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Management Strategies for Improving Construction Industry Ethics

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This is to certify that the doctoral dissertation by

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Walden University
2020

Abstract

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by

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MSA, University of Phoenix, 2009

BS, University of Phoenix, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Despite the existence of ethical codes, ethical lapses continue to occur frequently in the construction industry. Ethical violations can have negative effects on society. The specific research problem was that many executive managers in construction companies may not understand what ethical strategies to implement to align practical ethical conduct in the construction industry with existing codes of ethics. The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct. A conceptual framework based on Bandura's concept of reciprocal determinism was used for this study. Social change concepts, personal and social ethics, and aspects of the construction industry ethical environment were reviewed to support the conceptual framework. Semi-structured interviews were conducted with a purposeful sample of 19 project managers and superintendents from 13 construction companies in the Northeast United States in various trades who were subject to codes of ethics. The data were analyzed using Yin's pattern matching and were coded manually and with NVivo. In the results, study participants shared several strategies to improve the construction industry ethical environment. These strategies included improving frequent communication of industry codes of conduct, training in expectations and procedures, stressing ways to improve corporate ethical culture, developing a sense of self-ethical behavior, and the importance of leadership in modeling ethical behavior. The social change implications of this research include the potential for reduced project duration and cost, improved stakeholder trust, and improved quality of construction.

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Dedication

This dissertation is dedicated to my husband, Matt Foster, who has provided undying support throughout our life and this journey. Also, I dedicate this work to my children, Lauren and Matthew, who have been patient beyond measure in understanding when mom must complete schoolwork. Finally, to my mother, Helen Hoffman, who teaches me every day about perseverance through difficult times.

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Chapter 1: Introduction to the Study

On July 10, 2006, a concrete tile fell from the ceiling of a connector tunnel in Boston, Massachusetts, crushing a car traveling on the road below and killing one of the passengers of the vehicle (National Transportation Safety Board, 2007). The accident was the result of a series of unethical decisions made on a public construction project where pressure was high to perform because the project was over schedule and budget. More recently in Florida, a pedestrian bridge under construction at Florida International University collapsed on March 15, 2018, killing five members of the public in vehicles under the collapse and one bridge worker. The accident was determined to have been due to incorrect engineering calculations, inadequate peer review, and lack of follow up on structural cracking on the bridge span (NTSB, 2019a). A contributing factor to the failures in design and oversight were restrictions related to time and budget (NTSB, 2019b).

Ethical violations related to bidding, billing, payment, change order, and construction performance practices in the construction industry have far-reaching effects on society, including decreased stakeholder trust relationships, reduced project quality, longer project duration, and increased project cost, all of which may result in tax increases (Ethics Resource Center, 2013; FMI Corporation, 2004). Improvements in ethical action in the construction industry have potential positive impacts, such as improved public infrastructure through quality improvements, public budgetary and tax benefits through better cost control, and improved internal and external stakeholder relationships.

Bowen, Edwards, and Cattell (2015) identified the construction industry as “the most corrupt sector in the world” (p. 75). The common occurrences of unethical behavior related to bidding, billing, payment, change order, and construction performance practices were documented by FMI Corporation (2004) in a study where 84% of survey participants reported experiencing behavior they considered unethical at least once in the prior year. A third of those participants further stated that they had experienced unethical behavior more than three times in the previous year.

In a subsequent study by the Ethics Resource Center (2013), the authors referred to the construction industry as “just inherently more ‘at risk’ for facing ethics issues depending on the kind of work they do” (p. 2). The Ethics Resource Center confirmed the prevalence of unethical practices previously identified by FMI Corporation. Although the survey results showed slight improvements in industry ethical behavior, the authors provided evidence of continuing ethical issues in the industry over an extended period.

Chapter 1 includes a background of the issue, the statement of the problem, the purpose of this study, the research questions, and a description of the conceptual framework that I used for this qualitative case study. The chapter also includes the definitions of important terms, assumptions, limitations, and the significance of this study to social change.

Background of the Study

The specific types of unethical behavior in the United States construction industry related to bidding, billing, payment, change order, and construction performance practices were identified by FMI Corporation (2004) and The Ethics Resource Center

(2013). However, little additional research has been done in the United States into the topic of identifying strategies to improve the ethical behaviors related to bidding, billing, payment, change order, and construction performance practices in the construction industry. International research confirmed that questionable ethical behavior in construction is not specific to the United States (Bevan & Yung, 2015; Bowen et al., 2015; Buckeridge & Wang, 2015; Ho & Oladinrin, 2018; Mohamad, Rahman, Usman, & Tawil, 2015; Shan, Chan, Le, & Hu, 2015). With this qualitative, exploratory case study on industry leading contractors in the Northeast United States, I addressed a gap in research into the area of potential corrective management strategies to improve ethical behavior in the construction industry in the United States to assist in alignment with published codes of ethics (Locatelli, Mariani, Sainati, & Greco, 2017).

The Construction Managers Association of America (CMAA), the Construction Industry Ethics & Compliance Initiative (CIECI), other professional organizations, governmental agencies, and many corporations established professional codes of ethics for their members (CIECI, 2018a; CMAA, 2017b). The CMAA is a professional organization for construction management professionals while the CIECI is a cooperative association formed by construction companies interested in construction industry ethics. Both groups developed codes of ethics with the intent of improving the ethical conduct of member professionals in the construction industry. The codes for each of the organizations include advice to members on ethical corporate and personal conduct in the industry.

Researchers have studied the communication, implementation, and efficacy of codes of ethics in the construction industry and related service industries (Ho, 2013; Mason, 2009; Oladinrin & Ho, 2014; Parsons, 2014; Rebbitt, 2013; Scheiber, 2015; Shan et al., 2015). Ho (2013) did not find a relationship between improved conduct and the establishment of a code of ethics in Malaysian companies; however, Ho stated a belief that better communication of corporate codes of ethics through formal and informal means may improve adherence to existing ethical codes of conduct. Oladinrin and Ho (2014) studied strategies in the Malaysian construction industry related to improvement in implementation and adoption of codes of ethics. They advanced that systemic support for the code of ethics was necessary for successful implementation. Shan et al. (2015) stated that the best way to effect change in ethical behavior is for employees to see examples of positive ethical leadership. Parsons (2014) presented survey results that revealed that the majority of respondents in the construction industry do not believe that codes of ethics have an impact on actual behavior. Scheiber (2015) investigated the role that professional associations play in the successful implementation of a code of ethics in a related service industry in Germany. Scheiber posited that a code of ethics could be more successfully implemented in a service industry when the backing of a professional association provides legitimacy to and support for the code of ethics. Mason (2009) recommended that a single code of ethics for the construction industry would help improve conduct. However, discussion of the recommendation by Mason included an acknowledgment that implementing an industry-wide code would be difficult at best.

Rebbitt (2013) noted that how a corporation or industry handles ethical violations may affect continuing ethical violations. Rebbitt was primarily concerned about the issue of safety in relation to the handling of safety violation reports. Monitoring and reporting of safety violations are directly related to ethical decision-making and attempting to do what is best for the company and its employees. How the company responds to these reports can play a role in whether the unsafe or unethical behavior continues. Further, Rebbitt stated that the punishment of a reporter or a reward to a violator could be viewed by others in the company as an incentive to act unethically perpetuating the questionable behavior.

Problem Statement

In the United States and internationally, the construction industry is notorious for ethical violations related to bidding, billing, payment, change order, and construction performance practices that cost project stakeholders millions of dollars in lost time (Johnson, Sands, Fiori, & Pearce, 2015; Lohne, Shirkavand, Firing, Schneider, & Lædre, 2015). Industry and academic journals have highlighted the problem of unethical behavior in the construction industry in the United States and other countries, calling attention to the types of ethical lapses that frequently occur and the areas of practice that are especially susceptible to ethical violations (Ethics Resource Center, 2013; Ho, 2011; Lohne et al., 2015).

The general research problem for this study was that, despite the existence of ethical codes, ethical lapses continue to occur frequently in construction industry practices (Brown & Loosemore, 2015; Ethics Resource Center, 2013; FMI Corporation,

2004). The specific research problem was that many executive managers in construction companies may not understand what ethical strategies to implement to align practical ethical conduct in the construction industry with existing professional association and corporate codes of ethics (Brown & Loosemore, 2015; Jones, Michelfelder, & Nair, 2017).

Purpose of the Study

The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct (see Yin, 2018). The participants solicited were construction professionals who are either industry project managers (PMs) or superintendents and subject to a published professional or industry ethical code. To meet the purpose of the study, I used a qualitative, exploratory case study design and conducted interviews with 19 construction industry professionals who are either PMs or superintendents to obtain their unique perspectives on how to align industry ethical conduct and published codes of conduct based on their professional experiences (Yin, 2018). I analyzed the resulting suggestions, professional and industry ethical codes, and previous research regarding the construction environment using Yin's pattern matching to identify potential recurring themes among construction industry professional regarding the research topic.

Research Questions

The general research question was:

GRQ: What are the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct?

The specific research question was:

SRQ: What strategies do construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct?

Conceptual Framework

The conceptual framework for this exploratory case study was grounded in the concept of reciprocal determinism (Bandura, 1978), which posits that behavior is related multidirectionally to personal cognition and environment. Bandura presented the concept of reciprocal determinism as an idea for consideration in analyzing the actions of members of a group. Within this concept is the assumption that individuals consider personal implications, personal understanding, and social/environmental situations in decision-making opportunities and actions (Bandura, 1978). This primary concept was supported by personal ethical concepts, environmental aspects of the construction industry, and social change concepts relating to the behavior.

PMs and superintendents in the construction industry are in a central position of management hierarchy between those who create the ethical codes of conduct (i.e., owners and chief executive [C-level] management) and field staff as shown in Figure 1 below. This central position allows PMs and superintendents a unique perspective into the actions documented as occurring in the industry. Additionally, PMs and

superintendents are in a key spot in the hierarchy of an organization to advocate for, assist with implementation, and evaluate the efficacy of professional corporate codes of ethics. Figure 1 illustrates the central position PMs and superintendents hold in the construction industry and how their relationships may influence overall ethical action. Jones et al. (2017) used a similar logic in selecting engineering managers for their research into ethics and leadership in the engine. Engineering managers, like PMs and superintendents, can influence those employees they supervise and support implementation of ethical policies.

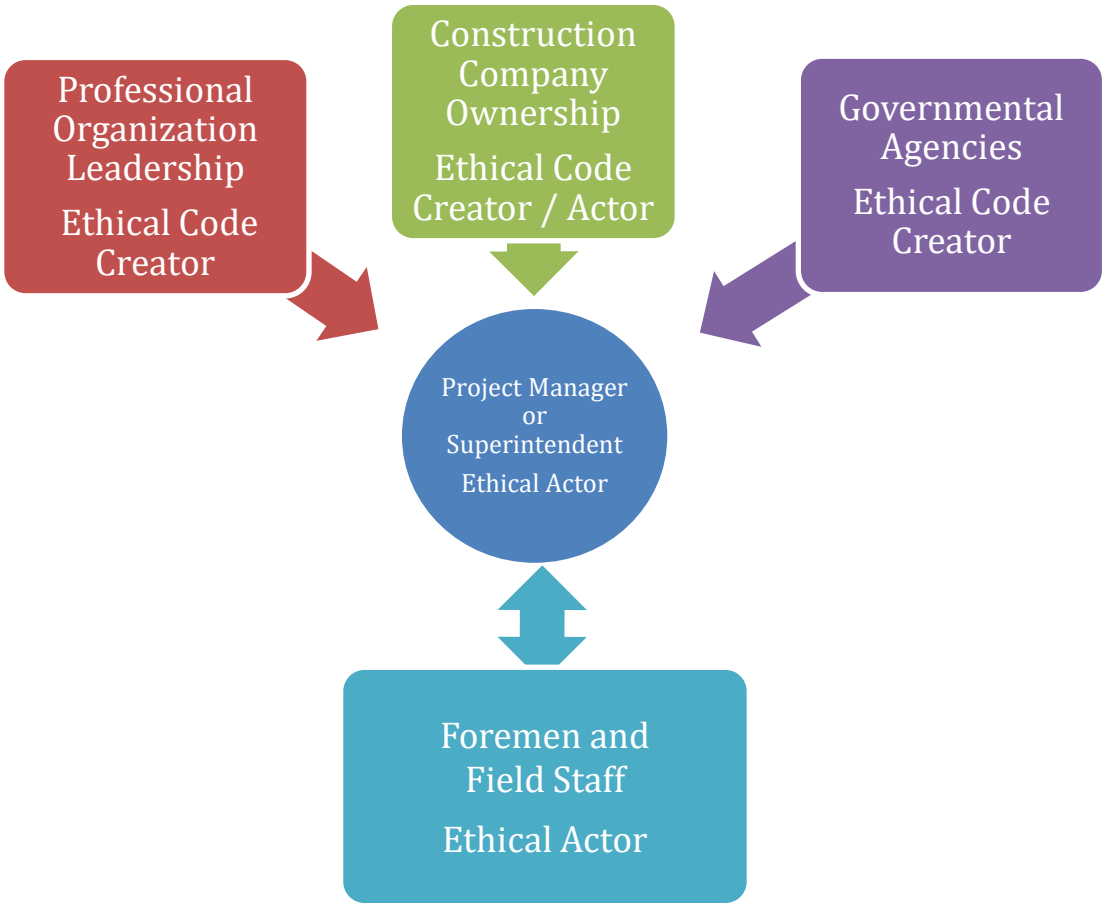

Figure 1. Hierarchy concept map.

I presented the ethical decision-making concepts of consequentialism (Sinnott-Armstrong, 2015), nonconsequentialism or deontology (Bond & Firenze, 2013), and value ethics (Bond & Firenze, 2013) as competing ethical concepts that result in a range of ethical conduct in response to professional codes of conduct and personal ethical considerations. In addition, I employed the social change concepts of *Gemeinschaft* and *Gesellschaft* by Tönnies (2001) and value-rational action by Weber (Boudon, 1992) to assist in understanding decision-making in the face of the personal and professional social pressures to perform considering quality controls, production time restraints, and budget concerns common in construction projects. Rounding out the conceptual framework was an acknowledgment of the current social/behavioral environment in the construction industry, which potentially affects ethical behavior. The surveys conducted by FMI Corporation (2004) and the Ethics Resource Center (2013) identified an environment in the construction industry in the United States where unethical conduct is entrenched and pervasive. The sum of these concepts of reciprocal determinism, personal ethics, social change behavior, and the construction industry environment informed my analysis of the suggestions from industry PMs and superintendents to align ethical conduct with professional and corporate codes of conduct.

Nature of the Study

The nature of this study was qualitative. Qualitative studies are an appropriate research method for forming an understanding of subject areas that have not been well studied previously and typically include rich, detailed descriptions of the presented data (Levitt et al., 2018). In this qualitative, exploratory case study, I wanted to provide wide-

ranging detailed information regarding my exploration of management strategies that may assist in aligning construction industry ethical conduct with published ethical codes of conduct.

I conducted this study utilizing a homogenous sample with the following inclusion criteria for the selection of this study's participants: (a) adults age 30 or over; (b) construction industry PMs and superintendents; (c) actively employed in an industry leading construction company operating in the Northeast United States or a member of a construction professional organization; (d) subject to a code of ethics through a professional organization, employer, or project affiliation; (e) employed in the construction industry as a PM or superintendent for at least 5 years; and (f) having specific knowledge and experience with the topic of the study (Robinson, 2014). During these interviews, I gained input from PMs and superintendents with first-hand information, insight into current industry ethical behavior, and strategies that may be effective in implementing valuable, lasting improvements in the best practices of construction companies to improve alignment with ethical codes of conduct.

The case I studied was defined by the specific unethical behavior described by FMI Corporation (2004) and The Ethics Resource Center (2013) in surveys performed in the construction industry. That conduct included unethical bidding, billing, payment, change order, and construction performance practices. FMI Corporation's survey of construction professionals highlighted issues with questionable bidding practices and project execution often meant to cut costs or time for the contractor that put the overall integrity of the project in jeopardy. These previous studies identified and confirmed the

presence of problem behaviors such as collusive bidding practices, improper information sharing, change issues, and fraudulent/deceptive business practices in the construction industry but did not examine potential improvements to the construction environment.

The overall purposeful sampling strategy selected for this case study was a type of group characteristics sampling (Krause, Luzzini, & Lawson, 2018). Krause et al. (2018) presented key informant sampling as one method for conducting group characteristic sampling. Krause et al. stated that key informants are "people who are actively engaged in the phenomena we wish to study" (p. 48). Group characteristic, specifically key informant, sampling allows a purposeful selection of a group of people who hold a specific position in a specific industry (Krause et al., 2018). The shared occupational interest area provided for a study where it was possible to have shared situations or experiences of ethical decision-making in similar professional situations. However, each individual practicing in the project management occupation brought a diverse personal ethical and social background with them that affected their responses to decision-making situations and solution suggestions. Participants in this study were asked to reflect on professional career experiences with ethical implications. They were further encouraged to share ethical decision-making techniques used in practice and potential improvement strategies for management regarding ethical conduct in the construction industry.

Yin (2018) presented four types of data triangulation including using different data sources, different evaluators, different concepts, and different methods. In this study, the conceptual framework included analyzing all data through the lens of Bandura's (1978)concept of reciprocal determinism which included personal ethical concepts,

environment, and behaviors. The concept of reciprocal determinism was based on reciprocity or triangulation of relationships between environment, behavior, and personal cognition.

In this qualitative, exploratory case study, “triangulation of perspectives to the same data set” (Yin, 2018, p. 128) was achieved through reflective analysis of the data as it related to construction industry environment, behavior, and personal cognition. The environment in the industry was represented by the seminal studies related to construction ethics conducted by FMI Corporation (2004) and Ethics Resource Center (2013). The behavior section of the data analysis in this conceptual framework originated in the interview data with construction industry PMs and superintendents. Review, consideration, and analysis of social change concepts by Tönnies (2001) and Weber (Noble, 2000) helped inform the understanding of personal cognition.

Definitions

Ethical code of conduct: A written declaration of expected conduct for members of a professional association or employees of a corporation (Kaptein, 2015).

Ethics: A set of guiding moral principles that are considered by an individual in evaluating an action or situation (FMI Corporation, 2004). For this study, positive ethical conduct is not tied to that which is legal but instead personal moral principles as stated above.

General contractor/construction manager: A construction company that manages and coordinates work on construction projects, as well as administers contracts for all

trades performing work on a construction project (Sears, Sears, Clough, Rounds, & Segner, 2015).

Key informant/knowledgeable: People who have personal knowledge of a topic who are also willing to share their information (Krause et al., 2018).

Personal ethics: The set of ethics formed from upbringing, individual experiences, and social interaction of an individual (Ho & Oladinrin, 2018).

Professional ethics: Those ethical actions identified and outlined in a published ethical code of conduct (Ho & Oladinrin, 2018).

Professional organization/association: An organized group of professionals in an industry or position who combine and collaborate to advance the profession (Scheiber, 2015).

Project manager (PM): A professional in the construction industry who manages construction projects for a general contractor or subcontractor. PMs are construction professionals who perform work in both the office and on the construction site. These individuals are often considered top-level managers for a group of projects and middle management in the corporate structure. Project management includes coordinating labor, materials, equipment rentals, subcontractors, and all other services required for project completion. (Sears et al., 2015).

Project superintendent: A top-level onsite management professional for a project in the construction industry. These individuals typically manage one physical site or a group of projects on one site. Onsite management includes coordinating necessary labor, working with various trade subcontractors, material management, and other tasks as

needed to complete the project(s) assigned (Rounds & Segner, 2011). Superintendents often report directly to the PM assigned to the project.

Stakeholder: Any individual, group, or company that is directly or indirectly affected by the regular business conduct of a construction company. Some examples include employees, the public, project owners, banks, bonding companies, insurance companies, and government entities (Kenny, 2014).

Subcontractor: Any trade contractor performing work on a construction project under the supervision and coordination of a general contractor (Sears et al., 2015)

Assumptions

In this study, I assumed that the current ethical landscape of the construction industry is as described in previous surveys conducted by FMI Corporation (2004) and The Ethics Resource Center (2013). These previous studies presented widespread unethical conduct in all phases of construction projects. The areas of greatest concern identified related to estimating, the purchasing of materials and services for completion of the project, and substandard contract performance.

I assumed ideal ethical conduct for the construction industry to be the behaviors described in the published professional organization and corporate industry ethical codes of conduct. I assumed that the professionals in the construction industry are not all people of poor moral character. I further assumed that most of the individual professionals and corporations in the construction industry prefer to conduct business in an ethical environment. I assumed that membership in a professional organization represents a

personal dedication to professional conduct and ethical action in accordance with the code of the association.

Additionally, I assumed that individuals and corporations in the construction trade are willing to work collaboratively to identify strategies that may have a positive effect on future ethical conduct. I assumed that the participants in this study would answer the interview questions honestly based on a personal or professional desire to improve the industry.

Limitations, Delimitations, and Scope

The Associated General Contractors of America (AGC, n.d.) is a professional organization formed to support the construction industry in the United States. The AGC is an active advocate of the construction industry through activities in government and private industry for its members, general contractors, subcontractors, and specialty contractors. The AGC also compiles and publishes demographic information for the United States and each state in the United States. AGC (n.d.) demographic information shows over 670,000 construction companies of all sizes employing over 7,000,000 people and performing over $1.3 trillion dollars of work each year in the United States. As of August, 2015, there were 28,800 construction firms in Connecticut, Massachusetts, and Rhode Island (Simonson, 2018).

This study presented input from a sample of industry leading contractors, including construction managers, general contractors, and subcontractors in the Northeast United States through organizational and professional association affiliation selected using group characteristic sampling (Krause et al., 2018). The Ethics Resource Center

(2013) stated that middle managers were more likely to have experiences with unethical behaviors. Therefore, based on their firsthand experiences, this population of PMs and superintendents presented original, valuable suggestions on how to reduce misconduct.

The study group included only contractors who performed commercial construction projects. Residential contracting companies may observe social environments or norms that are not in alignment with the social and structural environments of commercial corporations. Additional challenges of formal ethics, control, and decision-making may be involved in residential contracting companies.

This study was limited to professionals within the construction trade in the Northeast United States. There may be regulatory, legal, geographic, or social differences that delimit the ability to relate this group to other areas. This study also did not include contractors in the residential building trades. The variances in work type, environment, and stakeholder relationships in the residential building trades make residential work not comparable to the commercial construction industry.

By using the concept of reciprocal determinism, I tried to include as many factors related to ethical action and decision-making as possible. However, not all factors can be included in the areas of environment, behavior, and personal cognition. For instance, personal cognition is related to personal life, education, and childhood. The factors related to personal cognition for each participant are too numerous to provide a generalizable sample.

One challenge of conducting a study into ethics in a professional environment was managing the threat of retaliation for disclosure of potentially harmful information. With

this study, I endeavored to maintain a positive, problem-based approach to ethical challenges experienced. Interview participants were guided away from disclosing unethical conduct within their organization. Rather, they were asked to reflect on previous experiences and explain strategies that may have helped the situation. This procedure was intended to reduce the risk to study participants. In addition, the study was conducted as confidential and anonymous. There was no disclosure of related individual participant, company, or professional organization names in the reporting for this study. I am the sole researcher for this study. I have worked in commercial construction for over 25 years. My primary duties throughout my career have been in the area of finance and accounting. Due to my years in the industry, I may have some personal bias based on experiences in my career in the construction industry.

I have addressed my personal bias by use of data triangulation using interviews, social concept analysis, and inclusion of previous subject matter surveys. The interviews were semistructured with questions that encouraged the participants to share their personal experiences, thoughts, and ideas. The input of study participants was included in the results of this study without the addition of my personal industry experience. To make sure the participant group was indicative of the population, I used purposive sampling, specifically, key informant sampling. Using the method key informant sampling allowed me to purposefully select a group of people who held a specific position in a specific industry (Krause et al., 2018). The subject area in this study was not inclusive of my direct area of practice and my current employer was not considered as a potential organization to provide study participants.

Significance of the Study

The construction industry has a general problem with ethical action (Brown & Loosemore, 2015; Ethics Resource Center, 2013; Ho & Oladinrin, 2016; Oladinrin & Ho, 2014; Shan et al., 2015). Little research has been previously performed on strategies to improve ethics in the construction industry in the United States (Wang & Buckeridge, 2016). With this qualitative, exploratory case study on industry leading contractors in the Northeast United States, I addressed a gap in research into the area of potential corrective strategies to improve ethical behavior in the construction industry in the United States to assist in alignment with published codes of ethics (Locatelli et al., 2017). This study was significant in providing a voice to the project management and superintendent population in the construction industry who are in a pivotal position in the project management hierarchy to project duration, cost, and performance.

Significance to Practice

Project stakeholders experience harm in the form of lost time and money from the common unethical action in the construction trade (Bowen et al., 2015; Mohamad et al., 2015). The poor ethical action also places contractors at risk of legal liability, loss of reputation, and reduced employee morale (Ethics Resource Center, 2013). These same risks extend to the public, project owners, accountants, finance companies, and insurance and bonding companies as stakeholders in the construction industry.

As demonstrated in the Big Dig project in Boston, Massachusetts (NTSB, 2007) and the pedestrian bridge collapse at Florida International University (NTSB, 2019a), the public is also a stakeholder in ethical conduct in the construction trade. Ethical conduct

has the potential to negatively impact the public through increased taxes to pay for cost overruns, public safety concerns for poor construction, and legal fees for potential litigation. In this research, I sought to identify strategies for ethical improvement from industry PMs and superintendents through qualitative interviews. The goal of these recommendations was to improve ethical behavior, which may reduce potential stakeholder harm, increase stakeholder confidence, and reduce corporate risk. An increase in the positive ethical action and reputation of members of the construction trade may also have a positive impact on auxiliary services to the construction industry such as bonding companies, accounting firms, and insurance agents. These external industry stakeholders bear calculated risk in underwriting and auditing industry actions and reporting. Increased ethical action in the construction industry may reduce this risk.

Significance to Theory

This study was significant in that it made an original contribution to the theoretical literature and specifically to the concept of reciprocal determinism as it relates to ethical conduct in the construction industry by answering the study's research question on how construction industry professionals perceive alignment between industry ethical conduct and published codes of conduct. My conceptual framework and analysis were rooted in Bandura's (1978) concept of reciprocal determinism in which Bandura proposed that behavior, environment, and personal cognition are reciprocal in decision-making; specifically, in this case, ethical decision-making. I employed a conceptual framework that includes an analysis of personal ethics, social change concepts, and the pressured environment where the behaviors occur to gain rich information about how

PMs and superintendents think positive ethical changes may be implemented in the construction industry. I used a qualitative, exploratory method in this descriptive case study to provide rich, meaningful data for this study and for use in identifying future research into this topic and industry.

Significance to Social Change

The primary social change goal implication of this study was improved management strategies that may be implemented to result in increased ethical behavior throughout the construction industry. However, systemic change throughout the industry is not likely to happen quickly (Gyoo Kang, Edum-Fotwe, Price, & Thorpe, 2014). The competitive nature of the construction environment leads to pressure to perform unethically and offensive behavior is pervasive. Social change could be seen in improved ethical behavior and decision-making to include increased stakeholder trust, decreased taxpayer funding for construction projects through a reduction in cost overruns, reduced project timelines, increased personal satisfaction for construction employees, and reduced pressure on employees to compromise personal ethical standards.

Summary and Transition

In Chapter 1, I presented the outline of this descriptive, qualitative case study related to ethics in the construction industry. The construction industry is generally maligned and thought of as suffering from a pervasive ethics problem. The problem addressed was that many executive managers may not know what strategies to implement to align current conduct with professional association and organizational codes of conduct.

In this analysis, I used a conceptual framework that included Bandura's concept of reciprocal determinism that was comprised of personal ethics, social change, and behavior represented by prior published studies that contained information about the construction industry environment. The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct. The primary potential implication of this study included potential improvements in ethical action in the construction industry through improved management strategies for aligning actual behavior with published ethical codes of conduct.

Chapter 2 includes a presentation of the literature related to ethics in the construction industry around the world. I discuss prior research on the implementation and efficacy of professional ethical codes and key concepts related to the conceptual framework including personal ethical and social change concepts. Finally, I will include examples of recent ethical behavior in the industry as an example of industry behavior.

Chapter 2: Literature Review

The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct. Despite efforts to improve ethical conduct, researchers across the world have stated that the construction industry is one of the most unethical industries overall (Brown & Loosemore, 2015; Ho, 2013; Lohne et al., 2015; Loosemore & Lim, 2016; Mason, 2009; Oladinrin & Ho, 2015c). Studies were performed in 2004 and 2013 that identified the prevalence of unethical behavior in the United States construction industry and the types of behaviors observed (Ethics Resource Center, 2013; FMI Corporation, 2004).

In Australia, Vee and Skitmore (2003) reported that, while the majority of their study participants belonged to a professional organization or were bound to a corporate code of ethics, every member of the study reported experiencing some form of unethical behavior. Very little research has been devoted to advancing alignment between industry behavior and professional organization codes of ethics. The problem was that many executive managers in the construction industry may not know what strategies will be effective to align industry behavior with organizational and industry professional codes of ethics. FMI Corporation (2004) confirmed this problem in stating that leadership in the construction industry did not always know how to conduct work ethically and, as a result, in the construction industry, ethics required more attention, research, discussion, and understanding.

Literature Search Strategy

To identify current research performed on the topic of ethics in the construction industry, I used the search engine Google Scholar and the online libraries of Walden University and the University of Phoenix. I managed the settings in Google Scholar to identify links to my online libraries for ease of locating the full text of relevant articles and searching the databases available in each library. The databases included Proquest, EBSCO Host, Business Source Complete, SAGE Journals, and Emerald Insight. Search terms included *ethics*, *construction ethics*, *construction industry ethics*, *Tönnies ethics*, *Weber ethics*, *code of ethics construction*, *social change construction*, *reciprocal determinism,* and *reciprocal determinism ethics*. I obtained information on recent cases by conducting a Google search on *Big Dig*, *Construction Corruption New England,* and *Florida Bridge Collapse NTSB*. I also obtained copies of recent court cases through database searches on the Connecticut Judicial Department website case database. I performed additional forward and backward searches by referencing works cited for the original findings and cited by searches for the original findings.

Minimal prior research has been performed on the topic of ethical behavior and implementation of ethical codes specific to the construction industry in the United States. I included two seminal studies on the occurrence of unethical conduct in the industry to define the industry behaviors, including bidding, billing, payment, change order, and construction performance practices, which were the basis for this qualitative, exploratory case study research. I identified three recent ethics cases in the Northeast United States that served as examples of the types of potential ethical violations mentioned by FMI

Corporation (2004) and The Ethics Resource Center (2013) and the effect of those violations on project stakeholders. I also reviewed the example cases identified to exhibit alignment between the examples and the behaviors identified in the seminal surveys that defined this case study.

To address the lack of ethical research in the construction industry in the United States, I expanded the literature search to similar industries. I included studies in this research that are based on the construction industry in other countries, such as Australia, Canada, China, Malaysia, Nigeria, and the United Kingdom. I also included studies related to key components of the conceptual framework of this study and the implementation and efficacy of professional codes of ethics in other industries.

Conceptual Framework

In this qualitative, descriptive case study, I used a conceptual framework based primarily on Bandura's (1978) concept of reciprocal determinism. Bandura posited that behavior was not a linear result of personal cognition or environment; rather, behavior was influenced by both personal cognition and the individual's social environment depending on multiple related issues. In this analysis, personal cognition was related to personal ethics and values. The environment of the construction industry was the current situation where unethical behavior is pervasive. This concept was based on the notion that the circumstances of each project are multivariable and that those personal and social environmental conditions likely all play a role in the behavior exhibited in the industry.

I reviewed personal ethical concepts, social change concepts relating to community and society, and the concept of reciprocal determinism to examine how these

concepts combine to affect the ethical actions of members of the construction industry. In this study, I examined how personal ethics and social change concepts may be leveraged using ethical codes of conduct as a tool to produce improved ethical action in the construction industry.

Reciprocal Determinism

Bandura (1978) presented the concept of reciprocal determinism as an analytical tool that allowed for reciprocal relationships between the factors of personal cognition, behavior, and environment in decision-making. The concept was originally forwarded as a psychological construct in explaining behaviors in certain conditions. The concept was relevant to this study because its use allowed the ability to view the entire picture of the ethical problem in the construction industry. This included not only the individual actors but also the highly competitive environment, which is the current social/behavioral landscape where these actions and decisions take place.

One example provided by Bandura highlighted the concept of reciprocal determinism in relation to the behavior of children. In explaining the concept, Bandura described how a child exhibiting negative behavior might continue to behave badly, despite initial punishment because they expect that there will be a reward, or they will ultimately achieve their desired outcome through continuing. Alternately, if the child does not expect a positive outcome, they cease the poor behavior and choose an alternate behavior that was expected to provide the desired outcome.

In the case of the construction industry, many budget and schedule project goals are tied to compensation benefits or position advancements within the company. By

exhibiting one or more of the unethical behaviors identified by the FMI Corporation (2004) or The Ethics Resource Center (2013), a construction industry professional may be conditioned to expect that the unethical behavior will result in an outcome that has personal financial or professional advantages. This sort of conditioning may have the effect of perpetuating behaviors that are unethical and potentially damaging to stakeholders.

Phillips and Orton (1983) argued that Bandura's concept was not new and did not merit the new classification of reciprocal determinism. They argued that a previous author, Haldane, had also provided examples of multidirectional factors in relationships with personal behavioral outcomes. Interestingly, they did not argue that Bandura was incorrect in his summation of the relationships of personal cognition, environment, and behavior. Instead, they stated that "the issue at point is not that Bandura is wrong; on the contrary, his case is strong" (Phillips & Orton, 1983, p. 164) and posited that the concept was better explained in Bandura's book *Social Learning Theory* that the three factors were reciprocal through interactions over a historical period. They took issue with the term *reciprocal determinism* but not with the presentation or content.

Feenberg (2017) discussed the concept of reciprocal behavior by saying that "anger evokes anger, kindness elicits kindness, and so on" (p. 2). However, based on the concept of reciprocal determinism presented by Bandura (1978) where personal cognition, environment, and behavior are all reciprocal, perhaps Feenberg's belief is not always true. Anger by one person toward another may instead evoke understanding and compassion from a person based on the receiver's personal ethical beliefs and cognition.

Martial arts instructors in the Villari's school of Shaolin Kenpo Karate commonly teach their students that one way to change an uncomfortable, tense, or potentially threatening situation is to smile while taking your space (Creative Connections Through The Martial Arts, 2018). While this tactic may not always work, there is not always a need to return anger with anger. Sometimes conflict is born of misunderstanding. In the context of this study, the unethical action may not necessarily have to perpetuate itself in human behavior. Perhaps a change in the personal cognition of the actors or the environment in the construction industry can make a difference so that unethical behavior does not beget more unethical behavior.

Personal Ethics Concepts

Adelstein and Clegg (2016) posited that alignment between employees' personal ethics and professional or corporate ethics is necessary to avoid personal conflict. Otherwise, the employee must subrogate their personal ethics to the professional or corporate code advanced by management, which becomes the primary guidance for the company. Ethics is interpreted differently by individuals in society based on a person's own individual moral character or code. Further, what is ethical or not is sometimes interpreted differently based on the situation in which the decision maker finds themselves and the potential outcomes of the ethical action.

There are three main approaches to ethics: consequentialism, nonconsequentialism or deontology, and virtue ethics (Bond & Firenze, 2013). These approaches represent distinct ways of looking at how to evaluate an action and determining if the action is good, right, moral, or ethical per the personal ethical beliefs

of the actor or decision maker. Given a specific set of circumstances, a particular action could be either ethical or unethical depending on the decision maker's ethical framework and whether they were trying to maximize utility, fulfill a duty, or perform according to what was good and virtuous.

Consequentialism. Consequentialism is an ethical concept that, in its simplest terms, is interpreted that an action can be measured to be ethical or not based on the consequences of the action (Sinnott-Armstrong, 2015). Consequentialism includes the concepts of utilitarianism, egoistic, and the common good (Bond & Firenze, 2013). Classic utilitarianism, as proposed by Jeremy Bentham in 1789, John Stuart Mill in 1861, and Henry Sidgwick in 1907, is a concept wherein the basis for an action to be considered ethical the act must serve the overall good (Sinnott-Armstrong, 2015).

Jones et al. (2017) identified the consequentialist concept of ethics as the current norm in the engineering field where outcomes, not intentions, were the basis for measuring actions. They proposed that the engineering industry, which is part of the construction cycle, must move away from an outcome-based approach to ethical action and toward a community and social change approach. In contrast, Burnes, Hughes, and By (2016) posited that a consequentialist ethical structure would help direct corporate decision makers towards making decisions that were in the best interest of all stakeholders of the organization, rather than decisions that benefit only the individual or a small group.

In the construction industry, situations arise on a regular basis where PMs and superintendents are required to make decisions regarding costs and project quality that

will affect the final project and project stakeholders. The reasons behind these decisions are as varied as the personal ethics of the individuals who make up the industry. Judging these acts based on outcomes alone is rarely clear. The decision could have multiple outcomes that would result in very different ethical judgment decisions. A project manager may make decisions on a project to make more money for the company, to meet professional production or budget goals, or to save the owner money, but the decision may result in a major structural failure because the materials purchased for a lower cost are also lower quality.

Nonconsequentialism. Nonconsequentialism is a duty-based ethical belief system also known as deontology (Bond & Firenze, 2013; Gyoo Kang et al., 2014; Velasquez, 2006). Bond and Firenze (2013) stated that duty-based ethics might seem cold or unfeeling because individual circumstances in each decision are not a consideration for varying action; if the situation is x, the action should be y, every time. Kang et al. (2014) related deontology to ethical decision-making through professional and corporate codes of ethics. Written codes are often crafted with the improvement of an industry or group in mind.

Within deontology, also known as duties and rights:

> [T]he Right has priority over the Good. If an act is not in accord with the Right, it may not be undertaken, no matter the Good that it might produce (including even a Good consisting of acts in accordance with the Right) (Alexander & Moore, 2016).

A major subconcept of deontology is Kant's categorical imperative. Velasquez (2006) presented two formulations of Kant's categorical imperative. The first held that in determining if something is right or wrong, you must use the criteria of universalizability and reversibility. The second was that:

An action is morally right for a person if, and only if, in performing the action, the person does not use others merely as a means for advancing his or her own interests, but also respects and develops their capacity to choose freely for themselves (Velasquez, 2006, pp. 79-80).

For professional decision-makers in the construction industry, duty-based ethics may provide a clear structure of ethical expectations. This structure seems to combine well with the implementation of professional and corporate codes of ethics. Professional organizations and corporations can provide clear direction on what action is expected in professional situations for companies or organizations with a code of ethics, thus providing a structure of duty-based action for decision makers.

Virtue ethics. Athanassoulis (n.d.), an independent researcher formerly affiliated with the University of Leeds and Keele University, described virtue ethics as a class of ethical framework that is framed by the character and morals of the actor. Those who practice virtue ethics do so because they are trying to do good in the world. Athanassoulis pointed out that the motivation behind the good acts was a foundational quality of the consideration of virtue ethics. Those acting according to the virtue ethics framework were not seeking to maximize utility or fulfill a duty; instead, they sought to act according to what was good, righteous, and virtuous.

Elliot (2016) stated that the concept of virtue ethics returned to the forefront and again became popular in the late 1990's. Virtue ethics was defined by Velasquez (2006) as "an ethic based on evaluations of the moral character of persons or groups" (p. 60). "Virtue ethics is a broad term for theories that emphasize the role of character and virtue in moral philosophy rather than either doing one's duty or acting in order to bring about good consequences" (Athanassoulis, n.d.). The three major concepts of virtue ethics are eudaimonism, agent-based virtue ethics, and ethics of care. Eudaimonism is concerned with what makes us happy. Agent-based virtue ethics are concerned with those traits we see in others which we find desirable. Ethics of care related to actions which allowed us to provide for or care for those close to us (Velasquez, 2006).

The company Berkshire Hathaway quoted founder Warren Buffet in the company charter. Buffett (Berkshire Hathaway Inc., 2013) suggested that one way to increase ethical behavior in a company was to make ethical decisions as though all your actions would be printed on the front page of a major newspaper. If after considering that, you were still comfortable with your decision, then you could proceed with the action. This guidance was provided as the rule of thumb for ethical considerations in the business code of ethics for Buffet's employees. In the construction trade, the equivalent of the advice above was to construct the project as if the work was being performed for someone very close to you.

Hawks, Benzley, and Terry (2004) posited that developing conscience may assist in promoting ethical behavior. The practice of identifying that which was good and just in those we admired and endeavoring to exhibit those traits through positive ethical

practices, may make an individual more likely to make decisions that were in accordance with what was virtuous, just and right in ethical decisions. “Just as a strong rope is made up of hundreds or thousands of small strong strands, so is a life made up of consistent daily actions and choices” (Hawks et al., 2004, p. 266).

The recommendations of the PMs and superintendents participating in this study likely reflected their personal or group ethics. The concept of virtue ethics is important in cultivating a group ethical character through professional associations and corporate culture. Professional and organizational codes of ethics are created to develop a moral code amongst a group of people related through shared experience or position in the construction industry.

Social Change Concepts

Mason (2009) reported that personnel in the construction industry felt compelled to act in ways that were sometimes unethical to obtain a competitive advantage, remain competitive, or simply to stay in business. The climate in the construction industry, from bidding through project completion, is highly competitive (Ethics Resource Center, 2013). The competitive climate created pressure on construction professionals to complete jobs on time and within the project budget resulting in cut corners and ethical violations. In addition, contractual arrangements were carefully crafted to protect the company’s interests and contractors, both general and sub, made decisions about how to act on a project based on what was or was not included in the contract document.

An understanding of social change concepts of community and society can help us comprehend how people relate to one another while making ethical decisions. In this

study, I presented the social change concepts of *Gemeinschaft* and *Gesellschaft* (Tönnies, 2001) and value-rational action (Noble, 2000) to assist with this understanding. Analysis of the relationships between stakeholders helped guide how decision makers considered those people affected by their decisions.

Overall, PMs and superintendents in the construction industry based their business decisions on a combination of personal ethics weighed against their business or social environment and the facts of the decision-making opportunity. As stated previously, depending on the motivation of the action, a decision could be classified by any of the three ethical frameworks or a combination thereof. The social change concepts presented here include *Gesellschaft* and *Gemeinschaft* by Tönnies and value-rational action by Weber.

The social change concepts of Tönnies and Weber assisted in understanding actions taken as they related to the relationships that exist amongst people. In the construction industry, forging and nurturing personal relationships may improve the social ethical action. This could be accomplished through networking, unions, and professional organizations which give the people of the industry the opportunity to connect with one another and create close personal relationships.

***Gemeinschaft* and g*esellschaft*.** Tönnies (2001) first presented concepts of social action in 1887. Tönnies stated that people acted differently in social situations based on relationships. The two types of social interactions identified were called g*emeinschaft* (community) and *gesellschaft* (society). *Gemeinschaft* referred to social interactions that take place in close personal relationships with family, friends, or other close relations.

Tönnies' description of the family was not limited to only blood relationships; it was expanded to include those that worked for an individual or anyone where a genuine concern for the other's well-being existed. *Gesellschaft* referred to social actions in societal or contractual relationships. Tönnies indicated that social actions taking place under a *gesellschaft* type relationship were strictly transactional. Each party would be primarily concerned about their benefit without regard for the transaction outcome for the other party.

Tönnies (2001) suggested that *gemeinschaft* and g*esellschaft* relationships were the only types of social actions and could not exist together in a single transaction. For instance, in a social transaction carried out between two friends, each would always try to achieve what was equitable for all parties based on the favorable social ties. In a social transaction between two strangers, each party would always be only interested in that which would provide the most personal benefit, even if that outcome was unfair or unethical for the other party.

Cahnman (1968) posited that in a *gemeinschaft* type relationship, friends and family were equally concerned with acting such that outcomes were fair for all. One person was not concerned with gaining an advantage over another that they considered to be a part of their community. Cahnman called this a "common will" (p. 141). In a contrasting *gesellschaft* relationship, a vendor or transactional partner in a trade was not given the same consideration as oneself. Care was taken to conduct transactions that met personal needs or gained personal advantage. In g*esellschaft*, each party to the trade was primarily concerned with their well-being and advantage.

Tönnies saw a transition taking place in society from g*emeinschaft* relationships to *gesellschaft* (Cahnman, 1968). He believed that capitalism, trade, increasing population, and geographic distance between families and friends was behind the diminished community behavior. The transition was viewed as a deterioration of societal behavior. However, Tönnies appeared to believe that society may be able to once again revert to a more community-based framework by focusing on connections between people, not the transactional side of relationships.

Value rational action. Weber was a colleague and friend of Tönnies in late 1800's Germany and expanded Tönnies view of social action by stating that the understanding the intention of an individual was important in assessing social action (Noble, 2000). Noble described the term *value-rational action* as "the expression of a value . . . because it is the right thing to do, regardless of the consequences" (2000, p. 120).

In value-rational action, a person evaluating an action needs to endeavor to understand what was right for the person acting. The ethical actor brings individual experiences, upbringing, morals, bias, etc. to a situation and used those things to evaluate how to act in a given situation. The person evaluating the action also brought these things to their evaluation of an action.

Building strong, positive social connections within a corporate environment or professional organization may influence social ethical action within the construction industry. These connections may assist in ethical choices within the industry. However, this may not be enough. The concept of training members of the industry in the right

thing to do to protect all stakeholders for construction projects may result in improved ethical conduct by and for all.

Construction Industry Review

Research into Ethics in Construction

Research into ethics in construction has been somewhat scarce in the United States. However, the financial results of unethical actions in the construction industry have affected the overall cost of building by inflating cost to build by an estimate of anywhere from one half of one percent to five percent of the total cost of the building (FMI Corporation, 2004; Parsons, 2014). The Office of the Attorney General of the District of Columbia (Racine, 2019) determined in a recent study that there was a 16.7 to 48 percent competitive advantage in bidding gained by a company using unethical methods for staffing projects. Considering these percentages, on a multimillion-dollar project, the economic ramifications of unethical behavior may be significant.

In the survey conducted by FMI Corporation (2004), many people in the industry agreed that there was an issue with adherence to ethical practices. In addition, eighty-five percent of those surveyed agreed that there should be an industry wide code of ethics (FMI Corporation, 2004). However, there was some disagreement on the best way to lead a change in industry practices toward more ethical behavior. Suggestions made to FMI Corporation included “stiffer penalties for those caught in unethical or illegal acts, an industry-wide code of ethics, more emphasis placed on social responsibility, (and) more (ethics) training” (FMI Corporation, 2004, p. 11). Suggestions from previous international research for how to improve ethical behavior included increased education

on ethical issues, professional and association codes of ethics, increased corporate enforcement, stronger leadership, and governmental supervision, laws, and penalties (Ho, 2011; Oladinrin & Ho, 2014; Stucke, 2014).

Of the articles written and conferences held, the variety of topics covered were sometimes by-products of ethical decision-making rather than direct ethics issues. At the 2018 Ethics and Compliance Conference held by the Connecticut Construction Industry Association (2018), the topics on the agenda included the #MeToo movement and harassment in the workplace, the debarment and monitoring process, and issues related to drug testing employees. Of these three topics, the debarment process most closely related to ethical decision-making, avoiding fraudulent behavior, and leadership. However, one could easily argue under the umbrella of ethical conduct that maintaining a harassment-free workplace was also related to ethical decision-making and leadership. In 2019 (Connecticut Contruction Industry Association), the summit covered the topics of wage and benefit compliance in the State of Connecticut, wage theft and tax fraud in the national construction industry, and minority inclusion for contract compliance on government projects.

Likewise, the CIECI (2018b) conducts two meetings each year where member companies must attend. They conduct an annual meeting on best practices and an annual conference. A review of past meeting agendas also revealed a wide range of topics related to both compliance and ethics including leadership, cybersecurity and IT compliance, disadvantaged business enterprise (DBE) best practices, supply chain management, ethics program strategies, etc. The CIECI (n.d.) also published an outline

for creating and maintaining an ethics program that included aspects of leadership, codes of conduct, situational awareness, climate, reporting procedures, business policy, risk assessment, and corporate values. The document originated from a defense industry guide which was adapted for the construction industry. The charter for the CIECI additionally states that they will prepare "annual surveys of ethical behavior in the construction industry" (CIECI, 2018a). However, in response to a request for access to copies of these surveys, a representative replied that the CIECI had not conducted annual surveys but they had collaborated with The Ethics Resource Center in 2013 on completion of their study (C. McAnney, personal communication, January 3, 2019).

Multiple studies were conducted in other areas of the world: Malaysia (Gyoo Kang et al., 2014; Ho, 2011; Ho & Oladinrin, 2016; Oladinrin & Ho, 2015b, 2016), Australia (Brown & Loosemore, 2015; Loosemore & Lim, 2016, 2017; Loosemore & Phua, 2013; Vee & Skitmore, 2003), China (Shan et al., 2015), and Norway (Lohne et al., 2015; Lohne, Svalestuen, Knotten, Drevland, & Lædre, 2017). The studies in Malaysia and Australia had one primary author from each geographic area creating a link of information introduced by one author or group and carried forward into future works of that author or group. The same was true for the studies in Norway on the topic of construction engineering ethics. Although there were a couple studies in the United States regarding ethics in the construction industry, I was not able to find any recent studies in the United States that related to how to effectively improve the ethical behavior in the construction industry to more closely mirror the conduct expected through professional and corporate codes of ethics.

Malaysia. Ho and Oladinrin (2011, 2013; 2016, 2018; 2014, 2015a, 2015b, 2015c, 2016) have conducted multiple studies regarding construction ethics in the country of Malaysia in affiliation with Hong Kong Polytechnic Institute. The body of work included studies performed through various methods that included literature review, quantitative survey, and qualitative case study. Their work followed a mandate by the government of Malaysia in 2001 that construction companies must maintain a code of ethics and many of the studies reference prior works by the same group of researchers (Ho, 2013; Oladinrin & Ho, 2016).

In 2011, Ho reviewed several models of decision-making used in the construction industry for ethical decisions through a literature review. The five models presented included factors of moral awareness or understanding, personal cognition, organizational contingency variables, external variables, ethical philosophy, etc. Many of these factors, from the various models, were included in the conceptual framework of this study by using the concept of reciprocal determinism and factors of environment, behavior, and personal cognition. One of the suggestions for future research from Ho's 2011 study included additional research, similar to this study, that expand the theories utilized previously to include the relationships between the factors of ethical decision-making (Ho, 2011).

In 2013, Ho conducted a survey to study the role that communication may play in the effectiveness of code of ethics. The results of that survey showed that employees did not believe that codes of ethics for construction companies in Malaysia were well communicated. This lack of communication may affect the efficacy of the plan. Between

2014 and 2016, Ho and Oladinrin (2016; 2014, 2015a, 2015b, 2015c, 2016) performed several additional studies each expanding on and often citing their own previous research. They researched topics that included improving ethical code implementation in construction organizations, barriers to implementation of codes of ethics, ethical code evaluation, and practitioner perspectives on ethical code implementation and management.

In 2018, the group conducted a qualitative study through the use of semi-structured interviews with 19 participants, ranging from director level to frontline workers, from within the construction industry of Malaysia (Ho & Oladinrin, 2018). The researchers designed the study to solicit and compile the opinions of the industry participants regarding the implementation of corporate codes of ethics in the Malaysian construction industry. Although personal cognition was mentioned in the background of the study, the authors inferred that an organization should have an organizational ethical foundation. Personal cognition was not discussed in relation to the role it may have on the decision-making skills or processes of the employees of the organization. Some recommendations from this study included a rewards program for code compliance, ethical training, and punishment for ethical violations.

Australia. A group of common researchers performed studies in Australia in regards to engineering and construction (Brown & Loosemore, 2015; Loosemore & Lim, 2016, 2017; Oliver, London, & Everingham, 2006; Vee & Skitmore, 2003). Vee and Skitmore (2003) conducted a quantitative survey in which they inquired about ethical codes and ethical conduct in the construction industry in Australia. In results similar to

FMI Corporation and Ethics Resource Center, all of respondents stated that they had witnessed some sort of unethical behavior in practice in the construction industry. The behaviors included “unfair conduct, negligence, conflict of interest, collusive tendering, fraud, confidentiality and property breach, bribery, and violation of environmental ethics” (Vee & Skitmore, 2003, p. 117). Oliver, London, and Everingham (2006) performed a study specific to the ethics in the procurement process of construction business using the qualitative method of open space technology. Through open conversation the participants identified themes regarding ethics in construction in four locations in Australia. The themes identified by Oliver et al. (2006) were closely related to those identified by Vee and Skitmore. This correlation between studies appeared to confirm the presence and prevalence of ethical issues in the Australian construction industry.

Loosemore and Lim (2016, 2017) and Brown and Loosemore (2015) performed qualitative, quantitative, and mixed methods research regarding ethical conduct, the perception of fairness, and behaviors that may affect ethical behavior in construction. Loosemore and Brown (2015) studied how the environment of the construction industry may effect behaviors. They suggested that the underlying culture of the industry may be a hindrance in implementing strategies to address unethical behavior. For instance, industry professionals may know how they are expected to act in relation to organizational policies or ethical codes of conduct, but actual actions may differ because of the environment in the field. Loosemore and Lim (2016) found that subcontractors and suppliers were perceived as the main victims of unfair or potentially unethical actions and bore more risk than those at higher levels of the project hierarchy. By extension, those

closer to the owner of the project, were treated more fairly; i.e. general contractors and consultants. Loosemore and Lim (2017), in later work, studied corporate social responsibility (CSR) and organizational performance in the construction industry. In this case, CSR was related to a business governance structure that controls, not only ethical conduct, but also how the organization operated overall as a corporate citizen. Safety and ethical conduct were identified by survey participants as high priorities of a CSR strategy. However, study participants also indicated that they did not believe that CSR was related to better financial performance for the organization. This negative view may drive further unethical behavior when financial performance is viewed as a priority.

Canada, China, Nigeria, Norway, United Kingdom, and the United States. Various researchers have performed studies over the past several years around the globe, this included only a few studies in the United States (Good Corporation, 2011; Locatelli et al., 2017; Lohne et al., 2015; Lohne et al., 2017; Moodley, Smith, & Preece, 2008; Moylan, 2006; Rebbitt, 2013; Scalza, 2008; Schwartz, 2004; Shan et al., 2015; Sohail & Cavill, 2008; Yadav, Shrestha, Mishra, & Research, 2015). Over and over, the same ethical concerns were raised in the construction industry across geographic locations. Schwartz (2004), Scalza (2008), Sohail and Cavill (2008), Lohne et al. (2015), Burgess (2017), and Lohne et al. (2017) focused their research on the architecture, engineering, or AEC (design or architecture, engineering, and construction) phases of construction. This group included all of the studies I found that were conducted into the area of ethical codes of conduct, professional organizations, and the construction industry in the United States (Burgess, 2017; Jones et al., 2017; Scalza, 2008; Schwartz, 2004). Schwartz (2004)

discussed the occurrence of competitive bidding in the engineering phase. Scalza (2008) presented an educational piece at a conference held for the American Society of Engineering Education in 2008. Jones et al. (2017) suggested an ethical framework that may assist with management implementation of codes of ethics in the engineering profession. Finally, Burgess (2017), in a presentation for the National Institute for Engineering Ethics, discussed the sources of codes of ethics for the engineering profession.

Moylan (2006) used a mixed method study with a quantitative survey and qualitative interviews to research the potential effect of values based leadership in the construction industry in China. Moodley et al. (2008) suggested using a stakeholder matrix for identification of stakeholders and the ethical responsibilities to those stakeholders. Mason (2009), in the U.K., advocated for a single code of ethical conduct across all professions and nations for the construction industry through training, education, and guidance to avoid unintentional ethical violations. Rebbitt (2013) presented that an important part of addressing ethical behavior in the construction industry in Canada was related to how whistleblowing or violation reporting was handled. In a related study in China, (Shan et al., 2015) posited that response strategies could help provide a positive effect in reduction of unethical behavior and preventing vulnerabilities to unethical acts. Yadav, Shrestha, and Mishra (2015) used a quantitative survey and key informant interviews to gather data to assess the ethical behavior of the Nepalese construction industry as it related to procurement and contract tendering. Unfortunately, as Locatelli et al. (2017) presented, even though there were several studies

that confirmed the presence of unethical behavior in the construction industry, research into project management was largely quiet on the subject.

Ethical concerns. Ho (2011) conducted a review of literature ranging over approximately 20 years and provided a beginning point for the research into ethics in construction in Malaysia to identify ethical concerns. Likewise, FMI Corporation(2004) and The Ethics Resource Center (2013) conducted surveys to ask members in the construction industry to identify ethical concerns seen while they conducted business. The authors of this previous research identified a few recurring ethical concerns in the industry involving bidding, billing, payment, change order, and construction performance practices. Bid shopping, reverse auctions, and overbilling were three common ethical practices presented in these prior studies that may directly affect bidding, billing, payment, change order, and construction performance practices.

Bid shopping. Bid shopping is "the practice of divulging solicited bids as leverage to encourage contractors to lower their prices" (Parson, 2005). This occurs when a competitive bid is created for the purpose of obtaining work. In the case of a general contractor, once the work is awarded by the owner, the general contractor would then go back to its subcontractors and request that their bids be reduced, while providing information about competitor's bids to encourage the reduction. Bid shopping is viewed by ninety-four percent of people in the construction industry as an unethical practice (Parson, 2005) and is discouraged in the construction industry (Hatipkarasulu & Gill Jr, 2004). The practice of bid shopping theoretically allows the owner or general contractor of the project the ability to produce the building for the lowest cost.

Bröchner (2009) presented construction metaphors by Aristotle, “the house as a product for use is better than the activity itself of building . . . better in the sense of being closer associated with the purpose of the building” (p. 521). In this line of thought, bid shopping is an action that moves the building closer to its final purpose which is “a product for use” (Bröchner, 2009, p. 521). For the owner or general contractor, the action of shopping bids for the project and using the bids of others as leverage provides a result that may be considered as a good, a finished building for a low cost. In this manner, a classic utilitarian may argue that the result is good and the benefit outweighs the cost. An ethicist in the area of value ethics, however, is likely to argue that the degradation of trust caused between the owner and general contractor or the general contractor and subcontractor is a violation of value ethics. In the value ethicist’s eyes, upholding high moral character is more important than the economic factors. Divulging information harms the integrity of the owner or general contractor and gives an appearance of greed before honesty in business.

Reverse auctions. Reverse auctions occur when a competitive bid is prepared and submitted by a general contractor or subcontractor to an owner or general contractor. There is a bid announcement, followed by preparation and submittal of bids. Once submitted, the bidding is closed and bids are ranked anonymously. At this point, in a reverse bid, the bid is re-opened, disclosing the bid rankings and all bid prices. Those who are still interested in the project will lower their bids in an effort to obtain the work. If the owner or general contractor feels that the lowest possible bid is achieved, they award the work to the lowest bidder. If not, the process is repeated (Hatipkarasulu & Gill

Jr, 2004). The online version of a reverse auction has the ranked, anonymous original bids posted in an online site where contractors can then examine other bidders' prices and resubmit their bids in a predetermined time frame (Hatipkarasulu & Gill Jr, 2004).

In 2005, the United States House passed legislation to allow the Federal Acquisition Regulations (FAR) to utilize the online reverse auction method of procurement for commercial services (Winston, 2005). One concern in the construction industry was that, while the House panel indicated that construction services were not among those available for reverse auction, there was not a specific exclusion included in the bill (Winston, 2005) creating ambiguity in the law.

Reverse auctioning is a common practice in construction. The result is when a contractor presents their initial bid to a general contractor or owner known to reverse auction their projects, the initial bid includes some amount of *padding* that allows for a later give back or reduction off that initial price. By pressuring the general contractor or subcontractors into a situation where they feel certain that their initial bid will not be final, the entity soliciting for bids may be promoting the degradation of the competitive bid process (Horlen, Eldin, & Ajinkya, 2005).

Another problem with reverse bidding practices is that it forces a general contractor or subcontractor to make a quick, perhaps superficial, review of the project in reducing the costs to obtain the job. Unless a cut is pre-planned, as outlined above, the contractor must make reductions in another area of construction to make up the costs cut from their bid. This may mean reducing profits, pushing high margin change orders, cutting corners on quality, or pressing production beyond what manpower can produce

with consistency (Hatipkarasulu & Gill Jr, 2004; Horlen et al., 2005). A contractor operating under these conditions may feel pressure to provide a lower quality product or service. They may further justify their lack of quality by the original behavior of the general contractor or owner. This leads to a potential spiraling of unethical behavior.

The general contractor may justify their behavior as ethical under deontology as a fulfillment of the duty to produce a finished building for a reasonable cost. An owner may also claim that the lowest building costs available are a right. Therefore, reverse auctioning is an ethical action in achieving their right. An owner or general contractor may also profess under utilitarianism that the costs of conducting business this way (reduced quality or safety, potential for project abandonment by the contractor, degraded general contractor/subcontractor trust) do not outweigh the benefits of a less expensive building (Horlen et al., 2005).

Overbilling. Overbilling can encompass two somewhat different practices in the construction industry. The first relates to performing work on a time and material basis where an estimated final cost was given to the owner. If the work was performed in less than the expected about of time, a contract should specify whether the contractor bills only the experienced time and material or to overbill by billing the original estimated amount of the work. According to virtue ethics, the contractor would bill the actual amount of time and material experienced in the completion of the job. This represents the action of integrity, honesty, and trust in relation to the owner/contractor relationship. However, a contractor may argue that they were justified in charging the original amount because the owner was expecting that amount based on the original bid or that there were

other indirect or overhead costs associated with the job that technically could be considered part of completing the job. Billing amounts not considered direct costs helps provide compensation for these other overhead items.

The second practice of overbilling relates to front-loading bills from the general contractor to the owner or the subcontractor to the general contractor. This front-loading occurs when the contractor submits a bill for more labor then has been completed and/or more material than has been purchased for the project to date. For instance, in the first months billing, the contractor has experienced $10,000 worth of labor and material cost on the project. However, the progress billing for this period is for $25,000. This $25,000 represents work completed in period one, partial expected work in period two and beyond, materials that need to be purchased before the owner or general contractor makes payment, and allows for what the owner will hold in retainage on the project until completion

Eighty-six percent of respondents to a survey about the practice of billing in advance for goods and services not yet provided called it unethical (Parson, 2005). “However, 10% disagreed” (Parson, 2005, p. 53) with that assessment. Those who considered it unethical, stated that it was not right, good, or honest for the contractor to bill for work not yet completed. This evaluation followed the virtue ethics theory that the action is not moral, so not ethical.

Those who disagreed that the practice was unethical argued instead that the practice was necessary because owners and general contractors withhold payment to subcontractors from 60 to 90 days, in many cases. This payment withholding practice

causes the subcontractor to experience additional and undue costs in financing the jobs (Parson, 2005). Further, they argued that it was not right for the general contractor or owner to expect the subcontractor to carry the burden of financing the project and expending costs up front (Parson, 2005). Billing in advance for labor not yet completed or materials not yet purchased may provide the contractor the operating capital to facilitate the ethical result of completing their duty to finish the project in a timely manner.

Suggestions for improvement. In the survey conducted by FMI Corporation, many people in the industry agreed that there was an issue with adherence to ethical practices. Eighty-five percent even agreed that there should be an industry wide code of ethics (FMI Corporation, 2004). However, there was some disagreement on the best way to lead a change in industry practices toward more ethical behavior. Suggestions made to FMI Corporation included "stiffer penalties for those caught in unethical or illegal acts, an industry-wide code of ethics, more emphasis placed on social responsibility, (and) more (ethics) training" (FMI Corporation, 2004, p. 11).

Penalties for unethical or illegal acts. One possible solution for curbing unethical behavior was to dictate penalties for those acts considered unethical or illegal. Penalizing illegal behavior is a process that can be carried out in a court of law where the ethics of justice apply to all equally. Penalizing unethical behavior is a much more difficult venture. Since the mid 1970's, there have been actions by the United States Department of Justice and Fair Trade Commission, as well as, court decisions by the United States Supreme Court which have reduced the ability of professional trade associations to

regulate the ethical practices of their members (Schwartz, 2004). Arditi, Polat, and Makinde (2008) presented Supreme Court rulings related to anti-trust violations in 1975 to 1978 as a period in the construction industry where the breakup of professional organization practices had an adverse effect on the industry (Arditi et al., 2008). This end to the prominent professional organization self-regulation of the industry by the government may have had a detrimental effect on the ethical behavior in construction.

In order to allow for more governance of ethical practices within the construction profession by the professionals themselves, Schwartz suggested that "it is time for the pendulum to swing back to where professionals are granted wider latitude in their practice" (Schwartz, 2004). Professional organizations, like the CMAA, have well thought out codes of ethics that could help clean up the industry if there were stiffer penalties for violation. i.e. legal ramifications or loss of professional licensure.

The House of Representatives in 2005 and again in 2009 considered legislation toward the goal of making bid shopping an illegal act (govtrack.us, 2009-2010; Parson, 2005). The legislation failed to make it through committee to a vote by the House where it could be advanced to the Senate on both occasions (govtrack.us, 2009-2010). Failing the swing back to self-regulation on the part of professionals, actions to legislate unethical practices, by the House and Senate, could help bolster the ability to penalize those who engage in business practices that degrade the integrity of the industry to its customers.

Ethical codes. Carlsen (2008) posited that there was a lack of foundational ethics whereby parents imprint the need to act in an ethical way as a part of raising their

children. In fact, Carlsen believed that children were being told as they grow that it doesn't pay to be honest (Carlsen, 2008). Further complicating the ability for the industry to carry out ethical business practices was that the new generation of managers, from Generations X and Y, were focused on making money and "accomplishment vs. character" (2008, p. 2). Personal ethical upbringing and ethical cognition was related to the concept of personal cognition included in the conceptual framework for this study. In addition, the suggested tendency to focus on making money, rather than acting ethically, were included and addressed through the social change concepts of Tönnies and Weber.

Professional association and corporate codes of ethics were one strategy employed with the goal of improving ethical behavior in the construction industry (Good Corporation, 2011). Parsons (2014) stated that professional codes of ethics were not an effective way to guide industry behavior. Mason (2009) advocated for the implementation of a single professional code of ethics for the construction industry and acknowledged that some say ethical codes are used only to make the company look better. Mason found that while 85% of respondents in the United States and the United Kingdom agreed that there was a need for a uniform, international code of ethics, there was resistance to adding regulations that would compel companies to comply with a code of ethics. After identifying serious, entrenched ethical issues, The Hong Kong Housing Department, created an administrative requirement for all construction companies to develop a corporate code of ethics by April 2001 to qualify to conduct business with the government (Ho, 2013; Oladinrin & Ho, 2014). In cultures where a company cannot compete without participating in questionable behavior, some companies may have

developed an alternate code of ethics to guide work in other countries where transactions such as bribery, gifts, and kickbacks are a cultural norm (Gyoo Kang et al., 2014). To make the behavior more palatable, the company may redirect the profit gained through unacceptable behavior to a charitable cause.

Shan et al. (2015) studied strategies for companies to respond to construction industry corruption. They discovered that leadership was more effective than sanctions or training as a corrective action. Brown and Loosemore (2015) found, however, that attention should be given to the culture in the construction industry that normalizes poor behavior. Jones et al. (2017) discussed a reevaluation of the ethical concept used in the engineering practice to move away from consequentialism. Guntzburger, Pauchant, and Tanguy (2019) also studied the engineering field. They presented that further education about ethical issues was needed to prepare engineering students for future ethical challenges and decisions the students will face in practice. Attention in architecture, engineering, and construction also needed to be given to that behavior which was unethical but still technically legal (Lohne et al., 2017).

Gorsira, Steg, Denkers, and Huisman (2018) performed a quantitative survey to review the relationship between ethical climate, ethical behavior, and how personal and social norms affect ethical decision-making. In their study, they found that individuals tended to act more ethically when they perceived the ethical climate of the organization to be strong. Understandably, they suggested that a company that was dealing with unethical conduct should make sure to pay attention to the environment where the

decisions take place. This finding suggested that strong ethical codes of conduct may help influence personal and professional ethical decisions.

Construction Ethics Examples Representative of Case Behaviors

The construction industry has a generally poor reputation for ethical business practices (Vee & Skitmore, 2003). Bribery, unfair bidding practices, abuse of power, collusion, fraud, and conflicts of interest are all common in the industry (Ho & Oladinrin, 2016; Locatelli et al., 2017; Vee & Skitmore, 2003). The case examined in this qualitative research is the unethical behavior documented and defined by FMI Corporation (2004) and confirmed by The Ethics Resource Center (2013). The issues related to bidding, change order processes, buying out subcontracts, material substitution, over billing, substandard work, and more were consistent over history. There were only slight decreases in the number of unethical acts seen and experienced at work by construction professionals from one study to the next. Each study reported a consistently high instance of unethical acts seen and experienced at work by the industry professionals surveyed.

In the Northeast United States, there have been recent cases of ethical and illegal violations which have caused the loss of time, money, and stakeholder trust. Worse yet, at least one innocent member of the public lost their life because decisions were made on construction projects which affected the quality of the final project that led to catastrophic failure of the project. In each of the following examples, management at the construction company made decisions that were illegal, unethical, or both. These are public examples of the types of behavior that occur every day on a smaller scale at many

construction companies. Contractors pressured to meet demanding schedules, lack of knowledge, and greed were only a few of the reasons for these poor decisions (Ethics Resource Center, 2013).

Boston's *Big Dig*—quality, time, and budget issues. The *Big Dig* in Boston, Massachusetts was an infrastructure (roads) project in Massachusetts that began construction in 1991 with an initial project estimate of $2.8 billion (Fowler, 2010). Construction was eventually completed in December 2007 for $14.8 billion. The project resulted in indictments against the general contractor, Bechtel/Parsons Brinckerhoff (Bechtel), and others for substandard concrete, the excessive cost overruns, and an adhesive failure which caused a concrete roof panel to collapse in July 2006.

In the adhesive failure accident mentioned above, a couple was traveling through a connector tunnel on I-90 through Boston when approximately 26 tons of concrete ceiling tiles collapsed onto their car (NTSB, 2007). One passenger of the car was killed in the incident. The driver sustained only minor injuries. After a thorough investigation by the NTSB, it was determined that the epoxy adhesive and connectors used to mount the concrete ceiling tiles were insufficient to sustain the weight of the tiles long term. The investigators also discovered that there was ample notice given to the contractor that those installing the tiles believed that the type of connectors, fast set epoxy, and installation method were not satisfactory (Fowler, 2010). However, the contractor did not act on the information or denied the opinions provided by engineers evaluating the situation despite a previous failure without injury in another tunnel in the project.

In response to the identified issues with the construction fasteners and adhesive, the NTSB (2007) recommended to the Federal Highway Administration, State Highway Administrations, Transportation Administrators, and Departments of Transportation the prohibition of adhesive anchors in overhead applications where the public safety is at risk. The NTSB further advised that new installations of this type of anchors and adhesive should be subject to additional testing and safety procedures, with ongoing safety testing procedures added for existing installations. The anchor and adhesive manufacturers were ordered to revise packaging to limit use to short-term applications. Finally, the American Concrete Institute, American Society of Civil Engineers, and AGC were ordered to distribute information regarding the "creep characteristics of adhesive anchors before those anchors are used in sustained tensile-load applications" (p. 111).

Decision makers for Bechtel poorly managed the *Big Dig* project at best. In the case of this accident, the project team made choices in the installation of the ceiling tiles to potentially save time off an already expanded schedule and money from a project that spiraled out of fiscal control. Their decisions led to an accident that was traumatic for the entire community. The public lost time while the project area was again closed for inspection and repair and trust diminished even further in those constructing our communities' infrastructure that the projects are safe when opened for public use. Even more, the actions cost one woman her life. Her family lost a wife, mother, daughter, sister, aunt, etc.

The NTSB (2007) incident report described a culture of passing the buck and cutting corners that resulted in the death of an innocent member of the public. Bechtel

settled its legal issues related to the *Big Dig* with an agreement to pay the State of Massachusetts a total of $458 million including interest for their portion of liability. Bechtel (2010) published a code of conduct manual for employees in June 2010 that provided a guide to the behavior defined by corporate management as acceptable and representative of the values of the company. Acceptable behaviors stated in the guide included *uncompromising integrity, high standards,* and a goal of zero accidents. The company failed on all counts in the case of the *Big Dig* in Boston.

Tishman Construction—overbilling case. The Department of Justice, United States (U.S.) Attorney's Office in the Eastern District of New York completed an investigation of Tishman Construction Company (Tishman) in New York regarding client over billings on projects that used public funding (Department of Justice, 2015). The case involved a practice described as common by the U.S. Attorney's office of overbilling clients for time worked for certain staff. In this case, supervisory staff was allowed paid time off where the employee was not on the job site, such as sick, personal, and vacation time. However, the time was billed to clients as though the employee was working on site. Also, Tishman charged clients hourly labor rates for additional work in excess of the agreed upon rates for the projects.

Tishman worked with the U.S. Attorney's office to come to an agreement that would defer prosecution provided the company took corrective action within 24 months of the agreement dated December of 2015, as well as, paying restitution to the overbilled clients and damages to the government totalling $20 million. Another corrective action required Tishman Corporation to create a position within the company for a Compliance

Director and the creation of a new code of conduct. When the press release announcing the settlement prompted a story on Masslive.com (Glaun, 2015), the company responded that none of the over-billed monies were kept by the company. The funds were paid out to union members for wages and benefits to the appropriate union benefit office.

In this specific case, public funds were used for the construction of the projects that were fraudulently over-billed. Public funds are derived from taxes, fees, and other governmental sources. When public funds are spent irresponsibly, the losses are distributed widely resulting often in higher taxes to maintain all public programs. The relevance of the overbilling payments to members of the union is lost. The company's rebuttal was a fallacy of distraction meant to garner public sympathy and redirect the view of the actual fraudulent actions.

Tishman Construction is a member of the Aecom corporate group. In August, 2016, Aecom published a code of conduct for all companies that it operates (Aecom, 2016). The code of conduct for Aecom and Tishman was similar to the code adopted by Bechtel Corporation post-catastrophe or violation. Both codes committed the company to a high standard of ethical conduct, defined procedures for reporting issues, and provided case examples as guidance for expected conduct in certain situations.

The action against Tishman in 2015 was one of a string of enforcement actions taken in the State of New York by the Department of Justice with the intention of eliminating fraudulent building practices in the construction industry. These investigations, settlements, and prosecutions by the Department of Justice provide an

example of, not only unethical but also illegal behavior that is documented as common in the construction industry.

Semac Electric Company, Inc. vs. Skanska U.S.A. Building. In a court case in the State of Connecticut between a subcontractor, Semac Electric Company, Inc. (Semac) and a general contractor, Skanska U.S.A. Building Company (Skanska), a complex order was made in 2017 favoring the defendant, Skanska (Moukaswher, 2017). The case brought by Semac claimed Skanska's project management team violated the contract by changing the work to the extent that it no longer reflected what had been contracted, an act Semac claimed also validated the company walking off the project without completion and demanding damages. Skanska responded that Semac was not justified to walk off the project and filed a counterclaim for damages incurred in completing the project.

The breach of contract issues consisted of clearly defined contractual language that defined breach in contract termination by both parties. In the decision (Moukaswher, 2017), it was determined that both parties executed a wrongful termination of the contract by processes not in accordance with contract language.

The case also delved into unethical actions related to issues of payment to Semac by Skanska. The discovery of the facts of the case uncovered a scheme to aid Semac financially. Semac had billed half of a million dollars that were paid to Semac's owner, a quarter million in funds billed and received for a sub-subcontractor, which had not been paid to the sub-subcontractor, and billed the project heavily in advance for work not yet completed. Semac also overbilled Skanska for project labor on change orders in the

amount of almost another half of a million dollars. The result of these unethical acts resulted in the legal order, in 2017, that Semac must reimburse Skanska a total of $3,857,130.77.

Corporate and Professional Codes of Ethics

Burgess (2017) presented that there were three primary sources of codes of ethics. They were licensing boards or government, companies, and professional organizations. Archer (2017) posited that the most effective codes of ethics were those that carry the threat of enforcement or legal intervention. Codes initiated by governmental entities are typically backed by enforcement in the form of potential fines and penalties and defined by statutes. In the early 2000's, several financial ethical scandals, such as Enron, Adelphia, and WorldCom surfaced in the business world (Braswell, Foster, & Poe, 2009). These misdeeds affected hundreds of people causing large corporate failures. The response from Congress was to call for additional regulation to avoid similar issues in the future was the Sarbanes Oxley Act of 2002 (SOX) (Braswell et al., 2009). One requirement of SOX was that senior financial officers of publicly traded corporations must adhere to a code of ethics. The SEC later expanded this requirement to include the chief executive officer of the company.

Codes initiated by a company or professional organization are largely voluntary, meaning that there is not a legal, regulatory body that governs compliance with the code. The lack of a government regulatory body also means that the implications of non-compliance with a corporate or professional code of ethics are non-legal repercussions including loss of job, corporate discipline, and loss of membership in a professional

association. Adelstein and Clegg (2016) described these voluntary codes of ethics as "largely cosmetic" (p. 53) and "window dressing" (p. 64). Archer (2017) also noted that the efficacy of voluntary codes of ethics was not a resolved issue due to lack of research. Similarly, the efficacy of codes of ethics in the construction industry can be called into question. There is a history of unethical behavior in the construction industry documented between 2004 (FMI Corporation, 2004) and 2013 (Ethics Resource Center, 2013). The authors reported only a slight increase in ethical behavior over this period despite the use of ethics training and codes of ethics in the industry. Parsons (2014) presented survey results which showed a lack of efficacy of codes of ethics in the construction industry.

Typically, management of a corporation, in combination with compliance and human resources staff, create corporate codes of ethics. Corporate codes are written to establish standards of conduct with a single company or group of companies under an ownership group and apply to all employees of the organization equally (Adelstein & Clegg, 2016; Burgess, 2017). The code is then communicated to the employees of the company and, ideally, regularly monitored for compliance. Corporate codes are voluntary to the extent that the managers of the corporation can choose if management wants to have a code and how aggressively to monitor compliance of the code. In some cases, corporate codes are used only to make the company look better to potential clients and other stakeholders (Adelstein & Clegg, 2016).

Professional association codes of ethics are compiled by an association for professionals who share a trade area, such as project management or engineering. Professional codes apply to people in the same industry from different companies, as well

as, students and other members of the association as a condition of membership to the professional organization (Burgess, 2017). Burgess stated that ethical codes of conduct prepared for professional organizations were “more ambitious in nature” (p. 12). Additionally, the codes for professional organizations are voluntary.

In 1982, the Construction Management Association of America (CMAA) was founded with the goal of helping achieve professional standards in the profession of construction management in the construction industry (CMAA, 2017a). An integral part of the plan to achieve this goal involved the inclusion of a professional code of ethics for all members (McKeon, 2016). The CMAA posited that professional standards and a universal code of conduct for all members provided legitimacy for the profession. The ethical code of the CMAA presented below is indicative of many industry and professional codes of ethics:

> Since 1982, the Construction Management Association of America (CMAA) has taken a leadership role in regard to critical issues impacting the construction and program management industry, including the setting of ethical standards of practice for the professional construction manager.
>
> The Board of Directors of CMAA has adopted the following Code of Professional Ethics of the Construction Manager (CODE), which applies to CMAA members in performance of their services as Construction and Program Managers. This Code applies to the individuals and to organizations who are members of CMAA. All members of the Construction Management Association of America commit to conduct themselves and their practice of Construction and

Program Management in accordance with the Code of Professional Ethics of the Construction Manager. The code is as follows:

As a professional engaged in the business of providing construction and program management services, and as a member of CMAA, I agree to conduct myself and my business in accordance with the following:

1. Client Service. I will serve my clients with honesty, integrity, candor, and objectivity. I will provide my services with competence, using reasonable care, skill and diligence consistent with the interests of my client and the applicable standard of care.
2. Representation of Qualifications and Availability. I will only accept assignments for which I am qualified by my education, training, professional experience and technical competence, and I will assign staff to projects in accordance with their qualifications and commensurate with the services to be provided, and I will only make representations concerning my qualifications and availability which are truthful and accurate.
3. Standards of Practice. I will furnish my services in a manner consistent with the established and accepted standards of the profession and with the laws and regulations which govern its practice.
4. Fair Competition. I will represent my project experience accurately to my prospective clients and offer services and staff that I am capable of delivering. I will develop my professional reputation on the basis of my

direct experience and service provided, and I will only engage in fair competition for assignments.

5. Conflicts of Interest. I will endeavor to avoid conflicts of interest; and will disclose conflicts which in my opinion may impair my objectivity or integrity.
6. Fair Compensation. I will negotiate fairly and openly with my clients in establishing a basis for compensation, and I will charge fees and expenses that are reasonable and commensurate with the services to be provided and the responsibilities and risks to be assumed.
7. Release of Information. I will only make statements that are truthful, and I will keep information and records confidential when appropriate and protect the proprietary interests of my clients and professional colleagues.
8. Public Welfare. I will not discriminate in the performance of my Services on the basis of race, religion, national origin, age, disability, gender, or sexual orientation. I will not knowingly violate any law, statute, or regulation in the performance of my professional services.
9. Professional Development. I will continue to develop my professional knowledge and competency as construction manager, and I will contribute to the advancement of the construction and program management practice as a profession by fostering research and education and through the encouragement of fellow practitioners.

10. Integrity of the Profession. I will avoid actions which promote my own self-interest at the expense of the profession, and I will uphold the standards of the construction management profession with honor and dignity (CMAA, 2017b).

The regular establishment of codes of ethics for the construction industry, for privately traded companies and professional organizations, occurred at approximately the same time with the same goal of improving ethical behavior. One such group, the CIECI (2018a), was founded in 2008. The member companies of the CIECI represent construction corporations from across the United States who are dedicated to the improvement of ethical conduct in the construction industry and agree to conduct business in accordance with the charter that, among other things, requires each member company to have a published code of ethics (CIECI, 2018a). Member companies of the CIECI participate in semi-annual meetings with the goal of advancing ethical conduct. The Spring meeting is conducted in a conference format relating to ethics management issues. The Fall meeting addresses construction industry best practices. The membership of CIECI includes companies from general contractors to sub-contractors who are situated across the United States.

The State of Connecticut conducts a process of contractor prequalification for contracting work over the amount of $500,000.00. The qualification criteria were as follows: integrity, work experience, experience and qualifications of supervisory personnel employed by the applicant, financial condition, and safety (State of Connecticut, 2018). Contracting companies are reviewed annually through a

comprehensive process that includes a review of the contractor's standing with various state agencies, as well as, the requirement to provide referral letters from all owners or general contractors for work performed in the previous year. This continual review process was designed to insure the state is working with contractors who perform high-quality work with integrity.

Summary and Conclusions

The themes covered in this literature review included concepts related to the conceptual theory for this study. Those concepts included social change concepts developed by Tönnies (2001) and Weber (Noble, 2000), ethical concepts of consequentialism, non-consequentialism or deontology, and virtue ethics, information regarding the efficacy of ethical codes of conduct in professional associations and corporations, current legal cases regarding ethics, and an in-depth review of the literature related to ethics in the construction industry in the United States and internationally. The concepts of social change and personal ethics were used to inform the analysis of ethical decision-making and potential management strategies to support ethical choices in the construction industry.

The legal cases presented here served as further evidence of the ongoing ethical challenges that face the construction industry. Little research has been performed in the United States relating to management strategies that promote alignment of ethical action with ethical codes of conduct in the construction industry. With this study, I focused on members of the industry who were subject to ethical codes of conduct through professional association membership or employment with a company with a published

code of ethical conduct. The qualitative nature of the proposed study allowed me to explore rich, descriptive detail derived from the interview participants.

In Chapter 3, I will present details regarding the research design and rationale for this study. I will discuss my role as researcher and observer of the industry. Information about the methodology, including how I selected the participants, the researcher created instrument, field testing, data collection, and the plan for data analysis will be covered. The chapter will conclude with a review of issues of trustworthiness related to this research.

Chapter 3: Research Method

The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct. To identify potential improvement strategies, I conducted interviews with construction PMs and superintendents to obtain their unique perspectives on how to improve ethical behavior in the industry. I conducted an analysis of the resulting suggestions to identify recurring themes across companies, construction specialties, and professional organizations.

Research Design and Rationale

The general research question was:

GRQ: What are the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct?

The specific research question was:

SRQ: What strategies do construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct?

The central concepts in this study included ethical and social change models. The ethical change models included are consequentialism, deontology, and virtue ethics. In this study, I used these models as a conceptual framework for evaluating ethical decisions. I used the social change models of *Gemeinschaft* and *Gesellschaft* and value

rational decision-making to evaluate how social relationships affected decisions made and the ethical model used in the situation.

I performed this study as a qualitative, exploratory case study. Qualitative research was desirable in this circumstance because little previous research has been done into this area and qualitative research allowed rich, descriptive exploration into the research problem (Bloomberg & Volpe, 2019; Levitt et al., 2018). In qualitative methodology, the specific format of study for this research was an exploratory case study. Yin (2018) presented that case study, in some disciplines, was referred to as a distinct methodology from qualitative research. Hyett, Kenny, and Dickinson-Swift (2014) described Yin's approach to case study as postpositivist. However, Bloomberg and Volpe (2019) referred to postpositivism as a quantitative method. For this study, I proceeded with the understanding that case study is a qualitative method of research that uses a postpositivist approach and triangulation of data and analysis.

Yin (2018) presented that *what* questions, like the research question for this study, were often well suited to an exploratory case study format with the purpose of "identifying propositions for further research" (p. 10). Thus, I chose the qualitative, exploratory case study format for this study to explore the input of construction industry PMs and superintendents regarding management strategies that address the well-documented and confirmed pattern of ethically challenged behavior in the construction industry (Ethics Resource Center, 2013; FMI Corporation, 2004).

Role of the Researcher

In this research, I assumed the role of observer. I conducted interviews with the research participants and analyzed the resulting data. As an accounting professional in the construction industry, I may personally know and have some peer relationship with project manager participants in this study. However, I did not have a power relationship with any potential study participants and neither was I subordinate to them. The participants were recruited from professional organizations of which I was not a member and construction companies where I was not currently employed.

As a longtime member of the construction industry, I have seen many of the behaviors in practice that made up the defined case for this study. Consequently, I had to guard carefully to ensure my personal bias were not evident. My singular focus was on discussing the experiences of industry PMs and superintendents. The study was not about what experiences I may have had or how I felt about what changes may need to be implemented. Rather, with this study, I intended to give the PMs and superintendents a voice to suggest strategies to improve ethical action through the lens of their experiences in the industry.

Methodology

I conducted this study as a qualitative, exploratory case study with the intent of identifying management strategies that may be used to achieve alignment between construction industry ethical conduct and professional and corporate codes of ethics. I conducted a total of 19 interviews with construction industry PMs and superintendents from construction managers, general contractors, subcontractors, and sub-subcontractors

operating in Northeast United States. During these interviews, I intended to gain input from PMs and superintendents with first-hand information and insight into current behavior on strategies that may be effective in implementing valuable, lasting improvements in the best practices of construction companies to improve alignment with ethical codes of conduct.

Participant Selection Logic

The participants for this study were either project management level or superintendent members of the construction industry who were also members of a professional trade organization or worked for a company that required its members to adhere to a code of ethics. The Ethics Resource Center (2013) stated that middle managers were more likely to have experiences with unethical behaviors. Therefore, based on their firsthand experiences, this population of PMs and superintendents presented original, valuable suggestions on how to reduce misconduct.

The overall purposeful sampling strategy selected for this case study was a type of group characteristics sampling (Krause et al., 2018). Krause et al. (2018) presented key informant sampling as one method for conducting group characteristic sampling. Krause et al. stated that key informants are “people who are actively engaged in the phenomena we wish to study” (p. 48).

Group characteristic, specifically key informant, sampling allows for a purposeful selection of a group of people that hold a specific position in a specific industry (Krause et al., 2018). The shared occupational interest area provides for a study where it was possible to have shared situations or experiences of ethical decision-making in similar

professional situations. However, in this study, each individual practicing in the project management occupation brought a diverse personal ethical and social background with them that affected their responses to decision-making situations and solution suggestions.

The AGC is a professional organization formed to support the construction industry in the United States (AGC, n.d.). The AGC is an active advocate of the construction industry through activities in government and private industry for its members, general contractors, subcontractors, and specialty contractors. The AGC also compiles and publishes demographic information for the United States and each state in the United States. Industry demographic information published by AGC (AGC, n.d.) showed over 670,000 construction companies of all sizes employing over 7,000,000 people and performing over $1.3 trillion dollars of work each year in the United States. As of August, 2015, there were 28,800 construction firms in Connecticut, Massachusetts, and Rhode Island (Simonson, 2018). This study presented input from a sample of this population represented by 19 PMs and superintendents from a variety of construction companies that represented construction managers, general contractors, and subcontractors in various construction specialties including construction management, general contracting, electrical/solar, mechanical, sheet metal, drywall, telcom, and duct cleaning. Eligible PMs and superintendents had at least 5 years' experience in their professional position and were at least 25 years old.

I recruited participants through solicitation with professional organizations and construction companies that had corporate codes of ethics for members/employees as the first level of verification of membership in the desired participant pool. I sent a request to

construction project management associations and construction companies by e-mail and by phone with a request to share an invitation with their members or employees for potential candidates. I also posted an invitation on social media including Facebook and LinkedIn. Participation criteria were included in the invitation distributed to potential participants and on the social media invitations. I requested interested parties to contact me directly by phone or e-mail for further prescreening. In the prescreening process, potential participants were asked about professional organization participation, a corporate code of ethics, and position in the company. I used these screening questions to determine which participants met the criteria for this study. There were 19 qualified participants who completed in person interviews for this study. The in-person interview format was chosen because I believed that format would allow me the opportunity to build rapport with the study participants and the ability to view the nonverbal body language in combination with the verbal responses to the study questions.

Instrumentation

The instrument for this research consisted of 27 interview questions that are attached as the Appendix. Interview questions were prepared by me, as researcher, with the intent of gaining knowledge that helped inform the exploration into management strategies recommended by construction industry professionals to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct.

I used field testing with two participants to hone the interview questions to assure they were sufficiently probing to obtain input valuable to the purpose of this study.

Brewer (2015) presented that a field test is a process that can be used for the purpose of testing researcher prepared instruments with a selection of experts who are not participants of the final research. The field test experts did not provide data; they instead provided only feedback on the interview instrument.

The first 15 questions were crafted to classify study participants' roles, background, and experience. Information obtained in questions 16 through 22 related to ethical codes of conduct published by the participant's professional association or employer. Questions 23 through 27 were designed to gain information about management strategies that were in place to support ethical decision-making, what additional strategies could be implemented, potential barriers to implementation, and feedback to support new entrants in the industry with ethical decision-making.

The interview questions and their intended relationship to the research questions were as follows:

1. Are you over 30 years old? Will you share your exact age?
2. What is your title?
3. What level of management do you report to in your company?
4. Are you employed with a General Contractor, Subcontractor, or other industry classification (please explain and provide specialty)?
5. Do you belong to any professional associations or unions?
6. In what state is your company located?
7. How many years have you worked in the construction industry?
8. Do you know the approximate annual sales volume of your company?

9. What size projects, in gross billings, do you typically manage?
10. How many projects do you manage at a time?
11. If more than one project, who supervises your project and make decisions in your absence?
12. Are all your projects typically the same size?
13. Do you typically work in a field office onsite or main administrative office?
14. Please describe your role in your company.
15. Tell me about the types of decisions you make as part of your daily responsibilities.
16. Are you aware of your company or professional organization's published code of ethics?
17. Does your company communicate updates to the published code of ethics?
18. How are updates distributed and with what frequency?
19. How often do you refer to your company or professional organization's code of ethics?
20. How do PMs and superintendents weigh personal ethics versus professional ethical code obligations?
21. In what ways does the organizational published code of ethics guide your professional decision-making processes?
22. In what ways does your company support the efforts of employees to adhere to professional or corporate codes of ethics?

23. In what ways could your company support employees' ethical decision-making?
24. What strategies could managers in the construction industry use to reduce unethical behaviors based on your professional experience?
25. What barriers do you see to implementing your strategic suggestions in organizations in your industry?
26. How could organizations in your industry overcome the barriers you described?
27. What advice do you have for new PMs and superintendents in the construction industry regarding ethical decision-making?

Yin (2018) presented four types of data triangulation that included using different data sources, different evaluators, different concepts, and different methods. In this study, the conceptual framework included analyzing all data through the lens of Bandura's concept of reciprocal determinism which included personal ethical concepts, environment, and behavior (Bandura, 1978). The concept of reciprocal determinism was based on reciprocity or triangulation relationships between environment, behavior, and personal cognition.

In this qualitative, exploratory case study, "triangulation of perspectives to the same data set" (Yin, 2018, p. 128) was achieved through reflective analysis of the data which included the seminal studies related to construction ethics conducted by FMI Corporation (2004) and Ethics Resource Center (2013) that represented the current environment in the construction industry. Review, consideration, and analysis of social

change concepts by Tönnies (2001) and Weber (Noble, 2000) helped inform the understanding of personal cognition. The behavior section of the data analysis, in this conceptual framework, originated in the interview data with construction industry PMs and superintendents.

Content validity for this study was understood to mean the ability to assure that the interview questions were sufficient to answer the research questions of this study. In the case of this researcher created instrument, the first draft of questions was reviewed and evaluated against the general and specific research questions to focus on the type of information desired from the participants. Field testing was performed with two professionals; one was from a stakeholder industry to construction, the other was a project manager who was not eligible to serve as a study participant. Both field test partners had over 20 years' experience in the construction industry. Based on this field testing, I revised the interview questions to focus the study interviews on data to inform the answers to the research questions.

Field Testing

A field test is a process used to allow the researcher to check their instrument with experts in the subject area to determine if the data captured using that instrument will be valuable without gathering data (Brewer, 2015). Field testing was performed with two professionals; one was from a stakeholder industry to construction, the other was a project manager who was not eligible to serve as a study participant. Both field test partners had over 20 years' experience in the construction industry. Based on this field

testing, I revised the interview questions to focus the study interviews on data to inform the answers to the research questions.

The overall purposeful sampling strategy selected for this case study was a type of group characteristics sampling (Krause et al., 2018). Krause et al. (2018) presented key informant sampling as one method for conducting group characteristic sampling. Krause et al. stated that key informants were "people who are actively engaged in the phenomena we wish to study" (p. 48).

Group characteristic, specifically key informant, sampling allowed a purposeful selection of a group of people that held a specific position, in a specific industry (Krause et al., 2018). The shared occupational interest area provides for a study where it was possible to have shared situations or experiences of ethical decision-making in similar professional situations. However, each individual practicing in the project management occupation brought a diverse personal ethical and social background with them that affected their responses to decision-making situations and solution suggestions. Project manager participants in this study were asked to reflect on professional career experiences with ethical implications. They were further encouraged to share ethical decision-making techniques used in practice and potential improvement strategies for management regarding ethical conduct in the construction industry.

For the field test, I used the *key informant* method of group characteristic sampling (Krause et al., 2018). Over the course of my professional career, I have forged professional relationships with several stakeholders in the construction industry. In the field test, I solicited input from a sample of this population represented by two

professionals; one a professional in a stakeholder industry and one a project manager who was not an eligible participant for this study. Participants were recruited through direct solicitation with industry professionals. A request was sent to potential participants by email or by phone with a request to participate in the field test. Interested parties were requested to contact me directly by phone or email to arrange a time when we could review and discuss the research questions, specific research question, and proposed interview questions. No data were collected in the field test. The information gained in the field testing was used to hone the final interview questions to make certain that the questions asked would produce the information needed to answer the research questions.

Procedures for Recruitment, Participation, and Data Collection

I addressed the questions and purpose of this study by use of interviews with construction industry PMs and superintendents. Interviews were conducted in a location that was convenient to the study participant and provided an environment conducive to conducting the interview. A conducive environment was non-controversial, quiet, safe, well-lit, and comfortable. Examples of an acceptable environment included the participant's office, my office, quiet restaurant with a private space, or a conference room.

Each participant was scheduled for one interview of approximately 30 minutes in length. Interview audio was recorded using a digital voice recorder. I took notes during the interview and transcribed the notes. Transcribed full interview content was delivered to the study participant for review, correction, or clarification as needed. In addition, the study participants were invited to share any thoughts they had after their interview with

me in either a recorded follow-up interview or email. The participant pool of 19 PMs and superintendents was sufficient to achieve data saturation.

Solicitations to industry professional organizations included a standard invitation that included participant criteria, study information, and contact information. The groups I contacted include, Connecticut Construction Industry Association (CCIA), CIECI) Mechanical Contractors Association of Connecticut (MCAC), and CMAA. The current corporate members of these three associations include several individuals and large construction companies in the Northeast United States. In addition, I contacted and shared study invitations with multiple construction management companies, subcontractors, posted invitations on social media, including Facebook and LinkedIn, and shared invitations with known members of the industry. An IRB application, as required by Walden University to conduct this study, was completed and approved prior to any gathering of data. The Walden University IRB approval number for this study was 02-27-19-0320260. Participants remained anonymous in the results portion of this study to reduce any potential implications for participating personally or professionally. Direct quotes were used in the results section of the study. However, a participant number was used when referencing the participant. No participants chose to exit this study at any time.

Data Analysis Plan

The questions included, in the researcher-created instrument, were crafted to obtain information relating to the general and specific research questions. With each interview question, I either requested classification information to verify that the

participant met the requirements of this study or sought data about the construction industry ethical environment, ethical codes, or decision-making.

The general research question was:

GRQ: What are the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct?

The specific research question was:

SRQ: What strategies do construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct?

Data were analyzed using Yin's (2018) pattern matching technique. I used NVivo for data analysis, as well as, manual review for code words, recurrent themes in the data, and to highlight areas for potential future research. There were no discrepant cases or information that did not conform to the identified themes in the data to be noted in the research to reduce any potential view of bias.

Gibbert and Ruigrok (2010) presented three strategies to ensure internal validity including a clear research framework, pattern matching, or theory triangulation. In this study, the conceptual framework was framed to support theory triangulation. The data were analyzed using the interview data, social change theory, and the data from previous studies into ethical conduct in the construction industry.

Issues of Trustworthiness

Credibility

Credibility refers to the search for all explanations of the data presented in the research and relevance to the research problem (Bloomberg & Volpe, 2019). Ethics is a sensitive topic in any industry. To ask an employee to report on either personal unethical practices or observed unethical practice in their company would place the employee at undue risk of discipline including the potential loss of their position. The purpose of this study was not to identify unethical practices. Rather, the purpose of this qualitative, exploratory case study followed the notion that once a person recognizes a problem, they should always work to also identify practical solutions to share with peers or managers. I asked the PM and superintendent participants in the construction industry to assist in identifying potential practical solutions and workable strategies to correct the behaviors based on their unique view of industry processes. Identified strategies were compared to the conceptual framework for this study and literature identified from peer-reviewed journals and practitioner journals for their previous use in construction or other industries, efficacy in other situations, and the possible application to the construction trade.

Participants were carefully screened to make sure they met the specific parameters set forth and were selected from a variety of disciplines, professional organizations, and companies within the construction industry. This diversity provided a valuable cross-section of the industry in the Northeast United States. This variety also embraced the variances in corporate structures of different companies.

Individual participants were protected in the results by anonymous reporting. No participant was personally identified in any responses. Anonymity protected the participants from the potential for retribution or discipline from the participant's employer. Each participant was assigned a participant number for quotes shared in the results.

Yin (2018) presented four types of data triangulation including using different data sources, different evaluators, different concepts, and different methods. In this study, the conceptual framework includes analyzing the data through the lens of Bandura's concept of reciprocal determinism which included personal ethical concepts, environment, and behaviors. I have added to that a consideration of social change concepts by Tönnies (2001) and Weber (Noble, 2000) in understanding human action and decision-making.

Transferability

Transferability in case study research referred to the ability to use the research to help understand other settings or research settings (Bloomberg & Volpe, 2019). The details presented will assist in, not only possible re-creation of the research, but also identifying other possible corporate environments where the results of this study may be useful in advancing ethical conduct and alignment with ethical codes of conduct.

Dependability

Dependability of case study research was achieved through clear definition of the study methods, logic, and actions of the researcher (Bloomberg & Volpe, 2019). All study interviews were audio recorded, transcribed, sent to the study participants for

confirmation, and archived for future reference. This process allowed me, and those reading this study, to be assured of the validity and confirmability of the data. Participants confirmed their own information to be sure that the transcript was a true and correct account of the interview data and participants were given the opportunity to clarify any information that did not accurately represent their opinion.

All data related to this study will be archived for a period of five years. Archival will occur both on a removable electronic storage device (such as a removable hard drive) as well as on my Dropbox account, which is secured by multiple layers of protection including firewalls and passwords. All field notes from interviews, audio files, etc. have been scanned and included in the digital archive of this study.

One method to determine dependability of a study is through the use of a dependability audit. A dependability audit is a review of the activities of the researcher by an independent auditor. This includes a review of the audit trail to determine if the researcher met the standards of credibility and transferability (Lincoln & Guba, 1985). The audit process has five stages: pre-entry, determinations of auditability, formal agreement, determination of trustworthiness (dependability and confirmability), and closure (Lincoln & Guba, 1985). The auditor for this study was the research methodologist, Dr. Howard Schechter.

Confirmability

Lincoln and Guba (1985) said the confirmability was the degree to which the study represented the input of the participants, not researcher bias. Techniques for establishing confirmability were confirmability audit, audit trail, triangulation, and

reflexivity (Lincoln & Guba, 1985). I am an accounting professional in the construction industry. The industry relationship did not create a conflict of interest. I addressed my personal bias by use of data triangulation using interviews, social concept analysis, and inclusion of previous subject matter surveys. The interviews were semi-structured with questions that encouraged the participants to share their personal experiences, thoughts, and ideas. The input of study participants was included in the results of this study without the addition of my personal industry experience. The subject area in this study was not my direct area of practice and my current employer was not considered as a potential organization to provide participants.

Ethical Procedures

Upon completion of the oral defense of this proposal with the Chair, Committee member, and URR member, an Institutional Review Board (IRB) application was completed and submitted for approval. Walden University's IRB approval number for this study was 02-27-19-0320260. No gathering of data took place until an approved IRB application approval was in place. To obtain participants for this study, I sent a request by mail and email to the association or organization requesting that they forward a solicitation to their members or employees. I did not ask for direct contact information for the potential participants. For those responding to the solicitation only, I requested personal contact information for moving forward with the pre-screening, interview, and closeout process. Identifying information about individual participants was not provided to the association or organizations for the protection of the participants. Participants remained anonymous in the study results. All direct quotes were given a participant

number for the protection of the participant. I am the only one with identifying information.

Information that identified participants and all audio files, transcripts, notes, etc. will be kept in a separate electronic file on Dropbox utilizing password protection on the Dropbox, folder access, and individual file access. All folders and files will also be stored on an external hard drive that will be stored in a fire safe in a secure location at my residence. Only I have access to the data. I will keep the data in a secure location for a minimum of five years.

As stated previously, I am an accounting professional in the construction industry. The area studied was not in my direct area of practice and my current employer was not considered as a potential organization to provide participants.

Summary

This chapter provided a description of the planned method and procedures proposed for this study. Issues relating to the methodology, participant selection, study procedures, and data analysis were explained. PMs and superintendents in the construction industry were identified as the participants in this study because they are in a central position in the industry. The selected participants were key informants who were willing to share their input based on professional experiences. The instrument used in this study was researcher created with the general and specific research question in mind and field tested for content validity. Issues of trustworthiness of this study and the data were addressed, including how to maintain the data and assure that the results were reliable, valid, transferable, confirmable, and ethically conducted and maintained.

Chapter 4 will include information about the results of this study. In Chapter 4, I will present information about how the study was performed and analyzed, the themes that emerged from the participant responses, and a summary of how that data relates to the purpose, conceptual framework, and research question for this study.

Chapter 4: Results

The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct. In the United States and internationally, the construction industry is notorious for ethical violations related to bidding, billing, payment, change order, and construction performance practices that cost project stakeholders millions of dollars in lost time (Johnson et al., 2015; Lohne et al., 2015). Industry and academic journals have highlighted the problem of unethical behavior in the construction industry in the United States and other countries, calling attention to the types of ethical lapses that frequently occur and the areas of practice that are especially susceptible to ethical violations (Ethics Resource Center, 2013; Ho, 2011; Lohne et al., 2015).

The general research problem for this study was that, despite the existence of ethical codes, ethical lapses continue to occur frequently in construction industry practices (Brown & Loosemore, 2015; Ethics Resource Center, 2013; FMI Corporation, 2004). The specific research problem was that many executive managers in construction companies may not understand what ethical strategies to implement to align practical ethical conduct in the construction industry with existing professional association and corporate codes of ethics (Brown & Loosemore, 2015; Jones et al., 2017).

The general research question was:

GRQ: What were the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct?

The specific research question was:

SRQ: What strategies do construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct?

In Chapter 4, I describe the field testing, research setting, demographics, data collection procedures, data analysis, evidence of trustworthiness, and the results of the study.

Field Test

For this study, I performed a field test of the interview questions with a sample size of three industry professionals. Two of the professionals were industry PMs. One was an insurance professional who commonly writes general liability, worker's compensation, and builder's risk insurance policies for the construction industry. The field test consisted of a review of each interview question prepared for the semistructured interviews. I explained the type of information desired from the subject question and requested feedback from the field test participant on how to reword the question, if needed, to gain the desired information. The field-testing process resulted in only minor changes to the interview questions to clarify language for the study participants.

Research Setting

I conducted the semistructured interviews in Connecticut and Rhode Island with participants from Connecticut, Massachusetts, New York, and Rhode Island. The research setting included public library meeting rooms in Connecticut, Rhode Island, and Massachusetts, a private meeting room in a school office, a private meeting room in a senior center, a private conference room at an offsite office location, and at a participant's home.

The purposeful participant selection method for this study was a type of group characteristic sampling called key informant sampling. The 19 participants selected for this study all performed either project management or superintendent functions for their respective companies that included making ethical decisions related to project construction and construction management. Employers of the participants included construction managers, general contractors, subcontractors, and sub-subcontractors that operated in Northeast United States. The represented employers were all industry leaders in their respective specialty

Participant Demographics

Participant demographics for the 19 study participants are represented below in Table 1. Sixteen of the participants were PMs and three were project superintendents. All the participants had worked in the construction industry at or above the superintendent level for at least 5 years. The participants were assigned a participant number from P01 to P19 for the purpose of maintaining confidentiality. No information that could identify a

participant was shared in the study results. There were no vulnerable participants. None of the participants were employed with my current employer.

The study was originally projected to consist of 20-25 participants. However, after interviewing 13 participants, I began to experience data saturation. Data saturation occurs when continued data collection fails to reveal additional themes in the data (Fusch & Ness, 2015). At that time, there were 6 additional interviews that had been previously scheduled. I conducted those interviews to confirm data saturation and concluded data collection for the study.

Table 1

Participant Demographics

ID	Sex	Age	Position
P01	M	45-59	Project
P02	M	45-59	Project
P03	M	45-59	Project
P04	M	60-74	Project
P05	M	45-59	Project
P06	M	45-59	Project
P07	M	45-59	Project
P08	M	45-59	Project
P09	M	45-59	Project
P10	M	60-74	Project
P11	M	45-59	Project
P12	M	30-44	Project
P13	M	45-59	Project
P14	M	30-44	Project
P15	M	45-59	Superintendent
P16	M	30-44	Project
P17	M	30-44	Superintendent
P18	M	30-44	Superintendent
P19	F	30-44	Project

Data Collection

I conducted one semistructured interview with each of the 19 participants who were qualified participants for the study. Walden University's IRB approval number for this study was 02-27-19-0320260. The consent form for this study was reviewed and signed by each participant prior to conducting their interview.

Data were collected for this study through semistructured interviews and review of publicly available codes of ethics. The sample size was 19 participants. This sample size was sufficient to achieve data saturation and answer the research question. After 14 interviews, recurring themes were being presented in the data. To be certain of achieving data saturation, I continued conducting all 19 planned interviews. I conducted interviews in person with all 19 participants. I chose the in-person interview format because I believed that format would allow me the opportunity to build rapport with the study participants and the ability to view the nonverbal body language in combination with the verbal responses to the study questions. Each interview began with an introduction and review of the consent form with the participant. During the interview process, I was careful to make sure that I was not projecting personal bias regarding the subject matter in my follow-up questions. I conducted the interviews across Connecticut and Rhode Island in public library meeting rooms, a private meeting room at a local school office, an offsite office location, and a participant's home. The locations used were selected primarily for low level of noise, comfort, convenience, and confidentiality for the participant. I conducted all interviews outside of normal business hours to avoid conflict with the participant's employment. The script of questions for each interview was

consistent and follow-ups were asked for clarification as needed. Each interview was recorded using a digital audio recorder with the permission of the participants.

The interview script included 27 questions (see Appendix). As necessary, I asked additional questions to clarify a response or probe for additional information. The interview questions were crafted to obtain classification data about the participants and to obtain their input regarding strategies that may be implemented to improve ethical action in the construction industry based on professional experiences. Each interview was recorded using a digital audio recorder. I also took brief field notes during each interview to note immediate thoughts about the interview responses. The interviews lasted an average of 41 minutes. The times ranged between 18 and 92 minutes.

I began using NVivo transcription to transcribe the interviews. However, the text file returned was found to be unreliable on review possibly due to audio quality or regional speaking accents. Therefore, I changed techniques and personally transcribed the interviews by listening to each audio recording, using Express Scribe, a foot pedal, and headphones on my personal laptop. I saved each interview as a Word document and submitted the transcript to the participant to confirm that it reflected the essence of their input. I also offered the opportunity to correct, omit, or amend the responses at that time. There were no material changes made during transcript confirmation. The transcripts were copied into NVivo 12 for Windows for data management.

At the time of the interviews, I also collected a copy of the corporate code of ethics for those who offered that information. I also retrieved a corporate code of ethics from the internet for the CMAA (2017b, pp. 66–69) as presented in Chapter 2. Those

codes of ethics were also loaded into NVivo for comparison of similar terms and corporate goals.

Data Analysis

Data were analyzed using Yin's (2018) pattern matching technique. Yin's pattern matching is a process where the results of the study are compared to expected patterns conceptualized prior to completing the study (Yin, 2018). I used NVivo for data analysis, as well as, manual review for code words and recurrent themes in the data. Themes in the data were identified in the transcription process with the purpose of answering the research question of what strategies construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct. Ravitch and Riggan (2017) described a process of developing codes and themes in the data of a study using a conceptual framework during the process of transcription by listening to total input from the interview including the words and the delivery of the participants.

Themes in the data emerged from the concepts identified as the framework for this study. Codes were all related to the reciprocal concepts of personal cognition, environment, and behavior described in the conceptual framework for this study. The themes used in data analysis included the following:

1. Barriers - Barriers to improvement in ethical conduct in the construction industry.

2. Communication – Strategies used by companies and organizations in the construction industry to communicate desired ethical standards, updated to codes of ethics, and ongoing reinforcement of desired standards.
3. Self-Ethics – Self-identified personal ethics of the superintendents and PMs participating in the study.
4. Training – Ethics training and education strategies employed by companies and associations related to the study participants.
5. Culture – Characteristics of culture related to both positive and negative ethics of companies in the construction industry.
6. Leadership – Leadership strategies by leaders in the industry with positive and negative ethical implications for companies and associations.

I used NVivo 12 for Windows by QSR International (n.d.) to manage the data for this study. Each of the 19 interviews for this study were transcribed into Microsoft Word and uploaded into NVivo 12. Themes were conceptualized during the transcription process and each code was set up in the NVivo 12 software. Once the files were uploaded into NVivo 12, each interview was reviewed for passages related to the codes of barriers to ethical conduct, self-ethics of the participants, communication, training, culture, and leadership in construction companies and professional organizations about ethics related issues.

Evidence of Trustworthiness

Credibility

Credibility refers to the search for all explanations of the data presented in the research and relevance to the research problem (Bloomberg & Volpe, 2019). Yin (2018) presented four types of data triangulation including using different data sources, different evaluators, different concepts, and different methods. In this study, the conceptual framework included analyzing the data through the lens of Bandura's concept of reciprocal determinism which includes personal ethical concepts, environment, and behaviors. I have added to that a consideration of social change concepts by Tönnies (2001) and Weber (Noble, 2000) in understanding human action and decision-making.

Transferability

Transferability in case study research refers to the ability to use the research to help understand other settings or research settings (Bloomberg & Volpe, 2019). I have presented alternate possible business environments where the strategies from this study may be useful in improving ethical conduct.

Dependability

Dependability of case study research is achieved through clear definition of the study methods, logic, and actions of the researcher (Bloomberg & Volpe, 2019). All study interviews were audio recorded, transcribed, confirmed by the study participants, and archived for future reference. This process allowed me, and those reading this study, to be assured of the validity and confirmability of the data. Transcripts were emailed to participants so they could review and confirm their own information to be sure that the

transcript was a true and correct account of the interview data and participants were given the opportunity to clarify any information that did not accurately represent their opinion.

All data related to this study will be archived for a period of five years. Archival will occur both on a removable electronic storage device (such as a removable hard drive) as well as on my Dropbox account, which is secured by multiple layers of protection including firewalls and passwords. All field notes from interviews, audio files, etc. will be scanned and included in the digital archive of this study.

One method to determine dependability of a study is through the use of a dependability audit. A dependability audit is a review of the activities of the researcher by an independent auditor. This includes a review of the audit trail to determine if the researcher met the standards of credibility and transferability (Lincoln & Guba, 1985). The audit process has five stages: pre-entry, determinations of auditability, formal agreement, determination of trustworthiness (dependability and confirmability), and closure (Lincoln & Guba, 1985). The auditor for this study was the research methodologist, Dr. Howard Schechter.

Confirmability

Lincoln and Guba (1985) said the confirmability was the degree to which the study represented the input of the participants, not researcher bias. Techniques for establishing confirmability were confirmability audit, audit trail, triangulation, and reflexivity (Lincoln & Guba, 1985). I am an accounting professional in the construction industry. The industry relationship did not create a conflict of interest. I addressed my personal bias by use of data triangulation using interviews, social concept analysis, and

inclusion of previous subject matter surveys. The interviews were semi-structured with questions that encouraged the participants to share their personal experiences, thoughts, and ideas. The input of study participants was included in the results of this study without the addition of any personal experience. The subject area in this study is not my direct area of practice and my current employer was not considered as a potential organization to provide participants.

Study Results

The results of this study were organized by themes that emerged from the data. Once I completed the transcription process and review of the data in relation to the reciprocal concepts of personal cognition, environment, and behavior described in the conceptual framework for this study, I coded the data in NVivo by identifying the recurring themes in the participant responses. The recurrent themes identified during data analysis included the following: barriers, self-ethics, communication, training, culture, and leadership.

Table 2

Emergent Themes

Codes	Themes	Response %
01	Barriers - Barriers to improving ethical conduct in the construction industry. This item is related to the environment of the construction industry.	74%
02	Self-Ethics – Self-identified personal ethics of the Superintendents and PMs participating in the study. This item is related to the personal ethical codes and behavior of the ethical actors in the construction industry.	89%
03	Communication – Strategies used by companies and professional associations in the construction industry to communicate desired ethical standards, updates to codes of ethics, and ongoing reinforcement of desired standards. This is related to the environment of the construction industry.	100%
04	Training – Ethics training and education strategies employed by companies and professional associations in the construction industry. This is related to behavior and the environment of the construction industry.	100%
05	Culture – Characteristics of culture related to both positive and negative ethics of companies in the construction industry. This is related to behavior and the environment of the construction industry.	100%
06	Leadership – Leadership strategies by leaders in the construction industry with positive and negative ethical implications for companies and professional associations in the construction industry. This is related to the environment of the construction industry.	100%

Theme 1: Barriers

Of the 19 participants, 14 identified barriers to ethical conduct that occur in the construction industry in response to a specific question about challenges. Some of the barriers identified were schedule/time challenges, issues related to billing, pricing of change orders, bidding, personal ethics, training, leadership, culture of the company, buy-in to the ethics codes, and the environment in the construction industry.

The barriers presented by the participants in this study are supported by the environment described in the seminal studies by FMI Corporation (2004) and The Ethics Resource Center (2013). The comments of the participants confirm that the environment in the construction industry described in previous studies has continued. Some of the participants of this study stated that they felt pressure to make decisions in an environment that were not always conducive to positive ethical conduct. They were frustrated by time constraints in the industry that do not allow time for adequate communication of the ethical principles of the company, schedules that demand production without allowances for necessary labor hours, rejection of change order billings after having received an initial approval for the work, and training for members of the industry in procedures and ethical conduct.

- P03: The construction manager's unrealistic schedules. They (the construction managers) are too busy saying yes to the client without talking to the subcontractors that need to pull it off.
- P05: It would probably just be time. You know, a lot of times you're busy or running and doing this or doing that or you’ve got something going. So, it's a

matter of finding time to dedicate to proper training, seminars, and sending people.

- P05: A lot of times ethical decisions don't really get involved until you have money. But obviously the money is, it's half the equation of any majority decision especially in construction and everything either has to do with money or time. You either have enough time and not enough money or vice versa. You have enough money, but you don't have the time. So you're constantly playing the two against each other, trying to get the job done quick as possible and under budget as possible and you have to make multiple decisions on cost, schedule, means, methods, types of equipment, manpower, and materials and I think most of the ethical decision would come in on the cost end of it. You're always constantly providing what's required by the contract and for the best possible price because you have your budgets that you have to go by and you still have to get the work done in a timely manner.
- P07: I think at that level it's extremely unethical when you get to the construction management level. First of all, I mean I think the true honesty of the construction manager is not there. I mean you can't believe anything they say. They continually lie to you to get you to do stuff. They go behind your back. They talk to your men, and tell your men to do stuff that you already cleared it, and they direct you. I mean they're constantly spending our money for the benefit of themselves to get the job done and get it done in time with no complete care of what they do to get from A to B.

- P07: The barrier is cost. I mean, right now they're looking for the lowest price. They want the best quality job but they want it at the lowest bottom line price and that's what you're competing against and you know and it's frustrating to go into a job that you know you're going in at cost or below cost and then you're getting everything thrown at you. There's no support system where if it was a team environment you get two weeks and they get two years for the project they go to you get two weeks to build it and you're supposed to cover everything under the sun in twelve different volumes of specifications. And you just can't. And if you if you covered everything in the spec you'd never get the job. So, you have to . . . specs are boilerplate, they're not job specific. But any chance they get a chance to hold it against you they do. Every time you have something in your favor you go after a cost change. They fight you. And then they come up with a deduct to balance it. So, you're always trying to balance their number without any concern for the contractors. So, the barrier is the cost. You know, they're not going to share the cost or they're locked into a number. Their job is to bring it in as cheap as possible for the owner. And they don't care who they hurt in the meantime.
- P08: Well definitely it's the whole bidding process. You know that's the biggest risk and it's something that to me part of the business you just kind of go through the years expecting it, anticipating it, and trying to guard against it as best you can. But you know really, it's kind of weird because you know a lot of your customers do have the ethical statements that they have to sign

when they submit their bid but yet we are not held to the same standards. You know our bids are held private, for the most part. So, you don't know necessarily where you stood in that mélange of bids and the favorite line out there from our customers is asked after the job has already been bid and they have the job. They come back and they say all right give me your best and final. Well, wait a minute, you know, we bid this once all ready.

- P10: Well, the barriers that I've run up against are that a lot of times it's personalities, so for instance, you can have the best set of standards in the industry but if you get a person that doesn't follow or have share those same beliefs, you can have problems there.
- P12: Yes, obviously, it's never built into any estimate to have a day in there to train your employees. People wouldn't get jobs. Like we talked about again, falling back to the manpower issues is timing. I mean, you take four guys out of the field for a day to train them on whatever it might be, it hurts the project.
- P13: The time thing is our society. Everybody wants everything instantly. Instant gratification is the key. So, you've got a new school that they break ground for it in July and they want half the school open by September first. It's just not the right thing. So, I don't know how you overcome that.
- P13: The barriers? The barriers are getting people to read it or to go to it. The next thing you end up doing is making it a mandatory meeting, mandatory training, and the barrier is that everyone wants to be paid for that. It's either you are going to take them away from the jobsite for the day, which right now

we can’t do that, there’s just so much going on you can’t take guys out of a jobsite. When I first started with (Company Name), every quarter, every job would close for a day or half a day and everybody would leave the job at 10 in the morning and be back to the shop at lunch time. The owner would feed everybody lunch and give everybody the new of what was going on with the company. That was a long time ago and that was the old owner. We have a new owner now. I don’t see him doing that.

- P15: I think the one barrier would be a pattern of behavior that has been acceptable for a while now and changing behavior and thought patterns. It’s a culture change. Maybe some of the smaller guys, you know the smaller guys in the trade level with material suppliers, I’m sure it’s way more prevalent. Those material guys still have their expense accounts and stuff like that, so I think it happens down there more than we get exposed to. Especially as a construction manager, we don’t really have much dealings. We are just managing a project for somebody. We don’t really have a vested interest in steering stuff or that kind of thing. I think that the barrier would be just a true culture change, time.
- P16: So, it takes dollars to either write that plan or pull that plan from some industry standard and review and massage it. It takes management time to confirm that everything in that plan is what they want to stand behind. So, there is a financial aspect of it. Then there is the managerial aspect of rolling it out to your employee base. I think from a financial and from a managerial

> standpoint it is just a time sync. At the end, as it's being implemented it is a positive thing, but I could see a smaller company not wanting to spend the time or the money on that task. It's is an inevitable problem that (the) dollar often drive most of our decisions, especially in a business environment, where obviously a business is in business to make money. It is just, I think, once a company is of enough size, making sure that it is focusing on the right things to get repeat business. One bad ethical decision can close the doors of a small company pretty quickly.

Theme 2: Self-Ethics

A recurring theme from the participants in the study was how their personal ethical cognition affects their professional choices. Some participants spoke of their personal ethics in terms of outcome related decisions or consequentialism, ethics of duty to the organization or association or non-consequentialism, and ethical decision-making in relation to what was good or value ethics. In close correlation to the social change theories of Tönnies (2001) of gemeinschaft and gesellschaft, some participants spoke of how upbringing, family, and close personal relationships affect their professional behavior.

The participants for this study, in many cases, related that their personal ethical and social upbringing influenced professional and personal conduct. Several participants said that it was important to them to maintain their reputation in both their personal and professional lives. Many felt that once trust was lost, it was almost impossible to regain

and that the risk of that was untenable. Beyond personal reputation, several participants relayed that they felt a responsibility to represent their company in an honest way.

- P01: What I've learned is honesty is a lot better than anything else even if it's tough say it.
- P02: So, I'm a very, just, I was taught from my parents to be extremely ethical that you only had your name. So, that trumps everything for me. I wouldn't let somebody else's decisions or mandates affect my ethical decisions.
- P04: If your grandmother wouldn't want you to do it you should be doing it.
- P05: Basically, the ethics you have brought with you personally up through when you've been raised basically carry over into your professional ethics codes. So, for me it's very easy, I was raised by a Catholic or Pentecostal minister and ethics was always top of the line. Whereas, other people, maybe if they're raised differently, won't have the same ethics and need to be reinforced by the company's ethic codes. But I would think if you were raised to ethics was a top priority to you in the first place then the codes are great to be written, but as long as you're following what you think is right in the first place, the rest of it falls pretty much the line.
- P06: One of the keys to ethics is, to me, is having a stewardship or mentorship, your ethics and my ethics. OK? They came from where? From your upbringing, from your parents. Right? OK. Your parents, if they've done their job right, have taught you to be ethical. OK. And you carry that into your trade. And that's where you decide if you can stay with the company that

you're with or not based on the ethics that they allow you to put forward. You have your own standards.

- P06: It's private principles that we guide ourselves with, whether it be life, whether it be the job, OK? I tell everybody I run my jobs like I run my family . . . I run the jobs the same way. Everybody makes it so difficult. Management. It's not. If you effectively run a family, you can effectively run a job and vice versa. Really. It's very little. Mentorship. Everything. It's all the same. Ethics. OK. The, how much you apply yourself, the pride that you put into it. It's all tied together.
- P07: I feel I push more ethics on people than the code pushes back
- P10: No, well, I would say one thing in my life, I went to a service academy and one of the things that is ingrained to you from the day you walk through the doors is you don’t lie, cheat, steal, or attempt to deceive
- P13: It’s personal ethics. It’s personal morals. You know if it doesn’t feel right, it’s probably not right. That’s my way.
- P13: They are just like get this done. I can’t see it from my house. Favorite saying in the field. I can’t see it from my house. You will hear that everywhere.
- P14: So, we are really not trying to hire people, we are trying to find people who have integrity, who are tough minded, who care, and who have those core values that the company shares, a family owned business and they really push that into our employees. So, I think, while you might not necessarily refer to

the document always, you are referring back to those values and saying what am I basing my decision on and what am I doing. I skipped ahead and read the questions earlier but one of the things that is usually always on my mind is an early lesson that I got from a boss is do you want to see yourself on the front page of the New York Times doing that, right?

- P15: I would be more likely to break my personal ethical code than my professional one. I think because the ramification of breaking your personal ethical code is yours; the consequence is yours. Whereas, if you break a professional one, now you are exposing your company to the consequence and not you as a person.
- P16: I think the easy thing is it is just not worth making . . . if your gut tells you it is slightly on the border out of bounds, it's not worth making the wrong decision. You'd be much better off by just saying no and staying the line as true as you can. A short-term gain is not worth the long-term potential negative. You also feel much better about what you do when you don't.
- P17: Everyone is in it to do the right thing. I think a lot of that has to do with upbringing and family. That's when I say I refer back to the culture of the company, it's kind of like we have this family culture. There have been people that didn't fit that category and they have been weeded out.
- P18: There may not be somebody watching at all times but, you are representing the company, you are representing yourself.

- P19: If you are not a person that has a written ethical policy stick to your gut and hopefully your gut will lead you on the right way. Feel free to raise an issue if you ever see one occurring you don’t necessarily need to address it but feel free to call it up the ladder.

Theme 3: Communication

Throughout the interviews communication was presented by the participants as a component of implementing and maintaining an ethical code in the industry. The participants relayed that communication can be an effective strategy for sharing updates to ethical codes, communicating expected culture and conduct, and for helping employees to feel connected to the company. Effective, regular communication regarding ethical issues, as well as, company updates, helped the participants feel more connected to the company, confident in the expectations of management, and supported by leadership.

- P01: (Regarding code updates) So they send that out. I don't know if it's a statutory requirement or if it is a 'we need to do this to protect ourselves' like they have talked to counsel and they say you should do this every single every single year. But the other thing is that we've gone to a SharePoint Internet system and when we fire up our computers the first thing that pops up is the internet of (my company) construction in there.
- P02: So, we have quarterly sales and management meetings. So, all the people like myself in all of our offices, we all get together in the corporate office with the owner of the company or upper management and we talk about all these

process things. Any change in how we you know we do things in the field or any office or any kind of major changes like that, that will be included. You know, including ethical things and how we run our business. So, all that gets disseminated at those meetings. From there we go down to our local level at our different offices and there we have, we call them safety meetings, but there also are procedural meetings as well. We do a lot of different things in those meetings. You know we get safety truck inspections and things like that, but we also talk about how we're doing our jobs and what is considered acceptable behavior on a job or you know techniques for doing our job. That all gets done twice a month at our local level. So, all information gets disseminated and right to the last person in the company that way.

- P03: Town hall meetings. Quarterly. Via HR. Reinforcement via internal VM systems and awards for behavior associated with representation of the values, as elected by my fellow employees, as nominated by supervisors.
- P05: Typically, we have our H.R. departments and they're responsible for updating the code of conduct or the employee handbook. Those typically get updated maybe every four to five years depending on which H.R. director, if you have change over in the H.R. director more often than that you would get more updates. If not, then you typically would get an update, I would say probably every five years. Sometimes, we also have what they call the safety and ethics newsletters that go out and these used to go out every six months and basically, they just hit it a topic. But the communication is key. They

have, they publish the ethics hotline within the (Company name). Other times they're just doing avoiding conflict of interest and they send these out every six months as a reminder of your requirements under the or as an employee as a non-union employee of (Company Name).

- P05: I guess they could just continue to enforce it to management and then management enforce it to the regular employees. Sometimes all it takes is people actually hear it. When they actually hear it, then they say, “Oh, OK, the owners do care, or the management does care, and they do want us to do this or they don’t want us to do that.” Otherwise, if they don't hear it, especially after six to 12 months, if they don't hear something, they just assume the owners, or the manager doesn't care, and they can do whatever they want. That seems to be the breaking point. If they don't hear anything after a year, you are pretty much say giving in to the people's thoughts that it doesn't matter or doesn't care. But it seems like after six months or twelve months, it would be nice to reinforce every six months. Twelve months is like the worst, the last you want to go, after twelve months people get 18 months and they start to hear people talk and they're like oh owners don't care about this don't care about that so, it doesn't matter if we do this or do that. It’s like, No, you still have to hold the line no matter how long it's been since the owners come out. You can’t hit everybody in the whole company, we have about a thousand people. Even though we have multiple owners, you still got

it, take, even if he said it three or four years ago, you still got to take it as gospel and continue on with your ethical procedures. You can’t stray.

- P06: But the ethics are the same way they're handled. They are brought up and then again, it's like the family what we do is, me and my managers, every three weeks we'll have a lunch together on the job and during that, while we're eating, we talk about just like you do around the table. OK with your children. OK. Those suppers are important. That's where they absorb everything OK. And that's what lays the foundation or allows you to lay the foundation for your family. You know you talk about things like texting and you know while you're driving. You talk about all the things that you see day to day you want to make sure that they understand you know. It's the same way with the guys on the job. So, the code of ethics code of ethics isn't just a printed book. It's the principles that the leaders on the job show and it makes it clear to what's acceptable to the guys. What's acceptable and what's not. You know what our kids don't learn from what we tell them. They watch you and they're going to can conduct themselves like you. They do listen. They do hear things. But what you say and what you do, they better be the same thing.
- P07: I think it's constant the president the company, who speaks at every quarterly meeting, he meets with all the people, meets with the PMs, and that's the first thing or even the customers I've been to customer relation meetings with him directly. That's the first thing he'll tell the customers that were about top quality or not the cheapest but you're going to get what you asked for if

> not more, you're going to get quality people, you're going to get . . . and he instills it to everybody and then makes you feel like, I believe him. I have no problem operating the way I do because of that. I think they do a great job promoting ethics in the company.

Theme 4: Training

Training was a strategy raised by several participants as a key component of increasing ethical conduct and build quality in the construction industry. Training can be effective in assisting members of the construction industry on how to act in professional situations that may arise in the course of business. Training as a strategy for increasing ethical conduct also follows the ethical structure of non-consequentialism in laying out specific actions for specific situations (Gyoo Kang et al., 2014) and the social change concept of value rational action presented by Weber (Noble, 2000). The participants stated that they believed that individuals in the industry should take advantage of any and all training available to them to improve their knowledge of all aspects of the industry including ethics. They also stated the frequent communication about how to achieve the expectations of the company in terms of quality and reputation helped impress upon employees the importance of positive ethical conduct in achieving those goals. One strategy that was presented was promoting from within to maintain a desired level of training and culture within the company. The participants from larger companies talked frequently about regular, simulation training and review of their published corporate code of ethics. They felt that training was valuable in refreshing knowledge of the code and providing feedback.

- P01: Really take, take these seminars and classes as they become available and use the resources. You know? It's all about learning. It's all about, it's not just learning but actually applying what you learn.
- P01: What I like about the company too is if there is, if there seems to be a void in knowledge, whatever it is, even if one person speaks up and says you know something I really think we should do this and it makes sense they'll do it even if it's just one person.
- P02: You know we often talk about our quality of work. So, I guess that's the same and to me it kind of relates and that's constant. That's every one of our meetings. We talk about our reputation and our work ethic and our processes. So, Bi-monthly, it's a constant process in our company.
- P03: By letting them know upfront what our policies are as far as not embellishing, just hour for hour, dollar for dollar. Just be ethical, to not take advantage, to not do the wrong thing. So, you don't have to worry about getting caught, just do the right thing and everybody can sleep at night.
- P05: I guess they could just continue to enforce it to management and then management enforce it to the regular employees. Sometimes all it takes is people actually hear it. When they actually hear it, then they say, "Oh, OK, the owners do care, or the management does care, and they do want us to do this or they don't want us to do that." Otherwise, if they don't hear it, especially after six to 12 months, if they don't hear something, they just assume the owners, or the manager doesn't care, and they can do whatever

they want. That seems to be the breaking point. If they don't hear anything after a year, you are pretty much say giving in to the people's thoughts that it doesn't matter or doesn't care.

- P08: Almost always, we bring up our own talent. Yes, there are guys in the field who have done that and done it very well and so it's either that or you know you're taking a kid out of college and training him.
- P10: I think mentoring is really important. Having people in positions and having them giving people guidance on tough decisions that have to be made, maybe they're not tough decisions, but decisions that have to be made that involve the types of things where you could go in the wrong direction and I try to make sure I'm in touch with and that I talk to the people that work for me on a regular basis just to make sure we are connected and that we are thinking the same way. So, mentoring is important. We do have whole training seminars and sessions on topics like sexual harassment, contract law, how to manage change orders, and how to properly manage issue that come up on a job, so the decisions are sound and ethical. So, there is a training component to that behavior.
- P12: I wouldn't say it so much as the company as it is the union hall. The reason why I say that is they are constantly having trainings and stuff like that. The company that I'm working for right now, they don't take the time, unfortunately to educate or to make people take ownership of their decisions.

- P13: We talk about it in house, things we should and shouldn't do. It's more along the lines of you hear about someone doing something that doesn't sound right and we all talk about it. Like why would they do that? Or, listen, I hope nobody is doing that in our company . . . you know, collusion and all that stuff.
- P14: Before we sign it, you read the policy and there are a series of videos and situations online with . . . here's Samantha and Joe and Joe's a public official. Samantha wants to buy him a cup of coffee. Can she buy him that cup of coffee? There's four answers: Maybe, If it's less than $5 . . . and it is easy if you have common sense tied to ethics. It's probably 5 or 10 questions or something you flip through. You have to pass the quiz and then you sign off on the policy or whatever. The quizzes and situations are an every year thing as well tied to the review.
- P15: We have an ethics hotline. A company ethics hotline. It can be completely anonymous and that can be question, if you are in a situation, what should I do? I believe it's tied to HR and Legal maybe as a combined entity. That hotline can also be for reporting unethical behavior of others anonymously. There is tremendous report from corporation to get this right. If there's a question, it cannot be, I did not know because the resources are there to ask.
- P17: If there is any update to it, typically they'll hold meetings at the office and bring people in, PowerPoint presentation, typically by a member of the

general counsel. They will go through slides and give examples and make sure everything is on the same page. After you go through that training, there is a human resource software that the company uses, Paycom, you have to digitally sign that you read the handbook. It is tracked that way.

- P17: I think frequency in training. Training is very helpful, especially at more of an entry level position so you are started off with the mindset of how to do things right. What's right and what's wrong because you don't really know if something is not right until you are exposed to it. If you are not fully aware of the code of ethics or the policies that the companies have and how to deal with certain things, if these things arise, it starts at your employee orientation. So, when you are hired you have an employee orientation handbook that goes through all that stuff. You have your orientation and, in that orientation,, they go through everything. They identify and give examples, say if there's any sort of excessive entertainment gifts to staff or kickbacks, it is unacceptable. You can't accept any of those things. They don't say that you just can't accept it because you just can't accept it, they give you the reasons why, whether it's the law, our company's best interest, or just doing the right thing.

Theme 5: Culture

The culture within a construction company or professional organization may influence the decision-making of the ethical actors in the construction industry. Ethical codes are written for a company or professional association to set guidelines for conduct. These guidelines can also set the culture for the company. However, many of the

participants discussed aspects of personal relationships and social interaction amongst team members similar to Tönnies concepts.

Participants in this study talked about relating their sense of inclusion in the company to being part of a family. They talked about investigating the reputation and culture of a company before deciding to join the team. Participants involved in hiring talked about doing background investigations into prospective employees to try to find employees that would be a good fit for the company to help maintain the desired culture. Some participants felt a personal responsibility to the company to maintain the corporate reputation and culture through a feeling that they were a part of something bigger than themselves and expressed a desire to propagate that idea in their subordinates.

- P01: It's basically looking at how we make our employees and our subcontractors feel like they're part of a family.
- P02: I don't want them cutting corners anywhere because we have our company name to defend or to upkeep.
- P06: We will occasionally get together for picnics up here. I have them over. I do Christmas parties, because I enjoy them and I don't have the same guys all the time. My project teams are rotational, so you know I'll look at the type of project I have and say I need this guy and this guy. Back to different skills and putting people in the proper positions. So, it's always different. You're going to be management. OK. You can make that environment any way you want. And it's a lot better.

- P07: That's why I went to this company after I left my first company because they come from the same breeding, or they have the same values and there's other companies out there that could gone to work for when my first one didn't work out. But they work, I felt they were unethical and they were the type of people that were to ask you to do stuff and I would didn't want to be in that position.
- P08: And again, it's just their own personal track record. Because again I don't think people who practice on a consistent basis or even an inconsistent basis those types of things you want in your company. If other people look at them that way, then that's a reflection on your company.
- P11: I keep going back to the strength of the ethical approach that the owners take to the company. It's conveyed in many different ways on a daily basis and you know its high expectations as far as performance. We don't get to where we are without hard work, but everybody knows that there is a . . . it's all important. So, a good day's work is just as important as the attitude and the ethics and the performance of the field. It's not just turning a wrench as it goes.
- P11: They are . . . every month there is a birthday party for everybody whose birthday happens to be in a month when you have 75 employees there are birthdays every month. So, there's just gatherings like that and they don't break the bank doing it, but you invite everybody to it. And then there's quarterly larger parties where they talk about business and the successes that

we've had, the new people that have joined the team, and just always are encouraging. So, every time there's a new team member the entire team gets say an e-mail and everybody chimes in and welcomes the person on board. They just, they feel the camaraderie right from the very beginning.

- P12: I think it falls back to making sure people are working well with each other and grouping people together on the manpower front.
- P13: As we say we all work in the same sandbox. The sandbox gets smaller and smaller as we get older and work with more and more people now your sandbox is smaller so you can't . . . burn those bridges and expect to still work.
- P14: Business is very much about people. Companies don't build buildings; people do and so when that superintendent walks in and he's going to come work for our company, but he might have worked for somebody else one day. You only know if you call up your drywall guy and say . . . do you know this guy? What do you think of him? Hopefully that drywall guy is a trusted friend of yours and you are getting a real opinion like . . . stay away from him. He doesn't fit. He should be working for those other guys. He doesn't fit your culture. We have relationships out there in the market that allow us to go do that which I think is really the only other way that we are able to provide the stop gap.
- P16: I think the one that jumps to mind is the pride of working for a company that you know everyone is on the same page of a good ethical standard. There

is no direct activity or something that supports the good behavior. It's more of just being proud of who you work for.

- P17: I think our company has done a good job of creating a good culture, hiring the right people, and putting the right teams together.
- P18: In terms of actually making decisions, from a professional standpoint, I have always felt, since I have been with this company for 12 or 13 years, that by and large, people above me believe in it and believe that your personal reputation is based in part on you professional one and your professional one is based on who you work for. There have certainly been stories, you hear from time to time from other offices of people maybe flirting with violating the ethics code but I think mostly people understand that you came into a good company whether you are in your last year or 30 years ago and you have a responsibility to uphold that.

Theme 6: Leadership

Finally, many of the participants reported on the importance of strong, ethical leadership as an important factor in increasing or maintaining ethical conduct in the construction industry or the struggle of working for a leader that doesn't support ethical decision-making. Participants relayed that they felt less personal ethical conflict when they had a leader that they felt acted with fairness to both the clients and employees or association members. A leader sets the tone of the company or professional organization by their deeds and actions showing the members of the construction industry what is acceptable for professional conduct.

All participants in this study stated that they believed leadership was a key component in the implementation and maintenance of a positive ethical culture in the construction industry. Those with direct reports consistently relayed that they felt responsible for creating a good example for and the mentoring of their subordinates. Those who didn't feel that ethical leadership was strong in their companies still believed that leadership was important in making employees feel supported in ethical decision-making, but that they fell back on their personal ethics where there was a leadership void.

- P01: I try to empower people that are under me to make decisions
- P01: I try to do things the way that I would like to see them play out like if I was sitting on the other side of the table.
- P02: The owner of my company specifically has kind of the same philosophies as I do. He also preaches that our company is . . . we only have our company name.
- P04: By how their managers, supervisors, and company owners behave or perhaps even, God forbid, the shareholders.
- P05: Yeah, and it falls down to us as the managers to keep proliferating it but obviously a lot of employees still feel that the owners doing it means more because they're actually making the effort to come out. They're actually making the effort to say what they need.
- P06: So, I tell all my guys at the beginning of the job here's the deal. There's nothing worse in life than trying to carry a load you can't carry. If you get

stuck in something, I don't care what it is, you come to me you tell me what it is and I will carry that load with you.

- P06: You've got to do one thing right in your life. You have to find the right person to spend your life with. Well, if I was talking to young PMs, I'd say you can make a number of choices in your life, but if you want to make a good one, find a contractor whose ethics align with yours so. If you do, you got an easy life. If you don't, you've got some horrible decisions to make. My life's been easy.
- P07: I think it's constant the president the company, who speaks at every quarterly meeting, he meets with all the people, meets with the PMs, and that's the first thing or even the customers I've been to customer relation meetings with him directly. That's the first thing he'll tell the customers that were about top quality or not the cheapest but you're going to get what you asked for if not more, you're going to get quality people, you're going to get . . . and he instills it to everybody and then makes you feel like, I believe him. I have no problem operating the way I do because of that. I think they do a great job promoting ethics in the company.
- P08: I think just by example. You know I don't practice those things and so I think as long as you come across that way then your employees will be like, so my boss doesn't approve of those things so I'm not going to do it.
- P09: They really don't enforce it. It's up to the employee.

- P10: Well, I would like to think by their actions and I think for the most part that is true. What better way to ensure integrity than to have people in the senior leadership, senior management level that have that ethical behavior.
- P11: So, one management style is to let people do their thing. If you think if you don't bother them, they're going to do a good job and that person starts to stray. But these guys are very tactful in how they do it and they're always communicating, always feeling like you're not an island when you're working with this team. And it just gives you confidence and, at the backside of that, there's accountability. So, it doesn't let you fall off the wayside either. Lots of things going on.
- P13: They need to lead by example. First thing. If they are doing it, they are just going to pass it right along to everybody else in the company. It has to start at the top, the top has to work ethically and it has to be visible. It can’t be behind the scenes. Everything has to be visible.
- P14: That training and continued reinforcement from management is probably the best way and ultimately, they stand behind their employees. There are certainly stories where somebody has done the wrong thing, they are held accountable. It’s not necessarily a public hanging but in a large but small company, you hear about it. Then, the same thing if someone has done the right thing, they are typically very good at standing behind them and supporting them through whatever that might be. Same deal where it is not necessarily publicized and there is not a story about it, but word gets around.

- P15: Lead by example. Yeah, you have to know what is ethical and what is not.
- P17: The communication aspect of it starts at the top. Your project executive has to make it clear that if there are any issues, you can't be afraid to speak up and ask for help, ask questions. I think, especially with the younger guys, I see they are very intimidated if they don't know something. Just tell everyone, ask questions, ask questions, ask questions.
- P18: Yeah, not long after I started, one instance in particular was a job that had been closed for some time. I want to say a year or two. It was at some point realized that we had been overpaid a significant value and the money was returned without the client asking for it. You wake up every day to make your company money, that's how you have a job. When you hear the people you are working for say they gave it back because it wasn't earned, maybe it was just the timing that I had just started with the company, but it sent a message to me that just because you made the money doesn't mean you did it the right way.
- P19: It happened to me when I was a newer project manager. Something didn't feel right with a (situation on) the jobsite. I raised it up and it was the right thing to do. I don't know if complimented is the right word, but it was definitely appreciated from the higher ups in the company that went and reported it accordingly.

Summary

The general research question was:

GRQ: What are the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct?

The specific research question was:

SRQ: What strategies do construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct?

PMs and superintendents in the construction industry spoke about how they viewed ethical conduct in their organizations, professional associations, and other companies in the industry with whom they conduct business i.e. subcontractors, vendors, and clients. The study participants also shared candid concerns about barriers to ethical conduct in the industry, as well as, suggestions for strategies that managers of all levels may use to maintain or improve ethical conduct based on their professional experiences with both ethical and unethical conduct.

In the discussion portion of this study, I present the proposed strategies provided by PMs and superintendents that participated in the study. Study participants shared several strategies to improve the construction industry ethical environment. These strategies included improving frequent communication of industry codes of conduct, training in expectations and procedures, stressing ways to improve corporate ethical

culture, developing a sense of self-ethical behavior, and the importance of leadership in modeling ethical behavior. The findings are sorted by the themes identified in the participant responses which are presented in further detail in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct (Yin, 2018). Despite efforts to improve ethical conduct, researchers across the world have stated that the construction industry is one of the most unethical industries overall (Brown & Loosemore, 2015; Ho, 2013; Lohne et al., 2015; Loosemore & Lim, 2016; Mason, 2009; Oladinrin & Ho, 2015c). Two studies were performed in 2004 and 2013 that identified the prevalence of unethical behavior in the United States construction industry and the types of behaviors observed (Ethics Resource Center, 2013; FMI Corporation, 2004).

In Australia, Vee and Skitmore (2003) reported that, while the majority of their study participants belonged to a professional organization or were bound to a corporate code of ethics, every member of the study reported experiencing some form of unethical behavior. Very little research has been devoted to advancing alignment between industry behavior and professional organization codes of ethics. The problem was that many executive managers in the construction industry may not know what strategies will be effective to align industry behavior with organizational and industry professional codes of ethics. FMI Corporation (2004) confirmed this problem in stating that leadership in the construction industry did not always know how to conduct work ethically and, as a result, in the construction industry ethics requires more attention, research, discussion, and understanding.

The participants solicited were construction professionals who were either industry PMs or superintendents and subject to a published professional or industry ethical code. To meet the purpose of the study, I used a qualitative, exploratory case study design and conducted interviews with 19 construction industry professionals who were either PMs or superintendents to obtain their unique perspectives on how to align industry ethical conduct and published codes of conduct based on their professional experiences. I analyzed the resulting suggestions, professional and industry ethical codes, and previous research regarding the construction environment using Yin's (2018) pattern matching to identify potential recurring themes among construction industry professional regarding the research topic.

In the participant responses for this study, I identified six recurrent themes that related to the research questions and conceptual framework. Those recurrent themes were barriers, self-ethics, communication, training, culture, and leadership.

Interpretation of Findings

This section includes a discussion of the ways findings confirm, disconfirm, or extend knowledge related to ethics in the construction industry by comparing them with what has been found in prior research as described in Chapter 2. In the absence of studies performed in the construction trade in the United States, with this study, I seek to forward the suggestions of PMs and superintendents regarding strategies they believe will be effective in aligning industry ethical conduct with published ethical codes of conduct. The sections related to interpretation of the findings have been separated in accordance

with the identified themes in the data. The findings are interpreted using the conceptual framework of reciprocal determinism as identified in Chapter 2.

Theme 1 Finding: Barriers

Companies need to implement reporting strategies to facilitate reporting of ethical violations. Many construction companies and industry professionals in the Northeast United States are subject to voluntary and regulatory ethical codes of conduct. In this study, 18 of the 19 participants were aware of at least one code of ethics in place to govern their professional conduct. The Ethics Resource Center (2013) stated that despite the presence of codes of ethics, unethical conduct continued to be a problem. In this study, 74% of participants relayed frustration that they experienced what they perceived as barriers in the construction environment to compliance with ethical codes of conduct including project schedule pressures, budget limitations, lack of communication, and difficult vertical relationships between construction managers, general contractors, subcontractors, and sub-subcontractors.

One strategy that seven of the participants found to be helpful at their current employers was implementation of an anonymous tip line for the reporting of conduct that was not in alignment with the ethical code. Baird and Zelin (2008) posited in research conducted in the financial industry that when an employee disagrees with observed unethical behavior, they are likely to use anonymous tip lines to report the offending behavior. Anonymous tip lines for reporting of unethical conduct are one way to overcome the barrier of continued behavior that is not in compliance with ethical codes of conduct in the construction industry through reporting of behavior for handling by

leadership or regulatory agencies. The strategy of an anonymous tip line may facilitate reporting of issues that are in conflict with corporate codes of ethics that would allow for enforcement, which has been shown to increase compliance with codes of ethics (Archer & Piper, 2017).

Theme 2 Finding: Self-Ethics

Screening of prospective employees can help maintain a desired corporate ethical environment. The climate in the construction industry, from bidding through project completion, is highly competitive (Ethics Resource Center, 2013). The competitive climate can create pressure on construction professionals to complete jobs on time and within the project budget resulting in cutting corners and ethical violations. In addition, contractual arrangements are carefully crafted to protect the company's interests and contractors, both general and sub, make decisions about how to act on a project based on what is or is not included in the contract document.

The professionals in the construction industry are not just cogs in a machine. They are individuals who were raised in different backgrounds with varying belief systems. Every situation presents an opportunity for the individual to make different choices based not only on their professional training, but also on their personal backgrounds. Participants with hiring responsibilities reported that they believed it is important for companies in the construction industry to be aware of the people they are hiring to fill positions where ethical decisions are common. Participants reported conducting thorough background checks with references and former employers to be a useful policy in securing employees with strong personal ethics.

The value of employees with strong personal ethics and a sense of responsibility to their company could not be overstated by the participants. Eighty-nine percent of participants talked about the importance of self-ethics, especially in the absence of leadership who exemplify the desired ethical code. Several stated that it was important to them on a personal level to conduct themselves in ways that did not cause them conflict outside of their professional life. One restated the previous quote included in the literature review for this study by Warren Buffet (Berkshire Hathaway Inc., 2013) about conducting yourself in such way that if your actions were on the front page of the paper, you would not be embarrassed. Another suggested that incoming members of the construction trade should pick a company that practices ethics that align with their personal ethics to avoid future personal hardship and conflict.

Theme 3 Finding: Communication

Communicating codes of ethics to employees sets expectations, increases awareness, and confirms the importance of the code. Communication of the expectations for ethical behavior through publishing a code of ethics, regular updates to the code, training on the contents of the code, and enforcement of expected conduct through both reward and punishment removes personal judgement calls for professionals in the construction industry. However, having a code of ethics is not enough. Companies and professional organizations need to regularly communicate their expectations to all levels of employees of the organization to facilitate buy-in with the code (Adelstein & Clegg, 2016). All participants reported value from updates and periodic communication

of the code of ethics at regular intervals so that the code of ethics was not considered an archival type of document.

In one notable instance, a participant was not specifically aware of the code of ethics that applied to his work. He was aware that there was one that applied specifically to governmental work under his management, but not the contents of the code because leadership of the company did not share the code with company employees when they signed the compliance statement in which they agreed to adhere to the code.

Another participant of this study specifically stated that employees on a jobsite should see reinforcement of and hear a message of importance about the code of ethics at least every 6 months. Several others felt that an annual review of the code of ethics that required confirmation on the part of the employee was a useful reminder of its contents. At a minimum, the predominant suggestion of study participants was an annual review of the code of ethics by management to verify that the contents still reflect the intent of leadership, as well as annual training related to the contents of the code of ethics for all employees.

Additional communication strategies discussed that also related to the themes of culture and leadership were regular company meetings, informal ethics discussions, and information sharing. Formal and informal company meetings between leadership and staff provides valuable opportunities for sharing information about the company. Participants reported that they felt more connected to the company as a community when the leadership had regular meetings about company pursuits and interests. In addition, they stated that informal communication with corporate leaders provided rich opportunity

to discuss information about specific happenings in the industry and an intimate opportunity for ethical direction to be disseminated.

Theme 4 Finding: Training

Regular training informs employees on how to comply with corporate expectations for ethical behavior. Training is one way for a company to distribute information related to expected ethical behavior to employees. Training in ethical conduct should take place in construction companies through *Continuing Professional Development (CPD)* (Mohamad et al., 2015). In addition to CPD types of training, several participants of this study reported that annual review of the code of conduct associated with a simulation-based training was useful. Simulation based training should include mock situations where the employee is prompted to make values-based decisions in simulated ethical situations based on the corporate code of ethics without the real-life negative implications of potentially poor decision-making. Participants whose companies used this type of training found it to be a helpful reminder of the contents of the code of ethics and an opportunity for further discussion on principles where they were unsure.

Theme 5 Finding: Culture

A positive ethical culture supports employee decision-making in a network of like-minded people and normalizes the ethical expectations in the environment. Both FMI Corporation (2004) and The Ethics Resource Center (2013) presented studies that stated that the construction industry was one of the most corrupt industries. The environment in the construction industry is awash in discord between stated expected behavior and demands for production under the constraints of time and budget (Mason,

2009). Every participant in this study talked about the importance of the culture or environment of their company in maintaining and sustaining a corporate culture of ethical conduct. Participants in this study stated that they felt that a positive ethical culture empowered them to act in ways that they believed were in accordance with corporate and industry codes of ethics. They reported that their companies should work toward a positive corporate culture, despite project pressures, to support ethical decision-making.

One participant suggested that a collaborative group of companies in a similar industry could create a peer group through their professional organization. This peer group could conduct periodic inspections of the work of the companies that would assure that member companies were performing their hidden work in a way that conformed with the code of ethics of the professional organization.

Another participant suggested a similar collaborative for construction managers in a geographic area. In this arrangement, a group of construction managers would adopt a single code of ethics that would apply to, not only the construction management employees, but also all subcontractors, downline contractors, and vendors on all projects run by those construction managers. The suggestion would provide consistency of expectations from top to bottom on a group of projects so that when a laborer moves from a site for one construction manager to another, expectations for conduct would remain the same.

Theme 6 Finding: Leadership

Ethical leadership provides an example for employees to follow and helps employees feel supported in decision-making. Brink et al. (2015) presented that lower

level employees were more likely to engage in behavior detrimental to the company when they saw superiors acting fraudulently. Management of the company must be clear about their expectations for employees and model the expected behavior (Adelstein & Clegg, 2016). While all participants of this study spoke of the importance of leadership, they agreed with prior research that strong ethical leadership is important to supporting ethical decision-making at all levels in the company. The participants either reported that their current leadership was supportive of employees or that they had to rely on their own personal ethics. Those who relied on personal ethics stated that having leadership support would make their professional decisions less stressful and that it would increase professional job satisfaction.

Limitations of the Study

This study is subject to certain limitations that were not in my control. In this study, I tried to include participants from various types and sizes of commercial construction companies throughout the Northeast United States to reduce the limitation of applicability of the study findings. However, with a sample size of 19 participants, that means that each type and size company is represented by only a few participants for each. In total, the 19 participants originated from 13 different companies. All participants for this study worked in the Northeast United States for commercial contractors. The study results may not be generalizable beyond this geographic region or to the residential construction industry. The sampling method used was group characteristic or key informant sampling. There may have been members of the group who had information they could share who chose not to for various personal or professional reasons. Data for

this study was analyzed using triangulation of theories to reduce the limitation of a single source of data analysis (Yin, 2018). Yin suggested that allowing differing theoretical perspectives in a study increased the ability to replicate the study and its findings.

Recommendations

The purpose of this qualitative, exploratory case study was to explore the perceptions of construction industry professionals on how to achieve alignment between industry ethical conduct and published codes of conduct (Yin, 2018). The participants solicited were construction professionals who are either industry PMs or superintendents and subject to a published professional or industry ethical code. To meet the purpose of the study, I used a qualitative, exploratory case study design and conducted interviews with 19 construction industry professionals who are either PMs or superintendents to obtain their unique perspectives on how to align industry ethical conduct and published codes of conduct based on their professional experiences (Yin, 2018). I analyzed the resulting suggestions, professional and industry ethical codes, and previous research regarding the construction environment using Yin's pattern matching to identify potential recurring themes among construction industry professional regarding the research topic.

The general research question was:

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The specific research question was:

SRQ: What strategies do construction industry professionals recommend to executive managers in construction companies that might ensure alignment between company ethical conduct and published codes of conduct?

The recommendations for the construction industry are directly related to the input received from the participants of this study. The input received made clear that there is not one specific strategy that will assist management of construction companies in achieving alignment between ethical conduct and published ethical codes of conduct. Participants said that an effective approach to administering ethical conduct in accordance with the published code of ethics was multipronged and included aspects of positive ethical leadership, regular and open communication, ethical corporate culture, ongoing ethics training, and hiring people with a personal ethical base which aligns with corporate values. They also recommended strategies that included cross company peer groups to create consistent ethical expectations across corporate and project site boundaries.

There are other opportunities for future research that arose out of this study. First, the age of the members of the industry and their lived experiences in the trades, may affect what an individual believes is appropriate and acceptable behavior. Someone entrenched in behavior that was standard prior to the adoption of codes of ethics, may have difficulty adopting a new way of business. Second, some participants suggested that gender differences on project sites may have a moderating factor on corporate culture and ethical conduct. The data in this study was not sufficient to support that proposition as a

finding. Third, the possibility of adoption of a collaborative code of ethics for a project site that applies to all companies on a single site and to be administered by the construction manager. This strategy may encourage a more collaborative environment for a project amongst trades and construction management.

Implications

The primary social change goal implication of this study was to suggest improved management strategies that may be implemented to result in increased ethical behavior throughout the construction industry. Systemic change throughout the industry is not likely to happen quickly (Gyoo Kang et al., 2014). The competitive nature of the construction environment leads to pressure to perform unethically and offensive behavior is pervasive. In this study, participants presented components of a multipronged, holistic approach to aligning ethical codes of conduct with industry ethical conduct. The findings of this study have the potential to assist companies with code of conduct implementation with the end result of producing quality projects with employees who follow applicable corporate and professional codes of ethics. In extension, increased ethical conduct on construction projects may allow industry stakeholders, such as, banks, bonding companies, and insurance companies to gain increased trust in the construction industry. Employees may experience increased job satisfaction through an increase in leadership and reduction of personal conflict with professional ethical expectations. Finally, the public may experience increased trust in the quality and value of projects constructed for public use.

The findings of this study may help guide executive management of construction companies to develop or further develop codes of ethics and ethical programs that enhance the ethical conduct of construction professionals. The suggestions may provide guidance on additional measures that can be implemented to support employees in their efforts to comply with corporate requirements and corporate efforts to comply with legal requirements.

Conclusions

There is no simple path to achieving positive ethical conduct in the construction industry. The participant statement that stuck with me and exemplifies the relationship between construction industry employees and construction companies above all else was as follows:

> P06: You've got to do one thing right in your life. You have to find the right person to spend your life with. Well, if I was talking to young project managers, I'd say you can make a number of choices in your life, but if you want to make a good one, find a contractor whose ethics align with yours so. If you do, you got an easy life. If you don't, you've got some horrible decisions to make. My life's been easy.

The profound life insight from the study participants was remarkable to me. Their input left me with the impression that personal ethics and choices play the most significant role in professional ethical behavior. The participants stated repeatedly that when making professional choices, their first check was their informal personal *code* or upbringing. I

think, based on this data, that one of the most important things a company can do to build a positive ethical culture is build the right team by effectively evaluating new talent.

Executive management of construction companies need to develop a code of conduct that clearly defines what is expected from employees of the company. Then, they should supplement and enhance that code with regular review and updates, provide communication of the code and expectations, conduct employee training, encourage positive ethical culture, and leadership that supports and exemplifies the expected behaviors defined in the code of ethics. These research findings may support the implementation and administration of codes of conduct in the construction industry to improve overall ethical conduct and increase trust in the industry.

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Appendix: Interview Questionnaire

1. Are you over 30 years old? Will you share your exact age?
2. What is your title?
3. What level of management do you report to in your company?
4. Are you employed with a General Contractor, Subcontractor, or other industry classification (please explain and provide specialty)?
5. Do you belong to any professional associations or unions?
6. In what state is your company located?
7. How many years have you worked in the construction industry?
8. Do you know the approximate annual sales volume of your company?
9. What size projects, in gross billings, do you typically manage?
10. How many projects do you manage at a time?
11. If more than one project, who supervises your project and make decisions in your absence?
12. Are all your projects typically the same size?
13. Do you typically work in a field office onsite or main administrative office?
14. Please describe your role in your company.
15. Tell me about the types of decisions you make as part of your daily responsibilities.
16. Are you aware of your company or professional organization’s published code of ethics?
17. Does your company communicate updates to the published code of ethics?

18. How are updates distributed and with what frequency?
19. How often do you refer to your company or professional organization's code of ethics?
20. How do PMs and superintendents weigh personal ethics versus professional ethical code obligations?
21. In what ways does the organizational published code of ethics guide your professional decision-making processes?
22. In what ways does your company support the efforts of employees to adhere to professional or corporate codes of ethics?
23. In what ways could your company support employees' ethical decision-making?
24. What strategies could managers in the construction industry use to reduce unethical behaviors based on your professional experience?
25. What barriers do you see to implementing your strategic suggestions in organizations in your industry?
26. How could organizations in your industry overcome the barriers you described?
27. What advice do you have for new PMs and superintendents in the construction industry regarding ethical decision-making?