisfaction with the PPE.

$H1_a$: The degree of academic preparedness is positively associated with student satisfaction with the PPE.

Narayanan et al.'s (2010) internship effectiveness model served as the conceptual framework for the research study. In their model, academic preparedness was part of the antecedent phase of the model (Narayanan et al., 2010). The authors explained that they were not able to locate any research that proved that general academic preparedness and internship readiness influenced internship effectiveness; however, they had found through their literature review that the more a student is prepared for the learning experience the more likely the student will learn and there will be better outcomes. Narayanan et al.'s (2010) research study went on to support this theory and found that none of the antecedent indicators had a direct association to student satisfaction but rather were indirectly associated and worked to predict process concepts of the internship effectiveness model. The results of the full-scale PPE satisfaction survey also supported this and showed that academic preparedness and PPE orientation/PPE preparatory coursework were positively associated with student satisfaction with their PPE.

Research question 2. What are the differences in PPE satisfaction between students whose PPE site placement was arranged by the college and those whose college required the student to self-search and set up their own PPE site?

$H2_o$: PPE satisfaction with the PPE will not be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

$H2_a$: PPE satisfaction with the PPE will be higher for students who had their PPE site placement arranged by the college compared to those who are required to self-search and set up their own PPE site.

Internship site placement is handled differently in HIM undergraduate programs. At some colleges and universities, students are provided a list of PPE sites with which the institution has an affiliation agreement signed and then the student is responsible for reaching out to that site to set up their PPE. At other colleges and universities, students share their preferred PPE sites or locations and the institution's PPE coordinator makes placement arrangements and ensures the execution of an affiliation agreement with that site. The internship site selection was not a measure specifically addressed in Narayanan et al.'s (2010) internship effectiveness model and research. However, it was a theory addressed by D'Abate et al. (2009) as a contextual factor in determining internship satisfaction. D'Abate et al.'s (2009) literature review and pilot interviews identified contextual factors that were applicable to interns, including internship location. However, their research study showed no positive significant relationship between contextual factors and internship satisfaction. Even though this experience factor was not addressed by Narayanan et al. (2010) and no positive relationship was found in D'Abate et al.'s (2009) research, the researcher considered her past experiences with student PPE placements and the importance of site placement and felt it necessary to address it in her research study. Gathering input from the student and taking the time to arrange a PPE site that was a good fit for the student was an important part of her own program's PPE placement process. In a study by Maertz et al. (2014), the authors listed the internship placement process as a cost for schools. The oversight to "obtain, publicize, and/or monitor academic internships for course credit" (Maertz et al., 2014, p. 130) can be very costly due to staffing challenges and faculty seeing the role as being "under-appreciated and under-compensated" (p. 130). The researcher classified this experience factor as an antecedent on the internship effectiveness model. The findings of this PPE satisfaction study showed there was a positive correlation between those students whose

PPE coordinator set up their placements and their PPE satisfaction. In the case of PPE satisfaction, this is an important factor to consider in the antecedent phase of the internship effectiveness model.

Research question 3. To what degree is PPE coordinator/college mentor support associated with student PPE satisfaction?

$H3_o$: PPE coordinator/college mentor support is not positively associated with student satisfaction with the PPE.

$H3_a$: PPE coordinator/college mentor support is positively associated with student satisfaction with the PPE.

There were five items that were combined to determine whether PPE coordinator/college mentor support was positively associated with student satisfaction. The five items were:

1. My PPE coordinator/university mentor was helpful in identifying an appropriate PPE site suited to academic development and my needs and interests.
2. My PPE coordinator/university mentor developed clear PPE learning goals and objectives.
3. My PPE coordinator/university mentor developed learning activities to be done during my PPE that allowed me to meet the PPE learning goals and objectives.
4. My PPE coordinator/university mentor was concerned about my learning while at the PPE site.
5. My PPE coordinator/university mentor followed up with me and my PPE preceptor to review my performance.

These five items were supported by several pieces of literature. Eyler (2009) identified several guidelines for establishing a high-quality experiential education program. One of the

guidelines was to include an academic supervisor or instructor who is able to be attentive to the student while they are on their internship and to collaborate with the site supervisor to gain feedback and check on student performance. Another guideline was also a component of this scale: the work done on the internship is related to academic goals of the course or program. Zopiatis and Constanti's (2012) internship satisfaction research was based in the hospitality industry; however, they mentioned that

> Often, the coordinator can help "customize" internships for both the student and the host organization by matching the needs and expectations of the two parties, thereby developing both the formal and informal communication channels in which students are encourage to further reflect upon their experience. (p. 47)

This statement resonated with the researcher in that she asks students what their areas of interest are before PPE placement to help match a student with an internship mentor who works in their area of interest, manages their area of interest, or is able to connect the student with another individual at their organization with someone working in that area of interest. Anecdotally, the researcher has found that this *matching* supports student satisfaction and also demonstrates to the student that we are paying attention to their interests and expectations. This 5-item scale was internally consistent and showed a positive relationship between PPE mentor support and student PPE satisfaction. This scale could be used by HIM program directors independently to assess student satisfaction with the program PPE coordinator/PPE mentor.

Research question 4. To what degree is the PPE preceptor/onsite mentor support associated with student PPE satisfaction?

$H4_o$: Onsite PPE preceptor/onsite mentor support is not positively associated with student satisfaction with the PPE.

$H4_a$: Onsite PPE preceptor/onsite mentor support is positively associated with student satisfaction with the PPE.

There were five items that were combined to determine whether PPE preceptor support was positively associated with student satisfaction. The five items were:

1. My PPE preceptor (onsite mentor) functioned as a true mentor by providing guidance, motivation, emotional support, and role modeling.
2. My PPE preceptor provided me with access and insight into a variety of important professional situations that contributed to my learning.
3. My PPE preceptor was well oriented on what was expected by the university or needed by the student.
4. The PPE preceptor developed a schedule that allowed me to meet the learning goals and objectives established by my college or university.
5. The PPE preceptor was willing to answer my questions about the work setting and my specific tasks.

The researcher, based on her own student PPE placement experience, concurred with the research on this topic. The PPE preceptor role and the support they provided to the PPE student impacts that student's satisfaction with the PPE. As Sasnett and Ross (2016) stated, "Faculty and preceptors, like students, range from outstanding to apathetic and a failure by any party can doom an internship" (p. 390). Sauder et al.'s (2019) research demonstrated that there was a disconnect between preceptor and student expectations for the internship and that this could impact student internship satisfaction. The data from this student PPE satisfaction survey supported Sauder et al.'s (2019) findings and demonstrate the importance of the relationship

between the student and the PPE preceptor. There was a significant positive relationship between the PPE preceptor support measures and the student's overall PPE satisfaction.

Research question 5. To what degree is student financial compensation associated with student PPE satisfaction?

$H5_o$: Financial compensation for the student is not positively associated with student satisfaction with the PPE.

$H5_a$: Financial compensation for the student is positively associated with student satisfaction with the PPE.

Unfortunately, there were not enough respondents who reported receiving financial compensation for their PPE to test this hypothesis and answer the research question. This did not surprise the researcher. In her experience, PPE sites rarely pay students, but she wanted to see if that was truly the case nationwide, and it turns out that it was.

Research question 6. To what degree is PPE project relevance to industry and its potential utilization by the practice site associated with student PPE satisfaction?

$H6_o$: PPE project relevance to industry and potential utilization by the PPE site is not positively associated with student satisfaction with the PPE.

$H6_a$: PPE project relevance to industry and potential utilization by the PPE site is positively associated with student satisfaction with the PPE.

Research by Rothman (2007), D'Abate et al. (2009), and Narayanan et al. (2010) supported the relationship between project and task significance and student internship satisfaction. This student PPE satisfaction study also supported this relationship in that the 2-item scale for meaningful activities was internally consistent. The data showed a significant positive relationship between meaningful activities and PPE satisfaction.

Research question 7. To what degree is student attainment of new skills and/or further understanding of HIM concepts associated with student PPE satisfaction?

$H7_o$: Student attainment of new skills and/or additional understanding of HIM concepts are not positively associated with student satisfaction with the PPE.

$H7_a$: Student attainment of new skills and/or additional understanding of HIM concepts are positively associated with student satisfaction with the PPE.

To determine whether the student learning new skills is correlated to PPE satisfaction, two items were used to create the new skills subscale. This subscale was found to have internal consistency and there was a significant positive relationship between the student's attainment of new skills and/or understanding of HIM concepts and student PPE satisfaction. This is in alignment with previous research studies conducted on the relationship of internship quality factors and intern satisfaction (D'Abate et al., 2009; Dabke, 2015; Vélez & Giner, 2015).

Research question 8. To what degree does the student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience relate to student PPE satisfaction?

$H8_o$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are not positively associated with student satisfaction with the PPE.

$H8_a$: Student's improved knowledge of the HIM industry, possible career options, and attainment of practical job experience are positively associated with student satisfaction with the PPE.

Research question 8 was very similar to research question 7; however, this question focused specifically on improved knowledge of the HIM industry, career options, and gaining

practical job experience. These experience factors are considered work environment characteristics (D'Abate et al., 2009) and just as in research question 7, the data from the PPE satisfaction survey support the positive relationship between these experience factors and student PPE satisfaction.

Central research question. Does academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, PPE financial compensation, the relevance of the PPE project, learning during the PPE, and the PPE's connection to student career relate to student satisfaction with their PPE?

In reviewing the statistical analysis for this research study, the answer to the central research question is yes. The only experience factor that could not be evaluated was the relationship between PPE financial compensation and student PPE satisfaction. This was due to the fact that there were not enough respondents who received compensation for their PPE.

Demographic data correlation to student PPE satisfaction. Most of the demographic factors that were analyzed had no impact on student PPE satisfaction. It was found that there was no significant difference in PPE satisfaction between student GPA, type of program delivery, hours worked at the PPE, HIM experience, and gender. Where there was a significant difference in students enrolled in an associate versus baccalaureate degree program, it was found that students enrolled in a baccalaureate degree program were significantly more satisfied with their PPE compared to students enrolled in an associate degree program. The researcher considered the number of responses and whether more students from one type of program answered the survey questions. It was found that 100 associate degree students and 75 baccalaureate degree students answered the survey questions.

Implications

Theoretical implications. Kolb's ELT formed the theoretical framework for this study on the factors related to student PPE satisfaction. Kolb's (1984) theory is comprised of four modes or abilities: concrete experience, reflective observation, abstract conceptualization, and active experimentation. In order to understand how learning happens in a PPE or internship, one can look to Kolb's ELT. The PPE satisfaction survey has elements representative of Kolb's ELT. While the PPE satisfaction survey's intent was to measure student PPE satisfaction, the researcher believed that *learning* was the core of any experiential learning encounter, and that Kolb's ELT should be applied to all PPEs. As the researcher considered the experience factor elements (see Table 5 for experience factors and elements) and survey questions/statements to include in the PPE satisfaction survey, she applied Kolb's ELT to each factor, which were also the independent variables of the study. The concrete experience mode is represented through PPE experience element factors of

- developing learning activities to support PPE goals & objectives,
- access and insight,
- PPE preceptor planning for student experience,
- learning new things (skills, technology, etc.),
- understanding concepts,
- career options,
- job experience,
- hourly wage,
- meaningful project, and

- meaningful work.

Reflective observation mode was represented through

- PPE placement being handled by the university and/or PPE coordinator,
- appropriate PPE internship site/match,
- concern for learning,
- performance evaluation,
- PPE preceptor being a strong mentor,
- PPE preceptor orientation, and
- PPE preceptor availability.

The abstract conceptualization mode was represented through the knowledge acquired prior to the PPE and the development of learning goals and objectives for the PPE. Lastly, the active experimentation mode was represented through two experience factor elements that were also representative of concrete experience: meaningful project and meaningful work.

Kolb's (1984) "experiential learning model pursues a framework for examining and strengthening the critical linkages among education, work, and personal development" (p. 4). In applying this model to the experience factors and the survey tool used in this study, the research study results showed a linkage or correlation between all but one experience factor and student PPE satisfaction. The findings of this research study are in line with the theoretical framework used, and confirmed the use of Kolb's ELT as the basis for student PPE satisfaction.

Conceptual implications. Narayanan et al.'s internship effectiveness model served as the conceptual framework for this research study. Through their research, Narayanan et al. (2010) found that there was not a standard method for researchers to use when studying internships. As the researcher learned more about the internship effectiveness model, it was the only model

available that took the three major stakeholders, knowledge transfer, and personnel transfer into consideration for studying internships (Narayanan et al., 2010). The identified experience factors (independent variables) in this research study were placed into Narayanan et al.'s internship effectiveness model early on to see how they fit into the model (see Table 4). The PPE is unique to each student, college, and PPE preceptor, and each stakeholder enters the PPE with different goals. Whether or not those stakeholder goals are aligned can result in a positive or negative PPE. The internship effectiveness model brings all of the stakeholders, the pre-PPE work, PPE processes, and PPE outcomes together. When the Narayanan et al. internship effectiveness model was applied to the HIM PPE, the results were very positive and the researcher was able to easily adapt the internship effectiveness model to fit the HIM PPE narrative.

The researcher considered the experience factors that made up the pre-PPE antecedents, PPE processes, and PPE outcomes and placed them into the internship effectiveness model (see Table 4). After the research data were analyzed, it was determined that all of the experience factors or independent variables, with the exception of financial compensation, had a positive correlation to student PPE satisfaction. Based on this positive correlation, the literature review, and the research conducted by Narayanan et al. (2010), the researcher developed the HIM PPE satisfaction model (see Figure 3, HIM PPE Satisfaction Model as adapted by Katie Kerr) on page 121. This model has also been tested through the researcher's personal PPE program experience. The internship effectiveness model (Narayanan et al., 2010) provided the base for this PPE-specific model. This conceptual model can be used by any PPE coordinator or HIM program director to apply to their own PPE program to ensure a quality, satisfactory PPE.

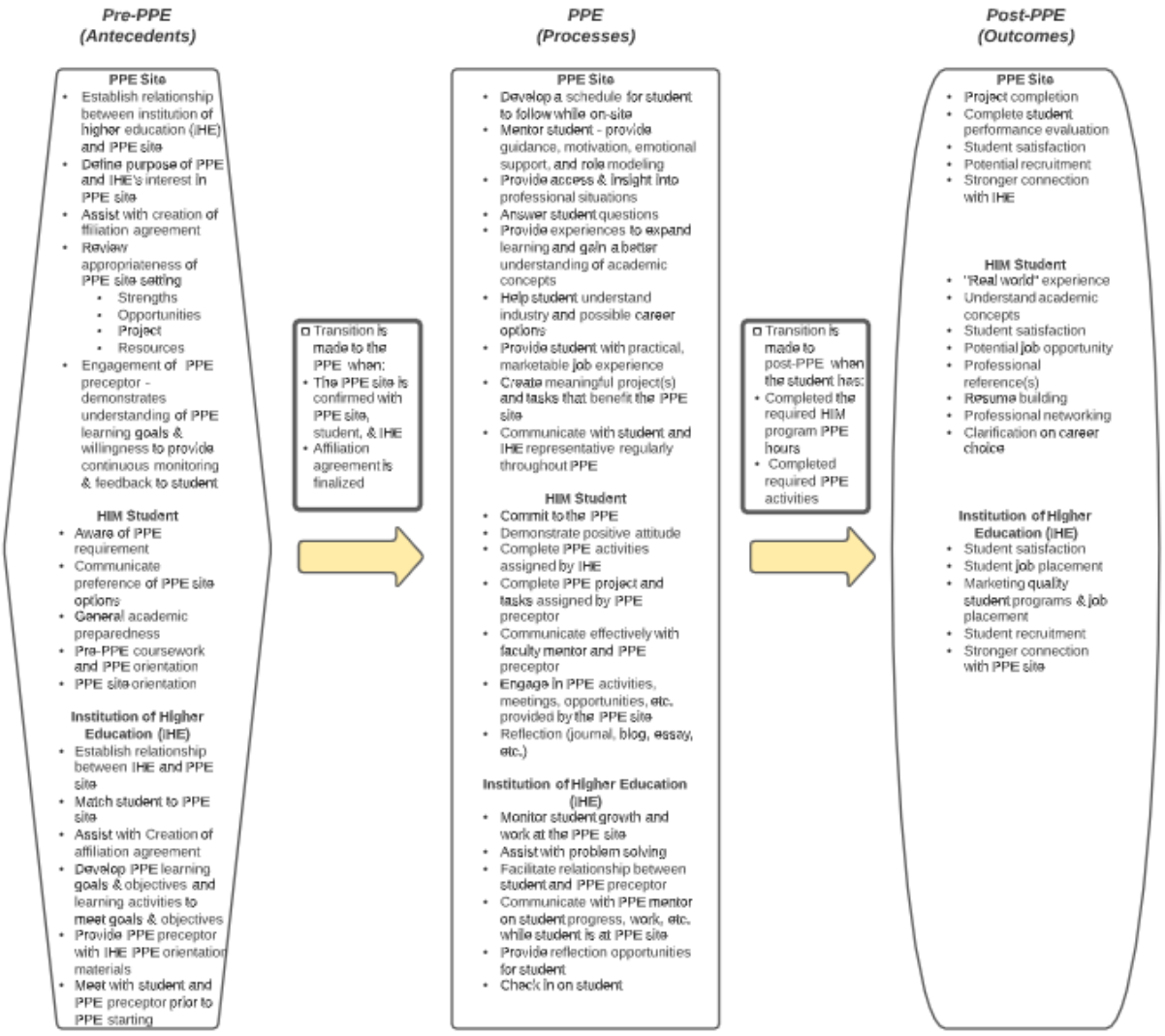

Figure 3. HIM PPE satisfaction model.

HIM PPE satisfaction model as adapted by Katie Kerr. Narayanan et al. (2010) found research studies that explored internship design related to the three key stakeholders, the importance of the internship preceptor and faculty mentoring, and sources of internship satisfaction, which were similar to that of job satisfaction. In reviewing these studies, they found

it necessary to focus on the way internship experiences were designed. They continued to review previous studies and developed a conceptual model for understanding the determinants of internship effectiveness (see Figure 1). The researcher found many similarities between the internship effectiveness model, the results of the full-scale research study on PPE satisfaction, and her own personal experience with maintaining a PPE program in an undergraduate HIM program in the Upper Midwest region of the United States. It is out of the congruence between these elements that the HIM PPE satisfaction model (see Figure 3) was developed.

The researcher changed the language on the internship effectiveness model and applied language commonly associated with HIM programs and PPE terminology. The first stage in the model, *Antecedents*, was recognized as the pre-PPE phase in the PPE context, *Processes* was recognized as the PPE phase, and *Outcomes* was recognized as the post-PPE phase. Within each phase of the model, more terminology was changed to be in alignment with the methods and procedures used within a PPE program. For example, in Narayanan et al.'s (2010) model, the first element under antecedents was, "Employing firm's preparedness for the internship" (p. 65). The researcher changed this to simply *PPE Site*. While Narayanan et al.'s (2010) model was very focused on the importance of the relationship between the employing firm, the student, and the university, the researcher felt that the importance of the relationship between the three key stakeholders could be reflected differently in the adapted HIM PPE satisfaction model.

Pre-PPE (antecedent). The importance of the relationship between the PPE site, the institution of higher education, and the PPE is still at the forefront of the antecedent phase of the adapted HIM PPE satisfaction model; however, it is not the primary purpose of the pre-PPE or antecedent phase. Narayanan et al.'s (2010) model, within the antecedent phase, laid out elements that are not common practice for a HIM PPE. One example of this is knowing the

internship project in advance of internship placement. It is very common in the field of HIM that the PPE project is not known to institution of higher education or the student prior to the start of the PPE. Unlike the scenario or process outlined in Narayanan et al.'s model, it would be impossible to match a student with a PPE site based on the project they would complete. It was very evident that the PPE preceptor/PPE site engagement played a critical role in student PPE satisfaction. The researcher felt that it was important to first identify an engaged PPE mentor versus considering the company's interests, as laid out in Narayanan et al.'s model. Based on her own research, experience managing a PPE program, and literature review, the researcher placed PPE preceptor/PPE site engagement as a top priority. Within this first phase of the HIM PPE satisfaction model, a relationship is established between the institution of higher education and the PPE site, there is work to ensure the PPE site understands the purpose of the PPE and that the PPE site is a appropriate for hosting a student for their PPE, and there is work to ensure that the PPE preceptor has an understanding of the student PPE learning goals and is willing to provide continuous monitoring and feedback to the student.

In Narayanan et al.'s (2010) model, the elements laid out for the student include the student's ability to apply and transfer knowledge to the internship, general academic preparedness, and internship readiness that included project choice and faculty mentor choice. The HIM PPE satisfaction model modified these elements to align better with the processes surrounding a PPE placement by including the student's awareness of the PPE requirements, general academic preparedness, pre-PPE coursework, PPE orientation, and PPE site orientation. Prior to a PPE, many PPE sites require students to go through the organization's employee, intern, or volunteer orientation course. Faculty mentorship is also an important factor in student PPE satisfaction. Faculty mentorship is handled differently at each institution of higher education

and thus this was left off the HIM PPE satisfaction model. However, PPE site choice was included in this phase by the researcher. In her own experience, students want to have a say in where they go on their PPE. Also, in multiple regression model 1 (see Table 14), the mentor's helpfulness in identifying a PPE site was an item that helped to predict overall satisfaction. So, it was decided to include *choice of PPE site* in this phase of the HIM PPE satisfaction model.

The role of the institution of higher education in the pre-PPE phase is addressed. The first step is the establishment of a relationship between the institution of higher education and the PPE site, just as it was the first step listed for the PPE site. After that, the institution of higher education can begin matching students with PPE sites. Narayanan et al.'s (2010) model lays out steps for the university that include the company's interests, such as prior ties, careful screening and matching, and similarity in strategies). When it comes to PPEs, prior ties can be key to getting a PPE placement, and this is addressed in the HIM PPE satisfaction model through the development of a relationship between the institution of higher education and the PPE site. In Narayanan et al.'s (2010) model, this phase also includes the company's organizational context and the formal internship structure. The organizational context is considered when matching a student to the PPE site within the HIM PPE satisfaction model. The formal internship structure is very important; however, the researcher looked at the structure of the PPE in terms of developing learning goals and objectives and learning activities to meet the goals and objectives, and providing the PPE preceptor with the institution of higher education's PPE orientation materials. The researcher's literature review revealed that communication was essential to a successful internship, and in her own experience, the researcher has found that having a one-on-one meeting with each student and mentor was helpful in clarifying PPE expectations, PPE responsibilities, and PPE goals and objectives.

PPE (processes). The Narayanan et al. (2010) internship effectiveness model, in the *processes* phase, identified two elements for the employing firm's role in this phase. Those two elements included the employing the firm's "communication with and commitment to the university" and their "feedback to student and supervisory support" (Narayanan et al., 2010, p. 65). While both of these elements encompass a lot of processes, the researcher felt that this was a crucial step in the PPE and it needed to be expounded upon in the HIM PPE satisfaction model. Based on the full-scale research study, multiple regression model 2 showed that three of the five factors that most predict student PPE satisfaction fell into this phase of the model under responsibilities of the PPE site (see Table 15). The three factors were (a) preceptor developed a schedule, (b) preceptor was willing to answer my questions, and (c) preceptor functioned as a true mentor. Based on the full-scale research study results, her own experience managing a PPE program, and her own literature review, the researcher added to the processes that fall under the PPE site. In this area, similar to Narayanan et al.'s (2010) model, this is where the PPE site demonstrates their commitment to the internship and their ability to effectively manage the PPE. The HIM PPE satisfaction model includes the following:

- Develop a schedule for student to follow while on-site
- Mentor student (provide guidance, motivation, emotional support, and role modeling)
- Provide access and insight into professional situations
- Answer student questions
- Provide experiences to expand learning and gain a better understanding of academic concepts
- Help student understand industry and possible career options
- Provide student with practical, marketable job experience

- Provide meaningful project(s) and tasks that benefit the PPE site
- Communicate with student and institution of higher education representative regularly throughout PPE

The student's role, as identified by Narayanan et al.'s (2010) model, includes motivation, which is "Task and knowledge challenges" and "Initial student learning" (p. 65). It also includes communication with faculty and the employer. In the HIM PPE satisfaction model, student communication and motivation are also taken into consideration. The student's commitment to the PPE, their ability to communicate effectively with their faculty mentor and their PPE preceptor, and their engagement in PPE activities, meeting, opportunities, etc. provided by the PPE site were included. In addition to these, the student's attitude, their ability to complete PPE activities provided by the institution of higher education, and student reflection were also included in this phase.

Communication is another key factor in process phase of Narayanan et al.'s (2010) model. This phase encompasses the university's interaction with the employing company and the student. Included in that is "Communication with and commitment to the employer" and "Managing the process" (Narayanan et al., 2010, p. 65). In terms of the role of the institution of higher education in the PPE (process) phase, Narayanan et al.'s model was expounded on to include monitoring the student's grown and work at the PPE site, assisting with problem solving, providing reflection opportunities, and checking in on the student. Communication was addressed by including the elements of facilitating the relationship between the student and the PPE preceptor and communicating with the PPE mentor on student progress, work, etc. while the student is at the PPE site.

Post-PPE (outcomes). The last phase of Narayanan et al.'s (2010) model, the 'Outcomes' phase, was the most similar in terms of process to PPE program processes. Narayanan et al.'s (2010) model identified a list of tangible benefits for the employing firm. The proximal benefits included:

- Project completion
- Project productivity
- Potential recruitment
- Initial inflow of ideas
- Student satisfaction. (Narayanan et al., 2010, p. 65)

Distal benefits included the "Continued inflow of ideas" and "Stronger linkages with academic institution" (Narayanan et al., 2010, p. 65). Similarly, the HIM PPE satisfaction model included project completion, completing the student performance evaluation, student satisfaction, potential recruitment, and a stronger connection with the institution of higher education.

For students in the Narayanan et al. (2010) model, the outcomes phase addressed student "skill development and career enhancement" (p. 65). Proximal benefits included "student satisfaction" and "student placement," and the distal benefit was "career prospects" (Narayanan et al., 2010, p. 65). The researcher addressed these elements in the HIM PPE satisfaction model but added several other outcomes for HIM students. Outcomes for HIM students in the HIM PPE satisfaction model include (a) *real world* experience, (b) better understanding of academic concepts, (c) student satisfaction, (d) potential job opportunity, (e) professional reference(s), (f) resume building, (g) professional networking, and (h) clarification on career choice. Based on the full-scale research study, multiple regression model 2 (see Table 15) showed that two of the five factors that most predict student PPE satisfaction fell into this phase of the model under the

HIM student. The two factors were *PPE provided me with marketable job experience* and *the PPE gave better understanding of academic concepts*.

Lastly, outcomes for the university according to Narayanan et al. (2010) are "enhanced capabilities and facilitation of student development" (p. 65). The benefits for the university included:

- Proximal
    - Student satisfaction
    - Student placement
    - Quality of student programs
- Distal
    - Inflow of research ideas
    - Stronger linkages with employing firm
    - Reputation for student placement. (Narayanan et al., 2010, p. 65)

The HIM PPE satisfaction model encompassed several of the above benefits including student satisfaction, student job placement, marketing quality student programs and job placement, and stronger connection with PPE site. Student recruitment was another benefit included in the HIM PPE satisfaction model.

Practical implications. There were several practical implications resulting from this research study. First, a validated student PPE satisfaction survey was developed. This final version does not include the PPE compensation survey item and the demographic survey items. Based on the measurement of Cronbach's alpha, this survey and its subscales have been shown to be very reliable for measuring student satisfaction. This student PPE satisfaction survey can be used by all undergraduate HIM programs offering a PPE. They will be able to use it with

confidence in knowing that they are capturing data that will give them a reliable measure of student PPE satisfaction. A final version of the student PPE satisfaction survey can be found in Appendix I.

The second practical application of this research study lies in the HIM student PPE satisfaction model. In order to answer the central research question and understand the degree to which factors of a quality PPE relate to student PPE satisfaction, survey items were developed for all of the independent variables. In analyzing data from the research study, the researcher was able to see that indeed, the factors of a quality PPE correlate to student PPE satisfaction. These variables were also applied to Narayanan et al.'s internship effectiveness model early on to see how they fit into the model and how applicable the model was to the PPE setting and processes. Narayanan et al.'s (2010) research study found that none of the antecedent constructs had a direct correlation to student satisfaction. However, in this research study, there were several experience factors that fit into the antecedent column of the internship effectiveness model, and they all had a direct positive correlation to student PPE satisfaction. As the researcher continued to work with the model, it became clear that with modification it could be used as the basis for a HIM PPE satisfaction model. This model can be seen in Figure 3 and can serve the needs of each HIM program director and PPE coordinator for all baccalaureate and associate degree HIM programs. The model can be used as a guide in developing a PPE program to ensure that all of the elements of a quality PPE that will ensure student PPE satisfaction are developed.

This research and the HIM PPE satisfaction model can help address the research problem identified for this research study, which was the lack of standards and requirements designed to provide quality PPEs. The degree to which factors of a high-quality PPE relate to student PPE satisfaction was unknown until this research study was completed. Now that these factors are

known, they could be built into the CAHIIM accreditation standards for baccalaureate and associate degree programs. The CAHIIM (2018a, 2018b) standards require undergraduate HIM programs to "describe how the PPE (e.g., clinical practicum, directed practice experience) is designed, supervised and evaluated, and name the objectives to be achieved in the PPE course" (p. 9). The HIM PPE satisfaction model could assist in developing the PPE program description or plan at their institution in order to ensure that each element is addressed. CAHIIM could also utilize the HIM PPE satisfaction model to develop specific standards to ensure quality, satisfactory PPEs for all student enrolled in a CAHIIM accredited program.

Strengths and Weaknesses of the Study

The primary weakness of this study was the initial sampling method used to conduct this research, the snowball sampling method. While this method seemed to be the most logical, it hindered the collection of a larger sample. Had the researcher taken more time to effectively communicate with and reach out to individual program directors, there may have been a better response rate, as more program directors may have participated. COVID-19 was also in full effect as the researcher enlisted the help of program directors to disseminate the survey to their alumni and current students who had completed a PPE. These program directors were struggling to end a school year that had been completely turned upside down by a pandemic. Many of them were not even able to ensure that each of their current students received or completed a PPE due to healthcare organizations sending workers home and not allowing visitors. The combination of snowball sampling and the COVID-19 pandemic created nonresponse bias for this study.

This research study did a great job in identifying the extent to which the PPE experience factors correlated to student PPE satisfaction, but as a weakness, it did not explain *how* the experience factor correlated to student PPE satisfaction. For example, there was a significant

positive correlation between PPE satisfaction and students who had their PPE site placement arranged by the college compared to those who were required to self-search and set up their own PPE site. This was a positive finding; however, it does not help to explain *how* colleges set up PPEs or how students found a PPE site if they had to set up their own PPE. Were they given a list of sites in which affiliation agreements were already in place? Did they have to cold call healthcare organizations to see if they would take a PPE student?

The strengths of this research study included the use of a web-based survey questionnaire as the form of data collection. This was an inexpensive method that allowed the researcher to easily distribute to HIM program directors and share on social media. Privacy and anonymity could also be ensured through the Qualtrics system due to its ability to not collect IP addresses or any other identifying information.

A major strength of this study was that the survey questionnaire that was developed was deemed highly reliable, meaning that it measured what it was intended to measure. There was not a standardized, validated survey available to the researcher. Due to the discovery of previous research on internship satisfaction and effectiveness, the researcher was able to identify the key experience factors that impacted student internship satisfaction. Narayanan et al.'s (2010) research study found that none of the antecedent constructs had a direct correlation to student satisfaction; however, they did help predict the process constructs. In this research study, there were several experience factors that fit into the antecedent column of the internship effectiveness model, and they all had a direct positive correlation to student PPE satisfaction.

Recommendations for Future Research

The HIM PPE satisfaction model can serve as a road map for program directors and PPE coordinators in building a PPE program that will ensure quality, satisfactory PPEs. However, this

model has not been tested or validated. A future research study could investigate student PPE satisfaction using the PPE satisfaction survey prior to the implementation of the HIM PPE satisfaction model and student PPE satisfaction after the implementation of the HIM PPE satisfaction model.

As one looks at the HIM PPE satisfaction model, one can see that the list of outcomes or post-PPE constructs is more limited than the pre-PPE/antecedent and PPE/processes constructs. This leads the researcher to wonder if there are other positive outcomes for each stakeholder group that have not been researched in other fields of study and especially in HIM or identified as possible outcomes. Also, post-PPE outcomes may seem more evident for HIM students, but what other positive post-PPE outcomes come from student PPEs for the PPE site and for the institution of higher education?

Research findings from one of the few HIM research studies on HIM educational and practice experiences by Bates et al. (2014) showed a disconnect between student, HIM professionals, and faculty perceptions in regards to educational experience and career preparation. Perception is something that was discussed in many of the internship satisfaction studies the researcher reviewed. An individual's perception can have an impact on internship satisfaction, and in many of the studies reviewed by the researcher, the primary stakeholder considered in the study was the student. Future research could include gathering data on what faculty and PPE preceptors perceive as a quality, satisfactory PPE. What experience elements do they think impact student PPE satisfaction and what factors make for a satisfactory PPE from their point of view? Further research on the topic of PPE satisfaction for each stakeholder group (students, institutions of higher education, and PPE sites) could provide further insight into how each stakeholder can contribute to a satisfactory PPE.

The primary demographic variable that had a correlation to student PPE satisfaction was the degree program in which the survey participant was enrolled. It was found that students enrolled in a baccalaureate degree program were significantly more satisfied with their PPE compared to students enrolled in an associate degree program. If associate degree program students are less satisfied, it would be interesting to investigate why that is. This could be done by doing a comparison of associate degree PPE programs and baccalaureate degree PPE programs. A researcher could analyze and compare

- PPE course syllabi or course outlines,
- the components of their PPE programs, and
- how the program is meeting the CAHIIM accreditation requirement – "The program must describe how the PPE (e.g., clinical practicum, directed practice experience) is designed, supervised and evaluated, and name the objectives to be achieved in each PPE course" (CAHIIM, 2018a, 2018b, p. 9).

Another research opportunity is to study whether HIM undergraduate programs address the four learning modes of Kolb's ELT. As the researcher previously shared, applying Kolb's ELT to the PPE experience factors and the survey tool used in this study, the research study results showed a linkage or correlation between all but one experience factor and student PPE satisfaction. Since there is a correlation, it would be interesting to see if all undergraduate HIM PPE programs were in alignment with Kolb's ELT.

Narayanan et al.'s (2010) internship effectiveness model was based on two central ideas: "personnel and knowledge transfers involve multiple actors, and these transfers should be conceptualized as a process rather than as an event" (p. 64). It would be worth diving further into

the knowledge and personnel transfers to see how related the literature is to HIM PPEs to further develop the HIM PPE satisfaction model.

Narayanan et al.'s (2010) research study found that none of the antecedent constructs had a direct correlation to student satisfaction; however, they did help predict the process constructs. Researching whether pre-PPE antecedents can predict PPE process constructs, and then whether PPE process constructs can predict PPE outcome constructs could be another way to apply and evaluate the HIM PPE satisfaction model.

Recommendations for Future Practice

The findings of this study show that there is a positive correlation between academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, the relevance of the PPE project, learning during the PPE, and the PPE's connection to a student's career and student PPE satisfaction. The first recommendation would be for undergraduate HIM program directors to take each of these PPE experience elements and the related questions on the PPE satisfaction survey and consider how these elements are being addressed in their PPE programs. It is recommended that after review and identification of areas for improvement they identify ways in which the area can be improved.

The researcher has some specific recommendations based on the five PPE satisfaction scale items that were significant predictors of overall PPE satisfaction. The five scale items were (a) preceptor developed a schedule, (b) PPE provided me with marketable job experience, (c) preceptor was willing to answer my questions (negative correlation), (d) preceptor functioned as a true mentor, and (e) PPE gave better understanding of academic concepts.

- When a PPE preceptor develops a schedule, it provides the student with the sense that the preceptor was prepared for the student's PPE and their time onsite. Rothman

(2007) found that interns wanted more structure in their internships and that students got frustrated with a lack of work and poor planning of assigned tasks.

- The CAHIIM baccalaureate and associate degree program standards require the college or university to provide an externally supervised experience for their students prior to graduation. Along with this, there is the additional requirement for the PPE to "relate to higher level competencies and result in a learning experience for the student and/or a deliverable to a practice site" (CAHIIM, 2018a, 2018b, p. 9). In the field of HIM, this higher-level learning experience or deliverable comes to the student in the form of a project. A project and/or high-level learning experience should provide the student with marketable job experience. These projects should be relevant and meaningful, which allows the student to practically apply what they learned in the classroom to the real world.
- A PPE preceptor's willingness to answer student questions may seem like an obvious duty for the PPE preceptor. The researcher believes that this is included in the role of being a true mentor. When an individual agrees to become a PPE preceptor, they should consider their availability to guide, mentor, and teach the student about HIM practice. If they are unable to fully commit, then it is best for them to not host a student for their PPE.
- Ensuring PPE preceptors are fully engaged and function as a true mentor can be difficult to ensure. The experience of the researcher has proven that the PPE coordinator forming relationships with PPE preceptors is essential to a successful PPE program. Narayanan et al. (2010) suggested an entrenched relationship between the internship organization and the university with a high level of communication and

commitment. The internship organization needs to mentor interns as well as provide ongoing feedback throughout the internship (Narayanan et al., 2010). As shared previously, "the more involved the mentor the better the internship outcome" (Narayanan et al., 2010, p. 66). Zopiatis and Constanti (2012) support Narayanan et al. (2010) when they stated, "It is imperative that the host organization commits to the practice and be responsible for orienting, training, monitoring, and evaluating the intern for the duration of the internship experience" (p. 48). It is also the responsibility of all credentialed HIM professionals through the AHIMA (2019) code of ethics to "Recruit and mentor students, peers and colleagues to develop and strengthen professional workforce" (para. 7).

- The PPE should provide the student with an understanding of academic concepts. HIM program directors should ensure that their students are academically prepared for their PPEs by ensuring that the curriculum is in alignment with CAHIIM curriculum competencies (Bates et al., 2014). It is then through the commitment of the PPE preceptor, in preparing to host a student for their PPE, that they prepare for and plan for the time the student is onsite so that they are able to provide the student with experiences that allow the student to apply their academic knowledge to real HIM practice. PPE coordinators should provide PPE preceptors with orientation to the institutions PPE program, PPE learning goals and objectives, and the expectations for the PPE.

Undergraduate HIM program directors, PPE coordinators, PPE preceptors, and college or university career services staff can all directly benefit from reading this research study. Individuals who oversee internships in non-HIM college or university programs can also benefit

from reading this research study. While the results of this study cannot be generalized across many professions, they could inform the development of internship programs, internship preparation, and the outcomes of internships for future students. Researchers interested in studying internship satisfaction could also benefit from reading this study as it could inform their research and provide other considerations to make in setting up their research studies.

Conclusion

Across undergraduate HIM programs and within AHIMA there has not been a study that specifically looks at student PPE satisfaction. This study provided the opportunity to examine and better understand the factors that contribute to student PPE satisfaction. Undergraduate HIM program directors and PPE coordinators can take this opportunity to learn from the results of this research study and support each other in strengthening their PPE programs to ensure quality, satisfactory PPEs.

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Appendix B

Pilot Study Survey

PPE Satisfaction Survey - Pilot Study

Start of Block: Informed Consent

Q0 The College of St. Scholastica *School of Health Sciences Department of Health Informatics and Information Management* ***Determinants of student professional practice experience (PPE) satisfaction Informed Consent Form*** ***Purpose of the Study:*** *You are invited to participate in a research study that is being conducted by Katie Kerr, MA, RHIA, Assistant Professor and Academic Coordinator of Professional Practice Experiences at The College of St. Scholastica in Duluth, MN. The purpose of this study is to determine the degree to which factors of a high-quality PPE in undergraduate health information management programs influence HIM student PPE satisfaction. You were selected as a possible participant because you have completed a PPE while enrolled in the undergraduate HIM program or the post-baccalaureate certificate program in HIM. I ask that you read this form and ask any questions you may have before agreeing to be in the study, if at any time during the course of the study you have additional questions please contact me. Your participation in this study is voluntary. You may decline to participate or discontinue your participation at any point in the process.* ***What will be done:*** *You will complete an online survey, which will take 5 minutes to complete. The survey includes questions about academic preparedness, the PPE placement process, the PPE coordinator/mentor, the PPE preceptor/onsite mentor, PPE financial compensation, the relevance of the PPE project, learning during the PPE, and the PPE's impact on student career. We also will ask for some demographic information (e.g., gender, GPA, region in which your PPE took place, degree type, etc.) so that we can accurately describe the general traits of the group who participate in the study.* ***Benefits of this Study:*** *Although there are no immediate, direct benefits for study participants; you will be contributing to knowledge about PPE (internship) satisfaction in the field of health information management. The data could potentially assist the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) establish guidelines and structure around the PPE as part of their accreditation requirements. HIM program directors and PPE coordinators at colleges and universities can use the information to orient PPE preceptors in the what they can do to ensure a satisfactory PPE. Lastly, this information could assist any professional that is mentoring a student as an internship preceptor, but especially those mentoring HIM students. This information could demonstrate what these professionals can do as preceptors to ensure the student they are mentoring is satisfied with their PPE.* ***Risks or discomforts:*** *No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. If you decided to quit at any time before you have finished the questionnaire, your answers will NOT be recorded.* ***Confidentiality:*** ***Your responses will be kept completely confidential.*** *IP address will NOT be associated with survey responses when you respond to the Internet survey. Only the researchers will see your individual survey responses. This information may be reviewed by individuals at The College of St. Scholastica who have appropriate regulatory oversight functions. Results will be reported in aggregate form. The list of email addresses used to solicit the participants will be stored electronically in a password protected folder; a hard copy will be stored in a locked filing cabinet. After we have finished*

data collection, we will destroy the list of email addresses. ***Decision to quit at any time:*** *Your participation is voluntary; you are free to withdraw your participation from this study at any time. If you do not want to continue, you can simply leave the survey website. If you do not click on the "submit" button at the end of the survey, your answers and participation will not be recorded. You also may choose to skip any questions that you do not wish to answer. Your decision whether or not to participate in this study will not affect your current or future relationship with The College of St. Scholastica, the Department of Health Informatics or Information Management, or the researchers. If you decide to participate, you are free to withdraw at any time without affecting those relationships.* ***How the findings will be used:*** *The results of the study will be used for scholarly purposes only. The results from the study will be presented in educational settings and at professional conferences, and the results might be published in a professional journal in the field of health informatics and information management. All data collected will be reported in the aggregate.* ***Contact Information:*** *The principal investigator conducting this study is Katie Kerr, MA, RHIA, Assistant Professor and Academic Coordinator of PPEs in health informatics and information management You may ask any questions you have now or later by contacting Katie Kerr at (218)-625-2790 or by email at kkerr@css.edu. If you have any questions or concerns regarding the study and would like to talk to someone other than the researcher, you are encouraged to contact the following individuals: David Marc, Ph.D., Associate Professor, Department Chair, Health Informatics and Information Management, (218) 625-4892, dmarc@css.edu Bruce Loppnow, Ph.D., School Dean (218)-723-7033 or bloppnow@css.edu Steven Cope, ScD, OT/L, Professor, School of Health Sciences Institutional Review Member (218) 723-5915, scope@css.edu You may also contact any of the above-identified individuals in writing or in person at: The College of St. Scholastica 1200 Kenwood Ave Duluth, MN 55811 By beginning the survey, you acknowledge that you have read this information and agree to participate in this research, with the knowledge that you are free to withdraw your participation at any time without penalty.*

End of Block: Informed Consent

Start of Block: Experience Factors

Q1 My degree program's PPE orientation coursework/PPE preparatory coursework was valuable in preparing me to succeed in my PPE.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q2 My academic coursework in the major prepared me with the professional knowledge and skills to be successful on my PPE.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q3 My PPE site placement was handled completely by my PPE coordinator/university mentor. (PPE coordinator/university mentor contacted PPE site and set up PPE for me)

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q4 My PPE coordinator/university mentor was helpful in identifying an appropriate PPE site suited to academic development and my needs and interests.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q5 My PPE coordinator/university mentor developed clear PPE learning goals and objectives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q6 My PPE coordinator/university mentor developed learning activities to be done during my PPE that allowed me to meet the PPE learning goals and objectives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q7 My PPE coordinator/university mentor was concerned about my learning while at the PPE site.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q8 My PPE coordinator/university mentor followed up with me and my PPE preceptor to review my performance.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q9 My PPE Preceptor (onsite mentor) functioned as a true mentor by providing guidance, motivation, emotional support, and role modeling.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q10 My PPE Preceptor provided me with access and insight into a variety of important professional situations that contributed to my learning.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q11 My PPE Preceptor was well oriented on what was expected by the university or needed by the student.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q12 The PPE preceptor developed a schedule that allowed me to meet the learning goals and objectives established by my college or university.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q13 The PPE preceptor was willing to answer my questions about the work setting and my specific tasks.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q14 My PPE taught me things that I would never have been able to learn in the classroom.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q15 My PPE has allowed me to have a better understanding of academic concepts I learned in the classroom.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q16 My PPE improved my knowledge of the industry and possible career options.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q17 My PPE provided me with marketable, practical job experience.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q18 I was paid for the work I did at the PPE site.

- Yes (1)
- No (2)

Q19 The project(s) I completed while on my PPE was useful and meaningful for the organization and/or department.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q20 The general, day-to-day tasks I completed while on the PPE were meaningful for the organization and/or department.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

End of Block: Experience Factors

Start of Block: Overall PPE Satisfaction

Q21 I would rate my overall satisfaction with my PPE as:

- Extremely dissatisfied (1)
- Somewhat dissatisfied (2)
- Neither satisfied nor dissatisfied (3)
- Somewhat satisfied (4)
- Extremely satisfied (5)

End of Block: Overall PPE Satisfaction

Start of Block: Demographic Information

Q22 What is your gender?

- Male (1)
- Female (2)
- Other Identification (3)

Q23 My overall GPA is/was about:

- 3.5 - 4.0 (1)
- 2.5 - 3.4 (2)
- 1.5 - 2.4 (3)
- 0.5 - 1.4 (4)
- 0 - 0.4 (5)

Q24 Select the region of the United States in which the HIM degree program you are or were enrolled in is located:

- Northeast (CT, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT) (1)
- Southeast (AL, AR, FL, GA, KY, LA, MS, NC, PR, SC, TN, VA, WV) (2)
- Midwest (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI) (3)
- Southwest (AZ, NM, TX, OK) (4)
- West (AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY) (5)

Q25 What type of degree program were you enrolled in while conducting your PPE?

- Associate Degree (1)
- Bachelor's Degree (2)
- Post-Baccalaureate Certificate (3)
- Master's Degree (4)

Q26 While enrolled in your HIM degree program, how were courses delivered?

- Online (1)
- On campus/seated (2)
- Hybrid (combination of online and on campus/seated courses) (3)

Q27 What was the length of your PPE?

- 40 hours or less (1 week or less) (1)
- 41 to 79 hours (2)
- 80 to 119 hours (3)
- 120 to 159 hours (4)
- 160 to 199 hours (5)
- 200 to 249 hours (6)
- 250 to 300 hours (7)
- 300 or more hours (8)

Q28 Prior to beginning your PPE, how many months or years of HIM professional work experience did you have?

- No HIM work experience (1)
- Less than 6 months (2)
- 6 to 12 months (3)
- 1 to 3 years (4)
- 4 to 6 years (5)
- 7 to 9 years (6)
- 10 or more years (7)

End of Block: Demographic Information

Appendix C

Full-Scale Research Study Survey

PPE Satisfaction Survey

Start of Block: Default Question Block

Q0 Informed Consent Form Bethel University "Determinants of student professional practice experience (PPE) satisfaction" **Purpose of the study:** You are invited to participate in a research study that is being conducted by Katie Kerr, MA, RHIA, doctoral student in the Doctor of Education in Leadership in Higher Education program at Bethel University. The purpose of this study is to determine the degree to which factors of a high-quality professional practice experience (PPE) in undergraduate health information management (HIM) programs predict HIM student PPE satisfaction. You were selected as a possible participant because you have completed a PPE while enrolled in an undergraduate HIM program or the post-baccalaureate certificate program in HIM. **If you decide to participate**, you will complete an online survey about your most recent professional practice experience (PPE), which will take approximately 7 minutes to complete. No risks or discomforts are anticipated from taking part in this study. If you feel uncomfortable with a question, you can skip that question or withdraw from the study altogether. **Your responses will be kept completely confidential.** IP addresses will NOT be associated with survey responses when you respond to the Internet survey. Only the researchers will see your individual survey responses. This information may be reviewed by individuals at Bethel University who have appropriate regulatory oversight functions. Results will be reported in aggregate form. Only the HIM program director, the person you received this survey from, have your email address. Your email address will not be shared with the researcher for this study. The HIM program director will only see aggregate data from the study and the aggregate data for their HIM program. Names, email addresses, and IP addresses will not be captured through this survey. Your decision whether or not to participate will not affect your future relations with Bethel University in any way. If you decide to participate, you are free to discontinue participation at any time without affecting such relationships. This research project has been reviewed and approved in accordance with Bethel's Levels of Review for Research with Humans. If you have any questions about the research and/or research participants' rights or wish to report a research related injury, please contact: Katie Kerr at (218)-464-3569 or by email at kak22423@bethel.edu Craig Paulson, Ph.D., Professor, Bethel University, 651-635-8025, cpaulson@bethel.edu **By beginning the survey, you acknowledge that you have read this information and agree to participate in this research, with the knowledge that you are free to withdraw your participation at any time without penalty.**

End of Block: Default Question Block

Start of Block: Most Recent PPE

Q0 **Please address the following statements and questions using your <u>most recent</u> professional practice experience (PPE).**

End of Block: Most Recent PPE

Start of Block: Experience Factors

Q2 My degree program's PPE orientation coursework/PPE preparatory coursework was valuable in preparing me to succeed in my PPE.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q3 My PPE site placement was handled completely by my PPE coordinator/university mentor. (PPE coordinator/university mentor contacted PPE site and set up PPE for me)

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q4 My PPE coordinator/university mentor was helpful in identifying an appropriate PPE site suited to academic development and my needs and interests.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q5 My PPE coordinator/university mentor developed clear PPE learning goals and objectives.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q6 My PPE coordinator/university mentor developed learning activities to be done during my PPE that allowed me to meet the PPE learning goals and objectives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q7 My PPE coordinator/university mentor was concerned about my learning while at the PPE site.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q8 My PPE coordinator/university mentor followed up with me and my PPE preceptor to review my performance.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q9 My PPE Preceptor (onsite mentor) functioned as a true mentor by providing guidance, motivation, emotional support, and role modeling.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q10 My PPE Preceptor provided me with access and insight into a variety of important professional situations that contributed to my learning.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q11 My PPE Preceptor was well oriented on what was expected by the university or needed by the student.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q12 The PPE preceptor developed a schedule that allowed me to meet the learning goals and objectives established by my college or university.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q13 The PPE preceptor was willing to answer my questions about the work setting and my specific tasks.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q14 My PPE taught me things that I would never have been able to learn in the classroom.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q15 My PPE has allowed me to have a better understanding of academic concepts I learned in the classroom.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q16 My PPE improved my knowledge of the industry and possible career options.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q17 My PPE provided me with marketable, practical job experience.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q18 I was paid for the work I did at the PPE site.

- Yes (1)
- No (2)

Q19 The project(s) I completed while on my PPE was useful and meaningful for the organization and/or department.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

Q20 The general, day-to-day tasks I completed while on the PPE were meaningful for the organization and/or department.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

End of Block: Experience Factors

Start of Block: Overall PPE Satisfaction

Q21 I would rate my overall satisfaction with my PPE as:

- ○ Extremely dissatisfied (1)
- ○ Somewhat dissatisfied (2)
- ○ Neither satisfied nor dissatisfied (3)
- ○ Somewhat satisfied (4)
- ○ Extremely satisfied (5)

End of Block: Overall PPE Satisfaction

Start of Block: Demographic Information

Q22 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Other Identification (3)

Q23 In what school year did you complete your **most recent** PPE?

- ○ 2019/2020 (1)
- ○ 2018/2019 (2)
- ○ 2017/2018 (3)
- ○ 2016/2017 (4)
- ○ Other (5) _____

Q24 My overall GPA is/was the following while enrolled in my **most recent** health information management (HIM) degree program.

- ○ 3.0 - 4.0 (1)
- ○ 2.0 - 2.9 (2)
- ○ Below 2.0 (3)

Q25 What type of degree program were you enrolled in while conducting your **most recent** PPE?

- ○ Associate Degree (1)
- ○ Bachelor's Degree (2)
- ○ Post-Baccalaureate Certificate (3)
- ○ Master's Degree (4)

Q26 While enrolled in your **most recent** HIM degree program, how were courses delivered?

- ○ Online (1)
- ○ On campus/seated (2)
- ○ Hybrid (combination of online and campus/seated courses) (3)

Q27 What was the length of your **most recent** PPE?

- ○ 40 hours or less (1 week or less) (1)
- ○ 41 to 79 hours (2)
- ○ 80 to 119 hours (3)
- ○ 120 to 159 hours (4)
- ○ 160 to 199 hours (5)
- ○ 200 to 249 hours (6)
- ○ 250 to 300 hours (7)
- ○ 300 or more hours (8)

Q28 Prior to beginning your **most recent** PPE, how many months or years of HIM professional work experience did you have?

- ○ No HIM work experience (1)
- ○ Less than 6 months (2)
- ○ 6 to 12 months (3)
- ○ 1 to 3 years (4)
- ○ 4 to 6 years (5)
- ○ 7 to 9 years (6)
- ○ 10 or more years (7)

Q29 Please identify the name of the HIM degree program you are or were enrolled in when you completed your **most recent** PPE.

▼ Alabama State University (1) ... Other (not listed here) (327)

Display This Question:
If Please identify the name of the HIM degree program you are or were enrolled in when you completed... = Other (not listed here)

Q30 Please type the name of the HIM degree program you are or were enrolled in when you completed your **most recent** PPE.

_____

End of Block: Demographic Information

Appendix D

College IRB Approval for Pilot Study

The College of St. Scholastica

Institutional Review Board

DATE:	March 16, 2020
TO:	Katie Kerr
FROM:	The College of St. Scholastica, Institutional Review Board
STUDY TITLE:	Determinants of student professional practice experience (PPE) satisfaction
IRB PROTOCOL #:	1573121-1
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
REVIEW TYPE:	Exempt Review

Thank you for your submission of materials for this research project. The College of St. Scholastica IRB has reviewed your application and determined that the proposed activity meets the federal guidelines as exempt from full-board review under 45 CFR 46.104(2).

Ongoing review and approval for this activity is not required. However, if you make modifications to the design or procedures of this study that may change its exempt status, it is necessary to inform the IRB by completing the Protocol Amendment Form and submitting it to IRBNet.

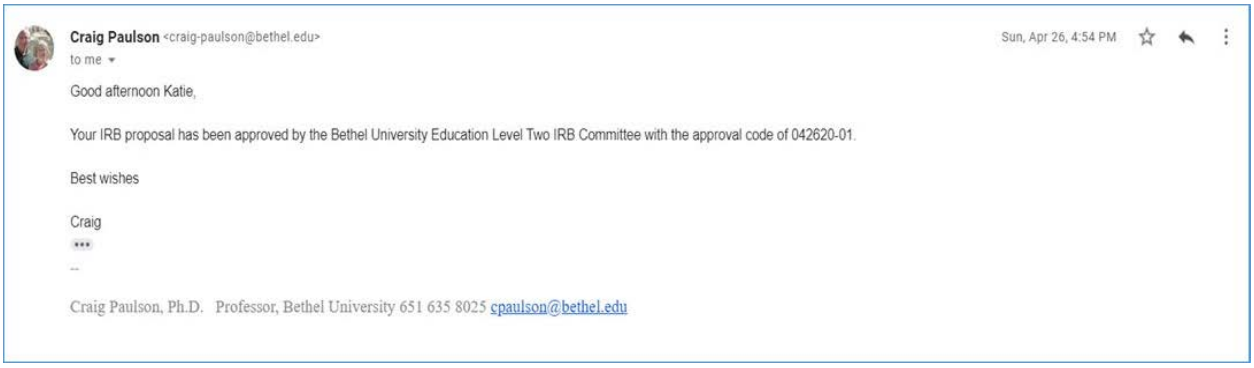
If you have any questions, please contact Steven Cope at 218-723-5915 or irb@css.edu. Please include your study title and reference number in all correspondence with this office.

Best regards,

Steven Cope, ScD
Chairperson, Institutional Review Board
The College of St. Scholastica
1200 Kenwood Avenue
Duluth, MN 55811

Appendix E

University Approval of Initial IRB Proposal for Full-Scale Research Study Survey



Craig Paulson <craig-paulson@bethel.edu> Sun, Apr 26, 4:54 PM

to me

Good afternoon Katie,

Your IRB proposal has been approved by the Bethel University Education Level Two IRB Committee with the approval code of 042620-01.

Best wishes

Craig

•••

--

Craig Paulson, Ph.D. Professor, Bethel University 651 635 8025 cpaulson@bethel.edu

Appendix F

Email Request to HIM Program Directors to Participate in Distributing Survey

Subject: PPE Satisfaction Survey to Students and Alumni Who Have Completed A PPE

Message: I am writing to you to request your assistance in distributing a PPE satisfaction survey for my Ed.D. program dissertation research study. I am enrolled in the Ed.D. in Leadership in Higher Education program at Bethel University in St. Paul, MN and I'm an Assistant Professor at The College of St. Scholastica in the Department of Health Informatics and Information Management. My research study is entitled, "Determinants of Student Professional Practice Experience (PPE) Satisfaction." I am asking that you distribute the following message and survey link to the alumni of your HIM program who graduated during the 2016/2017/, 2017/2018, and 2018/2019 school years and to those who completed a PPE during the 2019/2020 school year.

As an incentive for distributing this survey to your program's alumni and the 2019/2020 students that completed a PPE**,** I will provide you with the information listed below. It is my hope that this information will assist you in your CAHIIM accreditation efforts and PPE satisfaction data collection. By distributing the survey, I will provide you with the following:

- Aggregate data on the responses from your 2019/2020 students who responded to the survey
- Aggregate data on the responses from alumni graduating from your program during the 2016/2017, 2017/2018, and 2018/2019 school years
- Aggregate data from the research study for you to compare your responses to
- Use of the validated PPE satisfaction survey tool used in this study for your HIM program

Your institution will never be identified in any reports and your institution's individual data will only be provided to you. The overall aggregate report will only show the region of the United States that the programs are located and I, as the researcher, will never identify your individual school or program in any data or information I share.

When distributing the survey to your alumni and 2019/2020 students, you can simply copy and paste the message I've drafted below into your email.

I have attached the Bethel University IRB approval for this research study and a PDF copy of the survey tool. Should you have any questions or concerns, please do not hesitate to reach out to me at kak22423@bethel.edu or 218-464-3569.

Thank you very much for your assistance with this research study!!

Sincerely,

Katie Kerr, MA, RHIA
Doctoral Student
Leadership in Higher Education
Bethel University

Copy and paste the message below this line for alumni of your program and 2019/2020 students who completed a PPE

SUBJECT: PPE Satisfaction Study

MESSAGE:

Good morning/afternoon,

I am writing to you to request your participation in a brief PPE satisfaction survey. This survey was developed by Katie Kerr, MA, RHIA, who is currently enrolled in the Doctor of Education in Leadership in Higher Education program at Bethel University in St. Paul, MN. She is also an Assistant Professor at The College of St. Scholastica in Duluth, MN in the Department of Health Informatics and Information Management. She is currently conducting research for her dissertation. The research study is entitled, "Determinants of Student Professional Practice Experience (PPE) Satisfaction." Your responses to this survey will help her to determine if the following factors predict student PPE satisfaction.

- Academic preparedness
- The PPE placement process
- The PPE coordinator/mentor
- The PPE preceptor/onsite mentor
- PPE financial compensation
- The relevance of the PPE project
- Learning during the PPE
- The PPE's impact on student career

The data collected from you can assist the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) to establish guidelines and structure around the PPE as part of their accreditation requirements. The data will also assist HIM program directors and PPE coordinators at colleges and universities to orient PPE preceptors in what they can do to ensure a satisfactory PPE. It could assist professionals serving as internship preceptors to ensure the student(s) they are mentoring are satisfied with their PPE or internship. Lastly, as an HIM program director, I can use this same validated PPE satisfaction survey tool in our program(s) to collect PPE satisfaction data from future students.

The survey is very brief and will take approximately 7 minutes to complete. Please click the link below to go to the internet survey (or copy and paste the link into your internet browser).

Survey Link: https://bethel.qualtrics.com/jfe/form/SV_73xvTpanJFr1MbP

Your responses will be kept completely confidential. IP addresses and email addresses will NOT be associated with survey responses when you respond to the internet survey. Only the researchers will see individual survey responses. This information may be reviewed by

individuals at Bethel University who have appropriate regulatory oversight functions. Results will be reported in aggregate form. I am the only person who has access to your email address(es) and will not share them with the researcher (Katie Kerr) or anyone else involved in this research study.

The Bethel University internal review board (IRB) has approved this survey. Should you have any comments or questions, please feel free to contact the researcher, Katie Kerr, at kak22423@bethel.edu or 218-625-2790.

Thank you very much for your time and assistance in providing this valuable feedback on your PPE satisfaction.

Sincerely,

Program Director Name

Appendix G

University Approval of Revised IRB Proposal for Full-Scale Research Study Survey

Craig Paulson <craig-paulson@bethel.edu> Thu, May 21, 7:08 PM

to me

Hi Katie,

Your revised IRB proposal has been approved.

Best wishes

Craig

•••

--

Craig Paulson, Ph.D. Professor, Bethel University 651 635 8025 cpaulson@bethel.edu

Appendix H

Frequency Distributions for All Survey Items

Frequency Distributions for All Survey Items

Frequency Tables

My degree program's PPE orientation coursework/PPE preparatory coursework was valuable in preparing me to succeed in my PPE.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	5.4	5.4	5.4
	Somewhat disagree	8	4.3	4.3	9.7
	Neither agree nor disagree	10	5.4	5.4	15.1
	Somewhat agree	62	33.3	33.3	48.4
	Strongly agree	96	51.6	51.6	100.0
	Total	186	100.0	100.0	

My PPE site placement was handled completely by my PPE coordinator/university mentor. (PPE coordinator/university mentor contacted PPE site and set up PPE for me)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	21	11.3	11.3	11.3
	Somewhat disagree	11	5.9	5.9	17.2
	Neither agree nor disagree	9	4.8	4.8	22.0
	Somewhat agree	25	13.4	13.4	35.5
	Strongly agree	120	64.5	64.5	100.0
	Total	186	100.0	100.0	

My PPE coordinator/university mentor was helpful in identifying an appropriate PPE site suited to academic development and my needs and interests.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	19	10.2	10.3	10.3
	Somewhat disagree	15	8.1	8.1	18.4
	Neither agree nor disagree	10	5.4	5.4	23.8
	Somewhat agree	35	18.8	18.9	42.7
	Strongly agree	106	57.0	57.3	100.0
	Total	185	99.5	100.0	
Missing	System	1	.5		
Total		186	100.0		

My PPE coordinator/university mentor developed clear PPE learning goals and objectives.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	6.5	6.5	6.5
	Somewhat disagree	12	6.5	6.5	12.9
	Neither agree nor disagree	7	3.8	3.8	16.7
	Somewhat agree	51	27.4	27.4	44.1
	Strongly agree	104	55.9	55.9	100.0
	Total	186	100.0	100.0	

My PPE coordinator/university mentor developed learning activities to be done during my PPE that allowed me to meet the PPE learning goals and objectives.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	10	5.4	5.4	5.4
	Somewhat disagree	22	11.8	11.9	17.3
	Neither agree nor disagree	11	5.9	5.9	23.2
	Somewhat agree	45	24.2	24.3	47.6
	Strongly agree	97	52.2	52.4	100.0
	Total	185	99.5	100.0	
Missing	System	1	.5		
Total		186	100.0		

My PPE coordinator/university mentor was concerned about my learning while at the PPE site.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	17	9.1	9.1	9.1
	Somewhat disagree	10	5.4	5.4	14.5
	Neither agree nor disagree	19	10.2	10.2	24.7
	Somewhat agree	35	18.8	18.8	43.5
	Strongly agree	105	56.5	56.5	100.0
	Total	186	100.0	100.0	

My PPE coordinator/university mentor followed up with me and my PPE preceptor to review my performance.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	9	4.8	4.9	4.9
	Somewhat disagree	17	9.1	9.2	14.1
	Neither agree nor disagree	18	9.7	9.8	23.9
	Somewhat agree	35	18.8	19.0	42.9
	Strongly agree	105	56.5	57.1	100.0
	Total	184	98.9	100.0	
Missing	System	2	1.1		
Total		186	100.0		

My PPE Preceptor (onsite mentor) functioned as a true mentor by providing guidance, motivation, emotional support, and role modeling.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	22	11.8	11.9	11.9
	Somewhat disagree	10	5.4	5.4	17.3
	Neither agree nor disagree	20	10.8	10.8	28.1
	Somewhat agree	32	17.2	17.3	45.4
	Strongly agree	101	54.3	54.6	100.0
	Total	185	99.5	100.0	
Missing	System	1	.5		
Total		186	100.0		

My PPE Preceptor provided me with access and insight into a variety of important professional situations that contributed to my learning.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	14	7.5	7.5	7.5
	Somewhat disagree	13	7.0	7.0	14.5
	Neither agree nor disagree	20	10.8	10.8	25.3
	Somewhat agree	42	22.6	22.6	47.8
	Strongly agree	97	52.2	52.2	100.0
	Total	186	100.0	100.0	

My PPE Preceptor was well oriented on what was expected by the university or needed by the student.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	18	9.7	9.7	9.7
	Somewhat disagree	12	6.5	6.5	16.1
	Neither agree nor disagree	20	10.8	10.8	26.9
	Somewhat agree	36	19.4	19.4	46.2
	Strongly agree	100	53.8	53.8	100.0
	Total	186	100.0	100.0	

The PPE preceptor developed a schedule that allowed me to meet the learning goals and objectives established by my college or university.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	16	8.6	8.6	8.6
	Somewhat disagree	11	5.9	5.9	14.5
	Neither agree nor disagree	18	9.7	9.7	24.2
	Somewhat agree	47	25.3	25.3	49.5
	Strongly agree	94	50.5	50.5	100.0
	Total	186	100.0	100.0	

The PPE preceptor was willing to answer my questions about the work setting and my specific tasks.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	12	6.5	6.5	6.5
	Somewhat disagree	6	3.2	3.2	9.7
	Neither agree nor disagree	13	7.0	7.0	16.7
	Somewhat agree	32	17.2	17.2	33.9
	Strongly agree	123	66.1	66.1	100.0
	Total	186	100.0	100.0	

My PPE taught me things that I would never have been able to learn in the classroom.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	19	10.2	10.2	10.2
	Somewhat disagree	10	5.4	5.4	15.6
	Neither agree nor disagree	12	6.5	6.5	22.0
	Somewhat agree	38	20.4	20.4	42.5
	Strongly agree	107	57.5	57.5	100.0
	Total	186	100.0	100.0	

My PPE has allowed me to have a better understanding of academic concepts I learned in the classroom.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	15	8.1	8.1	8.1
	Somewhat disagree	10	5.4	5.4	13.4
	Neither agree nor disagree	15	8.1	8.1	21.5
	Somewhat agree	48	25.8	25.8	47.3
	Strongly agree	98	52.7	52.7	100.0
	Total	186	100.0	100.0	

My PPE improved my knowledge of the industry and possible career options.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	16	8.6	8.6	8.6
	Somewhat disagree	4	2.2	2.2	10.8
	Neither agree nor disagree	11	5.9	5.9	16.7
	Somewhat agree	42	22.6	22.6	39.2
	Strongly agree	113	60.8	60.8	100.0
	Total	186	100.0	100.0	

My PPE provided me with marketable, practical job experience.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	16	8.6	8.6	8.6
	Somewhat disagree	16	8.6	8.6	17.2
	Neither agree nor disagree	19	10.2	10.2	27.4
	Somewhat agree	47	25.3	25.3	52.7
	Strongly agree	88	47.3	47.3	100.0
	Total	186	100.0	100.0	

I was paid for the work I did at the PPE site.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	2.7	2.7	2.7
	No	180	96.8	97.3	100.0
	Total	185	99.5	100.0	
Missing	System	1	.5		
Total		186	100.0		

The project(s) I completed while on my PPE was useful and meaningful for the organization and/or department.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	18	9.7	9.7	9.7
	Somewhat disagree	14	7.5	7.5	17.2
	Neither agree nor disagree	26	14.0	14.0	31.2
	Somewhat agree	41	22.0	22.0	53.2
	Strongly agree	87	46.8	46.8	100.0
	Total	186	100.0	100.0	

The general, day-to-day tasks I completed while on the PPE were meaningful for the organization and/or department.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	13	7.0	7.0	7.0
	Somewhat disagree	17	9.1	9.1	16.1
	Neither agree nor disagree	26	14.0	14.0	30.1
	Somewhat agree	45	24.2	24.2	54.3
	Strongly agree	85	45.7	45.7	100.0
	Total	186	100.0	100.0	

I would rate my overall satisfaction with my PPE as:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely dissatisfied	11	5.9	6.0	6.0
	Somewhat dissatisfied	19	10.2	10.4	16.4
	Neither satisfied nor dissatisfied	8	4.3	4.4	20.8
	Somewhat satisfied	54	29.0	29.5	50.3
	Extremely satisfied	91	48.9	49.7	100.0
	Total	183	98.4	100.0	
Missing	System	3	1.6		
Total		186	100.0		

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	21	11.3	11.5	11.5
	Female	160	86.0	87.9	99.5
	Other Identification	1	.5	.5	100.0
	Total	182	97.8	100.0	
Missing	System	4	2.2		
Total		186	100.0		

In what school year did you complete your most recent PPE? - Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2019/2020	70	37.6	38.5	38.5
	2018/2019	44	23.7	24.2	62.6
	2017/2018	25	13.4	13.7	76.4
	2016/2017	38	20.4	20.9	97.3
	Other	5	2.7	2.7	100.0
	Total	182	97.8	100.0	
Missing	System	4	2.2		
Total		186	100.0		

My overall GPA is/was the following while enrolled in my most recent health information management (HIM) degree program.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0 - 4.0	162	87.1	89.0	89.0
	2.0 - 2.9	20	10.8	11.0	100.0
	Total	182	97.8	100.0	
Missing	System	4	2.2		
Total		186	100.0		

What type of degree program were you enrolled in while conducting your most recent PPE?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Associate Degree	100	53.8	55.2	55.2
	Baccalaureate Degree	76	40.9	42.0	97.2
	Post-Baccalaureate Certificate	2	1.1	1.1	98.3
	Master's Degree	3	1.6	1.7	100.0
	Total	181	97.3	100.0	
Missing	System	5	2.7		
Total		186	100.0		

While enrolled in your most recent HIM degree program, how were courses delivered?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Online	74	39.8	40.9	40.9
	On campus/seated	44	23.7	24.3	65.2
	Hybrid (combination of online and campus/ seated courses)	63	33.9	34.8	100.0
	Total	181	97.3	100.0	
Missing	System	5	2.7		
Total		186	100.0		

What was the length of your most recent PPE?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	40 hours or less (1 week or less)	31	16.7	17.3	17.3
	41 to 79 hours	45	24.2	25.1	42.5
	80 to 119 hours	44	23.7	24.6	67.0
	120 to 159 hours	24	12.9	13.4	80.4
	160 to 199 hours	12	6.5	6.7	87.2
	200 to 249 hours	9	4.8	5.0	92.2
	250 to 300 hours	5	2.7	2.8	95.0
	300 or more hours	9	4.8	5.0	100.0
	Total	179	96.2	100.0	
Missing	System	7	3.8		
Total		186	100.0		

Prior to beginning your most recent PPE, how many months or years of HIM professional work experience did you have?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No HIM work experience	99	53.2	54.4	54.4
	Less than 6 months	22	11.8	12.1	66.5
	6 to 12 months	12	6.5	6.6	73.1
	1 to 3 years	18	9.7	9.9	83.0
	4 to 6 years	9	4.8	4.9	87.9
	7 to 9 years	6	3.2	3.3	91.2
	10 or more years	16	8.6	8.8	100.0
	Total	182	97.8	100.0	
Missing	System	4	2.2		
Total		186	100.0		

Please identify the name of the HIM degree program you are or were enrolled in when you completed your most recent PPE.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Anne Arundel Community College	1	.5	.6	.6
	Anoka Technical College	4	2.2	2.4	3.0
	Borough of Manhattan Community College	14	7.5	8.5	11.6
	Charter Oak State College	1	.5	.6	12.2
	Clarkson College	1	.5	.6	12.8
	Community College of Allegheny County	1	.5	.6	13.4
	Delgado Community College	5	2.7	3.0	16.5
	East Central College	1	.5	.6	17.1
	Eastern Kentucky University	1	.5	.6	17.7
	Ferris State University	1	.5	.6	18.3
	Hutchinson Community College	1	.5	.6	18.9
	Indiana University	1	.5	.6	19.5
	Kirkwood Community College	2	1.1	1.2	20.7
	Lord Fairfax Community College	1	.5	.6	21.3
	McHenry County College	2	1.1	1.2	22.6
	Minnesota State Community and Technical College	3	1.6	1.8	24.4
	Missouri Western State University	5	2.7	3.0	27.4
	Onondaga Community College	3	1.6	1.8	29.3
	Palm Beach State College	5	2.7	3.0	32.3
	Pennsylvania College of Technology	3	1.6	1.8	34.1
	Pennsylvania College of Technology	4	2.2	2.4	36.6
	Resurrection University	5	2.7	3.0	39.6
	Roane State Community College	5	2.7	3.0	42.7

		Frequency	Percent	Valid Percent	Cumulative Percent
	Rowan College at Burlington County	2	1.1	1.2	43.9
	Saint Louis University	6	3.2	3.7	47.6
	Santa Barbara City College	5	2.7	3.0	50.6
	Schooolcraft College	3	1.6	1.8	52.4
	Shasta College	9	4.8	5.5	57.9
	Shoreline Community College - Online	3	1.6	1.8	59.8
	Sinclair Community College	10	5.4	6.1	65.9
	Southern University at New Orleans	3	1.6	1.8	67.7
	Spokane Community College	1	.5	.6	68.3
	Stark State College	3	1.6	1.8	70.1
	State Fair Community College	1	.5	.6	70.7
	Stephens College	1	.5	.6	71.3
	Texas State Technical College at Harlingen	1	.5	.6	72.0
	Texas State University-San Marcos	7	3.8	4.3	76.2
	The College of St. Scholastica	15	8.1	9.1	85.4
	Trident Technical College	1	.5	.6	86.0
	University of Pittsburgh	11	5.9	6.7	92.7
	University of Puerto Rico	1	.5	.6	93.3
	Volunteer State Community College	2	1.1	1.2	94.5
	Western Governors University	1	.5	.6	95.1
	Other (not listed here)	8	4.3	4.9	100.0
	Total	164	88.2	100.0	
Missing	System	22	11.8		
Total		186	100.0		

Appendix I

Final Student PPE Satisfaction Survey

PPE Satisfaction Survey - Final

Q1 My degree program's PPE orientation coursework/PPE preparatory coursework was valuable in preparing me to succeed in my PPE.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q2 My PPE site placement was handled completely by my PPE coordinator/university mentor. (PPE coordinator/university mentor contacted PPE site and set up PPE for me)

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q3 My PPE coordinator/university mentor was helpful in identifying an appropriate PPE site suited to academic development and my needs and interests.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q4 My PPE coordinator/university mentor developed clear PPE learning goals and objectives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q5 My PPE coordinator/university mentor developed learning activities to be done during my PPE that allowed me to meet the PPE learning goals and objectives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q6 My PPE coordinator/university mentor was concerned about my learning while at the PPE site.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q7 My PPE coordinator/university mentor followed up with me and my PPE preceptor to review my performance.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q8 My PPE Preceptor (onsite mentor) functioned as a true mentor by providing guidance, motivation, emotional support, and role modeling.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q9 My PPE Preceptor provided me with access and insight into a variety of important professional situations that contributed to my learning.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q10 My PPE Preceptor was well oriented on what was expected by the university or needed by the student.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q11 The PPE preceptor developed a schedule that allowed me to meet the learning goals and objectives established by my college or university.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q12 The PPE preceptor was willing to answer my questions about the work setting and my specific tasks.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q13 My PPE taught me things that I would never have been able to learn in the classroom.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q14 My PPE has allowed me to have a better understanding of academic concepts I learned in the classroom.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q15 My PPE improved my knowledge of the industry and possible career options.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q16 My PPE provided me with marketable, practical job experience.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q17 The project(s) I completed while on my PPE was useful and meaningful for the organization and/or department.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q18 The general, day-to-day tasks I completed while on the PPE were meaningful for the organization and/or department.

- ○ Strongly disagree (1)
- ○ Somewhat disagree (2)
- ○ Neither agree nor disagree (3)
- ○ Somewhat agree (4)
- ○ Strongly agree (5)

End of Block: Experience Factors

Start of Block: Overall PPE Satisfaction

Q19 I would rate my overall satisfaction with my PPE as:

- ○ Extremely dissatisfied (1)
- ○ Somewhat dissatisfied (2)
- ○ Neither satisfied nor dissatisfied (3)
- ○ Somewhat satisfied (4)
- ○ Extremely satisfied (5)

End of Block: Overall PPE Satisfaction