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Strategies to Mitigate Contractor Safety Noncompliance in the Construction Industry

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Walden University

College of Management and Human Potential

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Sallieann Wilson

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2025

Abstract

Strategies to Mitigate Contractor Safety Noncompliance in the Construction Industry

by

Sallieann Wilson

MBA, Averett University, 2011

BS, C.W. Post College, 1982

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

August 2025

Abstract

Some contract managers lack clear communication channels with their contract stakeholders on construction safety noncompliance, which is a well-known industry challenge. Stakeholders, contractors, and workers of construction companies need to communicate more effectively with contract managers to ensure job-related injuries are minimized. Grounded in contingency theory, the purpose of this qualitative pragmatic inquiry research study was to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. Ten contract managers with more than 5 years of experience in contract or construction management participated in semistructured interviews guided by an interview protocol. Data were analyzed thematically, revealing five strategies: (a) developing and implementing risk management plans and workplace safety policies, (b) increasing supervision through monitoring, compliance audits, and safety inspections, (c) effective communication and documentation about safety procedures and best practices. In addition, the themes included (a) conducting training on safety and promoting a strong safety culture, and (b) promoting ethical practices and implementing clear policies to prevent unethical conduct, such as bribery. A key recommendation is that to mitigate contractor safety noncompliance with awarded contracts, construction firms should promote ethical practices and implement clear policies against all forms of unethical conduct. The implications for positive social change include the potential for a reduction of job-related injuries among employees and the local community workforce in the construction industry.

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Dedication

I dedicate this study to God Almighty, my brother Chester A. A. Wilson Jr., my nephew Chester A. A. Wilson III, Brenda D. Monk and Miriam D. Brooks who supported me in continuing my pursuit of a doctoral education and encouraged me to believe that I can accomplish anything through God's guidance and hard work. This is also dedicated to my mother, Rhoda Wilson, a special education teacher, who would say, "Don't talk about it, just do it," would have loved to have seen me accomplish this extraordinary longing.

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Section 1: Foundation of the Study

The construction industry generates substantial profits and contributes to economic growth, but it also poses significant safety risks in the United States (US) and abroad. Historically, workers in the construction industry have faced hazardous conditions, resulting in numerous accidents. (Luo et al., 2021). The members of the US 2024 Construction Safety Week celebrated its 10th Anniversary, partnering with the US Occupational Safety and Health Administration (US OSHA) (OSHA, 2019). OSHA's National Safety Stand-down team introduced safety-focused activities aimed at promoting worker safety and wellness prevention measures related to falls in construction, which is the primary cause of injuries to workers (OSHA, 2024). Construction safety demands continuous attention and proactive measures globally.

Construction contracts carry various safety risks. Considering the unique characteristics of construction projects, these risks can include prolonged construction schedules, complex work processes, extensive outdoor and elevated activities, and a significant level of worker exposure (Wang et al., 2024). As a result, the construction sector experiences a high rate of production safety incidents, resulting in a substantial number of fatalities (Men, 2022). The issue of construction safety is unavoidable, and safety management is becoming increasingly important. In addition, construction accidents have negative effects on construction companies and the sector overall, such as lower productivity and higher financial obligations (Xu & Xu al., 2021). Construction accidents create stress for workers and their families.

Severe casualties can result from accidents in the construction industry, and these accidents also have societal implications. In many nations worldwide, the construction industry is a high-risk field (Xu & Xu, 2021). Fatal accidents in the construction industry pose a significant obstacle to the development of a peaceful and amicable community (Brown et al., 2021). Improving the safety efficiency of the construction sector is vital if the goal is to minimize tragic accidents and encourage safe production in construction projects. Construction, safety, and success encompass the actions of every individual, including the things they observe, communicate, participate in, and perform daily. Every individual on the construction contract or site, irrespective of their role, has a responsibility for safety. Everyone is responsible for taking the initiative regarding safety.

Background of the Problem

Contractor safety is an important element of any construction project and contract. The construction industry plays a pivotal role in economic development and societal progress, significantly impacting infrastructure growth and job creation (Fei et al., 2021). Construction contracts are, therefore, central to the industry's functioning. However, with construction comes the persistent issue of contractor safety noncompliance, which poses a serious safety challenge to contractors. Contractor safety noncompliance refers to instances where contractors fail to adhere to established safety regulations and protocols, resulting in accidents, injuries, and sometimes fatalities (Khan et al., 2023). Contractor noncompliance impacts project timelines and budgets, as well as employee wellness.

Problem and Purpose

The general business problem was that contractor noncompliance with construction-awarded contracts can affect safety performance. The specific business problem is that some contract managers lack strategies to mitigate contractor safety noncompliance on awarded contracts. I explored contract managers' strategies to mitigate contractor safety and non-compliance issues in construction contracts awarded to contractors. The qualitative pragmatic inquiry research design was the appropriate research method. My research focused on the subjective experiences of individuals, including contract managers, contract officers, contractors, and subcontractors with expertise in contracts or construction contracts. I selected the participants from various sources, including my professional network and social media.

The purpose of this qualitative pragmatic inquiry research study was to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. Managers who have successfully applied strategies to mitigate noncompliance in construction contracts, which impact safety performance, have seen improvements in overall project outcomes and a reduction in on-site safety incidents (OSHA, 2024). I explored and identified the contract manager's strategies to provide actionable insights for improving safety compliance in the construction industry.

Nature of the Study

The research method and design for my study was a qualitative pragmatic inquiry research project exploring strategies some contract managers use to manage contractor safety noncompliance with construction-awarded contracts. I used a qualitative, pragmatic inquiry approach to accommodate various communication platforms, including Zoom, Teams, and Facebook, by considering the structure rather than individual participants (Kelly & Cordeiro, 2020). I chose the qualitative pragmatic inquiry study method as the most suitable approach for this study. This is because a qualitative methodology enables the critical evaluation of existing noncompliance or risk disruptions, review of internal and external strategies, and observation of best practice methods from the perspective of participants (Myeza et al., 2021; Ramanadhan et al., 2021). I did not choose the quantitative methodology because it aligns with researchers who identify the causes and effects of techniques, strategies, and assumptions within relationships (Yin, 2017).

I did not primarily focus on identifying the cause-and-effect relationships among strategies, techniques, and assumptions. The mixed-methods approach includes qualitative and quantitative methods (Taherdoost, 2022). I did not choose the mixed method because the quantitative element did not align with my study goals. A researcher using the qualitative method can explore the perspectives of others, rather than prioritizing concerns and interpreting observations based on participants' perceptions, which aligns with the purpose of the proposed study (Tomaszewski et al., 2020). Qualitative research is the appropriate method for exploring strategies for contractual

noncompliance in construction among contractors and to study noncompliance issues (Tomaszewski et al., 2020). Therefore, I chose the qualitative method to explore strategies for contractual noncompliance in construction among contractors and to study noncompliance issues because data collection using semistructured interviews allows me to collect data from the perspectives of the participants.

I employed pragmatic inquiry design in their study. The pragmatic inquiry approach simplifies the use of open-ended interview questions and data-gathering tools for researchers, enabling a comprehensive understanding of the research problem and aligning with the study's purpose (Lim, 2024). The design entails examining a research phenomenon by utilizing various data sources in a setting where the distinction between the phenomenon and its context is ambiguous. (Kelly & Cordeiro, 2020). The data collection in this research approach entailed analyzing the context and process of the identified research phenomenon. Qualitative pragmatic inquiry research offers value to researchers in understanding how and why contemporary phenomena occur within their real-life contexts (King, 2022). For my study, this research design was appropriate as it allowed me to gain significant knowledge about conducting contractual noncompliance research in contexts. Additionally, the qualitative pragmatic inquiry research approach enables the researcher to ask participants how and why they respond to open-ended questions, effectively capturing their subjective experiences (Kelly & Cordeiro, 2020). This approach was practical for providing in-depth knowledge about a topic and was suitable for identifying the causes of contract deviations from primary sources.

Research Question

The research question guiding my qualitative pragmatic inquiry study was: What strategies do some contract managers use to mitigate safety noncompliance on awarded contracts?

Interview Questions

The following interview questions were used to guide and answer the research question of the study:

1. What do you consider as factors of contract noncompliance?
2. What contract noncompliance issues are most prevalent?
3. What contract noncompliance issues are most challenging?
4. What construction contract processes and strategies to mitigate noncompliance?
5. What construction contract processes and strategies have you used to mitigate noncompliance?
6. What improvements have you experienced using these processes and strategies?
7. What else can you share regarding processes and strategies to avoid noncompliance that I did not ask?

Conceptual Framework

The conceptual framework of the study reflected on Hersey and Blanchard's 1969 contingency theory. Hersey and Blanchard's contingency theory posited that no singular best way exists to organize a corporation, emphasizing the importance of adapting management styles based on situational factors (Fiedler, 1964). Hersey and Blanchard's approach suggested that management effectiveness depends on the context, and

employing a rigid management style may not appear optimal in the long term (Sulich et al., 2021). From a business perspective, using a contingency approach as a problem-solving tool enables researchers to understand and address issues in a manner that considers the specific environment and context in which they arise (Sulich et al.). I used Hersey and Blanchard's 1969 contingency approach for the conceptual framework of my qualitative pragmatic inquiry study. The contingency approach, also known as the situational approach, includes the significance of considering contextual factors. In the context of construction contracts, situational factors play a crucial role. Therefore, my qualitative pragmatic inquiry reflects on exploring Hersey and Blanchard's 1969 contingency theory as the conceptual framework.

Operational Definitions

I define the construction terminology used in my research as follows:

Construction Focus Four: The four primary hazards defined by OSHA (Occupational Safety and Health Administration) in the construction industry include falls, struck-by incidents, electrocutions, and caught-in/between scenarios, which are leading causes of fatal accidents (BLS, 2019).

Contractor Safety Noncompliance: Contractor safety noncompliance refers to instances where contractors fail to adhere to established safety regulations and protocols, resulting in accidents, injuries, and sometimes even fatalities (Khan et al., 2023).

Fatal Falls: Fatal falls involve incidents of falls from heights, which account for a substantial portion of fatalities in the construction industry, particularly within the *Construction Focus Four* (Brown et al., 2021).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are statements accepted as truth during the research process by a researcher to facilitate the study (Corbin & Strauss, 2008). I assumed that having prior experience in the construction industry would equip the participants to answer the interview questions knowledgeably. A second assumption was that selecting individuals with at least 5 years of contractor experience in the construction industry would yield authentic, substantial answers to the interview questions in the study.

Limitations

Silverman (2016) defined limitations as potential weaknesses that the researcher cannot control. Limitations refer to the shortcomings, conditions, or influences that the researcher cannot control, which restrict methodology and conclusions. (Levitt et al., 2021). The varying levels of construction experience among participants limited the study's findings in securing government support. A second limitation was that the participants provided sufficient data to identify themes and construct general statements regarding strategies for addressing contractual noncompliance in construction settings. The results of the research depend on the accuracy of the information that participants provide while sharing their experiences.

Delimitations

The researcher determines the delimitations of the study based on its scope, ensuring that the research remains feasible (Coker, 2022). In this study, the delimitations include focusing on decision-makers within a single body, the voluntary nature of

participant involvement, limitations because of the small sample size, the subjective nature of participants' experiences, and time constraints for interview sessions. However, the study included volunteers as participants. The small sample size of ten participants posed as a delimitation. The participants did not completely represent the general characteristics of all contract managers. The small sample size in the research limited my ability to generalize the findings to other studies or groups. Additionally, the location setting at a facility in the Southeastern region of the US, the participant population, and the sample size narrowed the study's scope.

Participating in the construction contract, managers shared their experiences. The subjective views of participants may differ based on their experiences (Shipp & Jansen, 2021). The final delimitation of the study was time constraints. Time constraints are a delimitation imposed and introduced by the researcher to conduct a feasible study within a specified time. In the completed research, the researchers set a time constraint, allotting a fixed, limited amount of time for semistructured interview sessions to obtain details from the participants.

Significance of the Study

The study's results may help raise awareness among contract professionals, contractors, subcontractors, and contract agencies about the importance of safety and wellness on the job, providing management with a deeper understanding of construction contract processes and strategies. In addition, the study's results may provide valuable insights into mitigating noncompliance among contractors, offering guidance on construction contract safety processes and strategies employed by contract managers.

Limited attention regarding safety noncompliance on awarded contracts exists, especially regarding the safety issues that contractors and subcontractors face in their awarded contracts (Kshaf et al., 2022) Additionally, the researcher may contribute to filling existing gaps in attention towards safety noncompliance in awarded contracts, thereby addressing crucial research needs and augmenting the body of knowledge in the field. The findings may inspire guidelines and training materials to ensure a skilled and equipped workforce in construction settings, as well as inform employee training and development literature related to the construction industry. The results of this research may serve as a foundation for advancing future studies in construction safety.

Contribution to Business Practice

The findings of the qualitative pragmatic inquiry study may contribute to business practices relating to the management and hiring of knowledgeable contract professionals, ensuring that they are well-versed in safety compliance processes and strategies. The findings could help managers in addressing safety and performance noncompliance issues effectively in awarded contracts. In addition, the study's findings may also enable contractors and workers to communicate more effectively with other construction businesses. Identifying strategic thinking and improving business practices can enhance collaboration in mitigating contract noncompliance.

Implications for Social Change

Enhancing understanding of the processes and strategies to ensure adherence to safety standards could lead to improved performance and safety outcomes, positively contributing to the well-being of individuals working in the industry. Increasing awareness of construction contracts and how to enhance safety compliance in the field may contribute to positive social change, as evidenced by a reduction in on-the-job injuries. On-the-job injuries often result in loss of quality of life, pain, suffering, and other intangible consequences of the injuries, which impact the wellbeing of society (Tompa et al., 2021). A reduced number of on-the-job injuries could benefit society by ensuring that workers return home to their families healthy and in the same condition as at the start of the workday.

A Review of the Professional and Academic Literature

The purpose of the qualitative pragmatic inquiry research study is to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. I explored the absence of safety processes and strategies within construction contracts for effectively managing noncompliance by contractors who have been awarded contracts. I addressed the lack of tools for insight into safety strategies within construction contracts. I aimed to contribute new knowledge to policymakers and construction management teams, with a particular focus on employee safety. I outlined specific and effective safety processes and strategies to integrate into awarded contracts. Consequently, I devised a plan to augment comprehension of strategies and processes aimed at mitigating noncompliance and enhancing safety performance. This endeavor is

to meet the needs of construction employees by identifying and developing effective safety compliance practices and strategies.

The literature review section describes the research's literature search and strategy regarding safety noncompliance in the construction sector. The conceptual framework I chose for my study is Hersey and Blanchard's 1969 contingency theory. The following subsections include a discussion on the causes of safety noncompliance in construction, the safety performance of construction projects, and the relationship between safety performance and project costs. Additionally, I reflected on the relationship between safety and activity delays, as well as safety compliance processes and strategies for enhancing safety performance. I concluded the section by integrating the findings and outlining essential considerations for the study. Finally, I summarized the literature review, highlighting safety compliance processes and strategies in the construction field that could enhance safety performance.

Literature Search Strategy

The literature search strategy for the study involved using secondary data sources, including textual analysis of records, written accounts, and journal entries, to ensure a comprehensive exploration of the topic. The research reflected on multiple databases, including ABI/INFORM Complete, Google Scholar, ProQuest, Academic Search Premier, Business Source Premier, ScienceDirect, and Emerald Management Journals, to gather relevant journal articles. The primary terms and combinations of search terms related to construction contracts include *Contractors Performance Assessment Reporting System (CPARS)*, *safety compliance*, *causes and effects of safety noncompliance*,

contractual noncompliance, and strategies for contractual compliance. Additionally, the terms include safety requisites, contractual nonconformities, and safety practices and strategies in construction.

The table below shows the statistics of the references used:

Table 1

Reference statistics

Statistic	Value
Total number of references	137
Total number of references used that are 5 or less years old	121
Percentage of references that are 5 or less years old	88.3 %
Total number of peer-reviewed references	125
Percentage of peer-reviewed references	91.2%

Application to the Applied Business Problem

The purpose of this qualitative, pragmatic inquiry was to explore contract managers' safety compliance processes and strategies for mitigating safety and performance noncompliance in construction projects. By adopting a pragmatic approach, the researcher can offer practical insights that inform administrative processes within the construction industry (Kelly & Cordeiro, 2020; King, 2022). Using qualitative methods guided by pragmatic principles, I attempted to capture the nuanced perspectives of contractor managers and uncover effective strategies for mitigating safety noncompliance. The framework for my research is Hersey and Blanchard's 1969 contingency theory, which is in the current section.

Conceptual Framework

The study aligns with Hersey and Blanchard's contingency theory, developed in 1969, which acknowledges that no single practical approach exists for determining an effective management and leadership style. Hersey and Blanchard (1969) suggested that management is situational, implying that leaders must adapt their behavior to fit the needs of the context and the conditions in which they operate. Hersey and Blanchard emphasized the importance of being adaptive and accommodating in managerial intervention, especially in volatile environments such as construction contracts. The use of the theory in the study is appropriate because, in the construction industry, the context is constantly changing and varies with each project. Factors such as the size, scope, stakeholder interests, and the regulatory context of the project can influence the effectiveness of various management techniques. Consequently, the objective of the study is to understand how, from the perspective of construction contract managers. Management behavior is a situational variable, as outlined by Hersey and Blanchard's contingency theory, to establish what constitutes effective management in various construction projects.

I explored the potential of applying Fiedler's contingency model in this study, a model developed in 1964. Like Hersey and Blanchard, Fiedler argued that situational factors play a crucial role in the efficiency of leadership (Fiedler, 1964). However, Fiedler is less flexible, as he assumed that the effectiveness of a leader depends on their inherent leadership style and the nature of the situation (Wararatchai et al., 2023). Fiedler's model categorizes situations according to leader-member relation, task,

position, and power, and posits that leadership should complement the inherent nature of the problem (Fiedler, 1964). Compared to Hersey and Blanchard's contingency theory, Fiedler's model incorporates some understanding of the correlation between leadership style and situational favorableness. However, it is somewhat rigid. Given the unpredictable and stochastic nature of construction projects, I considered a more adaptable framework.

Therefore, I selected Hersey and Blanchard's contingency theory for this study because it offers a dynamic and adaptable approach to leadership, compared to Fiedler's original model. In the context of construction management, where projects are variable in scope, complexity, stakeholder interests, and regulatory frameworks, Hersey and Blanchard's theory emphasizes the need for leaders to adjust their behavior to suit specific situational demands (Hersey & Blanchard, 1969). Flexibility is crucial in the construction industry, where unforeseen challenges arise, requiring managers to act responsively and adaptively in their leadership approach. Fiedler's model reflects how inherent traits and situational favorableness influence leadership effectiveness. (Fiedler, 1964). However, Hersey and Blanchard (1969) argued that leaders can actively modify their leadership style based on the maturity and competence of their team, as well as the specific requirements of the project. Adaptability is essential in a field as dynamic and unpredictable as construction, making Hersey and Blanchard's framework suitable for understanding how managers can effectively navigate the constantly changing variables that impact construction projects.

In contrast, Fiedler's contingency model, valuable in linking leadership style to situational favorableness, describes how leaders have fixed styles and that the situation must align with the leader's inherent traits for effective management (Fiedler, 1964). This rigid approach is less applicable in the construction industry, where the ability to adapt leadership strategies continuously is crucial. Construction projects encounter fluctuating conditions, including varying project sizes, shifting timelines, evolving stakeholder interests, and unpredictable external factors, all of which necessitate leaders to act versatile and responsive (Wang et al., 2024). Hersey and Blanchard's theory accommodates the realities by allowing managers to adjust their leadership style continuously based on the situational needs of the moment, making it an effective model for analyzing leadership within the ever-changing landscape of construction management.

Themes Identified in the Published Literature

Professionalism in Construction

I explored the literature on the implementation of professional ethics within the construction segment. According to Chadwick (1998), the concept of professional ethics pertains to the ethical dilemmas that arise from the specialized knowledge acquired by professionals and the appropriate governance of that information when delivering services to the public. According to Williams (2021), professional ethics encompasses not only the actions that professionals should engage in within their professional domain but also extends to the behavior in their interactions. Construction company managers can instill a sense of professional ethics through various means, such as implementing clear policies against bribery and corruption, promoting transparent communication

channels, and conducting regular training on ethical decision-making for all employees. The decision-making process of construction practitioners within a contractual setting has ethical implications and societal ramifications (Marabelli et al., 2021). The pivotal role of ethical decision-makers in construction practices demonstrates that the choices made by professionals extend beyond the immediate context. Decision-makers carry significant ethical weight and contribute to the broader societal impact of construction activities.

Understanding the ethical dimensions of decision-makers in the field is not only crucial for individual practitioners but imperative for promoting responsible and socially aware practices within the construction industry. Kuoribo et al. (2021) argued that establishing ethical norms within the construction sector is essential for cultivating client trust and confidence. Implementing cultural systems for ethical practices is essential. Professional ethics in the field of construction engineering provides a foundation for making moral assessments about the conduct and performance of professionals. (Lukhele et al., 2023). Companies involved in construction projects must embrace professional ethics throughout the entire project lifecycle.

Safety

Construction managers who deviate from or ignore safety procedures put their employees at risk of personal injury. Although safety rules pose well-known risks for non-compliance, including a higher chance of accidents, injuries, and possible legal repercussions, construction sites often fail to comply adequately (Mutikanga et al., 2022). To develop effective strategies for mitigating safety non-compliance, managers must understand the root causes of non-compliance with safety requirements. Mutikanga et al.

(2022) identified challenges in construction and contract management within engineering, procurement, and construction (EPC) projects. Initially, inadequate training and awareness of managers contribute to safety noncompliance within the construction industry. Despite their expertise in various aspects of construction projects, construction professionals may not understand the potential consequences of non-compliance with safety practices (Saleem et al., 2022). The lack of awareness often leads to disregarding safety measures, as individuals may underestimate the risks associated with non-compliance. Safety training programs often include regulatory requirements and basic safety protocols, potentially falling short of conveying the real-life implications of neglecting safety guidelines for individuals and the overall contract (Peñaloza et al., 2020). When construction professionals lack complete information regarding the risks and expenses associated with safety noncompliance, they may unintentionally prioritize other project goals over safety precautions.

Construction contracts are complex, involving many tasks and processes. Without thorough training that highlights the critical role of safety in the overall project, individuals may not fully appreciate the importance of adhering to safety measures (Homann et al., 2021). Consequently, team members may need to compromise safety to meet project deadlines, adhere to budget constraints, or address unforeseen challenges. Secondly, a strong safety culture reflects an environment where safety is paramount and integrated into daily operations. In contrast, a weak safety culture can undermine compliance with safety regulations and guidelines (Noor et al., 2024). In the construction industry, where the work environment is hazardous and demanding, workers must

prioritize safety (Nordin et al., 2021). A robust safety culture implies that everyone involved with the contract, from top management to frontline workers, prioritizes safety in all activities and decisions. Safety culture is a collective mindset that everybody shares responsibility for safety, and safety is not negotiable.

In a weak safety culture, managers often overlook the importance of safety. This lack of emphasis manifests in various ways; for example, managers usually prioritize other factors in decision-making processes, particularly when they compete with project deadlines, cost considerations, or production goals. Yazdi et al. (2020) indicated that a lack of safety attention could compromise safety to achieve other contract goals. Insufficient resources are another inadequate allocation of resources, whether financial, time, or workforce, towards safety initiatives, reflecting a weak safety culture (Claxton et al., 2022). When leaders fail to provide adequate funding and support for safety, managers often neglect to comply with safety measures (Zara et al., 2023). In a weak culture, communication about safety may appear lacking, unclear, or inconsistent, leaving employees unaware of the necessary safety protocols.

Understanding the causes behind what is essential for developing targeted strategies leading to a culture of safety compliance within the construction industry. By addressing inadequate training, promoting a robust safety culture, managing time pressure effectively, and enforcing strict compliance, construction managers can reduce incidents of safety noncompliance. Additionally, integrating the insights into tailored training programs and awareness campaigns can enhance the overall safety consciousness among construction professionals, ultimately leading to a safer work environment.

Inadequate Training and Awareness

Despite the well-known implications of non-compliance with safety rules, a low level of safety compliance exists on construction sites. Khalef et al. (2021) addressed the low level of safety compliance, discussing risk identification and common risks in the construction industry. Inadequate training and awareness are causes of safety noncompliance within the construction industry (Y. Liu et al., 2023). Despite their expertise in various aspects of construction projects, construction professionals may not understand the potential consequences of non-compliance with safety practices (Saleem et al., 2022). The lack of awareness often leads to disregarding safety measures, as individuals may underestimate the risks associated with non-compliance (Samanta & Gochhayat, 2023). Safety training programs often focus primarily on regulatory requirements and basic safety protocols. Safety training programs may often fall short of conveying the real-life implications of neglecting safety guidelines for individuals and the overall project (Peñaloza et al., 2020). When leaders do not inform construction professionals about the potential dangers and costs associated with safety noncompliance, they may inadvertently prioritize other project objectives over safety precautions.

Moreover, construction contracts are complex, involving many tasks and processes. Without thorough training that highlights the critical role of safety in the overall contract, individuals may not fully appreciate the importance of adhering to safety measures. Consequently, unskilled individuals may compromise safety to meet project deadlines, adhere to budget constraints, or fail to address unforeseen challenges (Oswald et al., 2022). Understanding causes is pivotal for developing targeted strategies to

strengthen a culture of safety compliance within the construction industry. By addressing inadequate training, promoting a robust safety culture, managing time pressure effectively, and enforcing strict compliance, construction managers can significantly reduce incidents of safety noncompliance. Additionally, integrating the insights into tailored training programs and awareness campaigns can enhance the overall safety consciousness among construction professionals, ultimately leading to a safer work environment.

The Relationship Between Safety Culture and Project Costs in Construction

Understanding and fostering a strong safety culture is crucial for ensuring safe performance in construction projects. Stemn et al. (2019) emphasized the importance of safety culture maturity and safety performance. The concept of safety culture has multiple definitions, yet a recurring theme in these definitions highlights the normative beliefs and behaviors associated with safety (Yorio et al., 2019). Kalteh et al. (2019) defined safety culture as a societal way of aligning values and beliefs about health and safety. The perspective highlights that safety culture is about collective practices rather than abstract values. Practical understanding aligns with the view that safety culture is specific to a particular group, and practices may not seem to apply to another group. (Sujon & Dai, 2021). Evaluating safety culture may involve subjectivity or objectivity (Stemn et al., 2019). The objective approach aligns with tangible, concrete indicators, such as accident reports and reviews, which are visible to both insiders and outsiders of an organization.

Safety Culture

The subjective approach involves surveys in which members express their opinions on abstract, intangible indicators, such as behaviors (Stemn et al., 2019). Safety culture requires considerable attention, especially in safety-critical industries where organizations strive to establish a robust safety culture. (Ylönen & Björkman, 2023). Scholars emphasized the positive influence of a strong safety culture on safety performance, which leads to reduced accidents and disasters. Societal entities cultivate a robust safety culture, generally encountering lower accident rates compared to entities lacking such a culture (Felix & Raphael, 2024). Improving safety performance through a focus on safety culture emphasizes the impact of social forces within construction on the safety concerns of its members (Sharman et al., 2020). The studies underscore the importance of safety culture in industries where safety is critical. Researchers use the subjective approach, which involves surveys and personal opinions, to assess abstract aspects such as behaviors. Stemn et al. (2019), and Ylönen and Björkman (2023) provided credibility to the discussion on the relevance of safety culture. The researcher further highlighted the positive impact of a strong safety culture on safety performance, as evidenced by a reduction in accident rates (Arzahan et al., 2022). The numerous authors cited in this paragraph suggested, that construction contracts with a robust safety culture are likely to have better safety outcomes.

A direct and significant relationship exists between safety performance and project costs in the construction industry. The uniqueness of construction lies in its hazardous nature and complexity, stemming from the range of tasks that involve working

in adverse situations and professionals relying heavily on heavy machinery (Bugalia et al., 2022; Khalid et al., 2021). According to Mohammadi et al. (2018), construction workers face hazardous working conditions, such as working at heights or becoming entangled in machinery and equipment at job sites, which often lead to accidents. The notorious nature of the construction industry significantly affects productivity, which managers evaluate in terms of cost. (Khalid et al., 2021). Alkaissy et al. (2020) analyzed safety data over the past two decades and noted that failing to model safety risks leads to incidents, which in turn lower productivity. Conversely, investments in comprehensive safety measures translate into cost savings by preventing accidents, reducing insurance premiums, and mitigating legal repercussions (Ylönen & Björkman, 2023). Managers with a strong safety culture led to a safe working environment and overall cost efficiency by preventing expenses associated with accidents and their consequences (Sharman et al., 2020). Therefore, integrating safety culture effectively within construction projects is a matter of safety and astute financial decision-making that positively impacts the project's profitability and sustainability.

Effective safety compliance processes and strategies are crucial for improving safety performance within the construction industry. Incorporating transformational leadership into safety compliance strategies is crucial for establishing a widespread culture of safety adherence among construction workers and contractors. Some researchers emphasized the substantial impact of transformational leadership principles on effectively deploying safety compliance strategies, which leads to a safer work environment (Zara et al., 2023). Utilizing time-lagged data highlights the intricate

relationship between transformational leadership and safety compliance, revealing a dual effect in which transformational leadership has positive and negative influences on safety compliance (Hong et al., 2023). Safety compliance has a positive impact on nurturing a sense of obligation among employees towards their leaders and instilling a commitment to meeting safety expectations.

There are negative impacts potentially encouraging a greater tolerance for safety risks can have negative consequences for employees. Understanding dual nature is critical for crafting tailored safety interventions and practices within construction contracts. By embracing transformational principles, organizational leaders can inspire employees to prioritize safety, aligning their actions with safety objectives. Leaders can harness key aspects, such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, to cultivate a culture that prioritizes safety (Xia et al., 2020). Managers inspire employees to prioritize safety by embracing transformational principles. They harness key aspects such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration to cultivate a safety-oriented culture.

The safety-oriented culture can lead professionals to consider the importance of leadership in shaping safety culture and compliance in the construction industry. Leaders demonstrating idealized influence can lead by example, prioritizing safety in their actions and decisions, and underscoring the importance throughout the process. (Pearson, 2020). Leaders can use inspirational motivation to communicate a compelling vision of a safe work environment, rallying employees toward a shared safety goal (Zhang et al., 2022).

Leaders who create intellectual stimulation encourage innovative problem-solving regarding safety challenges and inspire a proactive approach to safety compliance (Oswald et al., 2022). Individualized consideration entails managers recognizing and addressing each employee's specific safety needs and concerns, ensuring a personalized approach to safety. Furthermore, a high-level perceived safety climate serves as a beneficial contingent factor, amplifying the positive impact of transformational leadership on safety compliance (B. Liu et al., 2022). Managers can capitalize on the insight by cultivating a strong safety climate through clear safety policies, proactive safety measures, and consistent communication regarding safety expectations.

Integrating transformational leadership principles into safety compliance strategies empowers organizational leaders to cultivate a culture where safety is a shared responsibility and a top priority. Integration involves leveraging the positive aspects of the leader to inspire and engage employees, complemented by a conducive safety climate. A manager's integration serves as an asset for enhancing safety compliance and supporting employees who prioritize safety as paramount in the workplace.

Enhancing Construction Site Safety Culture Through Employee Perceptions

To reduce workplace accidents, leaders must create a robust safety culture, which is crucial for promoting safe work environments within the construction industry. Construction firm leaders' primary concern is ensuring the safety of their personnel by effectively mitigating workplace accidents and creating injury-free building sites (Albeaino et al., 2022). Safety culture is a component of organizational culture that centers on safety and health concerns. Safety culture reflects the conduct and mindset of

employees towards safety inside an organization (Patel et al., 2021). Establishing a safety culture inside an organization is contingent upon the dedication of management and employees to prioritize safety (Albeaino et al., 2022). An inverse relationship exists between the incidence of accidents and injuries in the construction industry and the presence of a strong safety culture. In the context of construction sites, research results from observations indicate that injuries often arise from a deficiency in a strong safety culture, leading to safety breaches by employees.

Safety infractions occur due to disparities in safety attitudes among personnel at different hierarchical levels within the organization. According to Chan et al. (2023), employees' perception of safety within an organization influences their behavior. Employees' perspective can indicate an individual's assessment of adherence to different elements of the safety management system (Ahamed & Mariappan, 2023). To enhance safety culture and ensure employee adherence to safety protocols, leaders and managers must examine the safety perspectives of individuals at different hierarchical levels on construction sites. Several studies by Stackhouse and Turner (2019) and Newaz et al. (2019) examined personnel operating at a specific organizational level. The data results from investigations at a single level might not adequately convey the actual state of a safety culture in construction sites.

Several researchers examined personnel's perceptions at different hierarchical levels about safety culture in construction projects within the United States (Ahamed & Mariappan, 2023). Thus, developing a constructive safety culture is crucial for mitigating accidents caused by hazardous behaviors, given its significant impact on safety. Safety

policies play a crucial role for leaders in ensuring the efficacy of safety management systems within construction projects. Organizational leaders primarily formulate safety-related policies. Safety policies play a crucial role for leaders in determining the level of safety within a specific business (Hu, 2021). Adequate safety measures play a crucial role in managing safety in construction (Al-Bayati et al., 2019). The construction industry faced high rates of injuries and fatalities for several decades.

Implementing safety measures encompasses various techniques and protocols for employees at different hierarchical levels within the construction organization. According to Ahamed and Mariappan (2023), careful adherence to safety practices has the potential to avert 98% of accidents on construction projects. In the current context, the term 'adherence to safety' refers to the essential actions that employees at various hierarchical levels within an organization must undertake to enhance the overall safety of the workplace (Kalteh et al., 2019).

The successful implementation of construction safety protocols requires a precise distribution of duties among top and middle managers. The structure should facilitate the development and implementation of policies while aligning with effective communication and coordination throughout the organization. During the implementation of construction safety protocols, managers assign specific duties and positions to employees at various hierarchical levels (Kalteh et al., 2019). Within an organizational context, the primary responsibility of top management is to develop and establish policies about workplace safety and health. Conversely, middle managers are responsible for implementing and executing policies throughout the various stages of a project (Yang et

al., 2023). The positions facilitate communication between executives and supervisors in the workforce.

The importance of complying with safety guidelines in construction lies in reducing hazards. Mistakes are the outcome of complex interplays rather than standalone elements. Workers must comply with the safety protocols outlined by their organization (Al-Bayati et al., 2019). At the organizational level, personnel across various hierarchical stages can effectively identify and mitigate errors throughout task execution levels (Lambers et al., 2023). Ahamed and Mariappan (2023) asserted that accidents result from the complex interaction of various causes rather than from a single cause. Winge et al. (2019a) suggested that incidents arise from the interaction of multiple factors, rather than stemming from human or technical mistakes. The authors identify errors and violations as common contributing factors to the conditions that lead to incidents.

Leaders must understand that the complex reasons for accidents in the construction industry require an examination of three specific levels of factors: immediate, shaping, and originating, each of which has a significant effect on workplace safety. A latent condition, though not directly causing accidents, significantly influences their occurrence and impact (Winge & Albrechtsen, 2018; Winge et al., 2019b). Latent conditions in accident causation include underlying, often hidden factors, such as inadequate safety policies and insufficient training that may not directly cause accidents but significantly influence their likelihood (Winge & Albrechtsen, 2018). Three distinct factors lead to the occurrence of accidents. Itam et al. (2023) indicated that accidents stem from three main components: immediate, shaping, and originating factors.

Immediate factors refer to the actions of workers and are typically the direct cause of an accident. Shaping factors, on the other hand, are the actions of supervisors that influence the immediate factors.

Lastly, the originating factors are the actions of the manager who influence the shaping factors. Al-Bayati et al. (2019) investigated a series of fatal incidents within the construction sector. Al-Bayati et al. noted that numerous investigations do not include the extent to which underlying factors influence immediate factors. Al-Bayati et al. (2019) revealed that the complex layers are at play in accident causation within the construction industry. Al-Bayati et al. (2019) suggested that a restricted focus on the immediate causes of accidents, typically at the worker level, may not encompass key systemic issues at supervisory and managerial levels.

The interactions among employees at various job levels underscore the necessity for a comprehensive accident prevention strategy. This strategy should encompass not only the immediate actions that lead to accidents but also the larger organizational and managerial contexts that influence these actions. Grasping the significance of all three levels of factors in accident causation can guide researchers in developing intricate safety strategies in the construction sector. Kalteh et al. (2019) identified immediate factors in most accident cases, while they found shaping factors in only a few cases, and they did not detect any originating factors. Consequently, emphasizing the significance of the conduct exhibited by employees across different hierarchical positions within the contract plays a crucial role in establishing safety protocols and mitigating accidents (Kalteh et al.,

2019). Accidents occurring on construction sites can result from multiple factors, not just worker actions.

In construction, accidents are a complex framework woven from numerous threads. The threads encompass the immediate factors, such as the behavior of workers on-site, but also extend into the broader domain of important managerial concerns and practices. In addition to immediate factors, such as worker behavior, accidents stem from management-related elements, including an unregulated working environment and organizational shortcomings (Itam et al., 2023). Individuals working in construction quickly recognize and experience the consequences of incidents (Rafique et al., 2021). To solve the problem effectively, organizational leaders should focus on implementing effective management strategies, refining policies, strengthening supervision, and developing comprehensive training programs, rather than placing the blame for human errors entirely on employees.

Human error can significantly contribute to accidents in the construction industry. Researchers struggle to define the actual scope of these human errors because of challenges in collecting and examining empirical data (Newaz et al., 2020). A lack of thorough analysis of human risk factors further compounds the issue. Several study results show that human error is the primary factor in 80% to 90% of accidents within the construction sector. The limited availability of adequate empirical data sometimes hinders the accurate assessment of the underlying causes of human mistakes (D. W. Chan et al., 2022). Additionally, managers lack emphasis on conducting a comprehensive analysis of human risk factors.

Strong evidence of employees' views on the execution of safety protocols is vital for optimizing safety management. Xia et al. (2020) suggested that variations in employee perception at different hierarchical levels regarding the implementation of safety protocols may lead to incidents. Establishing a comprehensive and systematic approach to assess the implementation of safety protocols and ascertain the degree of compliance with measures within the context of a construction project is valuable.

Examining the diverse range of employees' perspectives regarding safety measures can facilitate an understanding of how certain employees perceive the degree of adherence to safety protocols. Examining employees' perspectives on safety measures can facilitate the identification of significant safety concerns at construction sites and enhance understanding of the safety requirements, expectations, and behaviors exhibited by employees across different hierarchical levels within the organization (Xia et al., 2020). Identifying employee perspectives and behaviors regarding workplace safety would prove advantageous in facilitating judgments about safety. Researchers indicated that a lack of comprehensive understanding exists regarding the attitudes of employees at different hierarchical levels towards safety procedures (Al-Bayati et al., 2019). Schopf et al. (2021) and Namian et al. (2021) investigated employees' attitudes at different hierarchical levels about safety. The investigations emphasize the need for further research on previously unexplored aspects. The intricate composition of construction organizations necessitates a comprehensive examination of the perspectives held by personnel occupying different hierarchical positions within the firm.

Transition

The objective of the study was to explore and review the processes and strategies implemented for contractual noncompliance in construction among contractors using a contingency approach as the conceptual framework for improving safety. Section 1 addressed business problems, the purpose of the study, contingency theory, and reviewed the literature about the landscape of construction, a primary industry in the development of civilization for many countries. However, construction delays and safety noncompliance are common occurrences in construction projects, which can result in adverse consequences and penalties. Compliance processes and strategies are essential in the construction industry to enhance safety performance and construction deadlines.

In Section 2, I outlined the research project, which includes the purpose of the study, the research population, and the sampling method used to ensure a randomized and balanced set of unbiased data. Additionally, the following section outlines the study's methodology, including the data gathering process employed in the current study, the recruitment procedures, and the participation of the target population. The following section addresses concerns on tackling issues of trustworthiness of the results of the qualitative research.

Section 2: The Project

In Section 2, I defined my role as the researcher and explained the rationale for selecting the participants, population, and sampling methods. I outlined the methodology for the qualitative pragmatic inquiry and explained the rationale behind selecting the study's research method and design. I concluded Section 2 with discussions regarding the data analysis technique and how I ensured reliability and validity in the study.

Purpose Statement

The specific business problem is that some contract managers lack strategies to mitigate contractor safety noncompliance on awarded contracts. I explored contract managers' strategies to mitigate contractor safety and noncompliance in construction awarded contracts. The study's qualitative pragmatic inquiry research design was determined as the appropriate research method. The research is based on the subjective experiences of individuals including contract managers, contract officers, contractors, and subcontractors with contract experience or construction contract experience. These participants were selected from various sources, including my professional network and social media platform.

Role of the Researcher

In the qualitative pragmatic inquiry, my role was that of the researcher. The researcher is the primary instrument of data collection in a qualitative study (Merriam & Tisdell, 2015). Researchers must clearly define their roles in research, particularly for studies employing qualitative methodologies, to produce credible results. According to Yin et al. (2019), a research technique should incorporate credible interviewing

strategies, accurately transcribe, analyze, and report the data. Yin et al. (2019) emphasized the importance of maintaining high standards in the research process to ensure the reliability and validity of the findings. The primary role of the qualitative researcher is to collect data from credible sources responsibly, to investigate the thoughts of the participants, and to establish appropriate themes from participants' perspectives (Alam, 2021). Therefore, the qualitative researcher must ensure the integrity and validity of the collected data to provide meaningful and accurate insights.

Managing ethical challenges is an inherent responsibility that researchers must navigate diligently throughout all phases of a study, encompassing issues such as anonymity, confidentiality, and informed consent. Potential ethical challenges can occur in research studies (Du & Xie, 2021). Challenges include maintaining anonymity, confidentiality, and obtaining informed consent, as well as my role as the researcher, which may impact other participants and vice versa. The ultimate responsibility of the researcher is to seek the truth (Alam, 2021). The duties of a researcher extend beyond data collection and analysis, venturing into the complex realm of ethics. The journey into ethics involves safeguarding participants' confidentiality, obtaining informed consent, and preserving subject anonymity. The emphasis on accurate data management and ethical considerations indicates that the role of the researcher extends beyond just data collection.

My experience in handling government contracts, particularly those reserved for service-disabled veteran-owned small businesses (SDVOSB), offers practical insights into how qualitative research methods align with the complexities of government

contracting. I work on various government or government-affiliated contracts with specific requirements for service-disabled veteran-owned small business (SDVOSB) contractors. While my experience offers valuable practical insights, it may also introduce a certain degree of bias to my study. My familiarity with SDVOSB contracts could shape my interpretations and expectations, potentially leading to an inadvertent bias. However, I addressed the bias by adhering to rigorous qualitative research standards, such as maintaining transparency, employing reflexivity, and seeking peer review to mitigate the influence of my personal experiences. By adhering to the standard, I aimed to ensure that the data collected, and the themes established accurately reflect the participants' perspectives, and my background is not an influence. Tanioka et al. (2021) agreed that the researcher becomes the instrument in qualitative research and the data collection funnels through the human instrument, rather than through machines or databases. The researcher provided pertinent information to inform the reader regarding the proper measures taken to maintain an ample distance between the lived experiences of the participants and the actual focus of the study.

I identified potential participants through LinkedIn and my professional network. Fortunately, a relationship already exists between the participants, which could generate potential bias in the study. As a countermeasure, I maintained a reflexive journal as part of my research process. The journal served as a repository for my thoughts, feelings, and experiences that arose during the research. According to Creswell and Poth (2018), maintaining a research journal enables researchers to critically reflect on their own biases and assumptions, thereby enhancing the credibility and trustworthiness of the study.

Maintaining the journal helped heighten my self-awareness, particularly regarding any biases I may have that could potentially affect my research. Having a conversation that starts casually is crucial to ensuring a comfortable atmosphere in which participants feel free to build a rapport, express themselves, and provide open responses (Schroeder et al., 2021). A journal helped create a balanced and trustworthy research environment that prioritizes the authenticity and reliability of the participants' contributions.

Formal research frameworks help ensure the safety of research participants. The three fundamental ethical elements for using any human subjects for research are respect for persons, beneficence, and justice (The Belmont Report, 2003). The purpose of the Belmont Report is to ensure that the basic ethical principles serve as guidelines for your research, thereby refraining from any unethical acts that may arise when utilizing human subjects. I obtained Institutional Review Board (IRB) approval prior to commencing the research. I secured the signed consent forms from participants. I ensured participants' privacy and confidentiality. Participants had the opportunity to review their responses, thereby enhancing the credibility of their submissions. I attempted to mitigate bias in my research study. The goal of reducing bias is to ensure that researchers do not strategically pose or deliver questions, allowing participants to disclose the truth without inhibition (Corbin & Strauss, 2008). I used my interview protocol to add consistency to the interview process and minimize bias (see Appendix C).

I asked general questions before specific questions, or unaided before aided questions. I followed an interview protocol (see Appendix C). Utilizing human elements in a research process can introduce bias from either the participant, the researcher, or a

combination of both (Corbin & Strauss, 2008). However, to minimize the potential impact that bias has on qualitative research, a researcher must know what to ask and how to manage the impact of bias (Poerwandari, 2021). To mitigate potential biases, I maintained a reflexive journal to heighten self-awareness and counterbalance any preconceived notions. Additionally, I leveraged existing networks to access the study population while remaining vigilant against biases. An interview protocol is a guide that provides a list of questions and issues that researchers explore during the interview process (see Appendix C). The interview guide ensured that I maintained the same basic lines of inquiry with each participant I interviewed. The guide provides topics or subject areas that the researcher is free to explore, probe, and ask questions to elucidate and illuminate that subject (Patton, 2015). The interview protocol served as a checklist during the interview process to ensure I covered all relevant topics during the session.

Participants

For this qualitative pragmatic inquiry, I selected participants for the study from LinkedIn and my professional network in the southeastern US. I recruited the participants from public forums and social media groups where individuals willingly participated (Brall et al., 2021). I selected ten participants for data collection, with the possibility of increasing the number as needed to achieve data saturation. Participants in the study had at least 5 years of experience in contract or construction management. The eligibility criteria required demonstrated success in safety practices to ensure the inclusion of individuals with a proven track record of fostering a safe construction environment.

Verification occurred through relevant credentials, such as FAC certification, OSHA certifications, safety awards, or other recognized certifications in the contract industry.

The goal is to capture diverse perspectives from individual participants, enabling a robust set of information derived from different viewpoints (Levitt et al., 2021).

Contract managers who are decision-makers in construction settings served as participants, consenting to participate in interviews and volunteering without any expectation of compensation. I selected participants based on their managerial roles with decision-making authority in the construction industry, coupled with over five years of experience in contract or construction contract roles.

The eligibility criteria emphasize demonstrated success in contractual practices, ensuring the inclusion of individuals with a proven track record in fostering a safe construction environment. The pragmatic inquiry approach captured diverse perspectives and align participants with overarching research questions, contributing valuable insights to the study (Levitt et al., 2021). I conducted interviews with the selected participants and provided them with invitations and consent form agreements. I established a working relationship with the chosen participants by making conversations comfortable and building rapport simultaneously.

Research Method and Design

In this study, I employed a qualitative pragmatic inquiry approach. The qualitative research method is well-suited for exploring complex phenomena, allowing for open-ended questions, diverse data-gathering techniques, and semistructured interviews to gain deeper insights into the research topic (Kelly & Cordeiro, 2020). This approach enables

participants to provide rich, detailed accounts of their perceptions and experiences, facilitating a comprehensive understanding of the phenomenon under investigation.

Using the qualitative method allowed for a flexible and iterative exploration of participants' experiences and perspectives, leading to the emergence of new insights and understandings. In qualitative research, the researcher emphasizes the formulation of research questions and the conduct of interviews rather than the use of predefined hypotheses or objectives (King, 2022). The pragmatic inquiry design aligned well with the goals of this study, in which I explored contractor managers' safety compliance processes and strategies for mitigating safety and performance noncompliance in construction projects. By adopting a pragmatic stance, I produced actionable insights that can inform practice and contribute to addressing real-world challenges in the construction industry.

Research Method

The qualitative research method permits researchers to engage in decoding the complexities of human perceptions and experiences. The qualitative research method is the most suitable method available to explore the unknown and provides the exploration into seeking an understanding of a specific case (Fischer & Guzel, 2022). This unique capability positions qualitative research as an optimal instrument for probing into cases of noncompliance in construction contracts. Qualitative research methods originated from social and behavioral sciences: sociology, anthropology, and psychology (Locke et al., 2010). The chief reason for choosing a qualitative research method was the ability of a qualitative researcher to facilitate the collection of perceptions and experiences. Another

reason was my opportunity to probe (help the researcher understand why the selected participant's feel that way) and to reach beyond participants' initial responses and rationales through the dynamic nature to interview or have group discussion. The key reasons integrate quite well with research on safety noncompliance of construction contracts.

Qualitative research provides researchers with the flexibility to explore and interpret cases in depth. This method also enables the discovery of pertinent factors and assumptions that extend beyond the limitations of quantitative methods. Qualitative research encourages researchers to approach cases with autonomy, allowing them to draw assumptions and identify factors relevant to the case, while simultaneously mitigating limitations inherent in highly targeted data collections used in quantitative research (Yin, 2017). The opportunity to observe, record, and interpret non-verbal communication (body language, voice intonation) can produce valuable data that derived from interviews or during the discussion process. Qualitative research relies on a combination of participant observation, open-ended interviews, and historical research. Data analysis conducted concurrently with data gathering, interpretation, and report writing occurs as interviews are ongoing (Dyar, 2021). Qualitative research enables an in-depth explanation of procedures, concepts, and descriptive analysis by ensuring it addresses all probable factors affecting the inquiry (Dyar). A qualitative approach relies on a combination of factors, including participant observation, open-ended questions, and historical research.

Neither the mixed-methods approach nor the quantitative approach was suitable for my study. Mixed method and quantitative research lack rich, descriptive, and

exploratory results (Dawadi et al., 2021). The quantitative method uses numbers to test hypotheses and make predictions by using measured amounts which ultimately describe an event by using figures (Scharrer & Ramasubramanian, 2021). A quantitative researcher must collect data concerning a specific set of variables that are not helpful for an exploration of the phenomenon or experience. I did not quantify findings to address the research question of the study, making the quantitative method an inadequate fit for the study's purpose. Mixed method research often includes an explicit philosophical position (Coates, 2021). The mixed method approach was inappropriate for this study because of the explicit philosophical stance and the combined usage of quantitative and qualitative data. The strengths of qualitative research made it an ideal method for my study.

Research Design

A research design refers to the overall structure of a phenomenon. Qualitative pragmatic inquiry research offers a robust framework for investigating complex phenomena within real-world contexts (Ramanadhan et al., 2021). Flexibility and adaptability are characteristics of qualitative pragmatic inquiry research (Kelly & Cordeiro, 2020). Unlike traditional qualitative approaches that may adhere strictly to predefined methodologies, pragmatic inquiry encourages researchers to tailor their methods to suit the specific needs of the research topic and participants. This flexibility was particularly advantageous when studying complex phenomena such as safety compliance processes in construction projects, where multiple factors may influence outcomes.

The appropriateness of qualitative pragmatic inquiry research for examining safety compliance processes within construction projects stems from its capacity to encompass a range of perspectives and methodologies. Safety compliance is a multifaceted issue influenced by factors such as organizational culture, regulatory requirements, and individual behaviors. By adopting a pragmatic approach, researchers can employ a range of data collection methods, including interviews, observations, and document analysis, to capture the complexity of safety compliance processes from various angles (King, 2022). To study safety compliance processes in construction projects, it is essential to interact directly with contractor managers and other stakeholders in their work environments to understand their practices, difficulties, and strategies (Marks, 2015). A key advantage of qualitative pragmatic inquiry research is that it allows a researcher to focus on real-world contexts. Unlike laboratory-based studies that may lack ecological validity, pragmatic inquiry seeks to understand phenomena as they occur in natural settings.

I considered other qualitative designs but ultimately chose not to use them for the current study. Phenomenological study design helps to understand the meaning of peoples lived experiences (Nigar, 2020), which is not the object of this study. I also did not select grounded theory because I did not seek to collect empirical data first and then create a theory grounded in the results (Turner & Astin, 2021). I also did not choose ethnography because I did not engage with the participants' work setting to understand their work cultures (van Hulst, 2020).

By involving participants in the research process, researchers can enhance the credibility of their findings and ensure that they accurately reflect the perspectives of those involved. Member checking involves sharing research findings with participants to validate their accuracy and relevance (Marks, 2015). In contrast, transcript review enables participants to examine the transcript of their interview or responses to ensure its completeness and validate its accuracy (Rowlands, 2021). This process ensures that I record the participants' words without errors or misrepresentation.

Member checking is a process where participants review the researcher's interpretations to ensure they accurately reflect their experiences. The researcher asks questions, and the interviewee provides answers. The researcher then repeats the participants' responses to verify accuracy. The researcher allows participants to confirm that the interview questions accurately reflect their perspective (Marks, 2015). In the context of construction compliance, member checking might involve presenting a summary of preliminary findings to contractor managers and seeking their feedback on the accuracy of the interpretations. I summarized each interview transcript and sent the summary to the participant for verification that my interpretation of their input was correct. This member checking approach allowed for a deeper level of engagement with participants, ensuring that the final findings were accurate and reflective of participants' experiences.

In qualitative pragmatic inquiry research, reflexivity is crucial because of the interactive and iterative nature of the research process. Reflexivity refers to the process of critically examining and acknowledging the researcher's role in shaping the research

process and outcomes (Kelly & Cordeiro, 2020). Researchers must become aware of their biases, assumptions, and perspectives and actively work to minimize their influence on the research process. This process may involve maintaining a reflexive journal, engaging in peer debriefing, or seeking feedback from research participants on the researcher's role and impact.

Population and Sampling

The population for this qualitative pragmatic inquiry research consisted of ten contract managers who are leaders or decision-makers for those contracts, located in the southeastern US. The carefully selected managers have successfully applied strategies that mitigate noncompliance in construction projects, which affect safety performance. The selection of participants is purposive sampling. Purposive sampling was a non-probability sampling technique used to select a sample that represents the population of interest (Nyimbili & Nyimbili, 2024). Purposive sampling was suitable for qualitative studies because I was interested in participants who possess the most in-depth knowledge concerning the research topic.

The sample size was ten participants. The criterion for selecting potential participants was having a minimum of 5 years of experience in contracting, specifically dealing with subcontractors' noncompliance. The participants came from a selected contracting firm and were decision makers in their firm. The participants have a better understanding of the problem and the research question, according to their viewpoints, experiences, and success in dealing with subcontractors' noncompliance.

In qualitative research, the most important aspect of ensuring study quality is reaching data saturation. In qualitative research designs, sample size is less important than achieving data saturation (Hennink & Kaiser, 2022). Guest et al. (2006) recommended a minimum sample size of six participants for a qualitative pragmatic inquiry. Therefore, for the qualitative study, the sample was ten participants with a minimum of 5 years of experience in contracting, specifically dealing with subcontractors' noncompliance, which aligns with the recommendations by Guest et al. (2006). Sample sizes in qualitative research studies are often small, allowing researchers to elicit rich and detailed descriptions of the phenomenon under consideration (Sebele-Mpofu, 2021). Therefore, researchers should recruit participants as needed to achieve data saturation (Patton, 2015). Interviewing additional participants who can provide relevant responses to the questions continued until data saturation occurs, at which point no new concepts emerge (LaDonna et al., 2021). The methodology ultimately enhances the depth and richness of qualitative study.

Ethical Research

Prior to conducting the study, I obtained a collection of signed consent forms from the participants (Appendix A). The Belmont Report, released by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, provides an ethical framework for the use of human subjects in research studies (Nagai et al., 2022). A researcher has an ethical obligation to protect the privacy and safety of participants and present a truthful account of the outcomes (Taquette & Borges da Matta Souza, 2022). This approach involves eliminating any ethical dilemmas before

actual data collection begins (Carter et al., 2021). Researchers must also serve as advocates for study participants and maintain the highest level of confidentiality that is reasonably possible (Taquette & Borges da Matta Souza, 2022). In adherence to the prescribed protocols, my approach ensured participant protection and involved a series of vital measures. I used informed consent, ensuring that participants were fully cognizant of the scope of the research, their rights, and the confidentiality measures in place. I acknowledge the importance of privacy and safety; therefore, I implemented strategies to anonymize data and safeguard participant information. Throughout the research process, I continuously assessed and addressed any potential ethical issues that arose, with the primary objective of ensuring the welfare of the participants.

The signed informed consent forms certify that the participants are over 18 years of age. Participants signed the informed consent forms, confirming that participants were not under my supervision and did not receive any form of compensation from me or Walden University. Any participant in the project had the autonomy to withdraw at any stage of the project or interview process without incurring any penalty or consequence. To facilitate the process, I provided participants with my contact details, including both phone and email, ensuring that they could easily communicate their decision to withdraw from the study. The withdrawal process ensures impartiality, allowing participants to choose to end their involvement without feeling biased or negatively impacting their relationship with the researcher or the tool used. The commitment to voluntary participation without compensation emphasizes the respect for participants' autonomy throughout the research.

I explained to the participants the purpose of the study and my commitment to maintaining their confidentiality, as well as obtaining their signed consent forms prior to the interview process. I stored all the raw response data in a password-protected computer with an external hard drive. I kept any associated data, such as participant names, email addresses, audio recordings, notes, and files, locked in a safe deposit box with a numerical lock combination to ensure confidentiality. I am the only person with access to confidential files, exclusively for study purposes. I worked in a secure office environment where I restricted and controlled access. Keeping sensitive information in a locked filing cabinet within a secure office setting is a standard practice to ensure confidentiality (Taquette & Borges da Matta Souza, 2022). Considering the need for easy access while working on the research, I maintained the raw response data in a password-protected computer with an external hard drive, adhering to standard security measures. Associated data, including participant names, email addresses, audio recordings, notes, and files, I securely stored in a locked filing cabinet within the secure office space. The approach balanced the convenience of accessibility and the importance of maintaining the confidentiality and security of participants' information.

Assigning pseudonyms (P1, P2, P3, to P10) to each participant protected individual and identifiable anonymity. Rowlands (2021) and Yin et al. (2019) both proposed providing confidentiality to all interviewees for their complete responses. The data are confidential, and the study reports did not contain any information that identifies the participants. A study should include a confidentiality document to protect participants (Dougherty, 2021). The informed consent form (Appendix B) provides an agreement to

maintain the privacy, confidentiality, and the rights of participants. I submitted an IRB application and met all IRB requirements before any contact with the participants occurred. The criteria met the IRB requirements for the project. Five years after the study's completion, I will destroy all documentation and data collected during the study. Destroying the materials is an essential action to ensure that I will maintain and keep the participants' information confidential. The Walden Institutional Review Board (IRB) approval number is 12-30-24-0458213.

Data Collection Instruments

In the qualitative pragmatic inquiry research, I was the primary data collection instrument, and I directed interactions with participants through semistructured interviews. This approach allowed for flexibility while maintaining a systematic inquiry into the research problem, aligning with the pragmatic principles of the study (Kelly & Cordeiro, 2020; Marks, 2015). As the researcher, I played a crucial role in conducting the interviews, ensuring that the data collection process remained consistent and aligned with the research objectives.

I designed the semistructured interviews to include open-ended questions, encouraging participants to provide detailed responses based on their experiences and perspectives (Marks, 2015). I crafted the interview protocol, detailed in Appendix B, to address the research questions and objectives, drawing insights from the literature review and conceptual framework of the study (Tomaszewski et al., 2020). I conducted each interview one-on-one to encourage a conducive environment for participants to express their views openly.

Appendix C contains interview questions that guide the one-on-one sessions, ensuring consistency across interviews and facilitating a thorough exploration of the research topic. These questions helped to elicit nuanced responses from participants, contributing to the depth and richness of the qualitative data collected (King, 2022). By maintaining a consistent line of inquiry, my intentions were to capture diverse perspectives while addressing the research objectives.

To ensure ethical considerations and informed consent, Appendix A comprises the Informed Consent Form, which provided the participants with comprehensive information about the study's purpose, procedures, and their voluntary participation (Ramanadhan et al., 2021). This form helped to establish transparency and trust between the researcher and participants, respecting their autonomy and right to withdraw from the study at any time.

Member checking is a technique to enhance the credibility and trustworthiness of the gathered data (Birt et al., 2016). This process involves sharing a summary or the entire findings with participants to validate the accuracy and resonance of the data with their experiences. Through member checking, I ensured the validity and reliability of the research findings, aligning with the pragmatic approach to data analysis and interpretation.

Data Collection Technique

In the current study, I collected the data through semistructured interviews guided by an interview protocol (see Appendix C). Researchers determine the type of interview (telephone interview, focus group interview, or one-on-one interview) that will yield the

most helpful information to answer the research question (Johnson et al., 2021). Audio recording is a data collection technique that I also used with obtained consent from the participants. The use of semistructured interviews in qualitative research offers a balanced mix of structured and unstructured elements (Birt et al., 2016). The use of semistructured interviews is flexible, allowing for the use of both pre-set and spontaneous questions and fostering a more natural interaction with participants. Using semistructured interviews encouraged detailed responses and allowed for adjustments during the interview process. However, flexibility can lead to variability in responses, complicating data comparison and analysis. This process also raises the potential for bias researchers and requires careful mitigation strategies. Researchers should consider the time-intensive nature of conducting and transcribing the interviews in the research design and timeline. I obtained consent to record the individual interview sessions, from which I developed a transcript. I analyzed the data to look for emerging themes that influence the understanding, direction, and outcomes of the study.

During the interviews, I recorded all responses and maintained a comprehensive journal, emphasizing non-verbal cues and identifying any signs of misunderstanding or discomfort with the questions. The journal was helpful in supplementing the study by documenting detailed factors beyond verbal communication. Following the interviews, I encouraged participants to provide feedback on the interview experience. The feedback included their perspectives on the clarity of the questions, the comfort level with the interview process, and any suggestions for improvement. Such direct feedback from

participants is invaluable in gaining insights into the effectiveness of the interview questions and the overall process.

Advantages and Disadvantages of the Data Collection Technique

Using semistructured interviews allowed for in-depth coverage and a deeper understanding of the participants' experiences and their knowledge, often yielding more comprehensive data. Semistructured interviews offer flexibility, allowing researchers to delve deeper into topics as they arise while still maintaining a focused framework (Kelly & Cordeiro, 2020). The combination of both pre-set and spontaneous questions fosters a natural conversational flow, encouraging participants to provide in-depth responses that might not surface in more rigid, structured interviews (Kelly & Cordeiro, 2020; Marks, 2015). Participant feedback and member checking enhance the credibility and trustworthiness of the data collected, as they help minimize the gap between the researcher's perception and participants' narratives (Birt et al., 2016). Additionally, audio recording enabled transcription and analysis, to ensure that I do not overlook any details in the process.

Despite its strengths, semistructured interviews pose challenges, particularly in terms of variability in responses, which can complicate data comparison and analysis. A procedural weakness of the interview is that the inherent flexibility of the structure may cause variability across participants, making it difficult to standardize and compare the results (Ruslin et al., 2022). Furthermore, analyzing and categorizing qualitative data from semistructured interviews can prove complex, requiring a thoughtful approach to identify and interpret emerging themes (Price & Smith, 2021). Moreover, the

interviewing method of data collection is time-consuming, both in conducting the interviews and in transcribing the recordings, which can strain the research timeline. The possibility of interviewer bias exists, in that the tone or other reactions of the interviewer might affect the responses from the participants.

Data Organization Technique

To protect the integrity of the research and to meet the ethical requirements of protecting the participants, records were organized, files were backed up frequently and raw data was protected from loss or inadvertent exposure. I audiotaped and transcribed the interviews to ensure the data collected were aligned accurately with respect to participants' responses. According to Ummel and Achille (2016), the use of pseudonyms is a means of protecting participant confidentiality. I used a labeling technique in identifying the participants, giving participants an identification number (P1, P2, P3, to P10).

A review of the interviews enabled coded responses. I transferred all of the interview data from audio to text, storing the information in a series of Microsoft Word documents, maintaining a file for each interviewee. Excel spreadsheet for qualitative analysis software was used as a data management tool and aids in the analysis process (Allsop et al., 2022). Researchers use the excel spreadsheet in the process of managing, shaping, and understanding unstructured information derived from responses to open-ended questions (Sutopo, 2023). I uploaded the data into Excel Spreadsheet to prepare for qualitative data analysis. I will store and lock stored all data in a security deposit for five

years. After 5 years of completion of the study, I will destroy all documentation and data collected.

Data Analysis

In qualitative pragmatic inquiry research, the analysis process is a critical phase aimed at uncovering insights and patterns within the collected data to address the central research question effectively. Adhering to the systematic approach proposed by Ramanadhan et al. (2021), the researcher oversees the exploration of the data, from gathering and compiling to concluding the results. I used Braun and Clarke's (2006) thematic process of data analysis.

The qualitative data analysis begins by meticulously examining all statements made by participants during the interviews. This thorough examination helps researchers to understand participants' experiences and perspectives regarding the phenomenon of interest (Kelly & Cordeiro, 2020). Through this process, I identified recurring patterns and themes, which are essential aspects of decoding the data and facilitating a deeper understanding of participants' responses (Marks, 2015). I employed inductive analysis to identify codes and categories, allowing for a comprehensive exploration of the data and the extraction of meaningful insights.

In qualitative pragmatic inquiry research, the organization and analysis of data primarily revolves around pattern formation, theme identification, and categorization (Kelly & Cordeiro, 2020). Themes emerge as recurring patterns in participants' responses, providing clarity and insight into their experiences (Corbin & Strauss, 2008). As these themes surfaced, I developed new codes and categories, contributing to a more

nuanced analysis of the data (Braun & Clarke, 2006; Braun & Clarke, 2022). Braun and Clarke's six steps of thematic analysis include: (a) familiarization with the data, where researchers immerse themselves by reading and re-reading the data; and (b) generating initial codes, which involves identifying and labelling important features of the data. In addition, searching for themes, where researchers group code into broader patterns or themes, and reviewing themes, which involves refining identified themes and checking them against the data, are also part of thematic analysis. Defining and naming themes, where researchers clearly define and label themes, captures their essence, and writing the report involves weaving the themes into a coherent narrative supported by data extracts (Braun & Clarke, 2006).

To enhance the reliability and trustworthiness of the data, I employed methodological triangulation. I compared themes that emerged with different data sources. Using data from multiple sources can ensure consistency and validity (Ramanadhan et al., 2021). Methodological triangulation, particularly suited for analyzing interview and document data, entails integrating multiple data sources to draw robust conclusions (Arias Valencia, 2022). By utilizing Excel spreadsheet for textual analysis, I was able to mitigate potential biases associated with relying on a single data collection method, thereby enhancing the credibility of the findings. The final step in the data analysis process involves the collected data and the findings that contribute to the existing knowledge on the research topic (Salmona & Kaczynski, 2024). Through comprehensive data analysis and triangulation, I gained a profound understanding of the

phenomenon under study, which enabled me to draw robust conclusions and make valuable contributions to the field.

Reliability and Validity

Reliability

A key technique utilized to bolster the reliability and trustworthiness of the study is member checking. In qualitative research, reliability refers to the ability to obtain consistent and repeatable results within the qualitative research paradigm (Noble & Smith, 2015). To maintain research quality, researchers employ validity checks to implement appropriate actions that produce high-quality outcomes (Noble & Smith, 2015). Member checking is a powerful verification tool that I used for my current study. According to Birt et al. (2016), member checking is a valuable tool to explore the credibility of results. Member checking is also known as participant or respondent validation (Birt et al., 2016). In member checking, I asked the participants to review my interpretations to ensure they accurately reflect their experiences.

In qualitative pragmatic inquiry research, researchers maintain that methodological rigor occurs through careful attention to the principles of trustworthiness and credibility. Trustworthiness refers to the reliability and validity of research findings, while credibility refers to the believability and authenticity of the data (Tomaszewski et al., 2020). To enhance trustworthiness and credibility, I employed strategies such as triangulation, member checking, and reflexivity.

Validity

The validity of research instruments is crucial for obtaining accurate results, and unsuitable or ambiguous questions can introduce inaccuracies. The validity of an instrument refers to the relevance, significance, and usefulness of specific inferences made (Patton, 2015). Using an interview protocol helped to remove uncertainty and ensure repetition and consistency among the participants. Repetition was used by repeating the question over or in different ways. Repetition helped eradicate ambiguity and provide data saturation (Alam, 2021). The validity of the data depended on my methodological proficiency in conducting the interviews. I recorded the responses collected from participants during the interview process to ensure the data was reliable (Rowlands, 2021). The method enabled a comprehensive and precise representation of participants' input, thereby minimizing the risk of misinterpretation or omission.

The reliability is further reinforced during the transcription process, where the developed transcript can be systematically compared to the original recording of the interview. The comparison ensures the accuracy of the transcript, validating that it faithfully captures the participants' responses as articulated during the interview (Rowlands, 2021). The recording and subsequent verification through member checking contribute to the overall reliability and accuracy of the collected data.

After completing each interview, I transcribed and stored the recorded data in a secure environment. To achieve an unbiased analysis and ensure the reliability of results, I used Braun and Clark's 6 step process to analyze the participants' responses. I employed the triangulation methodology to analyze the participants' responses.

Researchers achieve reliability and validity in qualitative studies by utilizing research strategies to achieve credibility, confirmability, dependability, and transferability (Enworo, 2023).

Dependability

I maintained that Dependability occurred throughout the review, as I considered any changes that occurred throughout data collection and analysis. Dependability refers to evidence that is consistent and stable (Clayson et al., 2021). Researchers compare dependability to reliability because it assesses the integrated processes of data collection, data analysis, and theory generation (Polit & Beck, 2008). I employed member checking to enhance the dependability of the study.

In contrast to transcript review, member checking includes a summary interpretation of the transcript findings by the researcher. Member checking occurred throughout the research, which is crucial for validating the collected data and its summary or interpretation. Member checking was a process where participants reviewed the researcher's interpretations to ensure they accurately reflect their experiences (Birt et al., 2016).

The researcher asks questions, and the interviewee provides answers. The researcher then repeats the participants' responses to verify accuracy. The researcher allows participants to confirm that the interview questions accurately reflect their perspective. I scheduled review sessions, during which participants provided feedback on the summaries. I used the feedback to refine the data and enhance the transparency of the research. I documented the entire process, including the incorporation of feedback, to

ensure accuracy. I included the feedback and responses of the participants in the study's documentation.

Credibility

In qualitative research, an audit trail refers to a comprehensive collection of documentation that encompasses all aspects of the study. For the study, I used an audit trail process to enhance the credibility of the data. Ahmed (2024) emphasized the importance of an audit trail in qualitative research, highlighting its role in securing and preserving data. This process enhances the reliability of findings and enables researchers to trace the research process, thereby increasing the trustworthiness of the study (Birt et al., 2016). I diligently maintained an audit trail that covered all aspects of the study. Extensive documentation of data collection records and the data analysis process will be safeguarded for 5 years and may aid in current and future evaluations. The process included records of data collection, analysis processes, decision points, and study modifications. The documentation may increase research transparency, enable independent verification of findings, and enhance the study's reliability.

Transferability

Transferability refers to the extent to which research findings can apply to similar contexts or settings (Fingeld-Connett, 2010). Transferability, as defined by Noble and Smith (2015), is a critical aspect of qualitative research that I addressed meticulously in my study. To ensure transferability, I followed Fingeld-Connett (2010), emphasizing the significance of presenting a comprehensive and detailed account of the research context, methodology, and participant information. The "thick description" I provided may enable

other researchers to understand the circumstances under which the researchers collect and make informed decisions about the applicability of the findings to their contexts.

Confirmability

Maintaining confirmability ensures that the results derive from participants' characteristics and not from researcher bias, which is crucial (Singh et al., 2021). Confirmability refers to the degree to which the study results derive from the characteristics of the participants, rather than from the researcher's bias (Singh et al., 2021). Confirmability also refers to the objectivity or the ability of others to confirm or corroborate findings (Enworo, 2023). In the study, I employed strategies to ensure confirmability, including well-defined and accurate coding, providing adequate evidence to support claims, and ensuring the reliability of the intercoder agreement. I employed qualitative strategies, including acknowledgement and statement of the researcher's beliefs, self-evident truths, and assumptions, as well as the researcher's shortcomings and conditions that influence the current methodology of the study, both of which are part of the assumptions and limitations of the study.

Data Saturation

Data saturation occurs when no new themes emerge from the data analysis. (Hennink & Kaiser, 2022). The concept of data saturation is important because it addresses whether a study has an adequate sample to demonstrate content validity (Hennink & Kaiser, 2022). To satisfy the criterion, the chosen sample size was a minimum of ten carefully selected individuals, providing sufficient information to reach the point of data saturation for the project. To achieve data saturation, I provided

participants with in-depth, open-ended, semistructured questions and ensured the inclusion of necessary follow-up questions.

I concluded the interviews when the participants provided no new information. Although qualitative research is often inductive (Roald et al., 2021), it can also include a deductive approach (Clayson et al., 2021). I used a sample size of ten individuals to achieve data saturation, ensuring content validity. Data saturation occurred when the data reveals no new information. I used in-depth, semistructured questions to thoroughly explore participants' perspectives. Data collection concluded when the interviews revealed no new information. The balance ensured a comprehensive exploration of the research topic.

Transition and Summary

In Section 2, I outlined the methodology for my qualitative pragmatic inquiry research, which involves contractor managers who were leaders or decision-makers from a selected organization. The selection of participants was a sampling process identified as purposive sampling. The research question and the conceptual framework outlined in Section 1 provided the foundation for a comprehensive procedural discussion, which I further explained in Section 2. In Section 2, I provided the specific steps for data collection, analysis, and organization. In Section 2, I also outlined the steps taken to ensure ethical, reliability, and validity throughout the research. In Section 3, I navigated through critical aspects, including the introduction, qualitative findings presentation, application to professional practice, implications for social change, actionable

recommendations, further research suggestions, personal reflections, and a concluding statement.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The specific business problem was that some contract managers lack strategies to mitigate contractor safety noncompliance with awarded contracts. I explored contract managers' strategies to mitigate contractor safety and non-compliance issues in construction contracts awarded to contractors. The purpose of this qualitative pragmatic inquiry research study was to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. I identified and examined these strategies to provide actionable insights for improving safety compliance in the construction industry. The research question guiding my qualitative pragmatic inquiry study was as follows: *What construction contract safety strategies do contract managers use to mitigate safety noncompliance on awarded contracts?*

In Section 3, I provided the demographic details of the interview participants and described the process I employed in collecting and analyzing the data. The presentation of the findings is in detail. Additionally, the section includes discussions on the application to professional practice, implications for social change, and actionable recommendations. Furthermore, the section included research suggestions, personal reflections, and a concluding statement.

Participant Demographics

The study was based on the subjective experiences of individuals, including contract managers, contract officers, and contractors (N = 10). I also recruited Subcontractors with experience in contract or construction contracts for this study. These participants came from various sources, including my professional network and social media platforms. Each participant had a minimum of 5 years of experience in contracting, dealing with subcontractors' noncompliance. The participants were decision-makers from a selected contracting firm. To protect their privacy and confidentiality, I assigned each of participants an alphanumeric pseudonym such as P1, P2, P3, to P10. Table 2 summarizes the demographic details of the respondents.

Table 2

Participant Demographics

Pseudonym	Age Range	Gender	Position	Decision maker in their company (yes/no)	Years of contracting experience dealing with subcontractors' noncompliance
P1	30-39	M	Contract officer	Yes	6 years
P2	50-59	M	Contractor	Yes	9 years
P3	50-59	F	Contractor	Yes	12 years
P4	30-39	F	Contract Manager	Yes	5 years
P5	40-49	M	Contract officer	Yes	6 years
P6	50-59	M	Contract Manager	Yes	10 years
P7	30-39	F	Contract officer	Yes	8 years
P8	30-39	M	Contract Manager	Yes	7 years
P9	40-49	M	Contract Manager	Yes	13 years

Pseudonym	Age Range	Gender	Position	Decision maker in their company (yes/no)	Years of contracting experience dealing with subcontractors' noncompliance
P10	30-39	M	Contractor	Yes	5 years

Note. Ten participants took part in this study

Data Collection

Before collecting data, I first obtained informed consent from the participants. I contacted the selected participants and provided them with invitations and consent forms for their review and signature. The participants signed the consent forms and returned them to me. Next, I scheduled semistructured interviews at a time and location convenient for the participant. I collected data using semistructured interviews that contained open-ended questions. These questions encouraged participants to provide detailed responses based on their experiences and perspectives. I conducted individual, one-on-one interviews using Zoom Meetings over two weeks, each interview lasted between 45 and 60 minutes. I audio-recorded the interviews with the participants' permission. I only recorded audio; I did not record videos for interviews. I transcribed each audio recording. I sent a summary of the transcribed interviews to each participant for review, accuracy and approval. All the participants each confirmed that the response collected was accurate.

Data Analysis Procedure

In this study, I analyzed verbatim transcripts of the 10 individual interviews in a Microsoft Excel spreadsheet. In the data analysis process to achieve the thematic analysis for pragmatic inquiry. The first step was familiarization with the data. The data analysis

procedure begins with a comprehensive review of the dataset, conducted multiple times to achieve a thorough understanding of its content (Ramanadhan et al., 2021). The initial step also entails thoroughly examining each statement made by participants during interviews. This thorough examination included understanding the perspectives and experiences of the respondents regarding the phenomenon of interest (Kelly & Cordeiro, 2020). In this study, I initiated the data analysis process by becoming familiar with the qualitative data. I read the 10 interview transcripts three times. By reading and re-reading the transcripts, I became thoroughly familiar with the entire dataset. I wrote down notes while reading the data.

The second step was coding, which can be inductive or deductive, depending on the type of research conducted (Ramanadhan et al., 2021). Inductive coding involves reading and interpreting raw textual data to develop themes or concepts (Kelly & Cordeiro, 2020). The approach also entails reading the dataset and identifying codes, themes, patterns, and categories as they emerge (Kelly & Cordeiro, 2020). This approach differs from deductive coding, which is based upon priori codes to which the researcher assigns segments of texts in the transcript (Ramanadhan et al., 2021). In this study, I employed inductive coding to identify codes, as I did not have a predetermined set of codes or themes before starting the coding process. The inductive coding process allowed for a comprehensive exploration of the data and the extraction of meaningful insights. I performed coding by assigning labels, or codes, to segments of text that appeared relevant to the research question and the study's purpose. Table 3 demonstrates how the developed codes derived from the dataset.

Table 3*Identification of Codes*

Initial Codes	Participant Quotes
Inspections	P9: "Inspections both scheduled and unscheduled." P3: "Some of the strategies used would be to oversee the supplier through onsite visits to ensure all items on the contract are adhered to by the supplier."
Safety plans	P2: "Construction contracts are inherently risky environments, with the potential for accidents and injuries. However, there are several construction site safety practices that can help reduce risks and create a safer work environment such as: develop and implement a comprehensive safety plan." P6: "We have active plans we use to manage our contracts, safety plans"
Compliance matrix	P7: "a compliance matrix is used to identify each contractual requirement by responsible individual, date is due, reporting type to meet the requirement and the deliverables ensuring the government received what is asked by the deadlines." P8: "The Program Manager must directly be involved in any proposal submitted to the government to ensure compliance requirements are viewed by an authority source. Additionally, a compliance matrix is used to identify each contractual requirement by responsible individual."
Timeliness	P3: "The most noncompliant issues that causes challenges is for the supplier to not meet the schedule and become late on items." P9: "Timeliness and hiring qualified candidates."
Unclear contractual terms	P4: "The most challenging issues I have witnessed are having unclear contractual terms and poor communication. This all leads to compliance issues, construction risk, and poor management of any project. Costly mistakes and even safety risk." P1: "Clear Terms: Ensure all terms are well defined."
Inadequate communication	P1: "Contract noncompliance is often rooted in critical issues such as inadequate communication." P10: "outdated program systems that do not communicate across one Government Department to another."
Audits	P3: "Some of the strategies used would be to oversee the supplier through auditing and onsite visits to ensure all items on the contract are adhered to by the supplier." P5: "initiative-taking compliance audits"

Note. I assigned codes to segments of text.

Overall, I coded each of the 10 interview transcripts individually. I used a Microsoft Excel spreadsheet to aid the data analysis process. I identified a total of 174 codes.

The third step was identifying themes. During this step of thematic analysis in pragmatic inquiry, themes relevant to the research questions emerged (Braun & Clarke, 2022). Emerging themes derive from the categories. In this study, categorization involved combining similar codes, which I defined by their shared conceptual meaning. Categorizing the data and identifying patterns in the dataset was a vital aspect of decoding the data, allowing the researcher to thoroughly understand the participants' responses (Marks, 2015).

Table 4

Categories Derived from the Codes

Categories	Codes
Establish risk management plans	Use compliance matrix, risk management plans, risk assessments
Establish workplace safety policies	Use personal protective equipment, use proper tools, use proper equipment, safety hazards
Identify and address risks	Identify risks, Evaluate risks, Address risks
Perform compliance audits and inspections	Increase compliance, inspections, on-site visits
Improved supervision	Quality assurance plans, quality control plans, conduct audits, perform inspections
Monitoring and reporting	Performance monitoring, performance reporting, evaluation
Clear communication about procedures and best practices	Inadequate communication about procedures, avoiding ambiguity, accurate representation, communication about best practices
Have clear documents	Poor communication, unclear documents, proper documentation
Clear communication about contract terms	Lack of clear understanding about contract terms, lack of clear understanding about contract requirements, overly complex terms
Conduct safety training	Safety training, training employees, regular training
Promote safety culture	Safety culture, use proper tools, use proper equipment

Categories	Codes
Develop safety plans	Establish safety plans, implement safety plans, safety first
Promote ethical practices	Bribery, unethical behavior, coercion
Update policies and procedures	Current policies, wrong policies, wrong practices
Falsifying documents	Falsifying records, falsifying certifications, inaccurate documentation

Note. Codes are combined to form categories.

After pattern formation and categorization, themes emerged. Themes are broad concepts or categories that encompass common patterns observed from data analysis (Ramanadhan et al., 2021). They are recurring patterns in the responses of participants, offering clarity and insight into their experiences (Corbin & Strauss, 2008). According to Braun and Clarke (2022), a theme captures something significant about the data related to the study's purpose and research question. Since I utilized inductive coding in this study, themes emerged from the categories generated in the previous phase of data analysis (Ramanadhan et al., 2021). Table 5 demonstrates how themes emerged from the categories.

Table 5

Themes Derived from Categories

Themes	Categories
Theme 1: Developing and implementing risk management plans and workplace safety policies	Establish risk management plans Establish workplace safety policies Identify and address risks
Theme 2: Increased supervision through compliance audits and inspections	Perform compliance audits and inspections Improve supervision Perform compliance audits and inspections Improve supervision

	Monitoring and reporting
Theme 3: Effective communication and documentation about procedures, best practices, and contract terms	Clear communication about procedures and best practices Have clear documents Clear communication about contract terms
Theme 4: Conducting training on safety and promoting a strong safety culture	Conduct safety training Promote safety culture Develop safety plans
Theme 5: Promote ethical practices and implement clear policies against unethical conduct such as bribery	Promote ethical practices Update policies and procedures Falsifying documents

Note. Fives surfaced from the analyzed data.

In the fourth and last stage of the data analysis process, researchers synthesize the gathered data into meaningful findings that contribute to the existing knowledge on the research topic (Salmona & Kaczynski, 2024). In this study, the themes generated enabled me to address the research question effectively and provided a thorough understanding of the phenomenon under study, leading to robust conclusions. The themes made valuable contributions to the field.

Presentation of the Findings

The purpose of this qualitative pragmatic inquiry research study was to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. The research question guiding my qualitative pragmatic inquiry study was: What strategies do some contract managers use to mitigate safety noncompliance on awarded contracts? Five themes emerged from the data analyzed: (1) developing and implementing risk management plans and workplace safety policies; (2) increasing supervision through monitoring, compliance audits, and safety inspections; (3) using effective communication and documentation about safety procedures and best practices; (4) conducting training on safety and promoting a strong safety culture; and (5) promoting ethical practices and implementing clear policies against unethical conduct such as bribery. Table 6 shows how the themes addressed the research question.

Table 6

Themes Addressing the Research Question

Research Question	Themes	Number of Participants Supporting Theme (N=10)
What construction contract safety strategies do contract managers use to mitigate safety noncompliance on awarded contracts?	Theme 1: Developing and implementing risk management plans	7
	Theme 2: Increased supervision through monitoring, compliance audits, and safety inspections	9
	Theme 3: Effective communication and documentation about safety procedures and best practices	9
	Theme 4: Conducting training on safety and promoting a strong safety culture	9

Research Question	Themes	Number of Participants Supporting Theme (N=10)
	Theme 5: Promote ethical practices and implement clear policies against unethical conduct such as bribery	6

Note. Overview of themes that addressed the research question

Theme 1: Developing and Implementing Risk Management Plans

The first theme is contract managers develop and implement risk management plans as a safety strategy for mitigating safety non-compliance on awarded contracts. Participants discussed having established risk management plans to facilitate the identification of risks. Ten interview participants supported the theme.

P1 mentioned that they develop plans to assess and mitigate risks. This notion is among several other strategies that P1 employs. The participant commented, “To mitigate noncompliance in construction contracts, key processes and strategies include thorough contract review with legal expertise...risk assessment and mitigation plans; all aimed at ensuring all parties understand their obligations and can identify potential issues early on.”

P7 also mentioned that they use risk management plans. These plans help identify and eliminate risks. Addressing risks early on helps ensure the successful implementation of a project. The participant stated:

P7 focused heavily on mitigating construction risks by developing and implementing risk management plans. Potential hazards are identified, evaluating the risks associated with those hazards, and developing a plan

to mitigate or eliminate those risks. The Risk Management Plan includes measures to prevent or mitigate hazards, as well as contingency plans to address any unforeseen events. By understanding and addressing these risks, the likelihood of delays, accidents, and other negative impacts are reduced, resulting in successful project completion.

P8 shared similar views. P8 strived to mitigate construction risks by “developing and implementing risk management plans.” P8 added that the plan comprises “measures for preventing or mitigating hazards, and contingency plans for addressing any unexpected events.” According to P8, identifying the risks and addressing them leads to the successful completion of projects as it decreases the probability of adverse impacts such as “delays [and] accidents.”

Theme 1: Link to the Literature

These findings confirm existing literature on risk management. In the United States, the construction industry is popular for having high-risk operations (Brown et al., 2021). Serious injuries, some of which can appear fatal, can occur, and these accidents also have societal implications (Xu & Xu, 2021). Improving safety efficiency in this sector is crucial for minimizing fatal accidents and promoting the safe development of construction projects (Brown et al., 2021). Kalteh et al. (2019) underscored the significance of risk management in construction contracts. According to these scholars, safety policies are insufficient to ensure a safe construction environment, and practical implementation is necessary by every staff member.

Thus, safety policies are a vital aspect of risk management in construction contracts (Kalthah et al., 2019). According to Xu and Xu (2021), risk management plans help to improve safety and minimize accidents in the construction sector. Professionals in this sector use construction risk management plans to identify hazards in advance, including safety concerns, material shortages, and design flaws (Brown et al., 2021). When teams identify these risks early, they can prioritize what requires attention, assign resources efficiently, and implement preventive measures effectively. This process helps to minimize negative impacts and improve safety (Brown et al., 2021).

Theme 1: Link to the Contingency Theory

The findings are also in line with Hersey and Blanchard's 1969 contingency theory, which was the conceptual framework for this study. This theory posits that no singular best way exists to organize a company, and that managers should adopt styles based on situational factors (Fiedler, 1964). Contingency theory also suggests that management effectiveness is contingent upon the context, and employing a rigid management style may not prove ideal in the long term (Sulich et al., 2021). Using a contingency approach, as a problem-solving tool from a business perspective, suggests that leaders need to understand and address issues in ways that depend on the environment and context in which the problems arise (Sulich et al.). Contingency theory emphasizes the importance of being accommodating and adaptive in managerial interventions, particularly in volatile environments such as construction contracts. Based on the contingency approach, organizational leaders in construction companies may need to use a participative or democratic style when developing and implementing risk

management plans. Leaders who utilize this style value input from others and involve their team members in the decision-making process (Pasaribu et al., 2022). Therefore, organizational leaders of construction companies should seek to involve middle-level managers and employees in the development of risk management plans. In summary, the first theme revealed that the safety strategies contract managers use to mitigate safety noncompliance on awarded contracts include developing and implementing risk management plans. The participants stated that implementing such plans enables them to prevent hazards and reduce the likelihood of delays effectively. This process leads to the successful completion of projects. Data from seven interview participants contributed to this theme.

In summary, the first theme revealed that the safety strategies contract managers use to mitigate safety noncompliance on awarded contracts include developing and implementing risk management plans. The participants stated that implementing such plans enables them to prevent hazards and reduce the likelihood of delays effectively. This process leads to the successful completion of projects. The theme is consistent with existing literature and Hersey and Blanchard's 1969 contingency theory, which was the conceptual framework for this study. Data from seven interview participants contributed to this theme.

Theme 2: Increased Supervision through Monitoring, Compliance Audits, and Safety Inspections

The second theme revealed that contract managers enhance supervision by conducting compliance audits, monitoring, and safety inspections as a construction

contract safety strategy to mitigate safety non-compliance on awarded contracts. Through supervision, participants can ensure that contract workers comply with safety requirements. Data from nine out of 10 interview participants contributed to this theme.

P3 mentioned compliance audits as a strategy used. The participant also spoke about inspections through on-site visits where they physically supervise the contract workers to ensure safety compliance. P3 reported, “Some of the strategies used would be to oversee the supplier through auditing and onsite visits to ensure all items on the contract are adhered to by the supplier.”

P5 shared similar views. The strategies this participant mentioned included “vendor onboarding and compliance kickoff, real time performance monitoring, initiative-taking compliance audits.” P9 talked about site inspections, saying, “Inspections both scheduled and unscheduled to reveal problems in equipment, or other tools used in the workplace.” Site visits, whether scheduled or unscheduled, are essential for the identification of nonconforming processes, procedures or tooling in some situations on construction sites.

P1 mentioned that a strategy they utilize involves tracking compliance. This strategy is vital in identifying potential issues early on. P1 commented, “To mitigate noncompliance in construction contracts, key processes and strategies include utilizing technology to track compliance; all aimed at ensuring all parties understand their obligations and can identify potential issues early on.” This participant also stated that the strategy involves “monitoring.”

Theme 2: Link to the Literature

Theme 2 aligned with the existing literature. A variety of factors can cause accidents in building projects within the construction sector. Although human error causes many accidents at the worker level, other incidents result from major systemic issues that supervisors often overlook (Al-Bayati et al., 2019). Effective accident prevention requires a holistic approach that considers the direct actions of employees that lead to accidents, and the broader managerial and organizational contexts that influence those employee actions (Itam et al., 2023). Adequate supervision, including proper monitoring of employees' actions and conducting thorough inspections, can prevent most accidents (Itam et al., 2023). Instead of attributing human errors solely to workers, construction professionals should prioritize enhancing supervision, implementing efficient management strategies, and revising policies to adequately address the issue of accidents (Rafique et al., 2021).

Theme 2: Link to the Contingency Theory

The findings are also consistent with Hersey and Blanchard's 1969 contingency theory. Increased supervision through monitoring, compliance audits, and safety inspections necessitates the use of a transactional leadership style. Transactional style emphasizes compliance, performance, supervision, and organization (Pasaribu et al., 2022). Rewards and recognition help motivate staff members, and leaders closely monitor employees' performance and reward them when they meet goals (Aslam, 2023). Using this style, contract leaders of construction companies can closely monitor employees for compliance with safety standards and reward those who are compliant.

In summary, this theme revealed that contract managers use enhanced supervision as another safety strategy to mitigate safety noncompliance on awarded contracts.

Enhanced supervision occurs through monitoring, inspections, and compliance audits.

The participants mentioned that inspections often occur through site visits. During site visits, contract managers supervise workers to ensure safety compliance with the terms of awarded contracts. Nine participants contributed to this theme. The theme is consistent with both the existing research and the conceptual framework.

Theme 3: Effective Communication and Documentation About Safety Procedures and Best Practices

Theme 3 demonstrated that contract managers ensure effective communication as a key construction contract safety strategy for mitigating safety non-compliance on awarded contracts. The contract managers also strive to ensure adequate documentation. Data from nine participants supported the theme. P1 highlighted the importance of regular communication. The P1 stated, “To mitigate noncompliance in construction contracts, key processes and strategies include regular communication and monitoring, robust documentation practices.” This strategy helps ensure that parties to the contract understand their obligations and can identify potential issues early on.

P9 discussed the importance of communicating openly with the vendor to ensure compliance. Open communication ensures that the vendor clearly understands all the requirements. The participant stated, “open communication with the vendor and COR.”

P4 also discussed the importance of unambiguous communication and documentation as a strategy. Effective communication ensures that everyone agrees to

procedures, best practices, and contract requirements. The contract manager and the contract workers or team can meet face-to-face to discuss the contract terms and ensure successful project completion.

P4 commented: The process and strategies are the same for every project, clear communication, documentation and control plans, (quality, safety, regulations, etc.). Meet and discuss the entire SOW with the team to determine the best and most qualified by experience and certifications for the project, then create a site-specific Quality Control Plan.

Theme 3: Link to the Literature

Theme 3 reported in extant literature. According to Williams (2021), firms in the construction sector can impart a sense of professional ethics by promoting transparent communication channels within their contracts. Employee compliance with safety measures is likely to suffer when managers do not provide sufficient support or funding for safety (Zara et al., 2023). This scholar also reported that in contracts with a strong safety culture, effective communication about safety best practices, procedures, and policies exist (Zara et al., 2023). Conversely, communication regarding safety may lack unclear or inconsistency in a weak safety culture, which can leave staff members unaware of the safety protocols that they need to observe. Zhang et al. (2022) posited that managers can use inspirational motivation to communicate a compelling vision of a safe work environment, which will consequently help workers rally towards a shared safety goal. Contract managers in construction companies can foster a robust safety culture by clearly and consistently communicating safety expectations (Oswald et al., 2022).

Researchers have also reported that for construction managers to successfully implement safety protocols in an organization, senior executives and middle-level managers should ensure the development, establishment, and effective execution of safety policies in the workplace (Yang et al., 2023). The managers should also promote seamless communication and coordination throughout all levels of the contract process (Kaltah et al., 2019). When managers implement construction safety protocols within an organization, they often assign specific duties and positions to staff members at various hierarchical levels. Senior leaders and top managers are typically responsible for developing and implementing policies related to workplace health and safety. Conversely, the role of middle-level managers is typically to implement and execute policies throughout the various stages of a project (Yang et al., 2023). The positions facilitate seamless communication between supervisors and executives within the contracting industry.

Theme 3: Link to the Contingency Theory

This finding is consistent with Hersey and Blanchard's 1969 contingency theory. Effective communication about safety procedures and best practices necessitates the use of a transformational leadership style. Leaders who adopt this approach have a clear vision and focus on getting people to buy into it, uniting them over a common purpose (Pasaribu et al., 2022). The organizational leader should use transformational skills to influence and motivate the employees to follow specified safety procedures and best practices.

In summary, the third theme revealed that the safety strategies contract managers use to mitigate safety noncompliance on awarded contracts include effective communication and documentation. When managers communicate and document safety compliance transparently, they can easily avoid compliance issues. Data from nine interview participants contributed to this theme. The theme aligns with the existing literature and the conceptual framework.

Theme 4: Conducting Training on Safety and Promoting a Strong Safety Culture

Contract managers also conduct safety training as a construction contract safety strategy for mitigating against safety non-compliance on awarded contracts. Contract managers also promote a strong safety culture. Ten of the interview participants supported the theme. P2 mentioned that the strategy involves training people in safety. Managers also provide the workers with the necessary safety equipment, such as personal protective equipment, to ensure their safety. Additionally, the strategy fosters a culture of established safety. P2 noted:

Construction contracts are inherently risky environments, with the potential for accidents and injuries. However, there are several construction site safety practices that can help reduce risks and create a safer work environment such as: develop and implement a comprehensive safety plan, provide adequate safety training, use personal protective equipment (PPE), maintain good housekeeping, use proper equipment and tools.

P6 talked about having safety plans. This is in addition to other plans, such as quality control plans. P6 noted, “active plans are in place to manage contracts, quality assurance plans, quality control plans, [and] safety plans.”

P2 discussed the importance of observing relevant safety precautions to minimize safety risks. By establishing a safety culture that prioritizes safety, safety risk managers can effectively prevent. Some of these risks include “*OSHA’s Fatal Four which are: Falls, Struck by Object, Electrocutions, Caught-in or Caught-between equipment.* The *AIHA’s Focus Four for Health: Noise, Airborne Contaminants, Heat Stress, Material Handling Injuries.*”

P1 reported that when there is a strong safety culture, “safety hazards are unacceptable deviations from agreed-upon terms.”

Theme 4: Link to the Literature

Theme 4 aligned with findings reported in existing literature. Researchers have reported that the lack of sufficient training and awareness in the construction sector is a major contributor to safety non-compliance (Mutikanga et al., 2022). Professionals in this industry may not fully understand the potential consequences of non-compliance with safety practices, despite their expertise in various facets of construction projects (Saleem et al., 2022). Lacking awareness may cause the professionals to overlook safety measures, as they may underrate the risks of non-compliance (Samanta & Gochhayat, 2023). Safety training programs typically focus on fundamental safety protocols and regulatory requirements. Safety training is of significant significance as it instills knowledge regarding the real-life implications of neglecting safety guidelines for

individuals and the overall project (Peñaloza et al., 2020). When managers inform construction professionals about the potential dangers and costs associated with safety noncompliance, they are more likely to comply with safety standards and observe appropriate safety precautions (Oswald et al., 2022). By providing sufficient training, promoting a strong safety culture, and enforcing strict compliance, construction firms can significantly reduce incidents of safety noncompliance (Oswald et al., 2022). Moreover, integrating the insights into personalized training programs and awareness campaigns may improve the overall safety consciousness among construction professionals, thereby contributing to a safer work environment (Samanta & Gochhayat, 2023).

Understanding and promoting a strong safety culture enhances safety performance within construction projects. Stemm et al. (2019) emphasized the importance of safety culture maturity and safety performance. Researchers have emphasized the positive influence of a robust safety culture on safety performance, resulting in a decrease in accidents and disasters (Sujon & Dai, 2021). Construction firm leaders who promote a strong safety culture often experience fewer accident rates compared to those who do not have a robust safety culture (Felix & Raphael, 2024). Overall, existing research indicates that promoting a culture of safety that encourages consistent adherence to policies is significant.

Theme 4: Link to the Contingency Theory

The fourth theme aligns with the conceptual framework; Contract managers must adapt their leadership approach when conducting employee training on safety and promoting a robust safety culture. In this situation, the coaching leadership style is

especially effective in fostering employee training. Leaders typically employ this leadership style when they aim to develop their employees as individuals (Aslam, 2023). The leader provides a high level of individualized support balanced by helpful feedback (Aslam, 2023). The style reflects on goals (Wang et al., 2024). By adopting this style, managers in the construction sector will focus on achieving the goal of enhancing safety in projects. Managers may also adopt a different approach, focusing on the personal development of staff through safety training.

In summary, the fourth theme demonstrated that contract managers conduct training on safety procedures and practices to mitigate safety noncompliance on awarded contracts. Managers also establish a safety culture. As part of the safety culture, contract managers ensure that contract workers have the necessary tools and equipment to perform their jobs safely, including personal protective equipment (PPE). Data from nine interview participants contributed to this theme. Theme 4 is consistent with the existing literature and the conceptual framework.

Theme 5: Promote Ethical Practices and Implement Clear Policies Against Unethical Conduct Such as Bribery

The final theme revealed that contract managers promote ethical practices as a construction contract safety strategy for mitigating against safety non-compliance on awarded contracts. The contract managers may also implement policies against unethical conduct, including bribery and coercion. Data from six out of 10 interview participants contributed to this theme.

P1 discussed following a policy that ensures no coercion in accepting a contract and adhering to safety procedures. Coercing a contractor into accepting or doing something is generally considered unethical. The participant commented, “No Coercion or Duress: Ensure voluntary agreement without pressure.”

P7 and P8 mentioned that the factors of contract noncompliance include “overcharging the government, misclassifying employees as independent contractors, falsifying records or certifications, and bribery.” These are not only unethical practices but also illegal and can contribute to safety noncompliance on awarded contracts. Policies that prevent such unethical practices improve safety compliance on awarded contracts.

Theme 5: Link to the Literature

Theme 5 findings align with existing literature. Williams (2021) posited that construction companies can instill a sense of professional ethics through various means, including implementing clear policies against bribery and corrupt practices. Williams, (2021) also emphasized the need to conduct frequent training on ethical decision-making for all employees. Kuoribo et al. (2021) reported that implementing ethical norms in the construction industry can help promote client trust and confidence. Establishing cultural structures and systems that foster ethical practices is important. Construction engineering is a field guided by professional ethics that serves as a basis for making moral evaluations regarding the performance and conduct of professionals (Lukhele et al., 2023). Construction firm leaders need to implement professional ethics throughout the whole life-cycle performance of the contract (Lukhele et al., 2023).

Theme 5: Link to the Contingency Theory

The findings, as demonstrated by the fifth theme, are consistent with Hersey and Blanchard's contingency theory. When organizational leaders in the construction sector aim to promote ethical practices and implement policies against unethical conduct within their companies, the most suitable leadership style to employ in this situation is the autocratic leadership approach. The autocratic style emphasizes obedience and the enforcement of policies and rules to control staff members (Wang et al., 2024). In the construction sector, organizational leaders must adopt this style of leadership to ensure that they enforce policies and rules against unethical conduct and that all employees adhere to these rules.

In summary, the last theme revealed that contract managers promote ethical practices. They also implement policies against unethical conduct. This process helps prevent various unethical practices such as bribery and falsifying records and certifications and mitigates against safety non-compliance on awarded contracts. Ten interview participants contributed to this theme. The theme is consistent with the existing literature and the conceptual framework.

Applications to Professional Practice

The findings of this study apply to professional practice in the management and hiring of contract professionals who possess knowledge and experience in safety compliance processes and strategies. Applying these practices may help address safety noncompliance issues in awarded contracts effectively. Additionally, the study's findings can apply to professional practice to enhance communication. By applying the study findings, contractors and workers can communicate better with contract managers. This process may ultimately enhance collaboration between these parties towards the prevention and mitigation of contract noncompliance.

Additionally, the findings may increase awareness about safety compliance among various stakeholders in construction projects and contracts, including contractors, contract professionals, contract agencies, and subcontractors. In this way, the findings enable stakeholders to understand construction contract processes and strategies better. Equally important, the findings provide valuable insights into mitigating safety noncompliance among contractors, offering knowledge on the construction contract safety processes and strategies employed by contract managers. Awareness creation is of great importance, considering that generally, managers pay little attention to safety noncompliance on awarded contracts, particularly regarding the safety issues faced by contractors and subcontractors in their awarded contracts. Additionally, the study findings may inspire safety training for the workforce of contractors and subcontractors in the construction sector, thereby contributing to increased safety compliance.

Implications for Social Change

The findings of this study have significant implications for social change. The study enhances understanding of the processes and strategies necessary to ensure that workers' safety follows standards in the construction industry, which could result in improved safety and performance outcomes. This process could contribute positively to the wellbeing of workers in this industry. Raising awareness about construction contracts and how to enhance safety compliance in the field may contribute to positive social change, for instance, through the reduction of job-related injuries. Such injuries typically lead to various intangible consequences that negatively impact society's well-being, including suffering, pain, and a low quality of life (Tompa et al., 2021). When the number of on-the-job injuries decreases, society can benefit as employees can return home to their families healthily. The workers can continue with their work and be productive members of society, thereby contributing positively to the country's economic growth.

By conducting this study, I contributed new knowledge to policymakers and construction management teams, with a particular focus on employee safety. Based on the findings, precise and effective safety processes and strategies that can be integrated into awarded contracts include (1) developing and implementing risk management plans and (2) increasing supervision through monitoring, compliance audits, and safety inspections. Other strategies are (3) effective communication and documentation about safety procedures and best practices, (4) conducting training on safety and promoting a strong safety culture, and (5) promoting ethical practices and implementing clear policies

against unethical conduct, such as bribery. By demonstrating these safety processes and strategies based on the findings of this study, I helped enhance the understanding of strategies and processes for mitigating noncompliance and improving safety performance. Thereby ensuring the managers meet the needs of construction employees through the identification and development of effective safety compliance practices and strategies.

Recommendations for Action

To mitigate contractor safety noncompliance with awarded contracts, I recommend several strategies based on the study's findings. First, contract managers should develop and implement risk management plans. Second, managers should conduct more compliance audits and safety inspections to ensure that contractors and subcontractors comply with safety standards on all awarded contracts. Thirdly, I recommend that contract managers promote open and effective communication channels among all the stakeholders involved in a contract. Additionally, construction company managers should conduct regular training sessions for employees on matters related to safety and ethics. All their employees should participate in the training. The key recommendation is that construction firm managers should promote ethical practices and implement clear policies against all forms of unethical conduct, including bribery, falsifying records and certifications, and coercion. Since ethical decision-making is imperative in construction practices, the decisions made by professionals in the construction industry extend beyond the immediate organizational context (Marabelli et al., 2021). The decisions have ethical implications and contribute to the broader societal impact of construction activities.

Recommendations for Further Research

In this study, a small sample size of 10 participants, comprising contract managers, contract officers, and contractors, participated. This sample size was small, which negatively affects the transferability of the findings to other settings, contexts, and populations. I also conducted the study in a single setting in the Southeastern region of the U.S. The process negatively affects the transferability of findings. Therefore, future researchers on this topic should aim to use a larger sample size and recruit participants from multiple locations and settings. Enhancing the transferability of the findings to other settings, contexts, and groups.

Second, I gathered the data in this study from a single data source. I conducted semistructured interviews. Although the interviews prompted nuanced responses from participants and added depth and richness to the qualitative data collected, I compromised the study's credibility by using only one instrument for data collection, as I employed no triangulation.

Third, future researchers on this topic should adopt a mixed-methods approach. I used a qualitative pragmatic inquiry approach in this study. Using this method, the findings depended on the accuracy of the information that participants provided while sharing their experiences during the interviews. This information was subjective and made the findings less credible. By using a mixed-methods approach, future researchers could combine the advantages of the two methodologies and overcome the weaknesses inherent in each approach.

Reflections

Conducting this study has immensely benefited me in various ways. In this subsection of Section 3, I included reflections on my professional and personal growth. Precisely, a discussion concerning how conducting this study enhanced my growth both professionally and personally.

Personal and Professional Growth

Conducting this study has significantly enhanced my opportunities for professional and personal growth. During the research, I had to critically assess information and make informed decisions. Thus, I was able to develop my critical thinking capacity, which is an essential skill that I can utilize in solving academic problems; hence, it is vital for my personal growth. The research skills that I acquired while conducting the study enable me to properly identify, evaluate, and successfully address complex problems that I face in the workplace. The project involved gathering information from contract managers, examining different perspectives on construction contract safety strategies for mitigating safety noncompliance on awarded contracts, and providing actionable recommendations. By approaching challenges with a research-oriented mindset, my problem-solving capabilities improved immensely, thereby contributing to my personal and professional growth.

Second, conducting the research project contributed to the development of knowledge within my field of study, thereby helping me grow professionally. Through this qualitative pragmatic inquiry, I was able to pursue my interests, which focused on exploring the strategies contract managers use to mitigate contractor safety

noncompliance with awarded contracts. Through this research, I gained new insights into construction contract safety strategies that contract managers can utilize to mitigate safety noncompliance on awarded contracts. Some of these strategies included providing employees with safety training, maintaining effective and consistent communication about safety procedures, conducting compliance audits and safety inspections, and promoting ethical practices and policies to prevent unethical conduct. Conducting the study enabled me to gain vital experience in manipulating raw data from respondents, making informed decisions, and learning how other researchers in my field of study utilize data sources, including both primary and secondary sources. By accessing reliable information, I have been able to make informed decisions and form opinions, thereby reducing the likelihood of errors and increasing the likelihood of success in my professional endeavors, which contributes to both my professional and personal growth.

Conducting this study improved my communication skills. I can communicate more effectively with others now. Additionally, I can effectively and concisely convey the findings of my study, present complex information in a clear and concise manner, and support my assertions with credible evidence. My ability to communicate effectively, informed by research, enabled me to grow both personally and professionally. The research I conducted has also raised my professional reputation and credibility. In this study, I adequately used concrete research to support my proposals and decisions. This process enabled me to demonstrate my expertise and establish trust with my colleagues, peers, and superiors. Moreover, applying my research skills in my workplace may help

create opportunities for promotions and leadership positions. In this way, the study would positively contribute to my professional growth.

Summary

The purpose of this qualitative pragmatic inquiry research study was to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. The participants included 10 contract managers, contract officers, contractors, and subcontractors with experience in contracts or construction contracts. I selected the participants from a selected contracting firm who were decision-makers within their organization. I collected data from semistructured interviews and analyzed them using a pragmatic inquiry approach. The research question guiding my qualitative pragmatic inquiry study was: *What construction contract safety strategies do contract managers use to mitigate safety noncompliance on awarded contracts?* Five themes emerged from the data analyzed to address this question. The themes included developing and implementing risk management plans, increased supervision through monitoring, and compliance audits. The themes also included safety inspections, effective communication and documentation of safety procedures and best practices, conducting employee training on safety, promoting a strong safety culture, and promoting ethical practices by implementing clear policies against unethical conduct, such as bribery.

The study findings can apply to professional practice related to the management and hiring of contract professionals who are conversant in safety compliance processes and strategies. By applying these findings, contractors and workers in construction companies can communicate more effectively with contract managers, thereby improving

collaboration between these parties in the prevention and mitigation of contract noncompliance. These findings also provide valuable insights into mitigating safety noncompliance among contractors, thereby offering crucial knowledge on the construction contract safety processes and strategies employed by contract managers. Additionally, the findings inform safety training for employees in the construction sector, thereby contributing to enhanced safety compliance. Regarding implications for social change, the study enhances understanding of the processes and strategies necessary for ensuring that managers follow safety standards in the construction industry, which could ultimately improve safety and performance outcomes. This could then contribute positively to the wellbeing of workers in this industry. Creating awareness about construction contracts and how to enhance safety compliance in the field may contribute to positive social change, such as a decrease in job-related injuries.

A recommendation for practice is that to mitigate contractor safety noncompliance with awarded contracts, construction firm managers should promote ethical practices and implement clear policies against all forms of unethical conduct. Contract managers should foster clear communication channels among all the stakeholders involved in a contract. Construction companies should conduct regular employee training on matters related to safety and ethics. Furthermore, future research on this topic should employ a larger sample size and recruit participants from multiple locations and settings to enhance the transferability of the findings to other settings, contexts, and groups. Through this study, I have developed critical thinking skills and

enhanced my communication abilities, which are essential for both my professional and personal growth.

Conclusion

In this study, I explored contract managers' strategies for mitigating contractor safety and noncompliance in construction awarded contracts. The purpose of this qualitative pragmatic inquiry research study was to explore the strategies contract managers use to mitigate contractor safety noncompliance with awarded contracts. I recruited managers who successfully applied strategies that mitigate noncompliance in construction contracts, which affect safety performance. I explored and identified these strategies to provide actionable insights for improving safety compliance in the construction industry. The qualitative pragmatic inquiry research approach was the most appropriate method, as it allowed me to effectively explore the strategies that some contract managers use to manage contractor safety noncompliance with construction-awarded contracts.

My role in the study was that of a researcher, and I served as the primary instrument for data collection. My role also involved analyzing the thoughts of the participants and identifying relevant themes from their perspectives. The study's conceptual framework was based on Hersey and Blanchard's 1969 contingency theory, which is also known as the situational approach (Blanchard et al., 1993; Hersey & Blanchard, 1969). This theory emphasized the significance of considering contextual factors. In the context of construction contracts, situational factors play an essential role (Hersey & Blanchard, 1977). Thus, this qualitative pragmatic inquiry reflected on

exploring Hersey and Blanchard's 1969 contingency theory as the conceptual framework. I gathered data from 10 participants using semistructured interviews guided by an interview protocol. I audio-recorded the interview sessions with the participants' permission. I analyzed the data gathered using thematic analysis for pragmatic inquiry. The research question that guided this qualitative pragmatic inquiry study was: *What construction contract safety strategies do contract managers use to mitigate safety noncompliance on awarded contracts?* Five themes emerged from the analyzed data to answer the question. The findings revealed that the strategies include developing and implementing risk management plans. Additionally, the strategies include increasing supervision through compliance audits and safety inspections, as well as maintaining effective communication and documenting safety procedures. Best practices included conducting employee training on safety and promoting a strong safety culture, as well as promoting ethical practices and implementing clear policies against unethical conduct, such as bribery.

The findings of this study apply to professional practice, aiming to increase awareness of safety compliance among various stakeholders in construction projects and contracts, including contractors, contract professionals, contract agencies, and subcontractors. In this way, the findings enable stakeholders to understand construction contract processes and strategies better. The findings also provide insight into the mitigation of safety noncompliance among contractors, offering important information on the construction contract safety processes and strategies employed by contract managers. Besides, the study findings may inspire safety training for employees in the construction

sector, thereby contributing to increased safety compliance. Creating awareness about construction contracts and how to increase safety compliance in the field may contribute to positive social change, for instance, through the reduction of injuries on the job. A small sample size of ten participants I recruited for this study came from a single location, thereby limiting the transferability of the findings. Future researchers should, therefore, strive to use a larger sample size and recruit participants from multiple locations and settings to enhance the transferability of the findings. Conducting the research project has contributed to the development of knowledge within my field of study, thereby enhancing my professional growth.

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Appendix A: Informed Consent Form

The purpose of the qualitative pragmatic inquiry research is to explore contractor managers' safety compliance processes and strategies to mitigate safety and performance noncompliance in construction projects, which affect safety performance. The study is being conducted by a researcher named Sallieann Wilson, who is a Doctoral student at Walden University.

I am inviting you to participate in the research study because you are a successful contractor or contract professional in the field of construction acquisition. I will state that your participation in the research study is voluntary. You may choose not to participate. The form is part of a process called "informed consent" to allow you to understand the study before deciding whether to take part.

Voluntary Nature of the Study: Your decision to participate in the research study is voluntary. You may withdraw at any time, without penalty to you. No risks are associated during the interviews, except for the risks you are subject to in your offices and daily lives which may include minor discomforts like fatigue, stress, or becoming upset.

Informed Consent: The procedure in the interview involves potential participants responding to a series of questions. The interview will last approximately 60–90 minutes. I will review publicly available documents, including policies and procedures, the company's shipment processes, and other publicly available risk reports related to the company's supply chain. Every participant's response is confidential. The interview questions will reflect on participants' strategies for mitigating the effects of supply

disruptions. For confidentiality protection, the interview process will not include information that personally identifies the company or participants. The outcome of the study is for scholarly purposes only, and Walden University representatives may have access to the reports.

The information I will collect will be stored and secured correctly. I will keep the data for at least five years, after which I will destroy it. To ensure consistency, the interview will be audio taped. I will ask you to confirm whether I have interpreted the information accurately from the interview session. There are no benefits to the participants in the study; however, to the larger community, the outcome of the study will help to contribute knowledge to scholarly purposes and benefit managers planning to mitigate the impact of supply chain disruptions. If you have any questions about the research study, please contact Sallieann.Wilson@waldenu.edu. If you have any questions about your rights as participants, you may contact Walden University IRB through the provided email: IRB@waldenu.edu. Walden University's approval number for the study is 12-30-24-0458213.

Incentives and Payment: There were no incentives and no cost to participants in this study.

Appendix B: Interview Questions

During the interview I may ask interview questions and follow up questions

1. What do you consider as factors of contract noncompliance??
2. What contract noncompliance issues are most prevalent?
3. What contract noncompliance issues are most challenging?
4. What strategies do you use to mitigate safety and performance noncompliance on awarded contracts that you manage?
5. What construction contract processes and strategies have you used to mitigate noncompliance?
6. What improvements have you experienced using these processes and strategies?
7. What else can you share regarding processes and strategies to avoid noncompliance that I did not ask?

Appendix C: Interview Protocol

Interview Protocol and Questions

INTRODUCTION

Good morning (afternoon). My name is Sallieann Wilson. I want to thank you once again for coming and your willingness to participate in my study interview.

This interview should take about 60-90 minutes of your time. I will be taking notes and recording the interview. Please be assured that your identity will be kept confidential. Before we begin the interview, would it be ok with you if I tape-recorded our conversation?

I would also like to confirm that I received your signed consent form. This document will also be kept confidential.

Before we begin the interview, are there any questions you would like to ask me?

BACKGROUND

What is your age: _____

Gender: Male/Female/Non-binary/Other

MAIN QUESTIONS

1. What do you consider as factors of contract noncompliance?
2. What contract noncompliance issues are most prevalent?
3. What contract noncompliance issues are most challenging?
4. What strategies do you use to mitigate safety and performance noncompliance on awarded contracts that you manage?
5. What construction contract processes and strategies are used to mitigate noncompliance?

6. What improvements have you experienced using these processes and strategies?
7. What else can you share regarding processes and strategies to avoid noncompliance that I did not ask?

PROBING QUESTIONS:

1. Could you elaborate on your response?
2. Tell me more.
3. Could you give me an example?
4. Could you explain that?
5. Could you be more specific?

CONCLUSION

Thank you for your time and insights. If you would like to provide any additional comments or suggestions, please feel free to do so. Your contribution will significantly contribute to the advancement of knowledge in this field.