A Qualitative Comparison Case Study Evaluation of the Emotional Intelligence of College Health Care Business Students

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Concordia University–Portland
College of Education
Doctorate of Education Program

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A Qualitative Comparison Case Study Evaluation of the Emotional Intelligence of College Health Care Business Students

Cheryl Sue Nutter
Concordia University–Portland
College of Education

Dissertation submitted to the Faculty of the College of Education in partial fulfillment of the requirements for the degree of Doctor of Education in Transformational Leadership

Belle B. Booker-Zorigian, Ph.D., Faculty Chair Dissertation Committee
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2018
Abstract

Health care is undergoing significant transition in practice models, payment structures, and assessment strategies requiring health care leaders to adapt to support transition and lead change (Larkin, 2015; Miles, 2017). There is speculation that current health leaders lack the necessary awareness to connect the patient’s needs with critical business decisions (Quy, 2017). If this ability is lacking in current employees, academic institutions should evaluate college students to determine if there is a gap in knowledge that can be identified. Using emotional intelligence (EI) as the conceptual framework, this study aims to evaluate EI in college health care management (HCM) business students to answer the research questions: What are the emotional intelligence characteristics of college health care management business students?; How do college health care management business students use emotional intelligence when evaluating patient scenarios?; and How does a practicum experience influence emotional intelligence in college health care management business students? Through a qualitative comparative case study, 14 HCM students participated after purposeful sampling selected qualified individuals who aligned with the case under investigation at a private, midwest, liberal arts college. Semistructured interviews and focus group questions gathered data that was then evaluated through in vivo, value, and pattern coding. It was determined that a practicum experience enhanced emotional intelligence characteristics in the study population. Through these finding it is recommended that academic HCM business programs incorporate practical learning to stimulate the connection of patient care into enhanced business decisions.

Keywords: qualitative research, case study, emotional intelligence, health care, college students, business, education
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Chapter 1: Introduction

Introduction to the Problem

In 2016, the United States health care sector was reported as a 1.7 trillion dollar industry employing over 16 million people (Health, 2016). Health expenditures account for 17.8% of the entire United States gross domestic product (GDP) and this number continues to increase each year. The Bureau of Labor Statistics suspects another 2.3 million new health care jobs will be created in 2017 in order to meet the 19% industry growth expected by 2024 (Employment Projections, 2015). These projections look appealing for college graduates seeking a professional career path, but the uncertainty of the chaotic health care industry also causes hesitation. The number of doctors entering medical schools has already dropped due to fear of tighter restrictions, increased litigation, and reduced lifetime earning potential; all which make the years of medical school less appealing (Mann, 2017). Other health care professionals, often following a passion for service, are also highly trained with skills and technical expertise requiring credentials and years of college and clinical preparation (Santiago, 2017). With so many qualified employees working in health care, it is surprising that a solution to health reform continues to baffle industry leaders.

The turmoil within the health industry has reached crisis proportion (Cherry, 2017; Himmelstein, Woolhandler, Almberg, & Fauke, 2017). Many industries undergo change, but health care has been hit especially hard with technological advances, government regulations, and restructured payment systems that require reimagining the delivery of care services across the United States (Miles, 2017; Schulman & Richman, 2016). Doctors are no longer the drivers of the care continuum as the patient moves to the center of the delivery hub (Warren, 2013). This focus, called patient-centered care, began with the Affordable Care Act (ACA) and continues to
reduce the amount of reimbursement given to hospitals while increasing demands for higher efficiency and better outcomes (Abrams, Nuzum, Zezza, Ryan, Kizzla, & Guterman, 2015; Warren, 2013). This comes on the heels of a significant shift from fee-for-service payment to value-based care; placing a tight squeeze on the health service industry’s model of care (Abrams et al., 2015; Himmelstein et al., 2017). Such massive transformation in care delivery requires innovative solutions and creative minds to adjust, adapt, and reimagine a new functioning health network that elevates the human connection (Arunima & Ajeya, 2014; Dua, 2016; Steckler, Rawlins, Williamson, & Suchman, 2016). The heightened importance of these outcomes raises the bar and sets the expectation for success, as failure in such a critical industry could devastate a nation.

Challenging times require leaders to establish new concepts and strategies to create an enhanced perspective. The persistence of health care transformation and continued limitations suggests leaders are not prepared with the proper skills to solve the current crisis (Himmelstein et al., 2017; Steckler et al., 2016). Innovative solutions require divergent thinking in order to create new opportunities and ways of doing business (Larkin, 2015). Academic institutions are adept at meeting accreditation mandates that dictate specific didactic skills and knowledge objectives; however, this may not be enough to establish the creative, emotionally connected mindset future employees need to solve complex issues (Faguy, 2012; Steckler et al., 2016). Critical thinking is a common course objective in many health care programs, but the awareness of how to translate skills outside of the academic curricular context may be lacking for health care college graduates across the nation (Dua, 2016; Kahn, 2013; Kaur, 2012; Quy, 2017; Warren, 2013).
Conceptual Framework

Emotional intelligence (EI) is not a new topic to discussions about academic and workplace success. The phrase was initially coined by Salovey and Mayer (1990) and describes a person’s ability to understand and manage their emotions, with the goal of enhancing relationships and other personal interactions. A few years later, a meta-analysis conducted by O’Boyle Jr., Humphrey, Pollack, Hawver, and Story (2010) documented the value of emotional intelligence through its ability to enhance success factors associated with academic achievement and job performance, specifically evaluating skills such as negotiation, leadership, trust, conflict management, and situational awareness. Additional research by Walsh-Portillo (2011) examined emotional intelligence as it related to the general success of students enrolled in community colleges. Even though weak correlation between overall grades and EI competency scores was found, Walsh-Portillo discovered that EI could be enhanced through course design, by integrating concepts such as self-regard, empathy, social responsibility, and effective communication throughout the course readings, homework assignments, and class discussions.

Building upon the outcomes of these earlier studies, Dua (2016) and Hutchinson, Hurley, Kozlowski, and Whitehair (2017) researched emotional intelligence and decision-making noting improved reasoning due to higher levels of emotional awareness. The Institute for Health and Human Potential even offers leadership and emotional intelligence curriculum targeted toward athletes and employees of Fortune 500 companies who seek ways to thrive under pressure (Performing, 2017). Such widespread impact demonstrates the potential value emotional intelligence offers and makes the topic significant to health care professionals entering a transforming environment (Cherry, 2017; Warren, 2013).
Previously identified success noted by leaders investigating emotional intelligence offers hope that business-minded health care management students can emerge from college better equipped to support health care change (Warren, 2013; Weiszbrod, 2015). However, little research has focused on the education of health care business students while they are still in college. Therefore, and in an effort to contribute to this body of literature, the focus of this study is to evaluate the emotional intelligence of a limited demographic, traditional-age, health care business student population. Findings identified through the evaluation of health care management (HCM) students prior to them entering the employment sector, may provide information that suggests a more targeted and enhanced curricular design that includes emotional intelligence training.

Statement of the Problem

Emotional intelligence is of particular interest as this study arises from the concern that health care business students are not prepared to manage in the evolving health industry as it morphs into a patient-centered model of care (Abrams et al., 2015; Warren, 2013). Business leaders traditionally make decisions that involve strategic plans, organizational goals, and initiating protocols that increase market share, support efficiency, and bolster profits. With the new focus toward providing better coordinated services and patient outcomes, health leaders must redirect resources toward new targets (Mikolajczak & Bellegem, 2017; Steckler et al., 2016; Targeting, 2015). This may be easier said than done if there is a disjoint in understanding how to achieve enhanced care from the perspective of the patient and those on the front line of care delivery. There is speculation that this reduced awareness may limit effective decision-making, which has delayed health care reform in our current American system (Hutchison et al., 2017; Performing, 2017).
Health care is a unique industry as delivering care is very different than selling a product or other type of service. The personal connection cannot be removed. The evolution of patient-centered care and other health reform guidelines mandates change that the industry struggles to implement (Himmelstein et al., 2017; Warren, 2013). It is important that the health industry finds a bridge between health care business practice and policy, and the best way to deliver and support a quality care delivery network (Schulman & Richman, 2016). It could be that health care leaders lack and or fail to use emotional intelligence skills that could benefit decision-making and industry transformation. Bradberry and Greaves (2009) were one of the first to reported that middle managers; in roles that mitigate between employees, customers, and upper management; often score higher in emotional intelligence skill assessment than the company’s CEOs who reside in positions that set policy and make critical business decisions (Kaur, 2012; Larkin, 2015). This limitation could be responsible for the delay in health care reform as health care business leaders lack the skills and abilities that allow them to be aware and sensitive to the outcomes of policy decisions mandated within the new patient-centered model of care (Hutchinson et al., 2017; Quy, 2017). If this is true, academic institutions that train health care business students should redesign curriculum to include activities that enhance emotional intelligence competencies, so graduates are prepared to support the current and future challenges of the health care system (Faguy, 2012; Mikolajczak & Bellegem, 2017; Warren, 2013).

The time has come for delving deeper into actions that can respond to long-term health care dilemmas, and researchers believe that new skills and abilities may be required to meet new demands (Mikolajczak & Bellegan, 2017; Steckler et al., 2016). Generating a proactive workforce that is prepared to solve problems, create efficiency, and lead the health industry to a sustainable platform is in demand. Skills and abilities that enhance situational awareness and
understanding of the newly required patient-centered focus will support better decisions and possibly patient outcomes (Warren, 2013). Since higher levels of emotional intelligence has been linked to creative solutions, innovation, and heightened awareness (Castro, Gomes, & de Sousa, 2012; Kaur, 2012; Mayer, Caruso, & Salovey, 2016), this research study will use emotional intelligence as its conceptual framework to evaluate undergraduate health care business students. The findings from this research study may inform the educational community and body of literature by offering insight between emotional intelligence and the preparedness of health care business students as they strive to perform effectively in a challenging health care industry.

**Purpose of the Study**

The purpose of this qualitative comparison case study is to evaluate the role of emotional intelligence within current health care management college students in a small, midwest, private, liberal arts college.

**Research Questions**

The following research questions are investigated in this study.

1. What are the emotional intelligence characteristics of college health care management business students?
2. How do college health care management business students use emotional intelligence when patient scenarios?
3. How does a practicum experience influence emotional intelligence in college health care management business students?

**Significance of the Study**

Colleges are in business to support the expansion of knowledge and enhance the professional ability of its attendees (Cheshire, Strickland, & Carter, 2015). Through the use of
advisory committees and industry benchmarking, educators strive to create curriculum that offers foundational knowledge and transferable skills that support graduate success in their chosen field. As the needs of an industry evolve, program content should be adjusted in order to deliver relevant information in the proper context (Faguy, 2012; Hutchison et al., 2017; Topaloglu, 2014). Too often colleges get complacent and fail to alter course standards within a major. This is a disservice to the students and reduces their effectiveness as an employee. For industries such as health care it can be devastating, as the need for critical thinking and innovative solutions has never been greater (Arunima & Ajeya, 2014; Dua, 2016; Kaur, 2012; Larkin, 2015; Steckler et al., 2016).

Thus, this study could benefit educators of college business health care programs, college administrators, as well as potential health care employers seeking qualified applicants. Understanding the emotional intelligence of students, especially business-minded students enrolled in undergraduate health care management programs, could impact curricular redesign through new program offerings and the inclusion of experiential learning requirements (Boneso, Gerli, & Pizzi, 2015) or specifically assigned practicum experiences. Students graduating with higher emotional intelligence may, even in a small way, reduce the current industry stressors by being better equipped to navigate and thrive during change (Arunima & Ajeya, 2014; Coetzer, 2015; Steckler, 2016). Emotional intelligence research has identified a connection between innovation, creative decision-making and emotional awareness (Bradberry & Greaves, 2009; Dua, 2016; Hutchison et al., 2017; Mendelson, Mantz, & Guity, 2015), however limited research has focused on emotional intelligence abilities of college health care business students to determine their potential readiness to use emotional intelligence skills in a health industry that
has shifted the definition of quality outcomes away from standard business metrics (Jackson, 2015).

**Definition of Terms**

*Accountable Care Organization*: A voluntary group of health providers aligning to enhance access, cost, and quality of health care services (Abrams et al., 2015).

*Affordable Care Act*: Legislation passed in 2010 to focus on initiatives that extend Medicaid and other forms of insurance to America’s uninsured, while redesigning metrics for quality and outcomes in health delivery (Abrams et al., 2015).

*Fee-For-Service*: A health care payment model where each service equates to a charge, rather than bundling services related to incident or based on quality outcomes (Heath, 2017).

*Health Care Reform*: The overall initiative to realign health services in an attempt to stabilize costs and improve health outcomes (Abrams et al., 2015).

*Patient-Centered Care*: Health care focused on individual patient needs and preferences through purposeful collaboration to actively involve patients in their care decisions (Heath, 2017).

**Delimitations, Limitations, and Assumptions**

This study was delimited to HCM business students attending a private liberal arts college in the midwest. Delimitation refers to the scope boundaries in which the research will occur (Creswell, 2014). Establishing parameters to evaluate only one program, at one college, in one geographic location, associates the findings to a specific grouping of data. Recognizing qualitative data is not generalizable (Harding, 2013), the researcher is actually offering the foundational structure upon which results can be evaluated and compared in the future.
It is also understood that all studies have limitations and the researcher strives to recognize potential flaws, making appropriate steps to control validity and reliability whenever possible (Merriam & Tisdell, 2016). Limited research on health care business students and emotional intelligence required newly created research questions. Thus, these questions will not have standardized data upon which to compare results. The small sample size of the health care management student group at the chosen college, is also a limitation, but the numbers are acceptable for exploratory qualitative investigation. In addition, the researcher recognizes they are a novice at coding evaluation and will choose processes and tools recognized as beneficial for quality research outcomes.

There are a variety of assumptions that guide the study. First, it is assumed that all health care management degree students at the site location were invited and are eligible to participate in the research study. Second, participants were able to read, understand, and answer questions truthfully and to the best of their ability. Third, by answering the interview question as to whether or not the student participated in a practicum experience, the HCM students will appropriately classify into one of two groups: those who had completed a practicum experience as part of their program of study, and those who have not completed a practicum experience. Finally, due to the professional roles of the researcher within health care and academic, as well as over 30 years of health care experience, the research may have bias. Recognizing that the researcher is the primary data collection tool in qualitative research (Merriam & Tisdell, 2016), care must be taken to reduce biases, especially during data collection and interpretation. Strategies such as member checking and triangulation were used to reduce assumptions, as well as noted limitations, associated with researcher error.
Summary

This research study relies on data collected from HCM business students to qualitatively investigate the use of emotional intelligence in decision-making. The study unfolds by offering a detailed literature review describing the current condition and challenges within the health care industry and how emotional intelligence, as a conceptual framework, impacts a person’s ability to cope, change, and make quality decision. Next the methodology will be described including the importance and choice of the research style and how data will be collected, evaluated, and synthesized. Finally, a response to data will be offered along with future considerations. The findings may add to understandings of how emotional intelligence supports awareness and perspective in the target population. The findings may also offer an understanding of the impact of a practicum experience in the attainment and use of emotional intelligence of the health care management students being evaluated. Finally, the findings may add to the body of knowledge suggesting core course components for curricular design of HCM business programs.
Chapter 2: Literature Review

This detailed literature review focuses on the connection between emotional intelligence and HCM business students’ preparedness to make decisions in a complex health industry. As the next generation of industry leaders, HCM business students must leave college armed with the skills and abilities that foster success (Larkin, 2015; Steckler et al., 2016). Changes in cultural dynamics and industry process have created uncertainty and a reformation spiral that reduces the creativity and awareness needed to make quality decisions (Himmelstein et al., 2017; Quy, 2017). This concern sets the stage for further evaluation, synthesis, and critique of relevant topic information, with special attention to details surrounding change management and what inspires transformative thinking (Schulman & Richman, 2016). Limited research focuses on the connection between the business of health care and emotional intelligence (Barnhardt, 2017), leaving a gap in understanding and an opportunity to add to the overall body of knowledge.

This empirical and theoretical literature investigation occurred through database searches, which led to article and dissertation reviews, and text book evaluations where relevant concepts, theories, and practical implications and limitations impacting health care and emotional intelligence were documented. Research focused on the past 5 to 7 years, expect for seminal work that offered critical foundational context and data that demonstrated progression. Chapter 2 begins with a description of the challenges currently in play within the health care industry, while outlaying key factors that impact decision-making and transformation in complex organizations (Hinds, 2017; Joshi, Erb, Zhang, & Sikka, 2015). Second, the history of emotional intelligence theory is reviewed while applying EI as a lens, or conceptual framework, to leadership success in a complex health care industry (Arunima & Ajeya, 2014; Hutchinson et al., 2017; Johnson, 2017). Third, a connection between emotional intelligence and change is
presented (Mendelson et al., 2015; Schneider, Lyons, & Khazon, 2013; Tye, 2012). Fourth, the conceptual model of emotional intelligence is applied to health care with discussions of awareness and innovative thinking (Cherry, 2017; Mikolajczak & Bellegen 2017; Warren, 2013).

Finally, a restated purpose and gap are presented.

**Health Care Industry Challenges**

Health care reform is a current issue within our society, challenging the status quo through new ways to deliver care, stricter rules for gathering data, and a cumbersome new payment model (Himmelstein et al., 2017). In addition, patient-centered care, new access and delivery methods, increased policy and government regulations, and reduced pools of quality applicants for multiple health care roles, strains the industry (Mann, 2017; Targeting, 2015; Warren, 2013). Health care leaders are expected to address these challenging situations where decisions are often critical and outcomes directly impact patient lives. Solutions hinge on the manager’s ability to function competently in this volatile environment, culminating the use of acquired skills, personal behavior, and academic knowledge to guide success (Hutchison et al., 2017; Larkin, 2015; Steckler et al., 2017). Such drastic organizational change calls for an investigation into the skills and abilities required for those employed within such a transforming field.

Most of the changes in health care focus on issues that impact direct patient care and front-line health professionals, such as nurses, physical therapists, and social workers, who provide service (Corcoran & Tormey, 2012; Johnson, 2017; Warren, 2013). Refocusing education using an inter-professional health approach (Coetzer, 2015; Josiah Macy, 2011) as well as concept-based curricular models (Caputi, 2014) supports this type of patient-centered health care delivery. In times of significant change, it is common that initial emphasis be placed
on these front-line workers who are closest to the end user of a product or service (Corcoran & Tormey, 2012; Nichtingalea, Spibyb, Sheena, & Sladea, 2018; Warren, 2013). In health care, the end users are patients receiving treatment and care. However, addressing a complex situation such as health care reform must be attacked from multiple perspectives, infusing and intertwining concepts from a variety of angles (Miles, 2017; Schulman & Richman, 2016). A multifaceted approach requires a heightened sense of awareness; a lack which possibly slows change and diminishes progress (Larkin, 2015; Performing, 2017).

**Conceptual Framework**

This study is grounded in the conceptual framework of emotional intelligence. The concept of emotional intelligence has been suggested to be a vital component for leader success in multiple organizations and situations (Bradberry, 2015; Kaur, 2012; Mikolajczak & Bellegem, 2017; Warren, 2013). Seminal work by Salovey and Mayer (1990) defined emotional intelligence as the ability to monitor one’s emotions as well as the emotions of others, with the goal of differentiating feelings and using the information to guide future behavior. This perspective added a new dimension to the field of intelligence suggesting it was more than strictly a cognitive science (Coetzer, 2015). After continued study, Mayer and Salovey (1997) refined their definition of EI by expanding the discussion around the value of perceiving, using, understanding, and managing emotions beyond simple feelings; bringing together the intellectual components of interpretation and application. The value EI provides in decision-making may be of particular importance in the new age of health care leadership due to the increased expectation for understanding patient perspectives toward care and care services (Corcoran & Tormey, 2012; Nichtingalea et al., 2018). Just as people have different levels of cognitive intelligence, the ability model of EI infers people have different levels of emotional abilities (Coetzer, 2015;
Kong, 2014; Sterrett, 2014). Salovey and Mayer’s four branch model gave further depth and direction to the emotional intelligence construct and is visually represented in Figure 1.

![Salovey and Mayer’s four branch emotional intelligence model](image)

*Figure 1. Salovey and Mayer’s four branch emotional intelligence model (Velisavljevic, 2015).*

Goleman (1995) also supported emotional intelligence through seminal work in his book titled *Emotional Intelligence: Why It Can Matter More Than IQ*, by adding a behavioral perspective that connected the relevance of emotions for organizational and employee development. Later, Goldman (1998) combined the ability perspectives with 20 competencies, called the mixed model of emotional intelligence, and created five domains: knowing your emotions (self-awareness), managing your own emotions (self-regulation), motivating yourself (self-motivation), recognizing and understanding other people’s emotions (social awareness), and managing relationships (social skills). These domains were later reclassified into four overarching components: two focusing on personal skills, self-awareness and self-management,
and two focusing on social aspects, social awareness and social skills (Cherniss & Goleman, 2011). Behaviors within each of these categories are listed in Figure 2. Goleman (1995) argued that traditional measures and understandings of cognitive intellect were too narrow and that using emotional competencies in tandem with knowledge, created better equipped business leaders. Emotions in business were often viewed as taboo or signs of weakness, however these early researchers began laying the groundwork for documenting the value of emotional capacity in successful decision-making (Dua, 2016; Hutchison et al., 2017).

![Figure 2. Cherniss and Goleman’s Categories of Emotional Intelligence (Emotional Intelligence Theory, 2016).](image)

Bradberry and Greaves (2009), authors of Emotional Intelligence 2.0, followed Goleman’s mixed model concept and discussed reasons why well-educated people struggle and are sometimes not successful when others thrive. It may be attributed to the science behind emotional intelligence, which begins with sensory impulses that enter the brain at the spinal cord
and pass through the limbic system where emotions are created (Brann, 2017; Sterrett, 2014). In order to attach an intelligent and rational perspective to a stimulus, the electrical impulse must continue through the limbic system to the rational frontal lobe of the brain (Brann, 2017; Sterrett, 2014). The combination of perspectives generated during this journey throughout the brain is how emotional intelligence occurs.

Even though emotional intelligence has been discussed for decades, it is still not well understood or practiced by the general population, nor specifically within the health care industry. Bradberry (2015) called this a global crisis noting only 36% of the people who take an emotional intelligence assessment are able to accurately identify their emotions. The distinct communication pattern required to enhance emotional intelligence can be learned, and is a skill that through practice can support change (Strickland, 2013). Thus, using emotional intelligence could enhance awareness, support better decision-making, and potentially lead to higher level outcomes (Hutchinson et al., 2017; Joshi et al., 2015; Larkin, 2015). For this reason, emotional intelligence is used within this study as a foundation, or conceptual framework, upon which health care management students are evaluated.

**Review of Research Literature and Methodological Literature**

The literature review continues by describing health care transformation and some of the current challenges found in the health care industry in relation to services, patient experience, and overall care quality (Hinds, 2017). Details that limit reform will be mentioned as resources must realign toward patient-centered care delivery models and value-based care. The literature review continues with an overview of emotional intelligence including theories and common methods used to evaluate EI abilities. Finally, the potential connection and impact of EI on the
Health care leader is considered as vision, innovation, and heightened awareness effect decision-making.

**Health care transformation.** It is not unusual for complex industries to undergo major transformation as internal and external forces apply pressure (Performing, 2017). Adaptation and flexibility are typical ways to achieve a competitive advantage, as industry leaders use trends and forecasting to create a map toward the future (Joshi et al., 2015). However, health care leaders were somewhat blindsided by the extent of government regulations and policy mandates guiding multiple facets of care delivery (Abrams et al., 2015; McWilliams, Hatfield, Chernew, Landon, & Schwartz, 2016). These pressures removed the decision-making authority from the health industry and led leaders into scrambling chaos (Miles, 2017). Very few people function well under such loss of control, which results in a lack of ownership and an inability to lead an organization, or even themselves, forward (Cherry, 2017; Tye, 2012). This is the current state of health reform in the United States.

Embracing the new reality is difficult when leaders lack creativity and innovative solutions (Kaur, 2012; Mayer et al., 2016). The push toward patient-centered care requires a flip of the mindset guiding service and care delivery (Nichtingalea et al., 2018; Warren, 2013). Lean and Six Sigma processes that focus on reducing waste and creating efficiency have been successful in supporting change in other business industries, but offered limited success for health care managers seeking a viable response (Warren, 2013). Health care employees functioned in a business world using scorecard methods to monitor financial stability by documenting the number of filled patient beds and monitoring safety metrics, such as the number of documented patient falls (Ghazisaeidi, Safdari, Torabi, Mirzaee, Farzi, & Goodini, 2015; Jackson, 2015). However, today’s guidelines include patient satisfaction scores and patient care
outcomes that replaced previous monitors of hospital success (Jackson, 2015; Targeting, 2015; Warren, 2013). This forces business leaders to consider better ways to connect with the customers they serve to ensure the patient experience aligns with the new mandates set by those outside the health industry (Abrams et al., 2015; Ghazisaeidi et al., 2015). Using emotional intelligence as a lens to evaluate this dilemma may generate insight that can support reform and enhance outcomes for those served by the health care industry.

**Workplace readiness.** It is expected that a leader will support their employees and the organization through times of change (Joshi et al., 2015; Schulman & Richman, 2016). Companies such as Apple and Google are heralded as beacons for innovative solutions and transformation, as it is typical that these industries focus on new technology and creative ideas as their norm. People who gravitate toward fast-paced technology industries thrive in times of uncertainty, using the stress as energy for growth (Mendelson et al., 2015; Performing, 2017). Researchers have investigated the reasons why some people are successful in these transitional environments when others are not (Quy, 2017). Personality, level of education, age, gender, motivation, and opportunity have all been cited as potential drivers of success (Arunima & Ajeya, 2014; Mendleson et al., 2016; Mikolajczak & Bellegem, 2017). Perhaps emotional intelligence needs to be added to the list.

Understanding what skills are needed during times of change is difficult because intelligent problem-solving does not always align with intelligent behavior (Kaur, 2012; Mayer et al., 2016). Cheshire et al. (2015) identified different kinds of intelligence that people use to solve problems. Often this deductive process uses emotion as well as traditional intelligence to decipher details that lead to a response (Cheshire et al., 2015). People naturally have their strengths, but health care leaders may not have entered the industry prepared for this drastic
transformative environment (Larkin, 2015). Those involved in direct patient care often choose a service industry to help others (Santiago, 2017). However, those on the business side of the organization, who work in finance, strategic operations, and other traditional management roles, sought professions driven by non-patient care perspectives. These professional roles are built upon policy, standards, and a more structured platform. Forcing these professionals to quickly adjust attitudes and awareness toward patient-care decisions may be the reason health reform is slow and ineffective (Coetzer, 2015; Larkin, 2015; Soltani, Shahsavari, & Morodi, 2014; Quy, 2017). It is possible that health leaders lack the preparation, skills, and for our discussion, the emotional intelligence needed to connect business outcomes with patient needs (Hutchinson et al., 2017; Joshi et al., 2015; Larkin, 2015; Rude, 2013). To enhance health care proficiency and spring board a critical industry forward, it is time that broader perspectives of intelligence be recognized in order to thrive in the complexities of this new business environment.

**The value of emotional intelligence in health care.** With such significant industry changes, it is evident that the current state of health care hinges on innovative solutions (Joshi et al., 2016; Schulman & Richman, 2016). Critical to its success is the ability to respond to the new mandates in care delivery, which recognize the need for enhanced self-awareness and the ability to manage relationships (Miles, 2017; Nichtingalea et al., 2018). Emotional intelligence has been reported to enhance knowledge sharing, increase productivity, and decrease stress (Faguy, 2012; Mendelson et al., 2015; Woosley, 2016). Developing a workforce primed with emotional intelligence could elevate creative business practices and reduce the current challenges that torment health care leaders and reduce outcomes (Castro et al., 2012; Dua, 2016). Dua (2016) evaluated 150 senior leaders from four Indian manufacturing companies using only five emotional intelligence competences: emotional awareness of others, intentionality, resilience,
optimism, and interpersonal connection. A multiple linear regression showed EI was a significant predictor of successful top managers, especially with regard to decision-making and vision (Dua, 2016; Rude, 2013). In other words, leaders with these abilities are more likely to adapt, innovate, and proactively follow industry trends that inherently support stronger organizations (Joshi et al., 2016; Steckler et al., 2016).

Such vision is definitely lacking in the health care sector (Cherry, 2017; Mikolajczak & Bellegem, 2017; Quy, 2017). As stated previously, external forces stripped ownership from health care executives as mandates overruled business objectives and strategic plans. This left a trail of defeat before the race even began. Regaining vision and creativity in our health care leaders may be a way to see through the chaos, while also supporting financial gains.

Mikolajczak and Bellegem (2017) reported an elasticity coefficient within their study that showed for every 1% increase in an employee’s EI score, there was a documentable 1% improvement in the employee’s physical health. This translated to less days off, more energy and productivity, and an enhanced morale within the organization, which saves the business a significant amounts of money through an engaged and productive work force (Mikolajczak & Bellegem, 2017). Thus, emotional intelligence becomes a valuable tool that adds perspective and awareness to personal interactions and interpretable data that is also noted to reduce stress and increase resilience (Schneider et al., 2013). The new generation of health care needs leaders that are technically qualified, but that also have the ability to spur change through creative agendas and an enhanced awareness of the service industry (Larkin, 2015; Performing, 2017).

**Emotional intelligence and health care business students.** Enhancing the emotional intelligence of students, while they are still in academic institutions, may be beneficial to support and enhance workplace skills before college graduates begin employment (Lopez, 2016;
Schneider et al., 2013; Topaloglu, 2014). Emotional intelligence has been identified as an individual ability (Kong, 2014), so training that focuses directly on the individual gets better results than organizational group sessions (Bradberry, 2015). Studies have already occurred with some patient-care populations (Adams, McCabe, Zundel, Price, & Dahl, 2011; Corcoran & Tormey, 2012; Herrick, 2013; Hutchinson et al., 2017; Johnson, 2017; Nichtingalea et al., 2018) and business professionals (Cherniss & Goleman, 2011; Margavio, Margavio, Hignite, & Moses, 2014; Mendelson et al., 2015; Sania & Shahid, 2016), however limited research is available with health care business students (Barnhardt, 2017). These graduates will become the next generation of health care business leaders, entering an industry already in turmoil (Joshi et al., 2016; Schulman & Richman, 2016). Evaluating their emotional intelligence may offer insight that could lead to future curricular changes or comparisons with students pursuing direct patient-care roles, implying more structured interdisciplinary education. Thus, evaluating the emotional intelligence of health care business students will be the gap evaluated in this research study.

**History and models of emotional intelligence.** According to Faguy (2012), intelligence includes the entire set of skills that allow a person to grasp perspectives and act accordingly using knowledge and rational thought. Recognizing that there is more to intelligence than cognition, other types of intelligence have been identified and researched for their value in personal interaction and overall awareness (Coetzer, 2015). As previously stated, emotional intelligence emerged through the work of Salovey and Mayer in 1990. Their initial definition of emotional intelligence stated it was a subset of social intelligence that involved the ability to monitor one’s own and other’s feelings and emotions (Salovey & Mayer, 1990). In 1997, they revised their definition to emphasize the importance of the ability to perceive, appraise, express, understand, and regulate emotions during thought, and organized these details into a visual four
branch model (Mayer & Salovey, 1997). Labeled the ability model, Salovey and Mayer’s work has never wavered from the intent that EI is a mental ability and that people have different capacities to use, monitor, and understand their emotions (Mayer et al., 2016). Unlike IQ, which is stable throughout a lifetime, individuals have the opportunity to increase or improve their EI, which is why it has value for individual and organizational success (Ni, 2014).

Goleman (1995) also added to the early research on emotional intelligence by emphasizing the value of recognizing personal emotions as well as those of others. Enhancing self-motivation and recognition of emotions allows a person to effectively manage behavior, enhance relationships, and embark on activates that lead to workplace success (Faguy, 2012). Goleman also added to Salovey and Mayer’s (1990) initial work by recognizing that people are born with certain abilities, or specialized traits, but other emotional competencies could be learned. His mixed model of emotional intelligence includes 20 competencies divided into categories labeled self-awareness, self-management, social skills, and social awareness (Velisavljevic, 2015).

Some researchers were excited about the new perspective emotional intelligence brought to the scientific community, however other researchers, such as Locke (2005), Landy (2005), and Conte (2005), documented concerns over varied definitions and testing credibility. Their major accusations centered on inconsistent testing methods that were not measuring what was expected, generating results with reduced reliability and limited credibility (Locke, 2005). These counterarguments may have slowed the progress of EI inquiry, however its potential value in application continued to intrigue researchers and progress the field of study. Further research led to additional documentable findings suggesting that people with higher levels of EI may be more creative, flexible, and effective (Bradberry, 2015; Faguy, 2014; Rude, 2013). These behaviors
are attractive to workplace leaders as organizations strive to evolve and thrive in changing markets as industries become more complex (Steckler et al., 2016).

Methodological Review of Emotional Intelligence

Emotional intelligence has been evaluated in the literature using quantitative, qualitative, and mixed-methods analyses. Qualitative research is an inquiry technique allowing the researcher to explore a certain phenomenon where limited data is available (Yin, 2014). Data is often gathered from participants using open-ended and broad-spectrum questions, and must then be analyzed and interpreted in order to establish findings. Care must be taken to reduce bias as outcomes are more easily swayed due to the interpretive nature of the study (Merriam and Tisdell, 2016). Researchers such as Hollweck (2015), Johnson (2011), and Tausch and Menold (2016) chose qualitative analysis as their research method to expand the knowledge of emotional intelligence. In each example, the research investigated a specific aspect of emotional intelligence within a certain context, or phenomena. This connection and the interpreted value drawn from the investigation, is distinctive to the value that qualitative analysis offers to the study process (Johnson, 2017).

Quantitative research is more factual and emerges from data gathered from scientific inquiry (Creswell, 2014). Hypotheses and standardized instruments offer more reproducible opportunities for other researchers who wish to duplicate findings (Margavio et al., 2014). Surveys are a very common quantitative method tool and the one used most often in emotional intelligence empirical research (Merriam & Tisdell, 2016). Multiple examples of EI analysis using quantitative research are available (Bonesso et al., 2015; Cherry, 2017; Cheshire et al., 2015; Dua, 2016; Manning, 2012; Weisbrod, 2013), however they do not align with the specific research scope and interest of this study.
Some studies use a combination of qualitative and quantitative methods and is appropriately termed a mixed method approach (Creswell, 2014). Mixed method analysis offers the potential to increase the strength of the study by using the best aspects of both qualitative and quantitative analysis. Corcoran and Tormey (2012) used mixed-method research to analyze emotional intelligence within the teaching profession. Previous quantitative assessment of teachers noted a reduced EI score, as documented through survey results, than employees within other professions (Corcoran & Tormey, 2012). The goal of adding in the quantitative aspect was to research the connection between EI and classroom performance to better understand the static survey values. Teaching, like health care, is a caring profession. Thus, both industries rely on human aspects that impact outcomes, making emotional intelligence a concept worth exploring.

**Review of Methodological Issues**

The research design chosen for a particular study has significant impact on the outcomes gained from the investigation. All research is flawed and has limitations to some extent, thus it is the researchers obligation to recognize these inherent limitations, select the method that best aligns with the chosen study goals, and evaluate data with a critical eye (Creswell, 2014; Yin, 2014). While still a subjective process, the decision of which methodology will gather the best data to answer the research questions is a critical step in effective research design. Taking a closer look at the qualitative, quantitative, and mixed method methodologies brings forth advantages and disadvantages that should be considered during the selection process.

**Quantitative methodology.** Quantitative methodology dominates social science research and has historically been viewed as a solid, objective approach for investigating a relationship between variables (Mayer et al., 2016). Using numerical data, close-ended questions, and the use of instruments and calculations, quantitative methodology reduces bias and creates reproducible
data under established circumstances. Whether or not this occurs at a high level depends on various research implications and assumptions, however the perspective of a quantitative inquiry is to test theories through a deductive, prescribed process in a controlled environment (Mayer et al., 2016). Data is collected through surveys, questionnaires, field testing, and simulations, and is often considered cheaper, quicker, and easier to gather, even with a large sample size (Dyce & Williams, 2014). These advantages make it a popular choice for experimental and quasi-experimental design studies. The self-reporting mechanisms that support this methodology’s advantages, brings forth limitations concerning validity due to the participants possible misunderstanding of the questions and their ability, or lack of ability, to accurately, without inflation, document a proper response (Dyce & Williams, 2014).

The majority of empirical research found on emotional intelligence used a quantitative methodology. Examples of survey instruments include:

- Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). This quantitative survey has 144 items and tests four factors of EI: perceiving, identifying, understanding, and managing emotions (Maul, 2012). It was the evaluation method most often used by the gathered empirical data.

- Emotional Competency Inventory (ECI). The ECI is also a quantitative survey asking 117 questions in the categories of self-awareness, self-management, social awareness, and social skills (Livesey, 2017).

- Emotional Quotient Inventory (EQ-i). The quantitative survey developed in 1997 by Bar-On, tests 133 items evaluates intrapersonal and interpersonal adaptability, stress, management and mood (Walsh-Portillo, 2011).
• Schutte Self-Report Emotional Intelligence Index (SSEIT). This quantitative survey tested emotional recognition, reasoning, and management through 33 self-reported items. This assessment has a reliability score of .78 and an internal consistency score of .87 (Margavio et al., 2014).

A standard survey offers the benefit of providing reliability and validity on which to compare findings (Dyce & Williams, 2104). Ten years ago, Birks and Watt (2007) did a comparison of six separate EI studies trying to compare results and limitations within the data. They agreed within all accounts that there were limitations in perceived outcomes due to self-reporting biases, variations in sample size, and no record of standard intelligence, personal perspective, or professional health care experiences on which to compare results (Birks & Watts, 2007). These challenges are repeated throughout the literature review, posing issues to equate, connect, and validate research outcomes.

It is difficult to find EI research, quantitative or otherwise, that used health care business students as participants. Walsh-Portillo (2011) used a Bar-on EQi survey to evaluate EI in general college students. Adams et al. (2011) researched the emotional aptitude of clinical laboratory science students, but they did not use a standardized survey upon which to compare findings. Margavio et al. (2014) looked at emotional intelligence in Chinese and American business students and reported a correlation between higher EI scores and students living in larger cities. They used a quality sample size of 409 participants, but not all variables were compared in each category. Cheshire et al. (2015) compared traditional measures of academic achievement with EI scores in nursing students, and found that emotional intelligence seemed to evaluate a different type of intelligence than typically gathered through exam scores and standardized testing. While each of these quantitative measure offered some support of the value
of EI, every author recognized the need for further study and evaluation to better understand the phenomena.

**Qualitative methodology.** Qualitative methodology research uses words and open-ended questions to gather insight regarding general themes of behaviors (Merriam & Tisdell, 2016). Compared to quantitative analysis, qualitative research is less ridged, which is one of its advantages as new environments are explored (Yin, 2014). Instead of focusing on statistics, qualitative methods are more descriptive and offer insight into the meaning of experiences (Dyce & Williams, 2014). Gathering data for qualitative analysis requires a heightened involvement from the researcher during the collection processes, often leading to a more time consuming and costly procedure (Dyce & Williams, 2014). However, the advantage is the goal of obtaining information that can be interpreted, evaluated, and valued for the complexity of the situations under investigation, especially in exploratory situations (Merriam & Tisdell, 2106). Data is gathered through case studies, through observations and interviews called ethnography, through personal renditions and descriptions called phenomenological research, through interrelationships of details called grounded theory, and through detailed accounts of individual and group stories called narrative research in order to describe what is happening within a phenomena (Merriam & Tisdell, 2016). Quantitative research seeks to answer why and how questions that are associated with understanding, rather than what, which is associated to a value (Merriam & Tisdell, 2016).

Limited qualitative EI research was found in this specific literature review, especially with the target audience. Johnson (2017) conducted a qualitative investigation of veteran administration hospital employees using pre-collected data, interviews, and focused groups. She noted associations between these employees and EI factors such as self-awareness and self-
management. Themes centering on relationships, behavior, and the environment emerged as evident emotional intelligence groupings that impacted employee’s personal and professional values (Johnson, 2017). There was also notable improvement once awareness and discussion of EI occurred.

**Mixed method methodology.** The purpose of mixed method research centers on the recognition that both qualitative and quantitative approaches offer value depending on the focus of the study. Creswell (2014) stated that research often falls along a continuum between qualitative and quantitative, and by using mixed method methodology, researchers could reduce limitations and leverage the strengths of both perspectives through data triangulation. For example, a mixed methods evaluation might begin with a qualitative interview to explore an issue within a population, and then use a quantitative survey to gather specific data of that group. While mixed methods research can offer value and deeper insight, it can be complex to correlate, evaluate, and interpret for a novice researcher.

The identified strengths and weaknesses of various research methodologies are an important consideration of research design. Recognizing inherit limitations allows the researcher to properly select the methodology that best aligns with the desired goals and overall research questions. As previously stated, no method is without limitation. A mature and savvy investigation is one which embraces these conditions to create an environment primed for quality evaluation and synthesis, while aligning the study design with established outcomes.

**Synthesis and Critique of Research Findings**

Throughout this particular research, the lens of emotional intelligence guided the investigation in order to ground the discovery and knowledge journey through the material. Synthesizing research findings from a literature review involves a dissection of the material and
a reformulation of information in order to make new connections. The details gained from that perspective align with information of the current challenges health care leaders face in an unstable industry (Himmelstein et al., 2017). No time in history has the health environment been in more turmoil (Larkin 2015; Miles, 2017). Heightened policy and regulation requirements, increased technology and innovative devises, a shift in the way care is delivered, and a limited employment base strain health care leaders (Cherry, 2017). The goal of this investigation seeks to evaluate the emotional intelligence of health care business students who will inherit roles with what some consider, a chaotic industry plagued with unrealistic demands.

**Emotional intelligence revisited.** Emotional intelligence is not a new theory, but the value of emotional intelligence has only been investigated within business and health care leaders in a limited scope. Results suggest a range of outcomes, but generally demonstrate a positive correlation since research in this arena began. For example, Abraham (2006) performed a study over 10 years ago demonstrating higher emotional intelligence is needed to effectively transmit theory into practice. In 2009, Yarrish and Law evaluated EI in first year business students comparing their results over a 5-year period. While differences in scores were not specifically explained, and some participant results were incomplete, they identified opportunities to improve EI in all four categories of evaluation. Additional research in 2011 by Walsh-Portillo found students with higher emotional intelligence do better in community colleges and Cheshire et al. (2015) demonstrated students with higher EI have an increased propensity for academic success; demonstrating skills separate from traditional measures of GPA. These results create questions regarding the effectiveness of the current entrance and evaluation processes for college admission, and as Lopez (2016) reemphasized, leaves significant distance between theory and practice within this field of study. It is possible that an
emotional intelligence assessment could offer insight for aptitude, awareness, and coping strategies that support college readiness. Without this data and research available, academic institutions are unable to make evidence-based decision. While the scope of this research study will only look into emotional intelligence in health care business students in relation to decision-making, there could be a broader need for campus wide evaluation across all college students.

**Link between emotional intelligence and health care.** Some research has occurred between health care leaders and emotional intelligence, but for the most part it included participants who provide direct patient care and are already employed (Corcoran & Tormey, 2012; Nichtingalea et al., 2018; Targeting, 2015; Warren, 2103). These include employees within professions such as nursing, radiology, or even physicians who interact directly with patients. As heath care success metrics change from fiscal outcomes and bed counts to patient satisfaction scores, a positive patient interaction is vital for funding and accountable care standards (McWilliams et al., 2016). In fact, one specific research study by Mikolajczak and Bellegem (2017) reported findings suggesting that for every 1% increase in the emotional intelligence score of a health care leader, there was a 1% decrease in spending. Such quantifiable outcomes could easily pay for training or other suggested ways to enhance these skills. However, within many industries, like health care and education, change is slow (Warren, 2013). Practice hinges on the traditional ways of doing business that may or may not still be effective. It is understandably frustrating when change is forced upon an industry, but the “dragging feet syndrome” is no longer an option. The health industry and its employees must adapt to survive (Miles, 2017). Emotional intelligence research has been shown to support new ideas and knowledge sharing (Woolsey, 2016), and thus could offer value for employees, leaders, and students entering this changing environment.
**Change requires new thinking.** The unofficial definition of insanity is doing the same thing over and over, while expecting different results. This happens every day in our society. Change is hard for people in their personal lives as well as in business sectors, especially when there is a lack of adaptability, vision, and innovative thinking (Barnhardt, 2017; Kaur, 2012). Being able to foster adaptive skills in health care business students while they are still in college, could enhance their success and transition to employment. Kaur (2012) researched emotional intelligence by its ability to demonstrate a competitive advantage, and stated that confident, secure, and passionate employees are better able to empathize, be optimistic, and innovative. These problem-solving skills are exactly what health leaders need to reimage a complex health care delivery system (Hinds, 2017; Larkin, 2015).

The term transformation is often used to describe the reengineering expectation of an organization in the midst of change (Joshi et al., 2016). This word suggests an evolution, not just change. Moving to a higher ground, a better way of functioning, and an elevated way of doing business, is truly a transformation. This is the state of health care and patient’s lives are at stake. Change theories may shift the industry toward the desired goal, but the scope requires significant revolution. Arunima et al. (2014) found a correlation between emotional intelligence and transformational leadership style in 330 business students in India. Mendelson et al. (2015) also reported connection between success, personal motivation, and the ability of implied influence. These are valuable traits for business leaders, as not only do they need to navigate themselves through the unsure waters of industry transformation, but by their role, they need to guide, educate, inform, support, and ultimately lead constituents forward.

**Study application.** Recognizing the need for personal awareness, interpersonal relations, stress management techniques, a broad industry perspective, and reduced fear of the unknown is
why emotional intelligence theory is seen as a reasonable lens through which health care business students are evaluated. Most business programs do not have external practicum experiences within their curriculum, and instead rely on education gleaned through core business classes such as management, accounting, marketing, finance, human resources, law and regulation, and strategic policy (Bonesso et al., 2015). Many health care students graduate, move into a health care management position, and never see, work with, or have any exposure to the needs and perspectives for those to whom they make daily policy decisions. This path is very typical, and exaggerates the potential for disjointed decision-making (Dua, 2016). Evaluating the emotional intelligence of health care business students could offer insight into the need for curricular changes, mentoring, or possibly a mandatory external practicum experience where business students interact with patients or other health professionals who provide direct patient care. It is premature to discuss the outcomes or potential ways the research data may be useful, however it is the synthesis of previous research and knowledge of the health care industry challenges that fosters the need for this research study.

Summary

The health care industry is undergoing significant transformation as it seeks to manage changes in care delivery forced upon them through government and policy regulations (Joshi et al., 2016; Soltani et al., 2014). The need for quality leadership is vital for industry success, however the delay in the ability to solve health care reform issues, suggests a void in the skills and abilities health care managers need to support change (Larkin, 2015). People who have higher levels of emotional intelligence are often more resilient, innovative, and flexible due to a heightened awareness of their and others’ emotions (Mendelson et al., 2015). The ability to think differently supports transformative action and enhanced decision-making skills which are critical
in times of change (Hutchison et al., 2017). The review of methodological literature and the synthesis and critique of data, gave way to a gap and focus for this research study. Therefore, based on this review of literatures using emotional intelligence as a lens, or conceptual framework, to investigate health care business students, there is sufficient reason to think that an investigation would yield socially significant findings.
Chapter 3: Methodology

Introduction

This research study used a qualitative comparison case study design to examine how college HCM business students use emotional intelligence in decision-making. Individual response data as well as group comparison data was collected in order to evaluate the emotional intelligence of health care business students who have had an outside practicum experience, with other health care business students who have not had a practicum experience. The significance of this study stems from the fact that health care is a complex industry currently undergoing significant change (Dua, 2016; Himmelstein et al., 2017). Reform is slow and the shift toward patient-centered and accountable care is a difficult transformation (Arunima & Ajeya, 2014). Leaders seem unprepared to manage and lead in order to establish an enhanced operating health system (Weiszbrod, 2013). Thus, further information on aspects that enhance awareness, broaden perspective, and support change, such as emotional intelligence, could offer significant value for health care organizations and the educational institutions that offer academic preparation programs.

The chapter begins by describing the chosen study design as well as the specific student population and sampling method. A detailed account of the process and tools used in data collection is followed by the steps for analysis. The chapter concludes with a discussion of design limitations, validations, and possible ethical concerns, and culminates in a methodology summary.

Research Questions

This study investigates the emotional intelligence of students enrolled in a bachelor’s degree program for health care management: a non-patient care business program. Emotional
intelligence provides a conceptual framework, or lens, through which this study occurred. As previously stated, seminal work by Salovey and Mayer (1990) describes emotional intelligence as the ability to understand, recognize, manage, and use emotions to make decisions and think critically. Large, complex, and changing organizations, like health care, find it difficult to align decisions throughout the organization (Cherry, 2017; Tye, 2012). The added emphasis for patient-centered accountable care creates a void in quality outcomes and overall customer satisfaction: two metrics reviewed for success in the health care industry (Targeting, 2015). It would be beneficial to know if students who self-select into a HCM business degree program have emotional intelligence characteristics and how situational exposure or awareness, such as that gained through a practicum experience, influences decision-making. Thus, a qualitative case study was used to analyze this phenomena to explore how emotional intelligence may impact decision-making in this group of future health care employees.

Three research questions guided the study.

1. What are the emotional intelligence characteristics of college health care management business students?

2. How do college health care management business college students use emotional intelligence when evaluating patient scenarios?

3. How does a practicum experience influence emotional intelligence in college health care management business students?

**Purpose and Design of the Study**

A qualitative comparison case study was used in this investigate. Qualitative research was previously viewed as more subjective and less credible than quantitative research because it includes data gathered from human behavior, personality, reasons, or opinions (Creswell, 2014;
Hollweck, 2015; Mayer et al., 2016; Merriam & Tisdell, 2016). However, proper rigor and structured evaluation have changed that perception and now the value of qualitative methodology is well respected, especially within the social sciences (Creswell, 2014; Mayer et al., 2016; Yin, 2014). Qualitative methods can be especially effective in situations where a problem is being explored and further insight is needed. Researchers such as Collins and Cooper (2014), Herrick (2013), Johnson (2017), and Topalogla (2014), found a qualitative evaluation approach valuable due to its ability to be flexible yet rigorous when evaluating new programs, interventions, or theories. This type of methodology opens the door for exploration into new perspectives and strives to gain information beyond what might have been previously understood or documented.

Qualitative research aligns well with this study’s research questions because the nature of the inquiry is based on determining how HCM business students use their emotions to evaluate and attach meaning to various situations. Merriam and Tisdell (2016) emphasized that knowledge is constantly constructed through lived experiences as individuals relate, interpret, and associate phenomena, thus offering insight into how and why people act and think as they do. As noted in the literature review, the topic of emotional intelligence is most often investigated using quantitative research methodology (Cheshire et al., 2015; Margavio et al., 2014; Mikolajczak & Bellegem, 2017). This is true whether the investigation occurred inside or out of the health care industry. Thus, choosing qualitative analysis as the research methodology added to the exploration of emotional intelligence and health care student behavior in a space with less peer-reviewed research.

Using a case study design offered boundaries to the study by limiting the scope to a specific person, group, community, or a program where the phenomena is bound to the context (Merriam & Tisdell, 2016; Yin, 2014). According to Starman (2013), case study research has
been important in the practice-related industries, which includes professions such as education, health care, and management. Herrick (2013) researched emotional intelligence in relation to health care collaboration. Hutchison et al. (2017) investigated emotional intelligence as it related to the clinical reasoning of those who provide direct patient care, and Johnson (2017) investigated how hospital employees apply emotional intelligence in the workplace. Each of these studies added to the field of emotional intelligence by offering further insight and detailed information into the topic, but limited information focused on emotional intelligence in college health care students, and even less for those who are not in direct patient care programs, such as HCM business students.

One benefit of case study design is that it allows for an inductive approach where outcomes are based on generalizations that evolve from established truths and observations (Harrison, Birks, Franklin, & Mills, 2017). In this study, the phenomena was emotional intelligence and the context was HCM business students at a specific midwest, private, liberal arts college. Besides gathering individual data, the case study investigation subdivided the participants into two sections comparing responses from those students who had completed a health care practicum with responses from those students who had not. This offered a deeper comparative perspective of emotional intelligence of two distinct units within the population under investigation.

**Research Population and Sampling Method**

The research study population was undergraduate students currently enrolled in a health care business program at a midwest, private, liberal arts college. Nonprobability, purposeful sampling was used to identify, select, and invite HCM business student participation in the study. All enrolled HCM students, regardless of years within the degree program, were invited to
participate. There were 23 students enrolled in this degree program, and thus they become the specific group of HCM business students targeted for this investigation. Using a registrar generated list of currently enrolled HCM students, an email invitation was sent to the target group and 14 of the 23 HCM business students responded and chose to participate.

A consent form, found in Appendix A, was used to validate the student’s willingness and consent to participate, as well as to have their responses documented, audio recorded, and transcribed. A two-tier sampling method later sub-divided the health care management participants into two groups; those HCM students who had completed or were currently enrolled in a health care practicum experience and those HCM students who had not yet participated in a practicum experience within their required curriculum. This self-delegation occurred during the interview process as students responded to a structured question designed by the researcher. The self-designated practicum and non-practicum student groups became the two focused groups also used in the study investigation.

Instrumentation

As in many qualitative research studies, the researcher was the primary instrument used to gather data (Creswell, 2014; Dikko, 2016; Merriam & Tisdell, 2016). The researcher also created interview questions to gather data from each health care management student who consented to participate in the study. The mixture of structured and open-ended questions were designed to garner specific information, such as whether or not the individual had participated in a practicum experience, as well as rich detail regarding emotional intelligence concepts that aligned with the research questions (Dikko, 2016; Merriam & Tisdell, 2016). Notes were taken by the researcher during each interview and focus group session, in addition to audio recordings capturing full responses. Audio recordings can make interviewees uncomfortable so the
researcher verified consent with each participant, and ensured they were comfortable with the use of the tool (Baškarada, 2014). The researcher did not want to limit casual and accurate responses that offer detailed dialog and rich description, which is the goal when gathering qualitative data (Baškarada, 2014). In addition to the audio recordings, the researcher took notes and made comments related to observations of pausing, body language, and enthusiasm for a topic that may not be captured in literal words of the recorded session. Data was transcribed after each event for permanent record and analysis, and the audio recording was destroyed.

The interview questions, generated by the researcher, were field tested by an external professional to offer validity since the literary search did not demonstrate pre-established questions appropriate for this study. Field-testing is a common practice when specific, validated tools are not readily available for the topic and case under investigation (Dikko, 2016). Appendix B contains a copy of the semistructured questions that were used for the personal interview. Each personal interview was scheduled for 30 minutes. After data was collected, participants were able to review their responses to ensure accuracy and completeness of their response. This process, called member checking or respondent validation, offers internal validity to the study as it reduces biases or interviewer misinterpretation (Merriam & Tisdell, 2016).

Once students self-selected into one of the two identified subgroups upon their response to a structure interview question, a focus group session was used to gather information from group participants. Sub-unit detail added to investigative understanding by looking for comparisons and contrasts within the initial group data, as well as between practicum or non-practicum groups. The focus group sessions were scheduled for a 60-minute time frame, on a day and time selected by the majority of group participants. The session included watching a short vignette simulating a health care scenario and, as a group, a discussion of open-ended pre-
determined semistructured researcher-created questions. These questions also aligned with the research study design and are posted in Appendix C. The focus group sessions were documented via researcher notes and also audio recorded to support future analysis as it is difficult to capture comments from multiple group members simultaneously, while trying to witness the essence of the discussion occurring among the group members.

**Data Collection**

As previously stated, data was collected via responses to semistructured interview questions and focus group dialog through note taking and audio recording, after approval from both Concordia University and the participating college’s Institutional Review Board (IRB). The interview provided personal, foundational perspectives on emotional intelligence, as well as the opportunity for participants to document whether or not they had participated in a practicum experience. The participant’s response to that specific question designated their placement in one of two focus groups used for the second round of questioning. According to Tausch and Menold (2016), the focus group is effective because it supports the constructivist perspective through social group interaction. This level of data would not be available using only the individual interview format, as members are influenced by the discussion and explanations of other group members (Hennink, 2014). Combining interview and focus group discussion detail enhanced the case study research through the use of multiple sources of information that allowed themes to emerge (Hollweck, 2015; Merriam & Tisdell, 2016). Since truth is relative, it is the individual who creates meaning from social issues (Baškarada, 2014). Validity and reliability were also supported through triangulation, which is achieved through the use and analysis of multiple methods or sources of data (Carter, Bryant-Lukosius, DiCenzo, Blythe, & Neville, 2014).
Since the researcher was a faculty member at the site college under investigation, care was taken to reduce the concern over power relations. Reducing power and coercion were specifically addressed in both IRB applications and included action such as creating a comfortable seating arrangement, holding interview and focus group sessions outside the typical times and locations of traditional classes, reiterating the participant’s ability to discontinue participation at any time, and discussing the fact that responses or participation was in no way connected or associated with their course or degree participation or grades, as stated in the consent form. To maintain confidentiality of data, no personal information, such as the participants name, address, or email, was shared in the report findings and participants were advised that only the researcher had access to participant responses. Once details were transcribed, audio recordings were immediately erased. Data will remain in a locked filing cabinet within the researcher’s home office for 3 years at which time all documents will be destroyed.

Data Analysis Procedures

Data was analyzed by searching for emerging themes in participant responses and group discussion data. Saldaña (2016) suggests using descriptive coding for qualitative analysis by searching for statements or phrases that align with the study topic, and then grouping similar phrases together. A list of key words that correlated with aspects of emotional intelligence and the research questions guided the sorting process, using care not to overlook or dismiss data not previously listed as a key word. The following steps, adopted from Saldaña (2016), were followed to analyze study data.

Step 1: Review interview transcripts for codes associated with the study topic.

Step 2: Label interview data with codes or themes.
Step 3: Decide which codes are important for study.

Step 4: Create labels for categories.

Step 5: Look for connections between categories.

Step 6: Decide if there is a hierarchy by the number of times an item is mentioned.

Limitations and Delimitations of the Research Design

As with any research study there are limitations. First, the questions used for the personal interview and the focus group discussion were unique and created by the researcher for this specific qualitative investigation. While somewhat common in qualitative methodology, it is recognized as a limitation due to the inability to compare findings. Reliability and validity were supported through field testing the questions prior to use with the actual test subjects, however it is recognized that this does not offer comparability with other documented statistics. Field testing uses persons designated as experts to critique information quality and thus it is recognized that they are different than the human subjects under investigation. The interview transcripts were member checked prior to data evaluation and allowed each participant the ability to review and validate their transcribed interview responses to reduce errors in interpretation or documentation (Saldaña, 2016). The researcher has industry knowledge, but strived to reduce bias through member checking data. These initiatives support quality results and are proactive tactics that enhance finding accuracy.

Second, there was a limited data set of only 23 HCM business students from one academic institution asked to participate in the study. Small sample size is not unusual in qualitative research where the goal is to explore a topic in a specific population, rather than extrapolate results across a large sector (Yin, 2014). However small sample size is an inherit limitation and thus would not support generalizing the study, and the perceived outcomes,
outside its scope of evaluation. Third, the researcher is a novice researcher with limited coding analysis experience. To reduce bias, another research professional performed an external audit of the data and first cycle coding to enhance credibility and quality of findings (Saldaña, 2016).

Delimitations include specific choices made by the researcher that limits the study scope, choice of the type of research to be conducted, overall objectives, and the participants that will be included in the investigation (Creswell, 2014). This qualitative case study evaluation was only intended to investigate HCM business students in one college bachelorette degree program at a specific midwest, private, liberal arts college using the conceptual framework of emotional intelligence. These decisions were made due to access to a specific data set, time to complete the study, and familiarity with the study group and industry being evaluated. For these reasons, it is inappropriate to extrapolate findings to a broad audience outside of these parameters without further research.

It is also assumed that student participants will offer honest and open responses to the stated questions. As with any personal response claim, this is impossible to control. However, risk is managed by creating a comfortable physical setting, allowing students the unpressured opportunity to accept or decline study participation, and by asking clear and well-aligned research questions (Warren, 2013).

Validation

Validation of research data refers to trustworthiness and appropriateness of the research process (Carter et al., 2014; Dikko, 2016). This includes having clear research questions, ensuring the research design matches the case under evaluation, using a purposeful sample, and taking adequate steps to collect and analyze data correctly (Hollweck, 2015). The researcher ensured all interviews were conducted in a consistent fashion and maintained internal
consistency by developing questions that specifically addressed the research questions. In addition, strategies such as completing a comprehensive literature review and the use of triangulation added credibility. As previously mentioned, triangulation specifically supports internal validity by using multiple data collection methods and sources of data (Carter et al., 2014). Dependability was supported through member checking, the use of an external auditor to review findings, and reflexivity, which serves as a constant reminder to remain impartial in the midst of preconceptions and assumptions that all researchers bring into a study investigation (Creswell, 2014; Dikko, 2016).

**Expected Findings**

The purpose of this study was to determine how HCM business students use emotional intelligence in decision-making. Research gathered individual responses as well as focus group data for comparison between the two groups of HCM students; those who had completed a practicum experience and those who had not. While it is difficult to predict individual or group responses regarding emotional intelligence, the researcher expected that the students who had completed a health care management practicum experience would demonstrate a higher level of emotional intelligence characteristics over those who did not attend a practicum. Care was taken to ensure that this personal bias did not sway data evaluation, and for this reason, an external auditor reviewed findings.

The study intended to fill a current gap in the research literature regarding the impact of emotional intelligence on HCM business students and how emotional intelligence is used in decision-making (Woolsey, 2016). The literature review demonstrated the current chaos in health care that requires managers who are aware, attentive, and open to new situations and customer needs (Himmelstein et al., 2017). Business students, who move into employment positions that
rarely have direct patient interaction, may have reduced understanding of the service care industry as it relates to direct patient care (Boneso et al., 2015). It is possible that this lack of detail limits decision-making and ultimately reduces outcomes, which negatively impacts the success and reformation within the health care industry. Change requires innovative leaders with skills and abilities not previously required in the health care industry (Cherry, 2017; Warren, 2017). It is hoped that this study offers insight as to whether academic institutions should adjust HCM business curriculum to include exposure and training of emotional intelligence perspectives within the curricular and practicum experiences to better prepare students as quality future health industry leaders.

**Ethical Considerations**

The researcher had no real or perceived conflict of interests and documented this in writing to the IRBs. The IRB process, in general, addressed the concern for ethical issues of inquiry as it strives to increase trustworthiness across the research continuum (Merriam & Tisdell, 2016). Research participants were given the option to voluntarily participate and no physical or physiological harm was expected, as verified by the IRB Boards. The nature of the study was clearly explained to participants who had the ability to discontinue participation at any time without repercussion. Data privacy measures were initiated and the researcher had an obligation to protect data confidentiality and to ensure data security was maintained throughout and after the data collection process. This resulted from deliberate attention to transcribe recordings within 24–48 hours of collection, delete recordings after transcription, and to secure transcriptions in a locked filing cabinet in the researcher’s home; separate from participants’ consent forms. The researcher does have a preconceived perspective due to their extensive
experience in health care and education. Thus care was taken to limit personal bias through the strategies stated above.

Summary

This chapter described how research was approached including the type of analysis, research design, target population, data collection tools and process, and plans for data analysis. The natural design of a qualitative comparison case study approach offers aspects of structure while also allowing flexibility as needed (Merriam & Tisdell, 2016). The study’s purpose was to use emotional intelligence as a conceptual frame throughout the evaluation of this research study investigation. Chapter 4 will demonstrate findings and Chapter 5 will offer a detailed analysis of the study’s outcomes and future implications using the data garnered through the use of the methodology explained herein.
Chapter 4: Data Analysis and Results

Introduction

The focus of this qualitative case study was to evaluate HCM business students through a lens of emotional intelligence. With the changes currently erupting within a transforming health care industry (Dau, 2016; Lewis & Fleming, 2015), leaders need to be flexible, reactive, and highly in tune to the needs and desires of a patient-focused care delivery model (Arumina & Ajeya, 2014). This demands skills and abilities such as awareness, understanding, and a heightened sense of social perspective that bridges the gap between patient need and business decision-making (Lewis & Fleming, 2015). Current health leaders, whether involved in direct patient care or strictly within business practice, struggle to meet these changing demands requiring innovation, creativity, and transformation while maintaining a focus on care and patient satisfaction (Hinds, 2017; Larkin, 2015). If current health care employees have difficulty meeting these demands, it is no wonder new employees find it difficult to transition confidently into this evolving market (Miles, 2017).

Emotional intelligence goes beyond traditional forms of intelligence to include a person’s ability to perceive, use, understand, and manage emotions (Bradberry, 2015). It has been a concept researched in multiple fields, including business, with findings supporting enhanced innovation (Kaur, 2012), crisis management (Soljani et al., 2014), and overall leadership effectiveness (Arumina & Ajeya, 2014). Researchers such as Hutchison et al. (2017) found connections to emotional intelligence and clinical reasoning in health care professionals providing direct patient care noting the value and increase in understanding gained by the care giver. Other researchers investigated the impact of direct care providers, such as doctors and nurses, in order to determine if higher emotional intelligence led to improved patient experience
or overall satisfaction; two recently added health care business metrics (Targeting, 2015; Warren, 2017). However, the emphasis toward health care reform spans beyond those providing direct patient care, spreading to all professionals who function within the industry (Johnson, 2017).

Thus, the purpose of this study focused on health care business students who will enter roles required to make business decisions that impact multiple facets of health care delivery and practice, without the benefit of direct patient contact that often broadens understanding and empathy for those served.

This study is warranted because limited investigation has occurred to identify connections between EI in non-direct patient care health professionals, and even less research data was available from studies that evaluated HCM business students while they were still in college (Blakely, 2015). Collins and Cooper (2014) recognized the limited qualitative research that focused on emotional intelligence in health care, reiterating that EI was more often evaluated using a quantitative methodology where responses could be more easily related. The researcher recognized that choosing a qualitative approach offered less previously evaluated tools, a reduced number of tested methodological approaches, and a reduced amount of data upon which to compare findings. However, this qualitative comparative case study added to the field of knowledge by gathering data from a group of students currently enrolled in a HCM business program with the goal of evaluating ties of emotional intelligence within responses to semistructured questioning. The overall emphasis was to evaluate how emotional intelligence impacted decisions-making and if a more flexible and reactionary health care perspective was enhanced by a heightened sense of emotional intelligence allowing, and or supporting, an improved ability to make thoughtful, quality decisions that enhance patient and system outcomes to better prepare students for industry employment (Dau, 2016).
Qualitative research strives to understand meaning through an inductive process and descriptive analysis (Merriam & Tisdell, 2016). The case study approach aligned with the scope and purpose of this exploratory investigation because the researcher focused only on HCM business students at a specific site location, researching how HCM business students viewed experiences in health care as seen through formed knowledge, previous experiences, and a structured scenario. The study also evaluated perspectives on the current state of health care and its challenges, barriers that limit outcomes, and how, if at all, emotional intelligence impacted decision-making or leads to enhanced outcomes.

Three research questions guided the study.

1. What are the emotional intelligence characteristics of college health care management business students?
2. How do college health care management business students use emotional intelligence when evaluating patient scenarios?
3. How does a practicum experience influence emotional intelligence in college health care management business students?

As the primary researcher with over 30 years in health care practice and health education, the answers to these questions could offer valuable insight regarding employment preparation for a complex industry. Employers want incoming professionals who are prepared and able to navigate change and health reform initiatives (Larkin, 2015; Miles, 2017). Students, more than ever, need critical thinking skills aligned with the awareness to recognize issues beyond what is obvious, using intuition and empathy in conjunction with a broad intellectual perspective (Collins & Cooper, 2014). Investigating emotional intelligence within this group of students
offered an opportunity for enhanced understanding that could lead to programming and curriculum redesign that better aligns with the needs of an emerging workforce.

The research process and population were approved by the Institutional Review Boards at both the research university and the site college. Potential HCM student participants were emailed an invitation describing the study, expected time commitment, and the structure of the proposed interaction. After sending the invitation email twice to potential health care management students, the research study data collection began with 14 student participants. All HCM student participants were from the same midwest, private, liberal arts college, which created the case under investigation. Interview times were established for all students who responded to the evite, and meetings were held at a comfortable location outside the typical classroom setting. Care was taken to reduce fear and power due to the faculty-student relationship (Yin, 2014). During the interview, the same list of 13 semistructured questions, found in Appendix B, were asked to all HCM students, and responses were gathered via audio recording, observations, and note taking.

Each participant’s response to question two, asking whether or not they completed a clinical experience, placed them in one of two focus groups. These self-selected groups became the subgroups used for the two focus group sessions where more semistructured questions, listed in Appendix C, were asked after the viewing of a short health care scenario. The video titled *A Patient’s Health Care Story* (Human, 2011, 4:11) demonstrated a health care situation through the eyes of a transgender patient named Cecilia Chung. The goal of showing the video to the focus group students was to place them in the mindset and context of a direct patient care scenario. The video topic aligned with issues often present in health care and gave perspective to the topic by challenging students to consider a more broad perspective in care delivery.
Responses to questions were summarized after discussion and collaboration among group members. Focus group sessions were also audio recorded and the researcher took notes during each event and documented observations. Details from each individual interview and each focus group session were transcribed and later evaluated through a series of coding stages. Analysis led to the determination of themes and subthemes, and throughout the process, details aligning with the preestablished research questions began to unfold.

This chapter continues with a detailed description of the study sample, research methodology, analysis, data, and findings that evolved from this exploratory case analysis. The coding process is also discussed as well as theme and sub-theme development. All aspects described offer a foundation for the critical components leading into Chapter 5 where study implications and findings are fully developed and critiqued.

Description of the Sample

The site location was a midwest, private, liberal arts college where the researcher had a professional association with the institution. The study had been previously approved through Concordia University’s IRB as well as the site location’s IRB committee. To support the comparative case methodological approach under investigation, nonprobability, purposeful sampling was used to select the undergraduate health care management students currently enrolled in the Bachelor in Business Administration in Health Care Management degree program. There were 23 HCM enrolled students identified by the registrar, and each was sent an evite through their college email. Fourteen HCM students responded to the research email inquiry and agreed to review the consent form and ultimately agreed to participate. The consent form offered explicit objectives and rights for those health care management students who chose to participate, emphasizing the ability to withdraw from the study or decline to respond to any or
all questions throughout the inquiry. To address issues of potential power and coercion due to the faculty-student relationship, special care was taken to establish clear lines between the research process and the student’s typical classroom obligations. For example, the interviews took place outside regularly scheduled class sessions and in a separate location not used for structured class sessions. Each voluntary participant completed all aspects of the research study, including the personal interview and the focus group session. Student names were never used in order to maintain privacy, and instead participate responses were simply labeled as HCM 1–14 in the order in which students scheduled interview appointments.

Using this identification system, Table 1 shows the list of health care management student participants with respect to gender, age, and their current year in the degree program. Freshman designation refers to students with up to but less than 30 completed credit hours. Sophomore designation is used for students with 30–59 credit hours. Junior refers to those who have completed 60–89 credit hours and senior identifies those who have completed 90 or more credit hours. Note that no freshman health care management students choose to participate in the study and all but two students were upper classman, identified as juniors and seniors. Eight students self-identified as female and six students categorized themselves as male. No other self-identify response for gender was given. The range of student ages went from 18–47 years old, with the mean age of the health care management student participants calculated at 22.7 years old. All student participants were of traditional college age, falling between 18 and 22 years old, except HCM7 who was 47 years old.
Table 1

*Demographic Data of Health Care Management Student Participants*

<table>
<thead>
<tr>
<th>Identifier</th>
<th>Completed practicum experience</th>
<th>Self-Identified Gender</th>
<th>Age</th>
<th>Level in College</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCM1</td>
<td>Yes</td>
<td>Female</td>
<td>22</td>
<td>Senior</td>
</tr>
<tr>
<td>HCM2</td>
<td>Yes</td>
<td>Female</td>
<td>22</td>
<td>Senior</td>
</tr>
<tr>
<td>HCM3</td>
<td>Yes</td>
<td>Male</td>
<td>22</td>
<td>Senior</td>
</tr>
<tr>
<td>HCM4</td>
<td>No</td>
<td>Male</td>
<td>21</td>
<td>Senior</td>
</tr>
<tr>
<td>HCM5</td>
<td>No</td>
<td>Female</td>
<td>20</td>
<td>Sophomore</td>
</tr>
<tr>
<td>HCM6</td>
<td>No</td>
<td>Male</td>
<td>20</td>
<td>Junior</td>
</tr>
<tr>
<td>HCM7</td>
<td>No</td>
<td>Male</td>
<td>47</td>
<td>Junior</td>
</tr>
<tr>
<td>HCM8</td>
<td>No</td>
<td>Female</td>
<td>20</td>
<td>Junior</td>
</tr>
<tr>
<td>HCM9</td>
<td>No</td>
<td>Male</td>
<td>20</td>
<td>Junior</td>
</tr>
<tr>
<td>HCM10</td>
<td>No</td>
<td>Female</td>
<td>21</td>
<td>Senior</td>
</tr>
<tr>
<td>HCM11</td>
<td>No</td>
<td>Female</td>
<td>18</td>
<td>Sophomore</td>
</tr>
<tr>
<td>HCM12</td>
<td>No</td>
<td>Female</td>
<td>20</td>
<td>Junior</td>
</tr>
<tr>
<td>HCM13</td>
<td>No</td>
<td>Male</td>
<td>23</td>
<td>Junior</td>
</tr>
<tr>
<td>HCM14</td>
<td>Yes</td>
<td>Female</td>
<td>22</td>
<td>Senior</td>
</tr>
</tbody>
</table>

Table 2 offers demographic detail for those within Focus Group 1, which were the HCM student participants who self-identified as not having participated in a health care practicum experience. There were 10 HCM students in this group with equal numbers of males and females; five in each category. The average age of this group was 23 years old. No first-year students participated in the research study and as the chart shows, most participants were juniors and
seniors. Even though these students had not completed a practicum experience, they had progressed through the curriculum to a stage requiring completion of a minimum of three health care specific courses that offered a foundation of health care knowledge gained through traditional educational curriculum such as classroom lecture, discussion, case study evaluation, and project-based assignments. This is important to note as results from a heavy first-year population, who would not have taken any health care related coursework, might render different outcomes due to the lack of general industry awareness. It is important to note that all 14 students who completed the individual interview also participated in the appropriate focus group session due to their practicum designation.

Table 2

*Focus Group 1 Participants; Health Care Management Students Who Had Not Completed a Practicum Experience*

<table>
<thead>
<tr>
<th>Number of HCM students who did not completed a practicum experience</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Mean</td>
<td>23 years old</td>
</tr>
<tr>
<td>Level in College</td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>0</td>
</tr>
<tr>
<td>Sophomore</td>
<td>2</td>
</tr>
<tr>
<td>Junior</td>
<td>6</td>
</tr>
<tr>
<td>Senior</td>
<td>6</td>
</tr>
<tr>
<td>Self-reported Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 3 offers the same categories of demographic information for those who self-selected into Focus Group 2 by stating they had completed a practicum experience at a health care facility. These students were all seniors and had completed a practicum experience prior to study participation. The average age for this group was 22 years old, with three females and one male in the group.
Table 3

Focus Group 2 Participants; Health Care Management Students Who Completed a Practicum Experience

| Number of HCM students who completed a practicum experience | 4 |
| Age Mean | 22 years old |
| Level in College | Senior |
| Self-reported Gender | Male = 1 Female = 3 |

Research Methodology and Analysis

Qualitative methodology was used for this comparative case study investigation and supported the gathering of data to answer the posed research questions (Merriam & Tisdell, 2016; Yin, 2014). The philosophical foundations of qualitative research align with an investigative study into the meaning of details housed within a specific context by using tools such as interviews, observations, and interpretive analysis to establish findings (Merriam & Tisdell, 2016). This methodology focuses on how people interpret and understand the world in which they live and function, and why certain experiences are impactful to their thinking and individual perspectives (Merriam & Tisdell, 2016). Such insight becomes the basis for qualitative research and offers a different perspective to quantitative analysis that gathers numerical data answering questions such as how much or how many (Merriam & Tisdell, 2016). In fact, the majority of research found in the literature review, as sited in Chapter 2, used a quantitative approach to evaluate emotional intelligence. Thus, this study was beneficial through its varied look into emotional intelligence as a conceptual framework within the targeted study population of HCM business students.
As stated, the case was bound to a specific midwest, private, liberal arts college and focused only on students currently enrolled in the Bachelor in Business Administration (BBA) in Health Care Management degree program. All 23 HCM enrolled students were sent an email inviting them to participate in the study. Once a student chose to participate, a 30-minute interview date and time was established outside of the traditional classroom structure. At the beginning of each interview session, each student participant was given consent forms to review and sign, while also being assigned a unique identifier to support confidentiality.

In addition, names were not associated with transcribed data and consent forms were kept secure through locked storage in a separate location from gathered data. Semistructured questions guided the interview dialog, but the setting and the nature of the conversational interview allowed for expansion and further discussion if the discussion naturally evolved. In addition to the individual interview sessions being audio taped to support accurate gathering of information, the researcher took field notes, documented body language and pausing in the conversation, and recorded any other interesting aspects that could later be considered during evaluation. After each interview session the transcribed data was member checked to support internal validity.

The following semistructured interview questions were asked to each HCM participant.

1. What is your program of study?
2. Have you participated or are you currently participating in a health care management practicum?
3. What grade are you in your program of study: freshman, sophomore, junior, senior?
4. What is your age?
5. What is your gender?
6. What factors influence a patient’s well-being?
7. What is the most important item patient’s want from their health care system?
8. How have you interacted in the health system as a patient?
9. How would you describe that experience?
10. How would you enhance the current state of health care in the US?
11. What are the barriers that limit patient wellness?
12. What does it mean to have emotional intelligence?
13. How do you use emotional intelligence in decision-making?

As student participants responded to the second question asking if they had or had not participated in a practicum experience, their response placed them in one of two self-identified groups. These groups, those who did or did not participate in a practicum experience, became the focus groups for the second phase of the research investigation. An additional 60 minute date and time appointment was set for each focus group and all participants who completed an interview, also attended and participated in their identified focus group session. All participant interviews were completed before either focus group session took place.

The focus group session began by watching a short video vignette depicting a health care scenario about a transgender patient who described challenges associated with their care. The goal of including this 4-minute video was not to have the students evaluate this specific scenario only, but rather to get them thinking about current issues that occur within the evolving health care system. The focus group questions were asked one by one to the entire group with the goal of enticing discussion and gathering collective responses toward the posed topic questions. After discussion of each question, groups were asked to summarize their responses to support clarity and intent of answers before moving on to the next question. The focus group sessions were also
audio recorded and later transcribed with information only identified as data from practicum Focus Group 1 or non-practicum Focus Group 2 members; meaning individual responses were not associated with specific student participants. All audio recorded data from the individual interviews or the focus group responses was immediately erased after transcription. The researcher also made field notes documenting observations during the focus group sessions, which added to the depth of data that could be used for later evaluation (Merriam & Tisdell, 2016).

The focus group discussions were guided by six semistructured questions.

1. In your opinion, what is the challenge facing the patient?
2. What types of problems need to be solved to support better patient outcomes?
3. How could health care managers better understand patient’s needs?
4. Why do health care policies and procedures sometimes not align with desired patient outcomes?
5. What changes in health care should be made to support patient wellness?
6. What makes someone prepared to enter a transforming health care industry?

Data gathered from these sessions was used to evaluate HCM student’s perspective on a variety of health related topics including challenges facing the system, limitations to wellness, and ways to recognize or support change in a complex industry. Using the conceptual framework of emotional intelligence grounded the study purpose by focusing on the traits, behaviors, or skills of health care management students as they responded to the interview and focus group questions. Exploring this concept within the specific case allowed the researcher an opportunity to specifically assess levels of self-awareness, social awareness, and self-management that become valuable characteristic in complex adaptive industries such as health care (Arunima et
al., 2014; Cherry, 2017; Warren, 2017). Gaining insight into this phenomenon within HCM business students while they are still in college, could manifest into better preparatory education in future academic settings and programs, and in turn, create better qualified managers in the health industry (Joshi et al., 2016).

Summary of Findings

The raw data gathered through interviews was analyzed and interpreted by the researcher through the process of coding. Coding is one way of evaluating qualitative data and allowed the researcher flexibility as patterns and meaning emerged from within the information (Saldaña, 2016). The initial round of coding, often called first cycle coding, used in vivo and value coding to capture words and phrases that represented key aspects of the data (Saldaña, 2016).

In vivo coding allowed the researcher to pull out actual language stated by each participant and to then documents those specific words or phrases as notable codes (Saldaña, 2016). This style of coding recognizes cultural terms or discipline specific language that are used by participants due to the unique connections they have with their environment or past experiences (Saldaña, 2016). Since the case study under investigation involved a comparative look at health care management students who had or had not completed a practicum experience, this style of coding allowed for the investigation of variation in language possibly due to prior experiences in a health care practicum.

Value coding is an affective model of coding that captures a person’s values, beliefs, attitudes, and perspectives of a topic (Saldaña, 2016). This recognizes the value, or the level of importance, attributes to a concept or situations, and offers a solid connection to the emotional intelligence conceptual framework under investigation within this study (Saldaña, 2016). Value coding also uses a single word or phrase to document constructs associated with thoughts and
feelings (Saldaña, 2016). The coding process by nature is evolutionary and builds a story through a fluid manipulation of response data (Stucky, 2015). Table 4 lists the codes noted after first round coding of interview transcripts using in vivo and value coding, and demonstrates the beginning phase of evaluation upon which further findings matured.

Table 4

*First Cycle Interview Transcript Codes*

<table>
<thead>
<tr>
<th>In Vivo Codes</th>
<th>Value Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of coordinated care</td>
<td>Trust</td>
</tr>
<tr>
<td>Concerns over money</td>
<td>Quality</td>
</tr>
<tr>
<td>Limited access</td>
<td>Transparency</td>
</tr>
<tr>
<td>Long waiting times</td>
<td>Listening</td>
</tr>
<tr>
<td>Decide what makes me happy</td>
<td>Outcomes</td>
</tr>
<tr>
<td>Expect good care</td>
<td>Barriers</td>
</tr>
<tr>
<td>Treated fairly</td>
<td>Honesty</td>
</tr>
<tr>
<td>Respect from care-givers</td>
<td>Empathy</td>
</tr>
<tr>
<td>Patient discrimination</td>
<td>Open-mindedness</td>
</tr>
<tr>
<td>Lack of education</td>
<td></td>
</tr>
</tbody>
</table>

To support the fluidity of the coding process, transcribed data was uploaded into MAXQDA; a software system specifically designed to support qualitative and mixed method analysis. Some data could be coded by hand, however an automated software allowed the researcher to highlight individual words and phrases and label, or code, them with the same language, as with in vivo coding, or with a meaning or interpretive response, as would be
associated with value coding. While the researcher still made the decision regarding what and how to code, this automated system streamlined the coding process and enhanced documentation, retrieval, and comparison of individual and focus group data (Saldaña, 2016). Using an automated software also supported multiple layers of coding as themes and subthemes began to emerge through each round of the coding cycle and highlighted frequencies or other such factors that might not have been evident with manual coding alone (Saldaña, 2016).

The second cycle of coding focused on reassembling and evaluating what the individual codes said about the question or situation being evaluated by incorporating focused group responses in the next round of evaluation. It was here that concepts began to unfold, which supported theme development and theory building (Yin, 2016). Pattern coding was selected to search for causes and explanations, as it was during this phase that coding went beyond simple labeling and allowed for more extensive interpretation (Saldaña, 2016; Stucky, 2015). The research questions remained the focus throughout the analysis process, serving as the foundation and as a consistent thread throughout the investigative journey. Table 5 lists the themes and subthemes identified.
Table 5

Themes and Subthemes from Second Cycle Pattern Coding.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Challenges</td>
<td>Access to services</td>
</tr>
<tr>
<td></td>
<td>Cost of care</td>
</tr>
<tr>
<td></td>
<td>Quality variation</td>
</tr>
<tr>
<td>Expectations</td>
<td>Overall wellness</td>
</tr>
<tr>
<td></td>
<td>Professional ability</td>
</tr>
<tr>
<td></td>
<td>Levels of caring</td>
</tr>
<tr>
<td>Inequities</td>
<td>Patient health literacy</td>
</tr>
<tr>
<td></td>
<td>Clinical outcomes</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
</tr>
</tbody>
</table>

Qualitative research is effective with small numbers of participants as the emphasis is on making connections and understanding meanings of lived experiences (Merriam & Tisdell, 2016). Using HCM business students at a specific liberal arts, private, midwest college as the case under investigation, offered a focused approach into the research topic. While the literature demonstrated that emotional intelligence is most often researched through quantitative methods, this qualitative perspective enriched the depth of information and achieved new outcomes and perspectives through triangulation. Further discussion of data will occur through a presentation of the connection to the three research questions as well as the conceptual framework of emotional intelligence.

Presentation of Data and Results

The presentation of data and results will align with the research questions under investigation in this qualitative case study.

Research question 1: What are the emotional intelligence characteristics of health care management business college students? The initial cycle of coding evaluated health care
management student interview responses in relation to research study question number one, as listed above. All 14 participants’ comments were included in the analysis, and details from interview questions 6–13, as found in Appendix B, were the target responses under consideration. Interview questions 1–5 gathered structured responses and demographic data used for categorization, and thus details from those questions were not pertinent in this evaluative aspect of the study. The words or phrases gleaned through in vivo and value coding were listed in Table 4.

Emotional intelligence has four main categories that center around two vantage points: personal competence that includes self-awareness and self-management, and social competence that includes social awareness and relationship management (Collins & Cooper, 2014). Personal competence includes the ability to know your own internal emotional preferences and being aware of what is important to you, as well as the self-recognition of the impact of those emotions (Collins & Cooper, 2014). Self-management of emotions includes the ability to regulate internal responses and impulses (Bradberry, 2015). Those who have self-regulation can balance their emotional delivery and be more flexible in decision-making (Dau, 2016; Lewis & Fleming, 2015). Personal competence in emotional intelligence also includes honestly, integrity, accountability, respect and the general ability to manage change and be comfortable with new information (Bradberry, 2015).

The findings demonstrate that the student participants identified multiple examples of emotional intelligence traits in their responses. Examples of personal competencies noted by student include honesty, transparency, the need for quality, and the desire to treat people fairly; all refer to self-awareness and self-management actions. HCM3 stated, “If you are really mad at someone, it is important to recognize your emotions can dilute your normal thought process”.

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HCM6 stated, “I feel honesty it is very important. If health care employees are not honest with patients, it creates fear and anxiety”. HCM11 said, “It is important to know how you are feeling each day, in order to be at your best with others”, and HCM9 said, “If you are going to put yourself in a situation, it is best to know how that will affect your stress level.” Each of these responses demonstrates the awareness of personal competence in emotional intelligence and it is important to note that it is upon a foundation of personal emotional competencies that social competencies are built (Lewis & Fleming, 2015). Thus, individuals lacking skills in self-awareness and self-management will likely not have strong emotional strengths tied to social competence.

Social competencies related to emotional intelligence include the ability to understand other’s emotions, called social awareness, as well as demonstrating the skills needed to manage and respond effectively to relationships (Mayer et al., 2016). Traits such as corporation, empathy, trust, listening, communication, and the awareness to anticipate other’s reactions are key behaviors for emotional competencies in social interaction (Collins & Cooper, 2014). These aspects are also important for teamwork in the business sector, and support enhanced customer service and board thinking; key elements in service industry. HCM13 discussed interacting with others and stated, “I try to notice others who are in a similar situation where I can offer advise”, and HCM8 commented that, “It is important to consider how other’s impacted by your decision will feel”. Offering understanding, listening to patient’s concerns, and responding in a caring, reassuring manner are critical skills for the next generation of health care employees (Johnson, 2017; Warren, 2017).

It is also important to note that numerical evaluation is most often a quantitative consideration, yet Harding (2013) stated there are times when the sheer frequency of an
The aforementioned concept is valuable and it is acceptable to note within the study findings. During first cycle coding, the need for quality and open communication were mentioned the most by student participants. Quality, coded 30 times, and communication, coded 22 times, highlights the awareness and desire for quality care and improved patient outcomes in a transparent health care environment. This offers a level of importance to these specific components, and demonstrated a level of personal and social emotional intelligence competence already present within this group of health care management students.

**Research question 2: How do health care management business college students use emotional intelligence when evaluating patient scenarios?**

The pattern coding used to create the themes and subthemes listed in Table 5 built upon the individual interview response codes noted during first cycle coding. Interweaving the interview responses already categorized with the focused group responses gave a foundation of perspective upon which the focus group comments could be viewed. The focus group data responses were not linked to a specific person, but were categorized simply as coming from Focus Group 1 or Focus Group 2. At this stage of evaluation, the focused group comments were not separated regarding who had or had not participated in a practicum experience. In addition, the researcher used field notes and observations as well as the audio recorded data to triangulate information into identifiable concepts and perspectives (Saldaña, 2016).

Question two asked how HCM business students used emotional intelligence in practice, which is why the focus group session began with a short vignette sharing a health care scenario. The video footage showed a transgender women and documented their brief interaction within the health care service industry. The video was used to offer just one example of a health care situation, and the researcher explained the purpose and reason for using the video to each focus
group session. The goal of the focus group video was to offer an actual example that
demonstrated a real patient experience to place the topic in context so rich discussion could
follow as the focus group members discussed and responded to the proposed focus group
research questions. Three major themes evolved throughout the evaluation of focus group
comments: challenges, expectations, and inequities.

**Challenges.** One way health care management students used emotional intelligence was
by recognizing issues that created roadblocks in service delivery. The subthemes generated under
this theme refer to items related to access, cost, and quality. Patients who have limited access to
services struggle to maintain wellness and rarely get the treatment level needed at the proper
time. Access emerged as a subtheme under this topic from both subgroups as they mentioned the
need for services to be available to all patients. Focus group 2 elaborated on the need for access
by emphasizing different types of barriers that restrict care. “Technology, location, education,
knowledge, food, transportation, and other healthy options” as well as “medication” were
individually emphasized as consistent challenges patient’s face when interacting in the health
care industry. When a patient does not keep an appointment or is late to a procedure, those
without emotional intelligence might assume the patient did not care or even that they were lazy
and lacked the ability to pay attention to details. However, emotional intelligent employees may
ask about transportation options, and other factors such as day care needs that could delay a
person from timely arrival. In addition, limited insurance coverage impedes a patient’s ability to
pay and delays, or even restricts, access to care.

Cost also resonated as a challenge for patients across both focus groups. This was evident
by comments concerning lack of price transparency, concerns with insurance variation, and
limited coverage for special populations such as the poor and elderly. In addition, Focus Group 2
identified costs associated with medical errors that lead to medical malpractice and neglect-based law suits resulting in needless additional costs. These issues produce a strain on the care industry and distract funding away from the patient, thus reducing the available benefits and decreasing care service.

The final subtheme that emerged was quality. Quality was discussed by Focus Group 1 through concerns over a lack of care that limits outcomes. Good care equals quality care, and without a certain level of value, any business struggles. The difference with health care as compared to other businesses, is that people cannot discontinue use and just stop purchasing the service. Thus the industry has a captive audience of users and it is important not to take advantage of this variation in business strategy. Quality outcomes must be the goal across the industry standard, and both focus groups recognized this as a core patient desire.

*Expectations.* The students discussed expectations as they focused on the patient’s needs and general desires to be well. Health care is not only an industry that serves the ill, but actually also an industry that supports wellness. If patients can remain on the wellness side of the continuum, they have less need for traditional medical services. The recognition of this was evident by both focus groups as they stated that patients had a desire to know how best to navigate services so they could go to wellness check-ups, prenatal visits, and proper follow-up care service. Beyond this basic assumption emerged comments related to professionalism and the more personal interactions between caregiver and patient. Care often includes listening in order for patient’s to feel heard. Focus Group 1 spoke of expectations of efficiency in practice and within access to ease of using services, and both groups mentioned respect, lack of discrimination, and empathy as core factors, with Focus Group 2 specifically highlighting the need to align services with individual goals. Also emerging as a professional expectation was the
need to “see the bigger picture” and to be “flexible”, both emotional intelligence social competencies emphasized by members of Focus Group 2.

The final subtheme associated with expectations was the need for levels of caring. Not all patients need the same thing from their care providers. Some need medications, x-rays, surgeries and lab test as more traditional care services or procedures, while others possibly just need to be heard as they share their story and discuss options. Both are important and impact patient outcomes, however busy doctors and nurses responding to flashing call lights can lose sight of the latter perspective (Nightingale et al., 2018). Business health care management professionals might also not recognize this need as it is not a billable service or directly associated with a coded disease symptom entered into the electronic medical record (Caruso, 2016). Student participants related this fact through their discussions of “showing empathy, listening carefully to patient history, recognizing pivotal aspects possibly not stated in words, and trying to put themselves in the patient’s shoes”.

*Inequities.* The final theme the emerged from the focus group sessions centered on inequities evident across the health care spectrum. The students recognized variation in services due in part to some of the above mentioned issues, however specific subthemes developed with limitations due to health literacy, clinical outcomes, and communication. A lack of health literacy reduces a patient’s ability to navigate the health system, including understanding results and directives that impact care and follow-up. Health literacy may also be impacted by culture and norms of certain populations, and without understanding, can create a barrier between the patient and their physician’s plan of care. For example, Focus Group 2 members said it is important to ask probing questions so goals can be aligned, and Focus Group 1 members discussed the importance of health knowledge that supports general understand health initiatives.
Inequities influenced by discrimination was the topic of the video each focus group watched. The patient in the scenario identified as transgender and shared concern regarding feelings of acceptance and understanding by health care professionals. Building on the topic of discrimination emerged rich discussion from Focus Group 2 members discussing how discrimination impacts patient’s self-esteem. They felt that a person with lower self-esteem would possibly not think they needed or deserved care, or they would shy away from seeking care because when they sought service they felt misunderstood. Recognizing the underlying concern that leads to a lack of care shows emotional intelligence through enhanced social awareness. Clinical outcomes can be reduced due to differences of thought and personal bias. All patients deserve a high level of clinical care regardless age, disease state, race, or the ability to pay. Focus group students discussed the need for awareness and a broad perspective to embrace and appreciate diversity in desired outcomes, including “understanding different circumstances”. The realm of “what is the norm” became the question as discussions of balance and fairness emerged.

The final inequity centered on communication, which has two-way implications for the patient as well as the health system. However, the focus group students felt that within health care, the “burden” or “heightened responsibility for communication” fell on the care professional. This includes “communicating with the patient by asking the right questions, ensuring better access to detailed information, and finding ways to make paperwork and guidelines easier to follow”. In addition, communication was noted as an important part of quality as this enhanced dialog allowed patients to better relay individual needs and share critical details that led to more targeted procedures and testing that in turn supported improved interaction from health providers. Communication also includes “knowing how to diffuse
situations” by anticipating need, which is a relationship management social competency of emotional intelligence.

Q3: How does a practicum experience influence emotional intelligence in health care management business college students? The final case study question compared the student responses given by those who had not completed a practicum experience, labeled as Focus Group 1, with those who had completed a practicum experience, labeled as Focus Group 2. As with the evaluation of research question 2, no specific student response was identifiable to a particular individual as responses were documented as being from the entire participant group. There was also no variation in study evaluation knowing there were 10 students in Focus Group 1 who had not completed a practicum, and only 4 students in Focus Group 2 that had completed a practicum. The researcher used the data as given and felt comparisons could still be made from the group information.

It was during this comparative evaluation process that the researcher noticed a few unique findings that were not evident during evaluation of the other two research questions. The first notable finding was in the sheer depth and length of the responses to the focus group questions. After discussion of each focus group question, the group participants were asked to summarize their response into a bulleted list on the white board. Appendix D shows the data documented from that exercise. As is evident, the number and depth of responses from those who had completed a practicum experience is significantly different from the other group. Many comments from group 2 were in phrases as they elaborated on exactly what they meant by a response. This often added descriptive detail to clarify and offer further explanation to their response that was not evident in responses by Focus Group 1 members. For example, both groups responded saying communication was one way health care managers could better
understand patient’s needs. However, Focus Group 2 members who had completed practicum experience offered specifics such as listening, asking, and demonstrating ways of caring. This response complexity directly relates to emotional intelligence social competencies demonstrating higher levels of understanding and awareness as situations are evaluated and understood (Bradberry, 2015).

The second item of comparable difference was the recognition of the impact they felt they could have on an outcome. Having a sense of empowerment and the desire to lead, both relationship management skills of emotional intelligence, demonstrates confidence, courage, accountability, which are self-management skills. This level of thought and insight comes from increased awareness and connectivity to the topic being discussed. The inclusion of comments that support interactions among health professionals also speaks to teamwork, a relationship management social competence not mentioned by Focus Group 1. There were times when the practicum 2 group also posed follow-up questions, such as with the comment, “The standard norm is always changing—how do we know and stay on top of it”. This demonstrated a willingness to be a change agent, striving to go beyond the basic level of service to create a higher level of functionality. Being proactive aligns with the relationship management category of EI under social competence and similar comments are not evident from the focus group members who did not have a practicum experience.

The final difference the researcher noted, as evidenced by the inclusion and triangulation of their field notes, was the use of the word, “we” from members of the practicum focus group. It was not a concept that the researcher recognized initially until data was reevaluated and further reflection occurred. The simple use of the word “I” often used in responses by individuals within the non-practicum group, identified their introspective mindset as they responded to the
questions. HCM10 stated, “I wonder how the situation will affect me”. Their thoughts were not considering cooperation and organizational awareness, both skills associated with emotional social competence. However, the practicum group members often responded by sharing ways that involved improved services that could be achieved through “multiple perspectives, enhanced communication, increased efficiency, and specifically listening to the customer and incorporating their views into solutions”. Once again, all of these aspects demonstrated a heightened sense of emotional intelligence far beyond the level of detail gleaned from the non-practicum focus group member responses.

Summary

The data presented in Chapter 4 was gathered through a qualitative case study investigation of HCM business students attending a private, midwest, liberal arts college. Emotional intelligence, as the conceptual framework, grounded the study through a focused perspective and guided the researcher to answer three research questions:

1. What are the emotional intelligence characteristics of college health care management business students?
2. How do college health care management business students use emotional intelligence when evaluating patient scenarios?
3. How does a practicum experience influence emotional intelligence in college health care management business students?

Interview responses, focused group data, field notes, and participant observations was evaluated and became the findings upon which evaluation occurred. Some initial variation in emotional intelligence was noted using in vivo, value and pattern coding techniques, as themes and subthemes were identified. Of particular relevance was the increased emotional intelligence
responses from students in Focus Group 2, which were those that had completed a practicum experience. Member checking and triangulation were incorporated to reduce bias and misinterpretation of results. Reflexivity and continued coding by the researcher revealed significant findings and professional insight that will be discussed in the next chapter. In addition, Chapter 5 will include further evaluation and synthesis of results, as well as offer a discussion concerning study limitations, result implications, and recommendations for further research.
Chapter 5: Discussion and Conclusion

Introduction

The purpose of this qualitative comparative case study was to explore the emotional intelligence of HCM business students, specifically in relation to their readiness to transition as employees in a complex health industry. This chapter brings details and evaluation together as findings are discussed in relation to their impact on the literature review and the body of knowledge focusing on emotional intelligence. The researcher will connect study implications to future academic preparation and curricula design, and specifically discuss how it relates to the use of a practicum or experience-based learning event. The chapter will also offer considerations for future investigations and suggest ways the study supports a business student’s ability to not only function, but thrive, in a transforming service-based industry.

The lens of emotional intelligence served as the conceptual framework to guide research questions due to the value it offers in broadening awareness and supporting change (Cherry, 2017; Steckler et al., 2016). Complex industry reform requires health care leaders who can adapt and make decisions that focus on value-based care (Mikolajczak & Bellegem, 2017) as well as the needs of its patients (Warren, 2017). Traits such as organizational awareness, flexibility, cooperation, communication, customer sensitivity, and change management are drivers for success (Joshi et al., 2016). Through three research questions, the study investigated if health care management students displayed emotional intelligence traits, what those traits were, and evaluated if a practicum experience further impacted the level of emotional intelligence. Chapter 5 culminates the discussion of this investigation by demonstrating how the study findings adds new information to the body of literature and industry practice.

Summary of Results
The purpose of this qualitative comparative case study was to evaluate the emotional intelligence of HCM business students attending a midwest, private, liberal arts college. This specific population became the case under investigation and from whom data was gathered through semistructured interview and focus group questions. Three research questions led the investigation as connections to emotional intelligence and enhanced preparedness for functioning in a complex, transforming industry were evaluated.

1. What are the emotional intelligence characteristics of college health care management business students?

2. How do college health care management business students use emotional intelligence when evaluating patient scenarios?

3. How does a practicum experience influence emotional intelligence in college health care management business students?

Emotional intelligence offered a valuable conceptual framework for this study due to its documented value in enhancing awareness, social perspective, cooperation, and flexibility (Bradberry, 2015; Collins & Cooper, 2014). These skills support the ability to change, to anticipate reactions, and to respond effectively in complex adaptive systems like health care (Miles, 2017; Tye, 2012). Thus, health care professionals benefit from higher levels of emotional intelligence (Topalogla, 2014) and in turn, so do HCM business students transitioning into this evolving arena (Manning, 2012; Shulman & Richman, 2016).

Using a qualitative comparative strategy allowed the discovery of what EI skills health care management students had before and after a practicum experience, as well as how EI was used in decision-making. In vivo, value, and pattern coding supported the researcher’s creation
of themes and subthemes that centered on challenges, expectations, and inequities that impact care and services within the health care environment.

The comparative aspect of the case study was evaluated by participants self-selecting into one of two groups: those HCM business students who had completed a practicum and those HCM business students who had not completed a practicum. The focus groups were not even in distribution with only four student participants in the practicum group and 10 student participants in the non-practicum group. However, regardless of the number of students in each group, the practicum focus group demonstrated higher levels of emotional intelligence as determined through rich findings and researcher observation.

Focus Group 2, made up of health care management students who had completed a practicum experience, gave more in depth responses as evidenced by the use of specific detail and examples, and demonstrated increased awareness and understanding: emotional intelligence self and social awareness traits. Focus Group 2 student comments also focused on teamwork and collaboration rather than how a situation would impact them personally, thus demonstrating the willingness to be open, trusting, and respectful: self-management and relationship management traits. Finally, the practicum focus group seemed empowered to make changes and ready to lead in spite of the current unrest in the health industry. This is a relationship management emotional intelligence trait and one that will benefit new business employees entering health care reform (Schulman & Richman, 2016).

**Discussion of the Results**

Discussion of results occurs as findings relate to each research question proposed in this qualitative comparative case study.
Research Question 1: What are the emotional intelligence characteristics of care management business college students? In order to evaluate how or if emotional intelligence impacted decision-making, the researcher first began by evaluating what, if any, emotional intelligence characteristics were evident in the study participants. This required conducting personal interviews of each health care management student using pre-established semistructured questions listed in Appendix B. Once response data was gathered, it was transcribed and coded using in vivo and value coding to evaluate comments showing traits related to personal and social emotional intelligence competencies. Many health care management student participants were not able to offer an accurate definition of emotional intelligence, however response words and phrases indicated a level of comprehension through function and practice.

As previously stated, communication and quality emerged as the most frequent responses or response categories. Communication can occur in many different ways, and the HCM students recognized this need within health care. For example, HCM5 stated, “A lot of communication is nonverbal cues,” and “Communication boards in patient’s rooms have a lot of promise”. Recognizing the value of non-traditional communication venues shows the ability to understand others even when the words they choose may not say exactly what they are thinking. The “boards in the patient’s rooms” refer to white boards that display how the patient is feeling or what they believe equates to good care. These varied forms of communication arm the health care worker with details that if used enhances patient care through personalization. Student comments also demonstrate their willingness to use the information gleaned from the patient to alter their own behavior. Adjusting actions to influence or lead is an example of relationship management and suggests ownership and accountability for the outcome (Bradberry, 2016).
More meaningful interactions are possible when emotional intelligence factors, such as empathy and consideration, are in play.

In addition, HCM1 said, “I try to consider who I am talking to and what they are going through”. Being open to other’s needs and showing respect in times of challenge demonstrates self-management personal competencies such as honesty, trust, and respect (Bradberry, 2015). Putting yourself in someone else’s situations often defuses tension and brings forth patience. Balancing emotions reduces stress and offers less volatile swings in behavior that increases anxiety. Health care leaders need flexibility and the ability to reflect and p back to reevaluate a situation before reacting with a harsh or inappropriate response. These are vital skills in the patient-care industry and often not included in tradition business curriculum (Nichingalea et al., 2018; Warren, 2017).

These findings demonstrated that health care management students at the case study location do have and use personal competencies and social competencies of emotional intelligence in response to semistructured questions about current issues in health care. With the change in care model transitioning from fee-for-service to value-based care (Warren, 2017), these traits are crucial for supporting patient satisfaction and reducing costs (Mikolajczak & Bellegen, 2017; Targeting, 2015). Listening to patient’s needs, offering feedback, discussing health procedural options, and ensuring understanding in follow-up care, all coded as communication, make the difference in quality outcomes and patient wellness (Warren, 2017). In addition, recognizing quality and where quality is lacking is an awareness that enhances delivery and strengthens decision-making (Dau, 2016).

Emotional intelligence is important for those providing direct patient care (Hutchinson et al., 2017; Warren, 2017), as they offer care directly to the patient. However, health care business
professionals must also align understandings with needs. The delay in reform and the disjoint is care design suggest these skills are currently lacking in health care leaders (Joshi et al., 2016; Quy, 2017). The distance between the business health professional and the patient is seen as a potential barrier is gaining this understanding, and thus actions that connect these two perspectives would narrow the gap in general understanding of needs.

Research Question 2: How do health care management business college students use emotional intelligence when evaluating patient scenarios? The second research question used focus group data to evaluate how decision-making occurs in group environments where multiple participants have input on a health care topic. Individual voices are not often heard equally during group interactions, which can limit good ideas and reduce higher level thinking. However, rich discussion often leads to better outcomes as participants’ springboard ideas and knowledge off each other’s comments. For this reason, no individual data was analyzed during the focus group sessions as the researcher documented only collective responses and labeled them as coming from Focus Group 1 or Focus Group 2 members.

Allowing semistructured questions to be discussed and critiqued by the group as a whole also permitted the researcher to watch how dialog unfolded and consider why certain details emerged into final responses (Merriam & Tisdell, 2016). During observation, the researcher noticed participant behaviors such as taking long pause before speaking, as well as when response consensus came quickly and when discourse and conflict arose. Using observation and note-taking in addition to group response data is a benefit to the quantitative research approach, and adds rich insight into participant data through triangulation (Merriam & Tisdell, 2016; Yin, 2016). It is important to note that each focus group session watched a four minute video about a transgendered patient to offer an example and some context to the questions being asked. It is
recognized that the video gave only one real life situation, but was used to offer structure and a common visual example upon which discussion could begin.

It was during these focus group discussions that the themes and subthemes emerged and further personal and social competencies in emotional intelligence were identified. Challenges, expectations, and inequities were identified as common themes. The theme of challenges was broken down into subthemes of access, cost, and quality, which were not only literal words used by students during discussions, but were noted as categories that create barriers to health and wellness. More than one student commented on concerns over expenses and the lack of transparency that limits knowledge of service costs. HCM3 shared the limitation in care that even private insurance or Medicaid causes when services are available through limited providers. Recognition of these issues demonstrates emotional intelligence, specifically social awareness and understanding of others (Bradberry, 2015).

The other two themes that emerged were expectations; with subthemes of wellness, professional ability, and levels of caring, and inequities; with subthemes of health literacy, clinical outcomes, and communication. The theme of expectation demonstrates that students recognized that as citizens and users of health services, there is an expectation, or threshold, of what is considered appropriate care. People generally want to be well, but when they enter the health industry, they want competent professionals to take care of them. This includes listening, proper evaluation of need, and the desire for demonstrated empathy. The health care service industry is different than many other businesses because customers often have not planned for, nor do they want to use, the product or services when they become a consumer. This creates a unique dynamic and the need for emotionally intelligent employees who can recognize concerns and frustrations, and adjust enlist practices for change (Coetzer, 2015; Johnson, 2017).
The findings from research question 2 demonstrate health care management students used emotional intelligence to evaluate situations, discuss limitations, and to relate to the customer experience. They also discussed concepts with others in the group, and built upon other participant’s comments during discussion. These findings are rather impressive since most of the student participants had not completed a practicum experience. Data may have been impacted due to the close relationship of the case study participants. All students knew each other at least superficially, which reduces anxiety and may not offer a true reflection of group discussions comprised of stranger. However, the general value of teamwork and being open to other’s ideas, must be noted, and is a valuable asset that supports enhanced work environments and interdisciplinary relationships (Coetzer, 2015)

**Research Question 3: How does a practicum experience influence emotional intelligence in health care management business college students?** The findings of this portion of the research study showed that the group of HCM business students who had completed a practicum experience demonstrated higher levels of emotional intelligence as compared to the HCM business students who did not complete a practicum. There were only 4 students in the practicum focus group, but 10 students in the non-practicum focus group. The timing of the study’s IRB approval came after graduation causing a loss of eight students who could have joined the practicum focus group had they chosen to participate. This would have potentially made the focus groups more even in number, however rich and detailed content responses were still gathered from the two separate groups of members who did participate.

Within this case under investigation, a practicum experience is defined as a course with pre-determined content objectives that is scheduled to meet for a specified number of required hours outside of the traditional classroom setting. Practicums are reserved for junior or senior
level students who have taken a minimum of three other health care topic courses within their specified degree program. The practicum locations are decided by availability and student interest each semester, and occur at various private or non-profit health care facilities. Hospice, the public health department, food banks, acute care business operations, community health hubs, and anesthesiology departments are a few examples of previously used practicums offered through the site locations. The experience supports the expansion knowledge through practical interaction with other health care professionals, as well as the opportunity to enhance perspectives related to the functionality and complexities that drive the health service industry.

The variation in practicum and non-practicum student responses was evident in depth, detail, and spectrum. Appendix D demonstrates the focus group responses summarized by each focus group during their respective session. Observations remained a valid tool used by the researcher during focus group interactions as discussions sometimes increased in volume and speed when certain topics were addressed.

One example of this variation in response occurred with the question, Why do health care policies and procedure sometimes not align with the desired patient outcome? Focus Group 1 struggled to come up with a response and there was a lot of silence and members looking down, avoiding eye contact. After 3–5 minutes of minimal speaking, the group discussed that some patients may want different outcomes, possibly due to cultural beliefs of what is acceptable or valuable, and they wrote “cultural beliefs, practical procedures, and difference in patients and outcomes” on the board. However, the Focus Group 2 members who had completed a practicum experience, had a rather spirited discussion about the same question. They discussed how the system is “not flexible” and thus “limits personal choice due to standardization of care often governed by safety and regulations”. They voiced concern over the “limited scope of information
that sometimes restricts full understanding by some professionals”, and how through technology such as the electronic health record, this may change to enhance access to information.

As with Group 1, Group 2 also recognized cultural differences and typical “ways of life” that must be respected when creating care plans. However, the practice that truly set group 2 apart was when they discussed how the standard norm is always changing and posed the question, “How do we know and stay on top of it?” Reflection is a high-level behavior that causes a person to consider why a situation in happening, rather than just recognizing that it is happening (Merriam & Tisdell, 2016). The action aligns with relationship management, a social competency skill of emotional intelligence, and demonstrates not only the desire to better understand a situation, but the empowerment to take control of the outcome (Bradberry, 2015). This is the attitude desired by the next generation of health care leaders and a needed behavior to be successful in the transforming health care environment (Hinds, 2017; Steckler, 2016).

This finding is impactful because it agrees with previous research conducted by Margavio et al. (2014) and Adams et al. (2011) who suggested emotional intelligence could be taught through exposure to various perspectives that help students make connections to the patients being served and the dynamics that impact or impede care. Policies in accounting, finance, operations, and strategy, all non-clinical health care departments, often focus on money, timelines, and value in terms of efficiency. However, emotional intelligence includes awareness of the end recipient of care, and thus outcomes better align with a broader spectrum of need. It is here that personal and social emotional intelligence heightens the end results through empathy, cooperation, trust, accountability and teamwork: valuable understandings required for health care leaders (Cherry, 2017).
Discussion of the Results in Relation to the Literature

Preparing quality health care leaders goes beyond traditional coursework and content mastery. While those items are still needed, it also requires awareness, critical thinking, accountability, respectful inquiry, flexibility, and the ability to thrive during stress and continual change (Joshi et al., 2016; Larkin, 2015; Rude, 2013; Steckler, 2016; Weizbrod, 2015). Leaders who lack these skills slow progress and limit outcome potential through missed opportunities and misguided judgements (Hinds, 2017). The current state of health care and the struggle to incorporate new processes insinuates a void in leadership and the inability to conceptualize an enhanced outcome.

Evaluation of data for the first research question verified health care management students did have emotional intelligence traits. Whether gained through academic settings, personal inquiry, or connections to a liberal arts education, the study population used EI in basic responses to health care questions. The researcher had not considered the value a liberal arts education could have on emotional intelligence, but it may explain why all students demonstrated some EI characteristic. Examining students at a liberal arts college versus those at a non-liberal arts college was not within the scope of this study. However, it is worth noting that the literature findings do show value in the increase of awareness, perception, and general student achievement in relation to cognitive development at liberal arts institutions (Clarke, Lovelock, & McNay, 2016).

Clarke et al. (2016) explored the topic of EI in social work students participating in a liberal arts education and stated the need for further liberal arts inquiry due to the valuable outcomes demonstrated. Through documented findings, the researchers recommended incorporating modules emphasizing EI during the first year of college and potentially further
infiltration EI modules throughout other college years to expand on explicit learning outcomes (Clarke et al., 2016). Their discussions showed relevance for emotional intelligence in terms of expanded general cognition, and the connection to an increased awareness of social worker students in the health sector demonstrates parallels to this research study.

Mikolajczak and Bellegan (2017) published findings noting the value of emotional intelligence with respect to reducing costs. Their research was one of the first to equate physical costs to emotional intelligence through a quantifiable 1% decrease in expenditures for every 1% increase in EI (Mikolajczak & Bellegan, 2017). Through the evaluation of health care management student data in the current study, cost was established as a subtheme to the theme challenges. Cost impacts care because some patients cannot afford out-of-pocket expenses or the high rates associated with insurance premiums. There is also confusion over the actual costs of almost every health care procedure or service, impeding transparency and disallowing a patient the ability to select services according to value versus cost decision-making. Going forward, health care employees who recognize this void in service delivery can change policy or practice so costs are understood prior to care or services rendered.

Warren (2017) emphasized the importance of emotional intelligence in order to better understand concepts surrounding patient-centered care, and Schneider, Lyons, and Khazon (2013) documented the connection between resilience and emotional intelligence during times of change. Building a population of health care management college students who have the insight to understand EI and appreciate its concepts, supports a better prepared workforce as students transition into professional health care roles. This is of particular importance for health care business employees who do not have direct patient care as a primary function. It is human nature to lose sight of the importance of concepts that are not in a person’s daily practice. Without
purposeful inclusion, such as with a practicum experience, it is easier for health care students as well as health care employees to overlook critical aspects and details that should infiltrate care and industry protocol.

Now, possibly more than ever, the health care industry needs leaders and employees at all levels of the organization who recognize change is needed, and come prepared with the abilities to make change a reality (Hinds, 2017; Joshi et al., 2016; Larkin, 2015). Most of the students participating within this case study could not articulate a proper definition of emotional intelligence, but have begun incorporating aspects of EI into their skill sets. All student health care management participants within the case study were from the same private, midwest, liberal arts college. A liberal arts education values broad perspectives as gained through required curriculum in multiple content areas cross campus departments. This may have enhanced the level of EI in the study group under investigation, but does not take away from the documented findings evidenced in the evaluation of the study’s research population, nor through the enhanced variation in those HCM business students who completed a practicum as compared to those HCM business students who did not completes a practicum experience.

Limitations

The qualitative comparative case study design offered quality outcomes that supported the research questions under investigations, however potential limitations associated with the research sample and study design should be noted. The research sample size was a potential limitation. Only 14 of the 23 invited health care management students chose to participate in the research study. A smaller sample size is acceptable when using a qualitative research methodology, and this fact was taken into consideration when selecting a proper study design (Merriam & Tisdell, 2016). In addition, the focus groups participants were not evenly distributed
as only 4 health care management study participants had completed a practicum experience, while 10 health care management students had not. This variation did not seem to cause a challenge in rich and descriptive responses during the comparative focus group analysis, but it is worth mentioning as variation was noted. Another potential limitations stems from the fact that there is only one health care management faculty member at the site location, thus all academic health care courses are taught by the same individual. This could potentially limit ideas and perspectives as knowledge and industry preparation is only shared by one individual. Recognizing the value of broad thinking that is often generated through multiple perspectives, as outlined thought out the study, this too should be noted as a potential limitation. Finally, the study questions used for the interview or the focus group were created by the researcher. This is common in qualitative analysis where the details are specific and contextualized to the site and population under investigation (Merriam & Tisdell, 2016). Even though the questions were field tested and found to be appropriate, the lack of structured and comparative data offers a limitation in standardization.

**Implication of the Results for Practice, Policy, and Theory**

As noted, previous emotional intelligence research demonstrated value in heightened levels of leadership (Rude, 2013), dealing with change (Himmelstein et al., 2017; Steckler, 2017), and understanding health care reform (Hinds, 2017). Core details found in the literature review recognized the importance of increasing awareness to enhance decision-making (Dau, 2016). Liberal art colleges embrace this strategy for all of their degree programs, touting the importance of a well-rounded education in order to strengthen and widen individual perspectives (Clarke et al., 2016). Thus, there are implications that suggest emotional intelligence should be
recognized for its impact on awareness and understanding through changes in policy or practice regarding college student preparation.

**Practice requirement.** Changes in health care policy and practice creates stress across the health care industry (Hinds, 2017). The potential gap in knowledge or lack of skills of current health care professionals delays progress and adds to the confusion (Schulman & Richman, 2016). It is common practice for academic institutions to assess programmatic outcomes, while monitoring trends and re-evaluating industry needs. Thus, if the impetus for change cannot be managed from the professional side of health care due to potential complexity, there is an opportunity to create value and improve outcomes by altering practice during college preparation. The goal would be to identify how best to interweave new skills into health care academic programs so the next generation of professionals are better equipped.

The study findings indicated that emotional intelligence supports personal and social awareness, and health care management students who completed a practicum experience had higher levels of emotional intelligence. This demonstrates the value of real world experiences and suggests faculty at academic institutions should consider health care degree program curriculum redesign in order to require varied curricular opportunities. Whether mandating a practicum or inserting real-life scenario-based case studies in programmatic requirements, the goal would be to build upon the practical aspects that broaden a student’s thought process when exposed to a new or challenging situation. Service learning may also serve as a valuable alternative to a practicum experience, and is just another opportunity for students to broaden perspective and increase awareness (Manning, 2012).

**Policy change.** Margavio et al. (2014) researched emotional intelligence to determine the level at which EI could be taught, or enhanced, through academic programs. Their study
population compared Chinese business students to American business students and found enhanced emotional intelligence behaviors in the America study group with the conclusion that increased cultural awareness was associated with increased emotional intelligence (Margavio et al., 2014). Building upon Margavio et al.’s research and in conjunction with the current study’s findings, the researcher suggests a formal training program discussing emotional intelligence concepts could benefit preparation in the general academic setting. In addition, work published by Cheshire et al. (2015) shared quantitative findings that suggested value in accessing incoming student’s emotional intelligence upon college admission. They proposed colleges measure levels of emotional intelligence of all students upon admission just as they do an incoming student’s GPA or writing skills. The combination of these two approaches offer a pre and post evaluation that demonstrates which emotional intelligence strategy and tactics offer the most benefit in a particular student population. To support this inquiry, the college’s admission policy and program learning outcomes could be altered to reflect the desired skills and abilities demonstrated by a graduating student with a high level of emotional intelligence.

Theory implication. The implications of using the theory of emotional intelligence to support college student’s transition into the health care industry blends the thought that intelligence and emotion are interconnected (Mayer et al., 2004). If that premise is thought to be true, as this study’s findings would support, it behooves colleges to foster these skills and create opportunities for integration. One strategy that could be useful would be to offer interdisciplinary education that blends direct-patient care students in courses with HCM business students. This builds emotional intelligence traits such as teamwork, respect for colleagues, organizational awareness, and cooperation (Lewis & Fleming, 2015). Combining different disciplines during academic preparation offers a precursor to a combined work environment that could enhances
problem-solving through an engaged and unified patient care team in the health care industry (Lewis & Fleming, 2015; Sorrel, 2015). Expecting employees to work in teams, as is often the case in health care, is difficult when education and training occur in silos. As with emotional intelligence, a broad perspective increases awareness and expands ideas beyond the scope of what an individual with a more narrow view can comprehend. Kahn’s (2013) emotional intelligence research validated the connections of social and emotional interactions by demonstrating that levels of EI abilities ultimately predict success. If this is true, health care would benefit from these educational changes so future employees can adjust and adapt to the ebb and flow of new accreditation requirements and government mandates that require strong integration and collaboration for success.

**Recommendations for Further Research**

There are a variety of considerations for future research that could support the study of emotional intelligence in HCM business students, building upon the premise and methodology of this investigation. First, the use of a pre-test prior to a student beginning a practicum experience would offer a perspective on what skills were enhanced by the experience if a follow-up post-test assessment was given. This could be a quantitative or qualitative assessment. This approach could also demonstrate the level of change, and thus may support the continuation of certain practices or strategies over other approaches due to the significance of demonstrated impact. Second, to support triangulation an artifact could be included in the research study and adds an additional dimension for data evaluation. This could be a written essay gathered as potential health care management students applied to the college or degree program, or a journal reflection assignment given during a practicum or scenario experience.
Third, evaluating the level of emotional intelligence in health care management students at non liberal arts colleges would offer a comparison to those getting a liberal arts college. This could potentially be a marketing tools used by liberal arts colleges if the findings demonstrate enhanced success in transitioning to employment. Employers would also potentially be interested in this research as it could focus recruiting efforts toward students graduating from specific colleges. Finally, evaluate emotional intelligence in direct patient care students and compare to health care business students. It would be valuable to know if those who self-select into direct patient care roles, naturally have higher levels on emotional intelligence. Findings from this study would also support interdisciplinary classes where students could interact and learn emotional intelligence form each other.

As with all individuals, success in college or within a professional roll is guided by and based upon multiple factors. Identifying ways to improve efficiency, awareness, accountability, customer service, and stress tolerance has been a goal of efficient business practice and academic programs for many years (Hutchison et al., 2017). The recent changes in health care were systemic and demonstrated a weakness in the skills and abilities across the industry. Emotional intelligence is one strategy that might reduce stress and enhance delivery of care. Health care and education are fluid environments and thus further research is always valued to add to the continuum of knowledge where cognitive learning and practical application support optimal student growth.

Conclusion

This qualitative comparative case study investigated emotional intelligence within a population of health care management students at a private, midwest, liberal arts college. Semistructured research questions were used to gather individual and focus group data in order
to evaluate the posed research questions. Findings, gathered through in vivo and value coding, demonstrated that health care management students at the site location did possess both personal and social competencies of emotional intelligence, which included examples of self-awareness, self-management, social awareness, and relationship management (Bradberry, 2015). Subsequent pattern coding identified themes of challenges, expectations, and inequities that emerged through triangulated focus group data. Focus group comparisons demonstrated higher levels of emotional intelligence from those students who had completed a practicum experience, suggesting that experience and practical application broadens thought, increases perception, enhances communication, and supports the attainment of skills needed for critical thinking and effective response (Hinds, 2017; Lewis & Fleming, 2015).

The demand to balance health care reform has exposed a weakness of current health care leaders (Joshi et al., 2016; Larkin, 2015; Miles, 2017). The positive correlation between emotional intelligence and increased awareness creates an opportunity for academic institutions to reimagine program learning outcomes and academic preparation. While this study was small in scope, it added value to the body of literature by demonstrating the impact even one practicum course can have on student outcomes. More research is available connecting emotional intelligence with employees providing direct patient care, thus this study supports a gap in knowledge comparing emotional intelligence to HCM business students who need to interpret a service industry. The researcher shared ways that EI could be incorporated into academic programs so graduating health care management students enter professional roles with enhanced personal and social emotional intelligence competencies. Academic institutions strive to prepare students for employment through rigor and solid foundational knowledge. Research that
emphasizes ways to enhance the transition from college into the workforce is especially valuable in today’s competitive environment.
References


doi:10.1001/jama.2016.10874


Strickland, R. J. (2013). An exploratory qualitative study of the relationship between an educational leader’s emotional intelligence and effective teams (Order No. 3604304). Available from ProQuest Central; ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection; Social Science Premium Collection. (1474908903).


Appendix A: Consent Form

Research Study Title: A QUALITATIVE COMPARISON CASE STUDY EVALUATION OF THE EMOTIONAL INTELLIGENCE OF COLLEGE HEALTH CARE BUSINESS STUDENTS
Principal Investigator: Cheryl Nutter
Research Institution: Concordia University–Portland
Faculty Advisor: Belle Booker

Purpose and what you will be doing:
The purpose of the research study is to investigate emotional intelligence within Health Care Management (HCM) business students, comparing decision-making skills of those who have participated in a practicum experience and those who have not. Participation will require a 30 minute interview and a 45–60 minute focus group session. Dates and times of these events will be determined between the principle investigator and the participants. Data will be gathered via note taking, observation, and audio recording, then transcribed and coded for analysis.

All health care management students will be invited to participate, with no obligation, payment, or other compensation offered for participation. Enrollment may begin on May 1, 2018 and end on October 1, 2018. To be in the study, participants will respond to an email invitation, review and sign a consent form, answer interview questions asked by the researcher, and participate in a focused group session with peer health care management students at the study college. Participation should take less than two hours of time, assuming 30 minutes for the personal interview and 60 minutes for the focus group.

Risks:
There are no risks to participating in this study other than providing your information. However, we will protect your information. I will record interviews. The recording will be transcribed by me, the principal investigator, and the recording will be deleted when the transcription is completed. Any data you provide will be coded so people who are not the investigator cannot link your information to you. Any name or identifying information you give will be kept securely via electronic encryption on my password protected computer locked inside the cabinet in my office. The recording will be deleted as soon as possible; all other study documents will be kept secure for 3 years and then destroyed.

Benefits:
The information provide will allow the researcher to investigate the issue of emotional intelligence, as it relates to decision-making by HCM students. The health care industry is complex and constantly changing, requiring industry leaders to realign policies and practices around new regulations and models of care. The findings may benefit the body of knowledge by offering insight that could guide curricular content, support practicum requirements, and/or enhance general understanding of emotional intelligence in college business HCM students at a liberal arts midwest college.
Confidentiality:
Privacy and confidentiality will be respected throughout the study. During the consent process, each participant will establish a unique identifier that will correspond to their responses. No personal connection to information will be used within the research study. Notes and transcripts from the interview and focused group sessions will be stored in a locked cabinet in the home of the primary researcher, where only the researcher will have access. Audio recorded material will be collected and also stored in a locked cabinet in the home of the primary researcher. Once audio recordings are transcribed, data will be stored in the locked cabinet and the recordings will be immediately erased. After 3 years, all data will be destroyed. To support confidentiality, data and consent forms will be stored separately. Collected data will be in a locked cabinet in the researcher home, while consent forms will be stored in a locked file in the researcher’s work office on the college campus.

Right to Withdraw:
Your participation is greatly appreciated, but we acknowledge that participants have the right to choose to participate or discontinue participation at any time throughout the study. If a participant removed himself/herself after the interview, but not in the focused group, interview data will still be used as informational detail if the participant agrees. Otherwise all gather data from that individual will be removed. No penalty or loss of benefit will occur due to the decision to not participate.

Contact Information:
You will receive a copy of this consent form. If you have questions you can talk to or write the principal investigator, Cheryl Nutter at [email redacted]. If you want to talk with a participant advocate other than the investigator, you can write or call the director of our institutional review board, Dr. OraLee Branch (email obranch@cu-portland.edu or call 503-493-6390).
Your Statement of Consent:
I have read the above information. I asked questions if I had them, and my questions were answered. I volunteer my consent for this study.

____________________________________  ___________
Participant Name  Date

____________________________________  ___________
Participant Signature  Date

____________________________________  ___________
Investigator Name  Date

____________________________________  ___________
Investigator Signature  Date

Investigator: Cheryl Nutter; email: [email redacted]
c/o: Professor Belle Booker;
Concordia University–Portland
2811 NE Holman Street
Portland, Oregon  97221
Appendix B: Individual Participant Questions

1. What is your program of study?

2. Have you participated or are you currently participating in a health care management practicum?

3. What grade are you in your program of study: freshman, sophomore, junior, senior?

4. What is your age?

5. What is your gender?

6. What factors influence a patient’s well-being?

7. What is the most important item patient’s want from their health care system?

8. How have you interacted in the health system as a patient?

9. How would you describe that experience?

10. How would you enhance the current state of health care in the U.S.?

11. What word best describes your impression of the current health care system?

12. What are the barriers that limit patient wellness?

13. What does it mean to have emotional intelligence?

14. How do you use emotional intelligence in decision-making?
Appendix C: Focus Group Questions

*After watching vignette, the following questions will guide the focus group discussion.

1. In your opinion, what is the challenge facing the patient?

2. What types of problems need to be solved to support an enhanced patient outcome?

3. How could health care managers better understand patient’s needs?

4. Why do health care policies and procedures sometimes not align with desire patient needs?

5. What changes in health care should be made to support patient wellness?

6. What makes someone prepared to enter a transforming health care industry?
### Appendix D: Comparison of Focus Group Responses

<table>
<thead>
<tr>
<th>Focus Group Research Questions</th>
<th>Focus Group 1: No Practicum Experience</th>
<th>Focus Group 2: Had Practicum Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>In your opinion, what are the challenges facing today’s patient?</td>
<td>Discrimination, Price, Respect of all ages, Lack of quality, Time efficiency</td>
<td>Money/insurance, Access-technology, location, food, education, knowledge, transportation, healthy options, Discrimination, Language/communication barriers, Pharmaceutical drugs and associated prices/some places do not take some insurances</td>
</tr>
<tr>
<td>What types of problems need to be solved to support better patient outcomes?</td>
<td>Understanding the patient’s goals, Affordability, Speed/time, Types of coverage, Knowledge/communication</td>
<td>Re-admittance, Medication schedule-staying on track, Transparency, Burnout (employee), Less medical errors, Money/insurance, Access-close location to specialist, All information when needed-medical history to support proper care, Medication-planning and access, Better connection to options</td>
</tr>
<tr>
<td>How could health care managers better understand patient’s needs?</td>
<td>More empathetic, Communicating directly with patients, Understanding medical history of patients, Follow-up</td>
<td>Surveys/or just ask, Interactions/communication-with patients, doctors/ health providers, Put yourself in their shoes, Connecting outside sources; solving issues, Interacting at different points throughout care, Ask probing questions to get a good picture of the patient’s situation, Outside environment, Ask the patient their goals-align need with desire, Be personable to show you care, Listen—to the patient as well as other coworkers to better understand patient’s needs</td>
</tr>
<tr>
<td>Focus Group Research Questions</td>
<td>Focus Group 1: No Practicum Experience</td>
<td>Focus Group 2: Had Practicum Experience</td>
</tr>
<tr>
<td>--------------------------------</td>
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<td>----------------------------------------</td>
</tr>
<tr>
<td>Why do health care policies and procedures sometimes not align with desired patient outcomes?</td>
<td>Cultural beliefs Practical procedures Difference in patients and their outcomes</td>
<td>Not flexible Regulations Don’t understand/see full picture Technology Understanding different circumstances Convenience-paperwork and following guidelines Standard norm is always changing-how do we know and stay on top of it Exploring cultures and their needs, way of life, and ability to access</td>
</tr>
<tr>
<td>What changes in health care should be made to support patient wellness?</td>
<td>Affordability Respectful and understanding of environment Advancing with technology</td>
<td>Awareness Being proactive Convenience Improved access More providers and incentives Better education/health literacy</td>
</tr>
<tr>
<td>What makes someone prepared to enter a transforming health care industry?</td>
<td>Experience Understanding mistakes Education Open-mindedness Flexibility Networking Creativity</td>
<td>Knowledge Flexibility Understanding patient’s needs and desires Continue to listen Patient centered Think outside the box Keeping employees informed Making it easy for patients Able to put yourself in someone else’s shoes Able to be more personable, and understand patient’s feelings Able to take a step back Multiple perspectives Personally visit/understand patients –travel, books, internet, walk arounds Research/observance “become them” Communication Make an active effort to try to gain perspective</td>
</tr>
</tbody>
</table>
Appendix E: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does “fraudulent” mean?

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

What is “unauthorized” assistance?

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.
Appendix E: Statement of Original Work (continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*.

Digital Signature

Chery Nutter

Name (Typed)

11-30-18

Date