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Lived Experiences of Texas Construction Workers Reporting Near Misses on Their Jobsite

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Walden University

College of Health Sciences and Public Policy

This is to certify that the doctoral study by

Joaquin Manuel Diaz

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

2026

Abstract

Lived Experiences of Texas Construction Workers Reporting Near Misses on Their
Jobsite

by

Joaquin Manuel Diaz

MM, University of Phoenix, 2012

BS, Columbia Southern University, 2005

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Public Health

Walden University

May 2026

Abstract

Near miss incidents in the construction industry, when reported, serve as critical indicators of safety performance. When reported, organizations can identify hazards early and reduce the incidence of injuries and illnesses. Limited research exists on how construction workers perceive near miss incidents and how they are influenced to report them. Semi-structured audio-recorded interviews with 15 Texas-based construction workers in three cities about their lived experiences with near-miss reporting were conducted between July 18 and August 22, 2025. Data were organized using NVivo software and analyzed according to the phenomenological procedures outlined by Burns et al. and the qualitative analysis guidance provided by Patton. The theory of planned behavior provided a conceptual framework for understanding workers' reporting behaviors. The participants were unable to provide a specific definition of what constitutes a near miss and did not believe that all near misses should be reported, thereby missing an opportunity to investigate and implement corrective actions to prevent injuries and illnesses. Many believed that the severity of the event determined reporting action, but also potentially succumbed to peer and supervisory pressure not to report. Additionally, many felt that employers fell short in defining a near miss and in near miss reporting. Lastly, building a culture of near miss reporting requires intentional efforts, including communication improvements, by employers and their assigned supervisors. The potential positive social change impact of this study is an increase in near miss reporting rates among construction workers, resulting in decreased associated morbidity and mortality because of errors and accidents.

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Dedication

This doctoral study is dedicated primarily to my wife. She has been my life and my source of motivation for the past 28 years. She has been supportive of my journey for the past five years. I also want to dedicate this to my wonderful sons. They are my true purpose and my center. I set out to be an example for them each day. Lastly, my family on both sides. Thank you for being my foundation and guiding me through this life.

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Section 1: Foundation of the Study and Literature Review

Introduction

This study examined the lived experiences of Texas construction workers who have encountered near misses involving themselves or their coworkers, which, if not for chance or circumstance, could have resulted in an injury. In occupational health and safety (OHS), we strive to understand the underlying reasons behind the actions (Fan et al., 2019). OHS professionals consistently strive to learn from workplace incidents and create a safer environment for workers. The challenge for OHS professionals is to have the opportunity to investigate events. There is a reliance on workers, supervisors, and management to present events as they occur. Near misses provide an opportunity to address events as they occur, before harm is caused to people, property, and the environment (Duan & Zhou, 2023). Managers, supervisors, and OHS professionals can leverage near miss reporting and investigations to implement corrective actions and plug gaps.

With this study, I aimed to understand why workers report or fail to report near misses. The study was limited to a small group of construction workers in Texas. Duan and Zhou (2023) reported that near misses account for 80% of all construction incidents, which encompass injuries, illnesses, property damage, and other adverse events. These estimates are based on the findings of Duan and Zhou. This is a large part of the puzzle that we can seek to understand by learning why workers do or do not report near misses as they occur. Studies reflecting the lived experiences of construction workers were not identifiable in my literature review, indicating a gap in the research and a need to explore

this phenomenon. In addition, gaining insight into the workers' lived experiences can facilitate further discussions on effective interventions that increase near miss reporting, including empowering employees to speak up or stop work when a situation arises. Reporting near misses addresses potential adverse conditions, behaviors, practices, or actions that could result in harm to people, property, or the environment. The greater the scrutiny on near misses, the greater the opportunity to prevent injuries, illnesses, and other types of harm. Near misses are a step above an observation of unsafe action, condition, or behavior. For example, a worker is not wearing safety glasses while prepping to cut steel. That example is an unsafe action that could lead to an unsafe condition. A near miss occurs when that employee is not wearing safety glasses, ignites the cutting torch, and begins to cut the steel. Sparks and exposure to infrared light can cause harm to employees without proper eye protection, potentially representing a near miss. The state of condition resulting from the action led to potential exposure or contact with the light or sparks. The injury did not occur due to timing or happenstance, which would represent a near miss. An employer could act upon the report of this near miss by evaluating current procedures, providing proper personal protective equipment, and retraining the employee to understand the present hazards. Without reporting or observing the near miss, the employer misses an opportunity to address what may be a common condition.

This section highlights concerns about injuries and fatalities within the global construction industry. I work in a construction environmental, health, and safety leadership role for one of the country's largest construction companies. I have seen

injuries and incidents happen in numerous countries. I have experience in the worksite injury problem, but as my research presented, there are gaps in understanding why near misses are or are not reported from a worker's perspective. The literature review presents a summary of research on near misses from an organizational or analytical perspective, but provides very little insight into the human experience.

My research provides information on the background of the issue related to near misses. My focus was on understanding the workers' perspective regarding why near misses are either reported, underreported, or unreported. We aimed to understand the factors that influence a person's reaction to being part of or witnessing a near miss, as well as the subsequent decisions made. Construction is a human-dominant business, unlike other industries that manufacture products without much human involvement. The industry relies on competent and trained professionals who are skilled in specific trades. They are subject to micro decisions frequently throughout the day, including observing safe and unsafe actions and conditions.

The problem statement is presented to reinforce that near misses are a public health concern. The literature review presents studies that argue for near misses being an important part of an OHS program. They are critical because a robust employer near miss reporting program can reduce injuries and illnesses in a high-hazard industry like construction. Any method to reduce injuries and illnesses is considered and captured. As my research shows, near misses are underreported. While most of the research in the literature review highlights the benefits of a near miss reporting program, it does not

present the case from the human's near miss experiences. I aimed to understand and present this experience to increase interest in the subject.

The research questions and conceptual framework are presented to gain an understanding of the lived human experience. I can make assumptions based on my own experience as an OHS professional, but that is just one person's perspective.

Phenomenological research aims to comprehend human experience (Burkholder et al., 2019), whereas the theory of planned behavior can elucidate the factors that influence a person's actions, including motivations and behaviors (Hayden, 2017). In this study, I aimed to understand behaviors, perceptions, influences, and decision-making processes that reflect responses to workplace incidents and events. This paper reflects on the worker and how they bring their own experiences, life choices, and influences into the workplace. I focused on how these are applied to near misses and the missed opportunities that present with unreported or underreported events as they occur.

Background

The Bureau of Labor Statistics (BLS, 2022) has reported that the construction industry has the highest rates of injury and illness. Associated with the injury and illness rates are concerns about the numerous unreported and reported near misses that could contribute to unidentified problems, conditions, behaviors, or actions that result in an injury or illness in the future. Duan and Zhou (2023) reported that near misses account for 80% of all construction incidents. The indication is that focusing on near misses should reduce construction-related injuries and illnesses. Currently, there is research and resources related to construction near misses. There is limited research in other industries,

and none for construction on workers' lived experiences when reporting near misses. Understanding this phenomenon could lead to deploying additional resources, implementing containment measures, or developing programs to enhance near miss reporting and response.

Problem Statement

Near misses are a public health concern, as they can lead to injuries and illnesses if ignored (Winkler et al., 2019; Van Derlyke et al., 2022). The worker fatality rate is 10 for every 100,000 full-time employees, and injuries exceed 169,000 across the United States (BLS, 2022). An emphasis on near misses and interventions designed around reporting and investigation could reduce injuries and illnesses that are comparable to or higher than those in other high-hazard industries (BLS, 2022). Additionally, studying the workers' experiences can help organizations identify gaps in their programs and address them effectively. Van Derlyke et al. (2022) studied the association between near misses and a company's safety climate and found that poor safety climates were associated with influencing near miss reporting and investigations, as well as higher injury rates, compared to companies with suitable safety climates.

Although not a problem, Texas construction injury rates are lower than the national average, as indicated by BLS (2022) data for 2022, which uses the associated North American Industry Classification System (NAICS) super sector code of GP1CON (BLS, 2022). I initially intended to study Oregon-based construction workers, where the injury rates were twice the national average (BLS, 2022). The location changed due to a work relocation, and while Texas may have lower rates of injuries compared to Oregon,

the workforce demographics differ. According to the Columbia-Willamette Workforce Collaborative (2025) study, completed in 2025, the Oregon construction workforce is 76% white. Zhao (2024) indicated that the Texas construction workforce is greater than 50%. The workforce demographics changed significantly from state to state, presenting a new challenge. The problem was having an effective translation of the interview questions, where applicable, of the terms used. My study included interviews with predominantly Hispanic, as well as Texas-based construction workers from various sites across the central to southeast parts of the state. I aimed to understand the experiences of Texas-based construction workers in near miss incidents and the safety climate.

My own experience with worksite incidents and near misses has underscored the need to investigate near misses further. Based on my work site experience, I believe near misses are underreported, and the accompanying literature review for this study supports this assertion. The larger question from the available research is why? We have a general perception as to why near misses are underreported or unreported, but that is from a system's perspective. Van Derlyke et al. (2022) studied near misses from a systems perspective and presented data that near misses harm organizational culture. This influences whether near misses are reported, whether they are reported promptly, or not at all. I sought to understand the reasoning behind under- or unreported near misses. We must gain insight into the worker's own experiences, whether they have a positive or negative experience with near misses. We should understand how a supervisor's need to ensure production in a complex system, such as construction, can influence a worker's desire to report a near miss. As Van Derlyke et al. (2022) noted, near misses are

correlated with injuries. The overarching goal is to reduce the alarming rate of injuries and fatalities in the construction industry by enhancing near miss reporting. To summarize, the problem statement is to determine whether barriers exist and, if so, to identify their causes.

Purpose of the Study

The study's purpose was to learn, comprehend, and consolidate information from Texas-based construction workers on their lived experiences being party to or witnessing near misses, their reasoning for reporting and not reporting near misses, influences that persist in companies to encourage or discourage reporting, supervisor influence, and peer pressure persuading or dissuading near miss reporting. This study employed an interpretive, qualitative analysis through audio-recorded interviews, using questions designed within the framework of the theory of planned behavior. The intent was to learn more about the behaviors, pressures, and influences that steer a worker's behavior around near misses. Analysis was conducted using NVivo 15 software, where codes and themes were sorted to provide a review of the key findings. Field based products were developed in Appendices A–D that describe takeaways and implementation strategies from this research that could help public health and OHS practitioners with communicating and intervening.

Research Questions

Qualitative RQ1 – What are the lived experiences of Texas-based construction workers regarding the reporting of near misses?

Qualitative RQ2 – What are the lived experiences of Texas-based construction workers regarding the barriers they encounter when reporting or attempting to report near misses?

Qualitative RQ3 – What are the lived experiences of Texas-based construction workers regarding the importance of near miss reporting?

Conceptual Framework

This study used the Theory of Planned Behavior to examine the safety climate on job sites where these workers have experience. Wayment and Huffman (2020) employed the theory of planned behavior to examine how social norms and self-efficacy influence behaviors and self-reported behavior. This theory aligns with workers' lived experience of involvement in a near miss and their reporting of it. Whereas other theories have been considered and exist, such as the Swiss cheese, social ecological, health belief, and near miss management models, the theory of planned behavior best aligns with this study. The framework best helps understand the underlying opportunities that encourage or conditions that prevent poor behaviors and acts that contribute to near misses. The theory can also present the causes of the differing safety climates that influence a worker's comfort level in reporting near misses.

Nature of the Study

The study's nature was to gather the workers' lived experiences through a phenomenological approach and interview them about their past and current conditions. I wanted to explore the drivers behind their decisions, behaviors, and actions. Conducting this study will inform safety professionals about potential blind spots in their safety

climate and near miss reporting and investigation programs. While this study is not an approach to rectifying those hurdles, the study could serve as a guide to identifying those blind spots.

Definitions

The following key constructs are referenced in this study:

Near miss – an incident, event, or hazard that resulted in no harm to people, property, or the environment. Given a slight movement, schedule change, or position shift, harm could have resulted (Occupational Safety and Health Administration [OSHA], n.d.). Although not a standard definition, for the sake of this research, I used this as the basis.

Organizational culture/safety culture – an organizational system where leadership and management commitment to safety is apparent throughout the organization, and safety is a value system that is reinforced in gatherings, efforts, and responses (Otitolaiye et al., 2021).

Occupational health and safety (OHS) professional – Environmental, health, and safety (EHS) professionals, also known as OHS/EHS professionals, develop workplace strategies and lead/support workplace safety efforts. The OHS/EHS professional provides advice, support, and analysis to their employers or clients. They guide and support companies and leadership in risk assessments, controls, and practices. These are designed to reduce and eliminate incidents, events, and harm. They serve as the technical subject matter experts for employers/clients (American Society of Safety Professionals, n.d.).

Construction worker – OSHA (n.d.) defines a construction worker as a laborer or mechanic who conducts construction work and is exposed to hazards according to the Occupational Safety and Health Act. A laborer is a worker who performs manual labor activities, while a mechanic is considered a skilled worker, such as a carpenter or equipment operator.

Systems thinking – as applied in OHS, is a method of understanding the interaction of components at multiple levels resulting in a near miss incident or other safety events (Thoroman & Salmon, 2018).

Worksite/Construction Work – OSHA (n.d.) describes construction work as activities that involve construction, alteration, and/or repair, including painting and decorating. Contractors and clients may consider off-site activities that support construction, including modularization, precast, and assembly, as legitimate forms of construction work. A worksite is a location where construction activity is occurring.

Near Miss Reporting System – Thoroman and Salmon (2018) described a near miss reporting system as the mechanism for near misses.

Foreman/supervisor – these are immediate supervisors of construction workers assigned to carry out specific construction activities in support of the construction schedule.

Assumptions

Practicing as an OHS professional and applying my experience can lead to some assumptions about the research topic. For example, it can be assumed that a near miss is defined similarly across construction organizations. I have worked for five separate large

construction organizations, and each one had a distinct approach to near misses, including how to investigate them. Thoroman and Salmon (2018) provided separate definitions from the World Health Organization, OSHA, and the International Atomic Energy Agency. The National Safety Council also provides a different definition. Although the definitions differ to some degree and various descriptions exist for the same phenomenon, a general sense of a near miss can be understood. An additional assumption can be made about workers who can identify a near miss. Generally, organizational culture, a lack of recognition of the importance of near misses, limited or nonexistent near miss reporting systems, and limited systems thinking create barriers to the timely reporting of near misses.

Scope and Delimitations

The scope of the study was a phenomenological study of a worker's lived experience. My study included relevant interview questions to gain an understanding of the workers' experience. I intended to inquire about the worker's own challenges, involvement in near misses, and trailing steps if or when a near miss was reported. I set up QR codes for job sites, reached out to labor organizations, and leveraged a network of safety managers for companies across Texas. I also partnered with my employer, a large construction management and general contracting firm, for access to the different companies and trades that work on their jobsites. Seventeen trade workers expressed interest, of whom 15 qualified based on the screening questions. Workers not based in Texas or with limited experience working in the state were excluded from the study. My study did not favor one trade over another and did not exclude workers based on their

status as journeymen or apprentices. The two additional interested participants were excluded because of their previous or current work experience as forepersons and supervisors. The interviews were strictly limited to trade workers who are not or have not served in a supervisory role. Interviews were conducted using the interview questions provided in Appendix E of this paper, which evolved from the research questions to gather their lived experiences working on construction sites.

My study examined the perceptions of these workers and whether different types of barriers, including peer pressure, productivity expectations, or supervisor influence, hinder near miss reporting. Lastly, my study did not consider gaps in organizational culture, violations of company policies, the types of near misses that were reported, or whether company injury rates were reduced following an increase in near misses. Although these are important in a study regarding the effects of near miss reporting systems, I focused on the downstream effects of barriers that influence near miss reporting at the worker level.

Limitations

A study of this type can be challenging due to the limited number of trade workers in the sample. Along with the small sample size, there would be limited diversity among the workers interviewed. A method of addressing these concerns would be to ensure worksite diversity. I coordinated with safety managers from the partner organization and the trade contractors in posting my contact and research information. Research bias may exist when considering answers that reflect a desire to conduct a larger study. Another bias is the researcher's own experience, which can color objectivity

and confirm assumptions. An additional concern is whether workers are comfortable making contact, considering that information about the study will be posted on job sites.

The study may pose some uncomfortable questions about a worker's experience. The risk of research bias arises when a worker is not comfortable with the questions. A worker should feel autonomy when making contact and answering questions. I helped workers feel at ease by maintaining strict confidentiality in their responses and not sharing their contact information with anyone. Working closely with the committee chair to address these limitations minimized bias in the research.

Significance of the Study

The study informs readers about the near miss experiences of workers on a construction site. While much of the literature in this study examines the benefits of near misses and the influence of safety culture on reducing injuries, there was no evidence of studies from the bottom up that consider workers' perspectives. The organizations I worked for always sought to understand the workers' perception of the safety climate, but the research I found did not. I wanted to understand their experience. Understanding the experiences can lead to more comprehensive studies on the subject matter. This study can also influence employers and industry groups to consider interventions that reduce resistance to near misses. I believe this study can support a reduction in fatal and nonfatal injuries that happen at a higher rate than in other high-hazard industries.

Literature Search Strategy

I used various sources to gain a comprehensive understanding of the existing research. The literature I reviewed was sourced from industry groups, including the

National Safety Council's Campbell Institute and the American Society of Safety Professionals. Additionally, I searched through government agencies, including OSHA and the National Institute for Occupational Safety and Health (NIOSH). I also used search databases from the Walden Library and Google Scholar. I used various keywords including *near miss reporting barriers, organizational culture barriers that influence worker behavior, near miss reporting systems, systems thinking and near misses, benefits of reporting near misses, challenges to reporting near misses, occupational near misses, near miss, construction near miss, construction incidents, near miss reporting and construction injuries, near miss reporting construction, near misses as a public health concern, prevalence of injuries for construction, and near misses as an indicator of safety performance*. I sorted the information into relevant subject lines. Although I found studies on workers' lived experiences with near miss reporting in other industries, I noticed a gap specifically in the construction industry. I noticed that the research focused on the relationship between near misses and injury reduction, as well as the benefits of a near miss reporting system.

Literature Review Related to Key Study Variables

The literature review presents studies on near misses in the construction industry. According to the BLS (2022), the construction industry is one of the high-hazard industries, accounting for injuries and fatalities at rates higher than those of most other industries. The injury rate is 10 per 100,000 full-time employees, and approximately 169,000 annual workplace injuries occurred (BLS, 2022). These numerous injuries and illnesses do not include the number of near misses, whether reported or not. Duan and

Zhou (2023) indicate that 80% of all construction incidents are near misses, a higher rate than in other industries, suggesting that near misses account for over a million incidents annually.

Additionally, near miss loss values exceed the random normal distribution, indicating a potential loss severity greater than that of other unexpected losses (Duan & Zhou, 2023). These high incident rates are attributed to the nature of the building process, work organization, and sociodemographic characteristics (Marin et al., 2019). A measure of leading and lagging safety performance is the near miss (Van Derlyke et al., 2022). A study on the safety culture surrounding near misses has been conducted; however, none of the studies address workers' lived experiences in reporting near misses, which is the gap. The limited studies on lived experiences present an opportunity to understand the dynamics of knowledge about near misses, safety cultures, norms, volitional and behavioral controls, and attitudes. Linking these together within the present study can help construction supervisors and contractors understand the context in which near misses are reported or not.

Near Miss Definitions and Current Theory

A standard definition for a near miss in the construction industry? Has yet to be established and can depend on a company's experience or that of a regulatory or standard development organization. OSHA (n.d.) has defined a near miss in the Safety and Health Management System Manual as a close call or narrow escape, involving an unintentional event that could have resulted in injury, illness, environmental damage, property damage, or interruptions to normal operations. Additionally, the Campbell Institute (2020)

published a document guiding employers in designing strategies to prevent serious injury and fatalities. Within the document, a near miss is defined as an incident that could result in a serious injury or fatality if not for the presence of barriers or countermeasures. Lastly, the International Organization for Standardization (ISO) in 45001:2018 on Occupational Health and Safety Management Systems defines a near miss as an incident where no injury or illness occurs but has the potential to cause one.

The inconsistency in defining a near miss event is challenging for professionals and tradespeople. I have attempted to define a near miss by distinguishing it from unsafe actions, behaviors, and conditions, similar to Zhou et al. (2019), who studied near misses and human dynamic factors. Zhou et al. indicated that near misses induced 80% of construction incidents. Zhou et al. considered near misses as situations where the events leading to an accident were disrupted. Zhou et al. indicated that near misses are the typical result of unsafe actions, behaviors, or conditions.

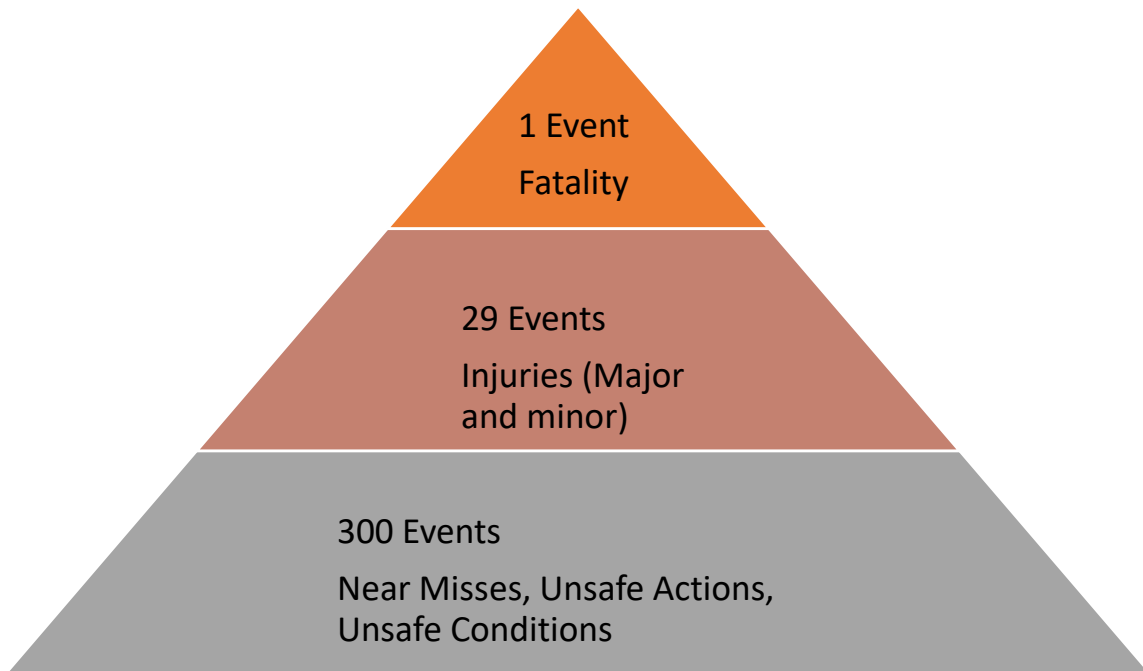
Simply put, near misses result from choices and conditions in the workplace, including those made by both management and workers. Defining a near miss in this manner is broad and may lead to some misinterpretations of actions, behaviors, or conditions. Conversely, considering a near miss as a disruption to production could lead to a more effective root cause analysis. Zhou et al. (2019) argued that human dynamics should be considered in terms of the dynamic features of human action and behavior. The study focused on metro construction in Wuhan, China, using available data from 2006 to 2017. The research methodology involved analyzing the dynamic characteristics of near miss incidents and the human dynamic effects. Zhou et al. examined the interactions and

decision-making processes of humans in the workplace, but the scope of their study was limited to a specific region in China. In addition, Zhou et al. did not address the reasoning behind human actions and behaviors, nor did they investigate whether near misses were reported promptly. A root cause analysis is necessary to determine why near misses are not reported or are not reported promptly, and to understand the human dynamics that contribute to near misses. My study was intended to understand the lived experiences of construction workers in reporting near misses. Zhou et al. emphasized the importance of reporting unsafe actions and conditions, as well as investigating and mitigating near misses.

Herbert William Heinrich proposed a theory in 1931 about a hierarchy of incidents that, if not addressed, could result in a fatality (Dunlap et al., 2019). The theory postulates that a ratio of fatal injuries to serious injuries to unsafe actions and conditions occurs within every organization (Dunlap et al., 2019). The ratio increases from the top to the bottom of the pyramid (see Figure 1). The theory, which has been tested and modified by other research, supports efforts by construction companies to address the pyramid base and reduce the potential for significant injury and illness (see Figure 1.)

Figure 1

Heinrich Injury Pyramid (reproduced by Dunlap et al., 2019)



Cooper (2019) described the relationship between safety culture or climate and its effect on severe injuries and fatalities. Cooper stated that a safety climate or culture may influence how workers participate and react to an action or event at a location.

Unreported near misses reflect the safety culture or climate of a particular organization.

In addition, a culture of unreported near misses can indicate poor safety performance and rates of unsafe actions and conditions that could result in an injury or illness within an industry with 169,000 workers injured annually.

The Cooper study did not aim to resolve competing definitions of a near miss, as previously identified in this paper, but rather to share information derived from the lived

experiences of construction workers. The published peer-reviewed literature does not offer competing theories on a near miss related to construction. Studies in the literature have proposed a theory regarding near misses and their impact on construction injuries. My study aims to understand the experiences of workers in reporting near misses.

Other studies on construction near misses have yet to investigate these experiences. Duan and Zhou (2023) argued that near misses are critical for the construction industry as it aims to achieve zero injuries. Duan and Zhou did not define a near miss; however, the quantitative analysis conducted supports the need to understand the lived experiences of construction workers. Duan and Zhou conducted a quantitative analysis of construction near misses and completed a systematic review of the quality of near misses. Duan and Zhou utilized the Web of Science, BibExcel, CiteSpace, CoPalRed, Sci2, and Vantage Point to collect data from 120 near miss papers, incorporating specific keywords such as “unsafe condition,” “unsafe act,” “worker,” or “near miss.” Lastly, they organized the information into two separate qualitative interpretations: near miss research themes, gap analysis, and trends in a critical review.

A key question I gathered was how near misses depended on personal or organizational risk perception. Duan and Zhou (2023) concluded that organizations need to develop a near miss management system. A near miss management system can assist organizations in understanding the dynamics of instantaneous or sudden energy release, the complexity of construction activities, and concealment where near misses are not easily understood or ignored, as well as in reporting quality and quantity. Duan and Zhou

focused on easily observable events, while missing the opportunity to understand workers' experiences within a construction organization or job site.

Duryan et al. (2020) investigated knowledge transfer within safety and health training and its relationship to safety culture. Duryan et al. explored the practices, policies, and experiences of construction safety management in the United Kingdom. The researchers employed an interpretive methodology, conducting interviews with three contractors and six representatives, followed by a workshop with the representatives who had been interviewed. The workshop organized the early interviews into themes and followed that with the primary interviews of 43 individuals. The themes, explored through method analysis and cognitive mapping, included institutional issues, business modeling, worker well-being, OHS, operational issues, recruitment, and employee turnover. The analysis indicated that emergent issues in OHS are clients' understanding and supporting a construction company's efforts to reduce injuries and illnesses, transfer of collective knowledge through the supply chain, a culture that triggers behavioral change, eliminates blame, learning from experiences, implementation of behavioral change programs, support and commitment, improving line managers' awareness, and efficiency in OHS management. Duryan et al. (2020) concluded that blaming can make learning from past incidents difficult. They also concluded that knowledge transfer on construction sites is unique, difficult, and complex, and tacit knowledge can help reduce unsafe behaviors and actions. Knowledge plays a central role in implementing a safety system and helps cultivate a culture of safety. A safety culture is a mental model that specifies values, shapes interaction patterns, and influences behavior. My study examined

the cultural factors that workers encounter when deciding whether to report a near miss. That decision is based on the factors identified by Duryan et al. (2020) in their near miss themes.

Another theory presented is the Swiss cheese model (SCM) by Larouzee and Le Coze (2020). This model analyzes an incident by focusing on human error, organizational reliability, or safety culture (Larouzee & Le Coze, 2020). The Larouzee and Le Coze article reviewed the history of the Swiss cheese model and why this model has dominated incident modeling. They addressed the criticism and motivations for using the Swiss cheese model in incident modeling. Larouzee and Le Coze concluded that human error has become a focus, and there is an increasing concern about human-machine interactions within the Swiss cheese model. They also distinguished between errors and violations by viewing one as a voluntary transgression, whereas an error is a mental or physical failure to achieve the intended outcome. In addition, safety management needs to focus on detecting and eliminating latent pathogens resulting from complexity, poor systems, and the upward movement of individuals that can cause incidents. Lastly, the researchers concluded that managerial decisions could affect the system's defense against an incident. The Swiss cheese model is a gap analysis tool that can help researchers identify barriers within an organization, including why near misses are not reported. My study aimed to understand what workers know about near misses and the barriers, if any, that exist on a job site to prevent them from reporting a near miss.

Connection Between Near Misses and Errors

Human error is defined as a decision or behavior that reduces quality or safety during construction operations (Bussier & Chong, 2022). In a study on falls from heights, Bussier and Chong (2022) reported that many construction incidents, injuries, and fatalities are attributed to human error. The errors lead to unsafe behaviors and actions, as well as misaligned perceptions of safety (Bussier & Chong, 2022). Current technology, training, and emphasis by construction employers should result in a lower number of falls from height injuries and deaths, yet they still occur. Bussier and Chong sought to understand why this phenomenon still occurs, and their results led to the identification of human error. Their study concludes that psychological distress is a significant driver of human error and incidents, and contractors implement psychological safety measures to mitigate these incidents.

A study by Chan et al. (2022) correlated human error and construction incidents. Chan et al. indicated that 80% of all construction incidents report human error as a causal factor. Underlying causes include the psychological burden and complexity of work, which likely increase the opportunity for an error (Chan et al., 2022). One conclusion of that study, along with Bussier and Chong (2022) and Haas et al. (2020), is that organizational culture and perceptions must be addressed, as well as reducing the opportunities for errors by lowering psychological and work-related burdens. Although my study was not explicitly focused on human error, it is essential to consider the human aspect of incidents. I wanted to understand what hinders or enriches a worker's

experience of near misses. I wanted to understand if organizational culture or the desire to get the job done influences their own perceptions or decisions.

Epidemiology of Construction Injuries

The U.S. construction industry has a fatality rate of 10 per 100,000 full-time employees, and globally, 60,000 deaths are reported from construction sites (BLS, 2022; Duan & Zhou, 2023). The industry employs 7% of the global workforce and accounts for 30-40% of the world's deaths (Shaikh et al., 2021).

Yang et al. (2020) studied the injuries and illnesses of construction workers in Texas from 2007 to 2013 using workers' compensation claims for 12,222 disabling injuries. The injury frequency, rates, medical costs, and lost workdays were analyzed by sorting the data by year, demographics, employment, injury type, and time. Multiple linear regression models were used to quantify associations between work hours, medical costs, and lost workdays. Yang et al. (2020) examined the burden and distribution of injuries and illnesses and suggested interventions for specific populations and working hours. The injury and illness rates, although lower than the national average in Texas, support the need for my study to explore the lived experiences of near miss reporting, considering that 80% of all construction incidents are near misses.

Yorio et al. (2020) studied injuries in high-hazard industries. Yorio et al. aimed to analyze the temporal relationship between injuries and illnesses to determine whether lagging indicators can also be used as leading indicators. The study analyzed incidents, including injuries, near misses, and fatalities, at 24,910 mining establishments over 12 years. They concluded that near misses and injuries were linked to future fatal events in a

cyclical relationship and that several considerations and safety incidents could be used to anticipate, mitigate severity, or prevent events. Yang et al. (2020) studied construction, and Yorio et al. studied mining. Both industries share similar concerns and hazards, highlighting the need to understand why these industries have higher injury rates.

Epidemiology of Construction Near Misses

In addition to the number of deaths and injuries that occur in construction, nearly 80% of all construction incidents are near misses that are reported or unreported (Bussier & Chong, 2022; Duan & Zhou, 2023) The potential to further reduce construction fatality rates and a high injury and illness count could be reduced with a robust near miss reporting system (Haas et al., 2020). A key argument I have made is that improving the safety culture around reporting near misses requires understanding what workers experience on a construction site and whether barriers exist for reporting those near misses.

Ayhan and Tokdemir (2019) considered a predictive model for incident prevention. The model analyzes risky behaviors and additional factors to predict the next outcome. Near misses result from risky behaviors and, if not reported or investigated, can result in injuries. They used three steps in their study: collection and categorization, development of prediction models, and appropriate prediction of construction incidents. Ayhan and Tokdemir analyzed 87 different construction sites over 5 years, involving 17,300 incidents, and employed the Delphi method. They found that their model could predict the outcome in 84% of the cases. A panel of 11 experts was used to review the questionnaire attributes. Following two rounds of review, the second questionnaire was

used to collect the information. The standard deviation and means were calculated for each question. The results were converted to binary, where “yes” indicated that the injured worker involved met one of the 149 attributes and “no” indicated that they did not. The researchers conducted two multiple regression analyses and subsequently reduced the number of attributes to 92. In addition, the researchers utilized an Artificial Neural Network to perform another data analysis for predictive purposes. Lastly, the researchers used the Conoco-Philips Marine Pyramid to reduce vagueness in the ANN results. My study examined whether roadblocks exist for workers who report a near miss when they experience or encounter one.

Shaikh et al. (2021) conducted a study on the performance indicators of construction activities, including near misses. Shaikh et al. analyzed construction safety performance indicators using a Scopus search engine and analyzed the publications from those search engines. The outcome indicated an interest in safety climate, orientation, management commitment, near misses, and job site audits. In addition, organizations are growing interested in using performance indicators to improve safety culture and reduce incidents, including near misses. Shaikh et al. concluded that performance indicators should act as a proactive approach to managing safety-related concerns and could be a mechanism for the sociotechnical system within an organization. The sociotechnical system represents an organization’s social order and structure, where people and their behavior influence the organization’s culture, processes, procedures, and metrics (Shaikh et al., 2021). Shaikh et al. found that near miss reporting and investigation reduce hazards

that could result in injuries. My study focused on the potential barriers in a safety culture that would encourage or discourage timely reporting.

Near Miss Reporting Standardization

Defining a near miss is not universally accepted, as evidenced by the varying descriptions from OSHA, the Campbell Institute, and ISO. I have worked for four global and one regional construction organization; within each, there were differing definitions or terms for a near miss. This anecdotal experience highlights a potential issue with near miss reporting. Near misses can indicate where things go wrong or right, identify high-risk worker behavior, unsafe conditions, and failed safety barriers, and identify correct things (Feng et al., 2022). Studies indicate that the frequency of near misses is higher than that of adverse events (Duan & Zhou, 2021; Feng et al., 2022).

Challenges With Near Miss Reporting

The challenges of near miss reporting vary from company to company, and understanding this variability is crucial for effectively addressing near miss reporting. The study was a small cross-sectional sample of the experiences of construction workers in understanding near misses and whether barriers exist to reporting them, using inductive reasoning to arrive at conclusions and recommendations for action. Feng et al. (2022) investigated the barriers to near miss reporting in a healthcare setting. Feng et al. first defined a healthcare near miss as an incident that did not result in harm to the patient. They studied 67 research articles using the Arksey and O'Malley methodology and PRISMA Extension for Scoping Reviews. While understanding barriers in a healthcare setting can reduce the potential harm to a patient, why not consider the same

impact on a construction worker? Like Feng et al., the study can apply a similar approach by seeking to understand risky behaviors, working conditions, and other safety culture barriers that exist for employees. The dominant concern from near misses is the need to quickly resolve the issue and complete the task, rather than reporting the near miss and delaying task completion (Feng et al., 2022). The quick fix is the dominant behavior after a near miss. Feng et al. concluded that near miss learning can provide an early warning of safety issues, and understanding the causes of near misses using appropriate learning theories can help improve effective learning. They suggest that learning can transition from retrospective and passive risk management to proactive and prospective risk management. Lastly, Feng et al. indicated that near misses are not reported due to the inconvenience. My study considered whether inconvenience is the dominant barrier to workers reporting near misses in construction.

Judy et al. (2020) investigated challenges with near miss reporting by attempting to determine whether a human factors analysis and classification system (HFACS) could serve as a framework for analyzing near misses. HFACS was used by Judy et al. to review human errors within an oncology setting. The study identified barriers to near miss reporting and human error. Judy et al. investigated whether radiation oncologists or ROPs could utilize HFACS after brief training to conduct near miss investigations. The study methodology included a simulated trial of eight near miss incidents, analyzed by five to 10 ROPs. This was followed by the integration of a prospective trial into a weekly near miss incident review meeting. Thirteen ROPs participated in analyzing these events. The conclusion was that ROPs could conduct HFACs efficiently to analyze near misses.

The relevance lies in understanding HFACS and training relevant managers and employees, which could lead to an increase in near miss reporting. Judy et al. connected to Feng et al. (2022) by first understanding the human errors and barriers that employees in a healthcare environment encounter.

Marin et al. (2019) examined perceptions of safety across structures and barriers to hazard mitigation. They examined the perceptions of safety climate among workers, supervisors, and managers using the Nordic OS Climate Questionnaire, which comprises 50 items across seven dimensions. The study included 266 workers, 55 supervisors, and 32 site managers. The study was collected as part of a larger project assessing safety climate, safety management practices, and injury rates of 26 Colombia-based construction companies. The companies were segregated based on injury rates, with low, medium, and high injury contractors. The ratio of people surveyed was ten workers and 1-2 supervisors and managers. Data were collected using the QuickTapSurvey on tablets. The quantitative analysis strongly agreed with the survey results and correlated with three-year injury rates. Marin et al. concluded that workers, supervisors, and managers perceived safety differently. For example, managers believed they effectively managed safety, while workers believed managers could do more or were not sincere in their efforts. Marin et al. focused on the overall safety climate without further investigating the barriers that prevent employees from reporting a near miss. The study did apply the same approach to learning about the lived experiences of construction workers.

Current Near Misses Prevention Efforts

Karakhan et al. (2018) conducted a study that collected safety and injury data for U.S.-based projects, analyzed the data to model time and safety, and used the relationship to validate the time-safety influence curve. The data collection consisted of the Sustainable Construction Safety and Health Rating System. This tool measures and evaluates the extent to which workplace safety and health are prioritized during different construction phases. Data were collected from 64 projects between 2006 and 2016. The metrics include the use of leading indicators. Twenty-four projects reported zero injuries, while the remaining projects had varying injury rates. The researchers used the offset-Poisson regression to model safety and injury data. Karakhan et al. developed a model to reduce hazards and incidents through design prevention methods in the construction industry. Although the model can be used to analyze hazards and incidents quantitatively, its applicability to all construction activities may be limited. There is limited universal infrastructure, either through regulation or policy. Companies develop their own systems of reporting, which may conflict with or differ from those of other companies. My study aimed to understand how current interventions affect or enhance near miss reporting among workers.

The Campbell Institute (2020) provides a framework for organizations interested in reducing serious injuries and fatalities (SIF). The Campbell framework includes using near misses as a metric to identify whether an incident is a SIF and using those near misses as predictors for future events. I have worked for some of the largest global employers that use near misses to indicate construction safety performance. These

include timely reporting, practical investigations, and lessons learned to carry forward. OSHA (n.d.) published a sample near miss reporting policy for employers to use. The sample policy includes the benefits of near miss reporting, which fosters an open and learning culture, a systematic reporting approach, the application of lessons learned and insights that prevent recurrence, and support for a reporting culture. The OSHA (n.d.) sample policy supports my research by highlighting the need for employers to eliminate barriers through effective near miss reporting practices and policies.

Previous Successful Studies

Köhler (2010) examined the barriers to reporting near misses in the maritime industry. The researchers concluded that near miss reporting is a function of both company and personal culture. The conclusion highlighted the perceptions and differences in near miss philosophy among crew members and officers. The researchers also concluded that an imbalance exists between the expectations and realities of near miss reporting, and companies need to foster a better culture for reporting. Lastly, the question is whether external factors should be considered in near miss reporting.

Regarding workers' lived experiences in the telecommunications industry, Hester and Fusch (2020) found that workers are concerned about the efforts companies make to improve safety and health, including near miss reporting and investigations. The lack of concern negatively impacts the project's safety climate, creating barriers to trust that prevent workers from reporting near misses and other incidents as they occur. Hester and Fusch identified a need for further research into workers' lived experiences, specifically in the construction sector, to understand the barriers present in near miss reporting. In

another study on the sociology of near misses, Gray (2018) emphasized the need for further research into the near miss framework and a deeper understanding of the nature of near misses. In Gray's study, workers were found to withhold near miss reporting due to fear of discipline, particularly among those in contract or temporary arrangements. Another aspect of uncertainty surrounding near misses is the issue of judgment. Workers may not consider an incident that did not harm people, property, or the environment to be consequential. I was unable to locate a study specifically focused on the construction industry. My study is the first to pose this question, potentially leading to a broader investigation of near misses.

Gaps in the Knowledge Base

Hester and Fusch (2020) and Gray (2018) argued that further research is needed to comprehend the challenges of near miss reporting and, in Gray's case, the sociological underpinnings of worker perceptions. Hester and Fusch also indicated a need for further research into the lived experiences of construction industry workers in near miss reporting. All prior near miss research has excluded the workers' lived experiences and how safety culture influences the timely reporting of near misses. Additionally, while many research studies aim to define near misses and assess their impact on the safety culture of a company, region, or project site, I sought to understand the experiences of construction workers within a specific region of the country. Understanding these experiences could lead to further studies on issues related to construction. Although studies on workers' lived experiences have been conducted, they are not directly related

to construction; however, they may parallel the challenges that construction workers face, such as near misses.

Summary and Conclusion

The literature review presented research on near misses and their relationship to injuries and fatalities in the construction industry. The level of effort an organization places on near misses can be representative of its safety culture and whether it cherishes learning. Although the relationship and impact of near misses on an organization and its safety efforts are understood, a missing element is understanding the workers' experience with near misses. There should be awareness of the downstream effects of near miss efforts and how organizational culture can influence whether workers are empowered to report a near miss or consider it important enough to inform their supervisors. My research aimed to understand the context in which workers make decisions when involved in or witnessing a near miss incident. The positive impact on social change hinges on whether organizations understand how culture influences worker behavior, or whether workers believe it is not necessary to report near misses. Interventions can result from the findings of a study, including a larger study on the topic or immediate policy changes within the industry.

Section 2: Research Design and Data Collection

Introduction

The purpose of the research was to conduct an interpretive phenomenological study and gain insight into the relevant lived experiences of Texas-based construction workers when they are party to or witness a near miss, and whether barriers exist for those workers who want to report them and for companies to investigate them as they occur. Additionally, I wanted to understand whether near miss barriers exist, including the definition of a near miss, a supervisor's emphasis on near miss reporting and investigation, the time and bandwidth required to report and investigate near misses, and the organizational culture. An interpretive phenomenology study is best suited to offer meaning and understanding of the Texas construction worker's lived experience. In this section, I outline my approach to the research, including the study design, methodology, roles of each participant, instrumentation, data analysis, and strategies for ensuring trustworthiness.

This section covers the research design and rationale, including the definition of the central concept or phenomenon relevant to this study. This section also provides an overview of my approach, including the method by which the research was conducted, as well as the roles of the participants and me. I acknowledge potential biases that could have influenced my approach to the study, including the relevance of my years of experience, and highlight my assumptions about why near misses are not reported. This section outlines the methodology used for conducting this research. This was a pilot study in which the interview questions and design were based on information that had not been

previously gathered for near miss reporting barriers in construction. In addition, to ensure validity and trustworthiness, this section addresses the potential shortfalls and the approach I took in providing reliable and valid research. The goal is to present the results that either support or disprove assumptions about near misses and how workers are influenced or not in reporting them.

Research Design and Rationale

The research questions for this qualitative phenomenological study are as follows:

- Qualitative RQ1 – What are the lived experiences of Texas-based construction workers regarding experiencing and reporting of near misses?
- Qualitative RQ2 – What are the lived experiences of Texas-based construction workers regarding the barriers they encounter when reporting or attempting to report near misses?
- Qualitative RQ3 – What are the lived experiences of Texas-based construction workers regarding the importance of near miss reporting?

The central theme of this study was to understand the lived experiences of construction workers in Texas regarding their understanding of a near miss, expectations for reporting them, supervisory and peer pressure, and safety culture. To advance in my profession, I must gain an understanding of the cultural elements and their impact on near miss reporting. I wanted to understand the phenomenon that influences a worker's decision-making when they witness or are part of a near miss. A phenomenological study was chosen to gain a deeper understanding of the factors influencing worker behavior. The research was conducted using interpretive phenomenology to inform the impact of

culture on a worker's decision to report a near miss. Frechette et al. (2020), in citing Heidegger (1927), stated that interpretation is the seeking of understanding. Burns et al. (2022) stated that, in a comparison of constructivist grounded theory and interpretive phenomenology, interpretive phenomenological studies are adequate for focusing on the means of lived experiences and provide an appreciation for understanding the different meanings of experience. The interview questions were constructed to align with the research questions and conceptual framework. That is why I chose the theory of planned behavior as the framework for the study. This theory was used to understand the behavior of reporting and how it is influenced by social norms, such as peer pressure or organizational culture, as well as self-efficacy, or the desire to report based on production demands or the ability to stop work and participate in an investigation. Other theories were considered, including OHS theories like the Swiss cheese or near miss management models. Beames et al. (2021) presented that while large meta-data or macro research offer benefits in influencing public policy, what is missing is gaining insight into the person's experience with a particular challenge, in their case, mental health. There is a wealth of research on the benefits of near miss reporting systems in reducing injury rates in high-injury industries, such as construction; however, relatively little is known about the workers' perspective. The theme of my research was understanding how workers perceive whether they are influenced to report or not report near misses. Organizational culture can influence how workers approach OHS concerns (Akpa et al., 2021). This research addresses a gap and need in the lived experiences of workers within a near miss reporting culture, considering that this culture influences worker decision-making. Given

the extensive research on near misses and their benefits, it is essential to understand the impact of this culture on workers.

Role of the Researcher

My role was to observe the phenomenon through interviews with Texas construction workers about their lived experiences relating to near misses. Questions were developed based on the theory of planned behavior and personal experience, and constructed in a format that allows for open-ended responses. The interview data were collected through verbal interaction and set questions. I recorded the interviews using Samsung software on a Galaxy S8 Ultra Tablet, and documented responses in my digital journal using the same tablet. The journal contained the responses as a quick reference, and demographic information was collected. Workers were debriefed on their responses and allowed to review my documentation of their answers. Fifteen workers were recruited by convenience sample and interviewed at locations most convenient for them. I am the Health and Safety Director for one of the country's largest construction companies, overseeing worksites where thousands of workers are exposed. I reached out to trade unions, contractor association groups, and professional safety organizations to disseminate my research and provide my contact information. After limited success, I partnered with my employer to access several sites throughout central and southeast Texas, following consultation with the Walden University Institutional Review Board (IRB) and its committee chair. The sites included two in San Antonio, one in Houston, and one in Galveston, all Texas cities.

The participants who volunteered had no prior interactions with me because my scope of work within Texas is limited. Additionally, participants who had prior work interactions with me from past employers were also prohibited. I did not encounter any worker who was aware of my experience or of any previous interactions. Pursuing this approach helped prevent concerns about power relationships or potential bias related to previous work experience. In addition, the questions constructed and answers will be recorded, with the worker's permission, to identify any potential biases that may arise from unscripted or follow-up questions. In addition, the workers agreed to being interviewed alone to maintain confidentiality and comfort, unless translation was needed.

Methodology

Participants

The research focused on Texas-based construction workers, regardless of trade, to gain insight into their lived experiences with near misses and near miss reporting. An agreement, signed and submitted to Walden University, was made with my employer to gain access to the different sites, post flyers, and make announcements about my research. Seventeen workers responded after announcements were made and flyers were posted at the partner organization's sites. Two were excluded based on previous work experience as forepersons or supervisors. Each participant was emailed a consent form to consider and read. After reading the email, they replied, "I consent." Each participant was asked if they were volunteering on their own free will without any influence from a supervisor; each responded in the affirmative. A series of questions was asked to gain insight into the workers' experiences before the research questions were posed. The

research focused on the lived experiences of 15 construction workers based in Texas. The number was chosen to keep the study small and controllable for the capstone project. I intend to present the information gained from the research to my peers for reflection and potential further research action, including a potentially larger study that covers United States-based projects.

The participants were given the opportunity to review the questions and answers they provided before being released. Email communication was used for any follow-up questions or confirmation of responses. Recorded copies were provided to each participant upon concluding the research, and a chance to follow up on any questions or concerns they may have.

Instrumentation

Interviews were coordinated and conducted to gather information about the lived experiences of construction workers in Texas. The instruments used to gather this information were face-to-face in a secure and private location, with recordings made on my Samsung Tablet and digital notes taken on the same device. I asked the participants if they were comfortable with my recording and note-taking while responding. Each participant answered affirmatively to their comfort. When there was a need for translation, each participant was asked if they were good with me using a translator to assist. Each participant responded in the affirmative. The interview questions were based on the theory of planned behavior by Hayden (2017) to explore the cultural elements and other influences that affect a worker's decision-making. Hester and Fusch (2020) and Gray (2018) both considered the influences on workers' choices related to safety climate.

Hester and Fusch (2020), Gray (2018), and Hayden (2017) informed my development of interview questions and protocol for completing them. I used an interview guide based on the theory of planned behavior. Refer to Appendix E for additional details on the interview guide. Section 3 covers the relevant keywords and coding used to organize the responses into themes, facilitating the interpretation of the responses.

Data Analysis Plan

The key concept within the theory of planned behavior is the intention of an individual to be ready or the likelihood they will engage in behaviors relevant to the present conditions (Hayden, 2017). In this case, the likelihood or the readiness to engage in near miss reporting once observed. The keywords center on the theory of planned behavior constructs, including attitude, subjective norms, volitional control, and behavioral control. These constructs form themes into behaviors that influence a person's response to my questions. Patton (2014) provides a framework for having good qualitative analysis. These include field analysis, data organization, data gap filling, data protection, software selection, clarification of analysis strategy, and journal maintenance (Patton, 2014). Following this line of thinking was helpful for me as I collected and analyzed the data. I conducted interviews at locations most suitable for the participants. I used a digital journal to take notes on the responses and recorded all of the interviews. I highlighted keywords that the participants use to identify consistency and patterns. The keywords and patterns were organized against the codebook developed using NVivo 15 software. Burns et al. (2022) indicated that interpretive findings follow a narrative that indicates a person's lived experience. The interview guide and codebooks are in the

appendices that follow this paper. The themes consider self-efficacy in reporting, the influence of supervisors, and peer pressure. Keywords that intend to capture the responses and themes align with the key aspects of the Theory of Planned Behavior.

I used a codebook to organize the keywords and create a theme. Keywords were identified for coding relevant responses from the participants. The keywords were based on each research question, drawing on the theory of planned behavior, my personal experience, and the literature review presented in this paper. NVivo 15 was used to organize all the responses and create diagrams to support the study's conclusions. Keywords and themes were organized into diagrams to express the responses from the interviews. These diagrams informed the conclusions regarding the support or rejection of the central theory on near miss reporting.

Issue of Trustworthiness

Trustworthiness represents the rigor one must adhere to when conducting a study. To ensure rigor, the study must be valid, reliable, and generalized (Dabengwa & Ngulube, 2023). Validity represents the truth value of the participant's responses and experiences, reliability refers to the instruments used to measure the study's intention, and generalization refers to the transferability of the study results to another context (Dabengwa & Ngulube, 2023). Rigor or trustworthiness in an interpretive phenomenological study can present challenges because the interpretive phenomenologist mediates the information that is collected (Dabengwa & Ngulube, 2023). My goal was to maintain rigor during my study to ensure the information was valid, reliable, and transferable. To ensure a valid study, I set aside my personal experiences and

assumptions when journaling and recording responses. To ensure the reliability of the instrument measurements, I recorded the responses and verified them by double-checking the written responses against the participant's input. Note-taking included the use of electronic sources for journaling. I typed the responses as they were stated, double-checking and confirming the participant's responses, and reviewing them as we proceeded. I asked the participant to clarify what they meant without leading them to the answer. I provided the committee chair with a couple of interview notes and recording transcripts to ensure the integrity of the research and that the manner in which it was conducted was maintained. I sent follow-up emails to each participant, requesting they verify the accuracy of the content. There were no responses to date.

I provided timely updates to my committee to ensure the disclosure of my study progress and challenges related to data collection. I shared some of my data as I progressed along with this research. Recording, with permission, of the interview sessions may help with recall, reliability, and validity checks against the theme or coding I select for each response. According to Patton (2014), reflection and reflexivity are integral to the qualitative analysis process. This process helped me avoid deviating from the scope of this research and prevent the introduction of my own bias. Part of the reflection and reflexivity involves maintaining a journal to analyze my data and keep it honest and open throughout the process.

Ethical Procedures

Another part of trustworthiness and rigor is maintaining ethical standards. I received approval from the Walden IRB on the manner and conduct of the research. In

addition to working closely with my committee to ensure I followed the IRB's approval. Along with maintaining the validity and reliability of the data collected, I assure that there are no compromises to the results due to my own bias. Along with the school's ethical standards and scrutiny, I carry professional credentials that can be compromised if I am not open and honest about my research. I am not willing to compromise those certifications or the number of years I have worked in this profession for this research. I maintain copious notes and recordings of all the interviews I conducted to ensure an honest and open research process. I gained permission from each participant to record and reviewed my notes at the end to ensure the accuracy and reliability of the information. These are always made available to my committee.

I obtained a cooperation agreement between my employer and me for access as a partner organization. The agreement was submitted to the IRB and the committee chair for approval before I commenced my research (IRB Approval No. 04-11-25-1041160). The letter provided the framework for conducting the research. All data collected will remain confidential and not be shared with any granting organization. My experience in conducting incident investigations and addressing workplace ethical complaints has prepared me to maintain confidentiality. I will protect the interview answers, save for the committee's desire to review the responses. At that point, names, organizations, and other identifiers will be removed. When sharing answers with peers, they will not include identifiers or specific responses, but rather summaries of the results. Data collection will include password protection on all folders that maintain names and other identifiers of the participants.

Summary and Conclusion

Section 2 provided an overview of my research methodology and approach to maintaining high standards of the research. My study employed an interpretive phenomenological approach to examine the lived experiences of Texas-based construction workers regarding near miss reporting. My research approach aligns with this form of study by capturing the meanings and narratives of each interview and collating the responses into a meaningful interpretation. The research design framework is the theory of planned behavior. This theory was chosen because I want to understand the organizational culture that influences a worker's reporting of near misses. Section two also highlights my methodology in conducting the study, including gathering participants, conducting the interviews, and note collection. I also described the roles of each person involved in this research, outlining how I collected and secured the data. I provided an outline of how I rigorously addressed validity, reliability, and generalization. A qualitative study in a field where I have lived experience could present challenges in maintaining credibility and trustworthiness. I believe the approach I outlined helped prevent bias and distortion in my assumptions during question development and answer collection.

Section 3: Presentation of the Results and Findings

Introduction

The study's purpose was to conduct interviews and gain insight into the lived experiences of Texas-based construction workers who reported near misses, employing a phenomenological qualitative methodology. I wanted to learn from the workers about their experiences to gain a deeper insight into what a worker hears, sees, and understands regarding near misses, including how near misses are defined. I wanted to understand whether there are barriers encountered when reporting or attempting to report a near miss. Additionally, I sought to understand the perceptions regarding the importance of near miss reporting. I also wanted to explore their perceptions further about peer pressure and culture, and how these factors work or do not work in synergy to influence a worker's ability to report a near miss when the event occurs. Scheduling one-on-one interviews allowed the workers to share their truths and insights. The interviews were an education about near misses, and several themes were uncovered that indicate a need for further exploration. The indications highlight a potential shift that the industry may need to consider when developing near miss standards and practices. There has been considerable research into near misses and the impact of effective near miss reporting structures on injury rates. Positive social change occurs when we have a complete understanding of the nature of near misses and the perceptions about the importance of reporting them at the worker level.

This section will cover the various steps conducted to gain confidence in the collection of information from the workers, including the limited pilot study, main study,

participant settings and demographics, data collection, and data analysis. Data were collected, sorted, and analyzed using NVivo 15, and quality assurance was performed using Microsoft CoPilot. The interview files and codes from NVivo 15 were uploaded into CoPilot using the command “analyze these codes” to determine if there was anything I missed. Once I received a CoPilot response, I compared it against the codes I used in NVivo. If CoPilot discovered a code I had missed, I would review my notes to determine if it was accurate. In all cases, no additional codes were added or changed as a result of CoPilot.

Pilot Study

The purpose of the pilot study was to assess the quality of the interview questions, refine the flow of the questions, and adjust the tone in response to the person’s answers. The pilot study was conducted on June 29, 2025, with my wife. She is an environmental, health, and safety professional, and I felt she could offer insight into the questions and whether they could give workers the space to answer comfortably. The questions were recorded on a Samsung Galaxy Ultra S8 tablet using voice recording and transcription software.

The participant signed a consent form indicating their willingness to participate in the study. The following steps were taken to explain the purpose and significance of the study in advancing near miss efforts within the industry. I explained the questions and their design based on existing health behavior theories with an emphasis on health and safety on construction sites. The participant showed confidence and offered clarity in their responses to each question. The results were submitted to the committee chair. The

committee chair offered valuable insights into the questions. It is recommended that I begin with a conversational tone and conclude with follow-up questions that would help increase the recall of items that may have been missed during the conversation.

Settings and Demographics

Data collection for the main study started on July 18, 2025, in Houston, San Antonio, Galveston, and concluded in Houston on August 22, 2025. All cities are within the central to southern parts of Texas. Fifteen participants were recruited through a partner organization. None of the 15 participants were employees of the partner organization, but rather subcontractors working on the partner organization's projects. The interview announcements were coordinated for four different construction projects within the partner organization's portfolio. An all-hands safety meeting was held on each site to announce the study, and employees could indicate their willingness to participate over a couple of weeks. When making the announcements, my contact information was left with the on-site workers. I had several workers approach me after the meeting, in each case to express their interest. We set a schedule for returning. Consent forms were provided to each candidate to ensure they met the recruitment criteria and were not persuaded to participate unwillingly. Several employees from the same projects were scheduled for the same day and time at a private location, away from the job site, including the use of school offices near the project locations. The rooms were secure, but were occasionally disrupted by school activities, such as school bells and announcements.

Before the interviews began and after I notified the participants, I started recording on my Samsung Galaxy Ultra S8 tablet. I asked each participant to reaffirm

that they were attending voluntarily and had given written consent to participate in the interviews, either by signing or providing an email confirmation, in my presence. I also established that none of the participants' information, interview recordings, transcripts, or notes would be shared with the participants' employers, the partner organization, or any other source, except with the academic institution upon request. I indicated that the recordings and notes would be stored in a OneDrive folder that is contained within a secure folder. I finally assured participants that I would not request any company information, exact events, dates, or times, and that if they felt uncomfortable at any time, the interview could be stopped.

Before each interview, I collected demographic information, including gender, ethnicity, race, age, years of construction experience, trade, whether they had ever worked as a supervisor, and whether they had ever worked as a safety professional. All of the participants identified as male, age ranges were from 18-62 years, years of construction experience were 0.3 to 40 years, trades were from apprentice to journey worker and from a variety of trades, three were White and 12 were of Latino ethnicity, 14 identified racially as White and one as Black, and none worked as an actual supervisor or safety professional (see Table 1).

Table 1*Selected Study Participant Demographics (N=15)*

Participant	Gender	Ethnicity	Race	Age	Years in construction	Trade	Worked as a supervisor	Worked as a safety professional
P1	Male	White	White	18	2	HVAC apprentice	No	No
P2	Male	Hispanic/Latino	White	22	2.5	Laborer	No	No
P3	Male	Hispanic/Latino	Black	20	5	Electrician	No	No
P4	Male	Hispanic/Latino	White	30	6	Operator/mason/welder	No	No
P5	Male	Hispanic/Latino	White	58	11	Surveyor	No	No
P6	Male	Hispanic/Latino	White	24	6	Framer	No	No
P7	Male	Hispanic/Latino	White	54	34	Operator	No	No
P8	Male	German and Irish American	White	59	30	Sheetmetal	No	No
P9	Male	Irish American	White	27	6	Plumber apprentice	No	No
P10	Male	Hispanic/Latino	White	25	10	Floor installer	No	No
P11	Male	Hispanic/Latino	White	27	7	Ceiling hanger	No	No
P12	Male	Hispanic/Latino	White	62	40	Electrician	No	No
P13	Male	Hispanic/Latino	White	50	8	Laborer	No	No
P14	Male	Hispanic/Latino	White	37	14	Electrician	No	No
P15	Male	Hispanic/Latino	White	23	0.3	Laborer	No	No

Data Collection

Interviews were collected using Samsung's voice recorder app, a stock version that comes with Samsung devices, including phones and tablets. The interviews ranged in time from 22 to 70 minutes. The timing proved sufficient for gathering information about their lived experiences with near miss reporting. Some of the interviews required translation for workers who are native English speakers but have English as a second language. An early challenge identified was the ability to translate "near miss" into Spanish, so the term "casi accidente" was used. The participants understood this term best. Given the prevalence of Latino workers, some interviews were conducted with a

translator present to ensure that the information was correctly received and accurately transcribed. During my review of the interviews and the transcription of each participant, I was able to double-check the quality of the transcription. When I could not understand what was said, my fluent wife was able to confirm the content. I was able to gather good information from the participants about their lived experiences. I collected notes while recording the interviews and read back their responses where needed to ensure accuracy of the information. Upon concluding each interview, I informed the workers that I may contact them for any follow-up questions or clarification about their responses. To date, there have been no callbacks. No compensation was offered to the participants for participating in the study. All were thanked for their participation and insights. .

I completed member checking for two purposes: the first was to share the notes with the participant so they could have a record of our conversation. The second purpose was for all participants to evaluate their notes and confirm that the intent of what they meant was accurately captured. Each participant is allowed to correct the record, but as of this point in time. Each participant has a complete and final copy of the notes and recordings. The committee will be notified if any changes are required for the record, even if the paper is already complete and has been defended.

Data saturation is the point at which the intended objectives have been reached, and no new information can be collected (Mwita, 2022). In the case of this study, it became apparent that saturation for defining and understanding a near miss was reached around participant 12, while other questions had not reached saturation. Given the number of questions asked, saturation was not met for the other questions. This was in

part due to how the questions were constructed to allow for reflection on their experiences. I was able to gather more accurate information by focusing on specific conditions, such as pressure in a work environment or the impact of safety culture. At the point of saturation, the questions about defining and understanding near misses within the interview guide were asked in a different way to achieve the same answer. Near misses can be a nuanced subject with differing reasons for why a person would answer in the way they did. Additionally, language barriers were another reason to adjust the delivery of the questions to facilitate a response and gain an understanding of the person's lived experiences. What also helped was the variety of experiences and ages of each participant, as they varied in their level of understanding of construction conditions, actions by other trades, and supervisor behavior. The inexperienced workers tended to be more black and white about near misses, assigning fault to themselves or others. They focused more on unsafe acts and conditions, often confusing those with near misses. The experienced workers were able to discuss culture and the work environment more comfortably. The experiences they shared were varied and insightful. Asking questions differently based on the participant's experience level helped me understand when saturation was reached, as a significant portion of the responses to defining a near miss were "something could happen." For the last three interviews, I asked more about their feelings regarding a near miss. The interview quantity of 15 was an appropriate number, so when data saturation on defining and understanding a near miss was achieved at around participant 12, the last three participants were used to confirm what I had already observed upon reaching saturation.

Data Analysis

Data analysis included the recordings, transcripts of the recordings, and interview notes taken using a Samsung Galaxy Ultra S8 tablet. There were no previous interactions, relationships, or engagements between any of the participants and the project prior to the announcement. The recordings were transcribed using the voice recording software provided by Samsung, which included available transcription software. Each interview transcript was reviewed and uploaded into NVivo 15 software for coding and thematic analysis. The NVivo software is primarily used for organizing data and sorting through information to support coding and thematic analysis. I used inductive coding within NVivo to construct themes based on the number of participants and the open-ended, broad questions that were asked. Vears and Gillam (2022) stated that inductive analysis is well-suited for health research, particularly in relatively small-scale studies. In addition, inductive coding is a text-based data analysis method that involves organizing written transcripts of conversations into codes for thematic analysis (Vears & Gillam, 2022). In addition, Aigbokhai et al. (2025) employed inductive coding in a study on near miss behavior and its effects. Using inductive coding allows me to assign a code to each line of the participant's response in NVivo. While doing this line-by-line analysis, I was able to identify trends within the responses.

I began constructing themes by grouping codes that were aligned. The initial coding considered terms like definition of near miss, emotional response, reporting behavior, supervisor and peer influence, safety culture, work environment, training, recognition, communication barriers, and external motivators. Microsoft CoPilot was also

used to analyze voice recordings, transcripts, and interview notes to confirm my own coding. The CoPilot results were similar to the themes and codes I organized from NVivo 15. I was able to utilize two different software systems to consolidate and organize the recordings and notes, serving as quality assurance to make sense of the hours of data. I also sought advice from committee members to maintain and critique my approach.

Evidence of Trustworthiness

During the prospectus phase, I identified four potential barriers that could impact the qualitative study. Autonomy, as identified by Haugom et al. (2019), ensures that participants are not subject to restrictions when participating in the research. The participants were allowed to volunteer without compensation and advised they could stop at any time. By being morally obligated to the participant, I am being beneficent (Haugom et al., 2019). My goal was to enrich the participants' experience by providing them with a relaxing and safe space to share their thoughts with me. This can be challenging when a partner organization allows access to workers on the job site.

In speaking with some of the candidate participants, I emphasized that the interviews would not delve into actual events, dates, or times. I also reinforced that the partner organization was providing access, but that I would not share any discussions, recordings, or notes with the partner organization or other companies. The conversations were to remain strictly confidential, and my notes would be secured. Some candidate participants withdrew their interest after the discussion, whereas others remained interested in participating. After receiving written consent, either by signing the consent form directly for those with no email access or by the participant replying "I consent" to

my email, I would then ask the participant on record if they were voluntarily participating in the research. After they consented to my recording, I would then restate the conditions of the consent. I acted with no intent of harm.

Non-maleficence is to not conduct research with harmful intent (Haugom et al., 2019). If either of these is disregarded, then the entire research and the potential harmful impact of the industry increase, and, ultimately, justice is compromised. I sought to treat the participants and my employer, the organization, fairly throughout the research process. I informed them when the recording would start and when it would stop. I reaffirmed during the recorded interview that they could stop the interview at any point if they felt discomfort. One participant did not want to answer one of the questions asked; I did not press the question again and moved on to the next set of questions. I assured that all information remained confidential while maintaining that future benefits of improving near miss programs are possible. Some participants expressed gratitude after completing the interview, feeling that they had been given a voice to share their experiences. Some added that they hoped the research would lead to safer job sites.

As previously mentioned, conducting research in my employer's work environment can be difficult.. I believe my methods and approach, as evidenced by the voice recordings and honest answers, led me to believe there were no influences towards a "proper" answer. I strictly followed the interview questions with the intention of obtaining an answer that represents the participant's lived experiences. I reflected on how I approached the interviews and how trust was gained.

Categories and Themes

Table 2

Theme to Question Mapping

Interview question	Categories
When you think of a near miss, what comes to mind?	Lack of clarity, personal interpretation, and language barriers
Have you witnessed or experienced a near miss?	Emotional response, sense of responsibility, cultural norms
Did you report a near miss? Why or why not?	Reporting behavior was influenced by the supervisor, peer, or safety culture.
What factors influenced your reporting behavior?	Supervisor/peers, safety culture, work environment (schedule pressure, confined work area), recognitions/incentives
How would you describe efforts around near misses?	Supervisor, peer, and safety culture influence behavior
Did you feel you could report a near miss? Influential factors	Training and education, incentives, transparent processes, psychologically safe environments, and trust
Have you ever been recognized for your efforts to report a near miss?	Recognition/incentive programs, future behavior impact
Do internal factors influence your ability to report a near miss?	Peer influence, safety culture, language/cultural barriers
Do external factors influence your ability to report a near miss?	External influences, cultural norms, and personal values

Table 3*Categories and Themes*

Categories	Themes
Language barriers Lack of clarity Near miss definition	Definitions and understandings
Emotional response Intensity Almost happened	Emotional response
Supervisor influence Peer dynamics “If my boss cares, I care.”	Supervisor and peer influence
Safety culture influences reporting. Rushed work and trade stacking suppresses reporting	Safety culture and work environment
Recognition does not happen often. Verbal praise	Recognition and motivation
Language barriers and technical jargon Visual tools and bilingual communication	Communication and accessibility
Family is influential Cultural pride and personal ethics	External and personal values

Theme 1: Definitions and Understandings

The primary question asked was about the participant’s initial impression of what a near miss was, and whether they could define it. Additionally, the participants were asked if they had ever heard of a standard definition. In all cases, the responses varied and were based on perception. Some participants described near misses involving injuries or property damage, while others reported unsafe actions and behaviors. In addition, language barriers appear to exacerbate the lack of understanding surrounding near misses. For example, translations from English to Spanish required careful exempling and the use

of “casi accidente” appeared to be the most appropriate term. By using the term, the workers gained a better understanding of what was meant by ‘near miss’. While there was no consensus on a definition, most replied with the statement “something that almost happened, or could have happened.” The description of a near miss as something that almost or could have happened makes sense, despite the organization’s efforts, the true definition is not retained. One participant stated the following:

I think there’s what I think is there’s a big difference between accidents and near misses. Near misses, I think, is something when it was something that shouldn’t happen, no matter what. And then there’s times where this stuff happens.

Another stated,

Near miss to me, it can be anything from Not knowing is there like or misreading the job and you know, just going to do it without inspecting the area. And basically, when it means to me is like you’re not really paying attention, you know, not paying attention to your surroundings.

Theme 2: Emotional Response

Questions were asked to gain an emotional understanding, like how someone felt, how discussions occurred with family and friends, and whether they were punished or rewarded. In a sense, it felt that everyone had an obligation to report and felt the urgency to report, but they would not act based on influence from other sources. An emotional response was triggered when asked about how they felt reporting a near miss and their feelings regarding the corrective actions. The participants generally care for one another and will support each other when needed. One participant stated,

It actually feels really good, really good knowing that I can help somebody else or help my how you say in the field, your brother's keeper, you know, I mean, I can help him out. Let him know. You know, Hey Watch out when I'm sharp edges or watch outfit.

Another stated,

It's just personal feeling, you know, knowing that I can You know, help you know, not because of the safety, it's there or OSHA's. There is just because I don't want to see anybody get hurt. You know, I just rather tell them whether the person they get mad or they get upset or they tell me, you're if you're not my boss or whatever, and I'll just, you know, everybody to me, I feel like everybody should have the power to stop anything that's going on.

In contrast, some are influenced to ignore the near miss based on the potential severity or if it is someone else's problem. Some participants used the term "brother's keeper" to describe their feelings about a near miss or an unsafe condition/action.

Another indicated that they would still report a near miss, even in the face of a peer's protest that a near miss should not be reported. They were willing to sacrifice a relationship based on the need to report a near miss. One participant stated the following:

Absolutely yeah, and I enjoy it. I enjoyed, I'd rather have somebody get p***** off and tell me, Hey you are wrong then to agree with me for the sake of getting their next check, and now we gotta call somebody be like, Hey dude, yeah, you're gonna make it. You'll never work here again, how you gonna hang pipe with one arm?

Another participant said, “Yeah, cause. I gotta look out for myself I gotta look out for others as well.”

However, when asked if they had ever reported a near miss, many responded “no,” while some had witnessed one. They felt it was not necessary. There is an irony in believing a near miss is important while not reporting it based on their own beliefs of its relevance. A participant stated the following about not reporting near misses: “I would be less inclined to report it. I’d like it. You don’t have my back, I don’t have your back.”

The participants displayed nuanced feelings about near misses and their impact on their work. The participants were interested in doing the right thing, but did not always act on reporting or intervening on a near miss.

Theme 3: Supervisor and Peer Influence

Participants felt pressure was situational and believed they were immune to the pressure to continue work. The situations were based on how the schedule would impact their ability to work safely with all the necessary equipment and whether others would be working in proximity. In addition, if an event occurred, the decision to report it would be based on whether other conditions were present in conjunction with the event. For example, if a tool was dropped near other workers, it may result in a conversation between workers, a correction, and a continuation of work. There would be no formal report to the supervisor as long as the condition was corrected. When it came to having comfort in stopping work to address it, one participant shared the following: “That’s the main thing that we’ve been told. You can stop working every time anytime you can stop working. You see somebody doing wrong, you see that something’s not right.” Relating

to stopping work, another participant stated: “Not to stop. Mmm, hmm, no I usually stop work, I will stop it.”

Part of that immunity stems from experience working on a construction site, where pressure can be the norm. Many participants had not, based on their current perception of a near miss, encountered a situation where they felt pressure to stop work because of a near miss. Although one participant stated, what I felt is a normal condition:

So I just we just go back to work, near like you said, near miss like whoops, hope that doesn't happens again, but like you said it, it should be addressed at that moment. Someone should have stopped work or I should have just stopped this in, you know, because anybody can stop work. And call, a supervisor call someone, but that's why I'm glad like we're having this conversation.

The misperception of a near miss could create a misunderstanding of what should occur and how companies should react. Other participants described situations that they perceived as near misses as actual unsafe conditions or actions by another worker. Correcting the hazard was the primary focus rather than investigating whether the action or condition was a near miss. A participant was asked about a personal experience with a near miss, and the following was the response, indicating how a worker can perceive a near miss and how it can also be considered an unsafe condition or action: “Uh. Going up on the lift and Standing on the on the up the middle rail. With the lanyard pretty much extended full capacity.” Another example of an unsafe condition or action that was identified as a near miss is described through translation: “He was saying then. In the

company that he used to work, they were digging a hole, but then that company didn't put barricades or any signs, that there was a hole."

Some participants view near misses as a process of reporting and investigating, and as a matter of time. They believe the time is unnecessary and that focus on getting the job done is critical. One participant said, "Yeah, honestly, just because that's in my opinion, that's something that doesn't need to be reported okay? Everybody makes mistakes stuff happens all day, every day. If you report every little thing there." Another stated, "It's almost like a yeah, okay? That was scary. We'll replace the scaffold and move on the kind of thing."

Some were told by coworkers/peers not to report, while others believe it may have to do with general awareness and training about near misses. Some believe that coworkers do not have a complete understanding of near misses. A participant stated the following about awareness for coworkers and himself not reporting:

Um, in the moment that I didn't know I just keep working after that, I tell you I came into. Company, this company and there. Make me take courses about the OSHA, and that's the moment that I realized that it's like this action was bad. Another said, "Knowledge, not enough, knowledge, definitely not enough knowledge. I would say not enough, what would you just said the last thing you said?"

Some participants expressed that at times, there can be conflict around coworker or peer attempts.

More than that, make people would And so it starts a little so some people, it starts a little like, well, if you're watching me, I've got me gonna be watching too,

if it becomes like a little back-and-forth, because they don't want to say, like, yeah.

So I just we just go back to work, near like you said, near miss like whoops, hope that doesn't happens again, but like you said it, it should be addressed at that moment. Someone should have stopped work or I should have just stopped this in, you know, because anybody can stop work. And call, a supervisor call someone, but that's why I'm glad like we're having this conversation.

Some people Me, being one of them previously in my career, they're not comfortable, they don't want it. They don't want to rock the boat, they don't want to ruffle any feathers.

That's like saying he didn't care, he don't care about it about me or anyone else.

The participants, at separate times, were asked about the supervisor and management's positive or negative influence in preventing the reporting of near misses. The participants consistently indicated that supervisors and management had a neutral effect. However, some respondents stated that if a supervisor or manager attempted to influence their reporting, they would report more, despite it. In contrast, others stated that they would report less or not at all. One participant stated that they would report fewer incidents if a supervisor attempted to influence near miss reporting. Another participant offered the following statement about supervisor and management culture:

Yeah cause that that okay. It starts like it's it's gonna start from the top, if your company don't it doesn't care, it's just going to trickle down all the way down to employees where the employees don't care, you don't want that.

An additional participant stated, “On the top of the they’re not, the company, is that no importance on safety, then he would feel the person that pressured to not say something. Think he may be fired for saying something.” A third participant stated, “If he were to report it and they reprimand him, then he would not report it.”

A key and underlying observation from the participants was that organizations are inconsistent in identifying or creating standards for near misses. Reporting culture varies from project to project and is influenced by the efforts of supervisors and managers to shape the reporting process.

Theme 4: Safety Culture and Work Environment

While the previous theme hinted at safety culture through perceptions of supervisors and managers, I will explore this concept further in this section. Although the participants discussed how supervisors and managers influence reporting, they had different reflections on safety culture. The summary is that safety culture was not as influential as understanding what constitutes a near miss. In my opinion, near miss reporting reflects the safety culture and is not mutually exclusive. One participant stated, “I would feel good because like I can just I’ll go and report it without any issue.” Another shared that “No, everyone gives that importance of reporting near misses.” A participant stated the following in response to the same question:

Alright, very well, anyway or another job site on another job site with what could very well objectively be described as a negative safety culture. There’s a divide. There is an enormous tangible rift between the management and safety and then the workers.

An undefined or limited understanding of near misses led some participants to make assumptions about when to report them. One participant stated that his personal fault would be the reason to move on after a near miss:

No, no, no, if it So like if it's sometimes you can be at a fault, but Well, I don't know. Cause sometimes a person getting hurt is the one who is at fault. So it's like I'm not gonna go report my boss or something if you know I was the one in the wrong, but if my boss drops a whole load on me or cuts my arm open, then I'm gonna report it, I'm gonna go be like, Hey, you need to get this, can't be my boss.

A second comment shared was the following, around severity, but also whether there would be a reprimand: "Just because There wasn't, it wasn't serious, you know, like there's I might have got something someone in trouble for something that wasn't serious. You know, so I'm not gonna." Another stated that they would report it if it were serious, while addressing minor occurrences as they occur without reporting. The first participant quoted earlier also stated the following when asked a follow-up question about fault. "Yeah, honestly, just because that's in my opinion, that's something that doesn't need to be reported, okay? Everybody makes mistakes stuff happens all day, every day. If you report every little thing there." Another participant added, through translation, that everything should be reported, regardless of severity, because he generally cares for his coworkers. A participant followed up a statement he made earlier by stating that a near miss is serious and needs to be taken seriously.

Some participants shared insights about whether they were personally at fault, the pressure, culture, and demands of the job site. For example, one participant stated,

If it was If it was serious like like something where this guy should not be operating in that machine. Because it's just there's like why was he on there if that happened or like somebody cut their arm open or something like that and obviously no matter what I'm gonna report it and then um, and but then like like I said last time. It was pretty serious cause that whole load could follow me and who knows what happened, but I never really reported because it was it's my fault, man their fault.

A second participant shared the following insight: "Mm, I probably wouldn't report it, but I would make sure I would explain to them, you know, the consequences and all that That's okay, like I would still give them consequences like through our end, the companies end." A third one, through translation, offered a confirming statement, stating that if a coworker or supervisor felt no need to escalate the issue, then they would not escalate the event themselves.

Another perspective pertains to the work environment. A question was asked about whether differing work environments and participants offered further clarity on whether those work environments influenced near miss reporting. A participant stated that they would report less due to the pressure of the work environment. Another offered the following:

Like that, the type of work environment, no words I don't think it will. It would I don't think it would make me report differently from what I said before, from the fact that I mean, it's just, we'll try to do the right thing most. I mean, I guess it could.

Another participant stated that not just the work environment would influence, but whether workers were present, by saying, “the presence of the workers plays a role in it for sure, right if the only thing to be damaged is some material. So be it right. These things happen.” While one participant shared that the near miss would be addressed immediately by talking with the impacted trade working near the participant’s crew, they would refrain from reporting because the event had already been addressed.

Theme 5: Reprimand, Recognition, and Motivation

As I began compiling my questions for this research topic and interviews, I was unsure what types of answers would emerge from reprimanding, recognition, and motivation. I had my preset bias around how reprimand and recognition would influence motivation. The participant responses were insightful and situational. Generally, reprimanding a worker did not instill fear, and recognition was not a critical motivator when deciding whether to report a near miss or not. A participant stated the following regarding getting reprimanded for attempting to or reporting a near miss: “Mmm, not yeah. In the future, I think we’re, we’ll have more experience and we I will have been it’s more reasons to report.” Another participant shared that they would not forget and report more. Another participant shared the same sentiment by offering the following response: “I guess what might be more. I mean, well, make me want to report it even more.” In sharing one more quote, the participant stated, “Okay, I guess I’ll make me more. Oh, it made me feel Angry in a way mad made me but I would not let it stop me from reporting it.”

Many participants shared similar experiences around recognition. Many had not been formally recognized and shared no desire to be recognized. The remaining participants who were recognized varied in their future reactions. One participant stated the following. “No, no, but I’m not out there to look for recognition. I’m just out there to Make sure everything’s safe.” A participant, speaking generally, said, “Yeah, yeah, definitely. Give them something to look forward to.” According to another saying, they are not looking for or interested in being recognized. The intention was to ensure everyone’s safety.

Participants felt a sense of duty to report near misses, and this was the key motivator, not financial incentives or recognition. One participant expressed that “Yeah, cause. I gotta look out for myself I gotta look out for others as well.” And another spoke about doing the right thing with safety:

Well. It’s, I think it’s important no matter what, because You know, when it comes to people’s safety, it’s like you take you put your health over you and pay it anyway. So you have to make sure you’re always in being safe.

One participant said that it felt bad ass when they reported the near miss. A light-hearted yet acknowledgment of a motivating personal statement. Lastly, of interest for potential future research is the limited effort made in recognizing near miss reporting, which may be a reason for the indifference shown by the participants.

Theme 6: Communication and Accessibility

Language barriers can present some challenges, as some participants mentioned. One comment from a participant emphasized the importance of preparing workers

through enhanced bilingual efforts at meetings, where simultaneous translation is used.

Another comment is the following regarding bilingual support:

Uh, besides. I was saying awareness to the guys, I would say, definitely. We should Me personally, I think we should have groups instead of just one whole thing, because some people are bilingual, and some people are or not, you know, kind of just have those guys with a translator.

A standard or consensus definition is perhaps a solution that comes from listening to the participants' answers to questions about the definition of a near miss. It is apparent that each participant had a general understanding of what they believed a near miss is; none could cite a formal definition. In some cases, participants confused general unsafe conditions and actions with a near miss.

Theme 7: External and Personal Values

An additional initial impression was whether interviewing a predominantly Latino workforce would highlight the so-called "macho" culture. The participants, predominantly Latino and quite representative of the Texas workforce, did not present that type of culture. The participants reinforced their general care for each other and had honest discussions about safety culture. One example came from a participant who was born and raised in El Salvador and is a tradesperson in Texas. He said the following: "Even from El Salvador you know, they've been telling him to go and be cautious. So from his experience You know, years back, he's been told so yes."

Many of the participants felt they had the ability and desire to report near misses, but contradicted their statement by witnessing one and not reporting it. Part of this is

because of their individual, nuanced approach and ongoing site conditions where the near miss occurred. Lastly, many participants discussed some form of external conversation with peers, family, community members, or employee organizations. Some of the discussions took place with spouses, while others involved peers working on other construction sites. One participant shared his story below: “That they get worried and then they’re always telling him to be careful.” Another shared a story of a conversation they had with other construction workers on different projects.

Yes, especially with my friends that they in construction but different different trade, you know, like, we’re talking about, like things that people do wrong way or doing unsafe, you know, like, like actually cutting like some like concrete without a mask or water.

A third example comes from a participant sharing his values around families and coworkers:

Um, great, and because of I mean, having a family, the main thing cause, I feel like you’re able to I take care yourself by your point and take care of all people. So I’m pretty sure everybody’s working to support either usually themselves or their families. That’s what we are all working for you know.

Summary

Fifteen participants were interviewed in this phenomenological study, drawn from various construction projects in three different Texas cities. Each participant provided unique perspectives, drawing on their own experiences with near misses, which varied from several months in construction to multiple decades. Interviews were conducted in

private locations, written consent was provided, and interviews were recorded. I spent several weeks transcribing the interviews and then followed up with line-by-line coding of the transcripts using Lumivero's NVivo 15 software. After coding using the software, seven themes emerged. The themes include (a) definitions and understanding; (b) emotional response; (c) supervisor and peer influence; (d) safety culture and work environment; (e) reprimand, recognition, and motivation; (f) communication and accessibility; and (g) external and personal values.

Language barriers could present some challenges in understanding a near miss. Some participants required a Spanish-to-English translation. The term "casi accidente" was used and understood as the appropriate translation of a near miss. The Spanish-speaking participants were able to describe their impressions of a near miss when using "casi accidente." Early on, an emerging trend arose, the participants could not provide a definition that represented something close to a near miss. Many of the participants described a near miss as something that could happen. They described limited employer-to-employee conversations about what a near miss is and how it benefits safety performance. Some participants confused near misses with unsafe actions or conditions. The participants demonstrated compassion and empathy for their fellow workers, yet showed inconsistency in how they viewed and reported near misses. Part of this inconsistency stems from the inconsistent efforts of near misses from job site to job site and company to company.

Each participant presented confidently and was capable of describing events, as well as sharing how their experiences had shaped them. The participants could also share

their impressions of safety and how companies and jobsites differ. The participants shared their experiences and provided valuable insights. Section 4 will discuss how the findings can be applied to further research on this topic.

Section 4: Application to Professional Practice and Implications for Social Change

Introduction

I aimed to understand the lived experiences of Texas-based construction workers in reporting near misses. The study included interviews with 15 construction workers across four projects in Galveston, San Antonio, and Houston, Texas. I interviewed workers from several different construction companies. A research gap exists between understanding the benefits of near misses, near miss programmatic efforts, and understanding a worker's lived experience. The questions were developed using the theory of planned behavior, sorting by attitudes, volitional control, and subjective norms. Critical gaps were identified during the interviews, indicating a need for further studies on the topic on a larger scale.

Interpretation of the Findings

The Gap Between Perception and Intention

The results also indicate disagreement between a worker's perception of a near miss and a company's intent. Köhler (2010), in a similar study for the maritime industry, indicated a similar phenomenon. A worker's perception does not align with a company's intent. Several factors identified by the participants during my research may explain the disagreements. First, while workers could describe a near miss, not all of them had experience witnessing or being a part of one. All participants responded to what they believed a near miss is, and that it is important, but not necessarily always reportable to their leaders. The findings suggest that near misses do occur, but the perception of severity influences the desire to report them. OSHA (n.d.) describes a near miss as a close

call or narrow escape from an unintentional event that could have resulted in harm to people, property, and the environment. In my experience, companies, whether they are general contractors, clients, or trade contractors, generally align with that definition. While these companies intend for employees to follow that definition, they do not, as the participant responses indicated. The study indicates that near misses do happen, although they are not always reported. Further studies should be conducted to understand what constitutes a near miss or to establish a standard definition from a worker's perspective.

Influence of Culture and Personal Decision

Cooper (2019) suggested that safety culture may influence worker participation in a reporting culture. A participant described how a job site schedule or perceived pressure to get the work done would limit their ability to report a near miss. The crew experienced a near miss event with another crew, addressed the concern, and continued their mission. In the moment, as the participant described, there was no need to report the situation upwards because they had fixed it. Another participant described observing a near miss but did not report it because they did not want to concern the company with investigating it. The participants expressed their own willingness to do what is right, but with additional responses, indicated their lack of readiness to report. Workers remain hesitant about reporting, even though they acknowledge having witnessed or heard of near misses.

Company culture and work environment may influence a worker's desire or need to report a near miss. Some participants mentioned that companies discuss near misses but do not clearly define what a near miss is, nor whether near miss reporting reduces injuries and illnesses. Interviews indicated that peer pressure and supervisor pressure

exist, but they do not influence individuals to refrain from reporting, although systemic pressure may play a role. Systemic pressure encompasses defining a near miss, as well as the work environment, including schedule impact, congestion, trade stacking, or trade coordination. The participant responses confirm that near misses are not understood consistently nor treated with the same level of importance by companies, supervisors, and workers, according to the participants. Further study should be considered into the influences of the work environment and near miss reporting.

Another finding was centered around recognition programs. Results on the benefits of recognition programs were mixed. Workers were not influenced by recognition programs, but appreciated being recognized when reporting near misses. A larger interview group across a larger spectrum is needed to investigate these experiences. Recognition programs are used to increase and influence worker behavior. Perhaps the benefits of a recognition program are conflated or misunderstood.

Lastly, the findings indicate that companies are inconsistent in their dialogue and reinforcement regarding near misses. Construction is a dynamic business that attracts individuals from diverse backgrounds, encompassing various cultural influences, personalities, and regions. Perceptions vary, and how supervisors communicate them can vary from crew to crew, project to project, and location to location. The lack of consistency, definition, and reinforcement influences a worker's perception of near misses. An interesting result, considering the workers worked for different companies, but all these companies were working on job sites managed by the same construction manager/general contractor. Further studies should be conducted on this dynamic and

how companies and individuals perceive near misses differently when working for the same construction manager/general contractor. This phenomenon is intriguing because it suggests a discrepancy between the construction manager/general contractor's policies and procedures and the trade contractor's perception.

Defining a Near Miss and the Language Barrier

All the participants had different definitions for what they described as a near miss. The participants commonly responded with "something that could happen." While true and in alignment with OSHA's (n.d.) definition, it does not provide the whole picture. As Dhuan and Zhou (2023) and Fan et al. (2019) have demonstrated, organizations can leverage near misses to prevent injuries and illnesses by investigating and correcting actions learned from these incidents. The absence of a clear definition characterizes failure in a near miss reporting culture, unclear expectations for reporting, and a failure to utilize the event as a learning opportunity (Fan et al., 2019). Although organizations, professional associations, and regulatory agencies offer definitions that vary in wording, they share the same intent. Participant responses on whether their companies told them what a near miss is were inconsistent, and no participant could share what the company defined as a near miss.

Another aspect of near miss clarity is the response. Workers provided different assumptions on how to respond to near misses. While some felt a near miss should be reported, they did not report it. The reasons varied, but generally not from pressure. The responses stem from a willingness to report but lack readiness to do so. Another study should explore this phenomenon to understand willingness, but not readiness, regarding

near miss reporting. Another question that should be asked is whether this willingness and readiness apply to other conditions, like hazards or other forms of incidents.

Another issue is the translation of the term “near miss” into Spanish. Workers would recite different definitions based on their interpretation of what a near miss meant in Spanish. A larger-scale study across different cultures, languages, or regions would help further our understanding of the potential language barrier.

Limitations of the Study

The state of Texas has a large and diverse construction industry, with numerous projects currently in the construction phase across various industries. The study is limited to a small number of workers across four construction sites in Houston, San Antonio, and Galveston, presenting a geographic limitation. The sites located in these areas of Texas were diverse in scope and complexity, but they represented only a small portion of the Texas construction industry. The experiences captured in this study may not accurately represent those of workers in other parts of the state, such as the North, Central, and West Texas regions. Worker perception based on construction methods, safety culture, and subcontractor networks may differ.

A second limitation was language. Several participants were Spanish-speaking, requiring additional time to carefully translate the questions and terms to ensure a clear understanding of what was being asked. I also needed time to clarify the responses effectively. Time was spent attempting to translate the term “near miss” from English into a suitable Spanish equivalent; a near miss does not have a direct translation in Spanish. The term “casi accidente” best reflects the translation from Spanish into English.

The Spanish-speaking workers were able to understand the interpretation; the need to clarify the terminology could have influenced how they framed their responses or how they recalled them. This challenge highlights a perception that employers may not have considered when developing near miss reporting programs.

An additional limitation was maintaining focus on the subject of near misses. Some workers steered away from the questions by expanding into other safety-relevant topics. The questions were developed to elicit the lived experiences of the participants. Several of the participants shifted into broader discussions about safety culture, work environment, production pressures, safety professional approaches, and expectations. While some questions did address these topics as they relate to near misses, others spent time adding information that was not relevant to the topic. I spent time redirecting back to the questions and the subject matter.

The other limitation was research saturation. Some questions began to converge, and similar themes were presented across the participants after the eighth interview session. I consulted with the committee chair to discuss advice and approaches to interviewing the remaining participants, including asking questions differently or reframing them to encourage greater reflection on the topic. Saturation was reached when defining a near miss after the twelfth participant.

Delimitations

This study was limited to the intentional boundaries I created in exploring the lived experiences of Texas-based construction workers, with a scope focused on near miss reporting. Other avenues could have been explored, including defining a near miss,

identifying policy gaps, or investigating whether investigations into near misses were conducted to understand potential failure points through some form of root cause or factor analysis. My sole intent was to understand what workers experience when they encounter, discuss, or respond to a near miss. The limiting scope helped me focus on the challenge of why workers do or do not report near misses. I could have veered into those areas, and during my interviews, some participants wanted to delve into them when expanding their thoughts in response to a question posed. I had to redirect back to the original question to keep everything on track.

I wanted to speak directly with workers within the limited geographic boundaries of Texas to gain an understanding of the consistent, shared experiences participants have regarding safety culture, expectations, and general contractor safety culture. Many of these workers share experiences working with similar general contractors and construction clients. A larger study could help gain insight into how the regulatory environment, client expectations, general contractor culture, and safety culture vary across different regions of Texas.

Another delimitation of the study was ensuring that workers participating in the study were not supervisors or safety professionals. I wanted to understand the perception of workers who have experienced or directly witnessed near misses without any influence on having people report them. While one participant expressed a desire to become a safety professional and another held a limited role as a non-supervising journey worker on a crew, their experiences were as trade workers. Safety professionals, forepersons, and

supervisors were excluded from the study due to their potential influence on reporting behaviors, expectations, and organizational pressure.

Additionally, a phenomenological study focuses on the meaning and personal interpretation of experiences. I wanted to truly understand a worker's perception, reality, and decision-making. The study was not an attempt to validate my own feelings about near misses, but rather an attempt to understand the behaviors surrounding a near miss when it occurs. Examining data or statistics that a company provides does not do that for me.

Recruiting efforts created another method of delimiting the study. Participation was voluntary and relied on communications that expressed a desire to hear from the worker's perspective. The participants were eager to share their stories about near misses and their experiences. Language barriers were addressed by leveraging technology to identify a particular term that best describes a near miss in Spanish. Workers understood the term and were able to present their experiences.

Near miss discussions within the family framework were limited. The discussions were generally generic, and in cases where the employee discussed a particular incident, the family response was to exercise caution at work. Organizational changes may include a revised approach to near miss communication. Workers indicated that they had heard about and their organizations had discussed near misses. Limitations to communication included a standard definition and changing expectations for reporting, which were influenced by the site's culture and work environment. This is where some of the gaps lie based on the interview questions.

Recommendations

A larger study is needed across construction sites to gain further clarity on what workers understand by a near miss. The study identified a gap in defining a near miss and inconsistencies in their experiences across organizations and sites. There should be further exploration into how near misses are communicated to workers and how they receive this information. This study uncovered and addressed several biases surrounding what a worker perceives as a near miss, what the organization expects, and how the worker or organization responds. Organizations may be taking a one-size approach when it comes to near misses. An additional recommendation may include investigating the efficacy of near miss and recognition programs.

Public Health Practice and Field-Based Products

Four field-based products were developed as part of the research to communicate, in a simple format, to employers, safety professionals, public health practitioners, and others about the study and the impact on improving public health for workers. These products are listed in Appendices A–D at the end of this paper. The products include a policy brief memo for practitioners, an executive summary that features a graphic summarizing the actions necessary for organizations regarding the results, a visual table outlining the framework and its alignment with the policy brief and executive summary, and a factsheet summarizing the findings and recommendations.

Positive Social Change

Social change includes a perception of a knowledge gap between what an organization considers a near miss and what a worker actually does. Definitions varied

from the different sites where the interviews were conducted, despite similar requirements from the general contractor. The study may indicate a need for isolation from the general contractor's site and program. However, the workers interviewed worked different job sites throughout their careers and have developed experiences or perceptions based on where they have worked. Like Dr. Matthew Hallowell's research on understanding the psychology of the worker in pre-task planning, perhaps we should consider how we understand the psychology of the worker in the context of a near miss.

Conclusion

This study examined the lived experiences of Texas-based construction workers who reported near misses. The study aimed to understand what, if any, potential barriers or inhibiting factors influenced near miss reporting. What was discovered in this small-scale study was that supervisors or coworkers did not drive the barriers. They are self-inhibiting due to a lack of understanding of what constitutes a near miss or because of the nuances of their work environment. Drawing on my experience, construction has many nuances; people are charged with making micro-decisions on a minute-to-minute basis. The participants were gracious and grateful for the opportunity they were given with the interviews. They shared their insights and let their experiences dictate how they view near misses. The participants gave honest answers without any duress. They spoke freely and clearly about their lived experiences.

The theory of planned behavior served as the framework for developing the interview questions. I was able to look at the three pillars of this theory: attitude, volitional controls, and subjective norms in organizing the questions. I used inductive

coding, which involves a line-by-line analysis of coding, to identify trends. The trends were organized into seven themes: (a) definitions and understanding; (b) emotional response; (c) supervisor and peer influence; (d) safety culture and work environment; (e) reprimand, recognition, and motivation; (f) communication and accessibility; and (g) external and personal values. What was uncovered by the seven themes is inconsistencies in defining and understanding what a near miss is, despite employer efforts. Awareness of what a near miss is because of language barriers or training efforts, and decisions on whether a near miss is critical enough to report, if it has been corrected in the field. The participants expressed a willingness to report near misses, but were not always prepared to do so.

This study contributes to a body of research around near misses in construction sites. The study also takes a different approach from current research by examining the lived experiences of construction workers. While employers develop near miss reporting structures and programs, they often overlook the employees who are most impacted by these initiatives. Further research in a larger-scale study is needed to gain further confidence about where the gaps lie with near miss reporting.

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Appendix A: Field Product #1 – Policy Brief Memo

Improving Construction Safety by Strengthening Near Miss Reporting on Texas Projects

Introduction

This policy brief summarizes the findings of a qualitative phenomenological study on the lived experiences of Texas-based construction workers when deciding to report or not report near misses.

Scope of the Problem

A greater quantity of near miss reporting lowers injury, illness, and fatality rates, yet they are highly underreported (Duan & Zhou, 2023). Three key findings from the research include inconsistent gaps in perception and intention, the influence of culture and personal decisions, and the definition of a near miss, as well as language barriers.

Current Approaches

Near miss reporting programs are often informal, inconsistently communicated, or perceived as punitive.

Proposed Program or Policy

This memo recommends implementing a Near-Miss Reporting Program with the following components grounded in workers' lived experiences. Key components include standardized and multilingual definitions and reporting pathways, supervisor accountability measures, culturally responsive training, and the integration of near-miss data into safety performance criteria (Thoroman & Salmon, 2018; Van Derlyke et al., 2022).

Major Constituencies

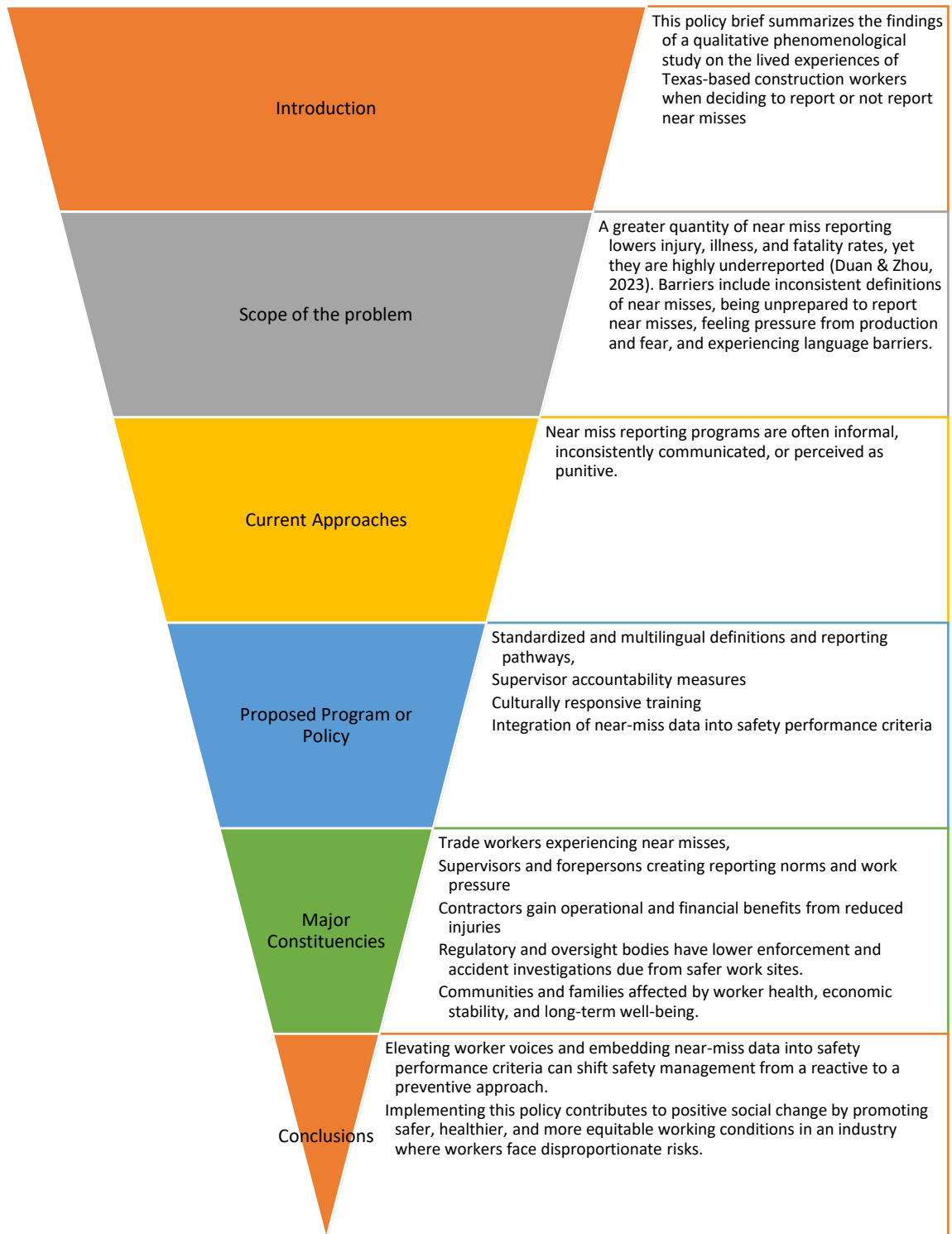
The constituents include trade workers who have experienced near misses, supervisors and forepersons, contractors, regulatory and oversight bodies, as well as communities and families affected by worker health, economic stability, and long-term well-being.

Conclusions

Elevating worker voices and embedding near-miss data into safety performance criteria can shift safety management from a reactive to a preventive approach. Implementing this policy contributes to positive social change by promoting safer, healthier, and more equitable working conditions in an industry where workers face disproportionate risks.

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Appendix B: Executive Summary for Program Development and Implementation

Strategies

Executive Summary

This executive summary outlines the significance of near miss reporting in construction and is designed for public health professionals specializing in occupational health and safety.

Public Health Problem

Near misses are severely underreported in the construction industry. Underreporting limits hazard identification, weakens safety culture, and contributes to preventable injuries, illnesses, and fatalities.

Population Impacted

The primary population affected includes Texas-based construction workers, particularly Hispanic and Spanish-speaking workers who make up more than half of the state's construction workforce.

Key Findings from the Study

The study findings are organized into three categories: the gap between perception and intention relates to self-efficacy, peer and supervisor influence on culture, and defining a near miss across all languages.

Suggestions for Program Development

Program development should focus on a standardized and multilingual definition, supervisor accountability, culturally responsive training, and the integration into safety performance criteria

Suggestions for Implementation Strategies

Implement a multichannel communication campaign using bilingual materials to reinforce key messages. Discuss near misses during daily huddles and weekly planning meetings. Utilize near miss data to identify trends, inform corrective actions, and share findings. Develop performance indicators for near misses.

Community and Context Considerations

Programs must emphasize collective safety and shared responsibility. All materials should be bilingual and written at a level that is accessible to readers. Workers are more likely to report when they trust supervisors and believe their concerns will be addressed. Tailor examples and training to reflect the varied trades, backgrounds, and experiences.

Key Takeaways

Near miss underreporting is a preventable public health issue that contributes to injuries and fatalities. Culturally responsive programs have been shown to significantly improve reporting rates. Supervisor influence and safety climate are critical determinants of reporting behavior. Strengthening near miss reporting contributes to positive social change by protecting workers, families, and communities.

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Appendix C: Visual Representations of Program Plan Framework

Table 1: Theory of Planned Behavior		
<i>Concept</i>	<i>Definition</i>	<i>Potential Change Strategies</i>
Volitional Control	Belief that one has control over a specific action or behavior	Treat near misses as a safety performance indicator, measure and trend reports and corrective action
Subjective Norms	How is this behavior viewed by others	Identify supervisor and peer influences Develop accountability programs that focus on behavior influences Strengthen near miss attributes
Attitude	A person's feeling and evaluation of the behavior	Define and standardize near misses to improve perception and intention Provide multi-language education and communications about near misses

Reference:

Mathew, M., Li, K., Kloosterman, J., Albright, A., Taddesse, N., (n.d.) Development of Theory of Planned Behavior. <https://courses.lumenlearning.com/suny-buffalo-environmentalhealth/>.

Appendix D: Field-Based Product #4 – Fact Sheet

Lived Experiences of Texas-Based Construction Workers Reporting Near Misses

Opportunities for Prevention

Overview

Near misses are incidents that are an important indicator of safety culture health. Despite that, near misses are generally underreported for a variety of reasons. This study explored the lived experiences of Texas construction workers to understand the factors that influence near miss reporting.

Why This Matters

- Texas construction workers experience **higher injury and fatality rates** than the national average.
- Near misses account for **up to 80% of construction incidents**.
- Underreporting limits employers' ability to identify hazards and prevent injuries.
- No studies on worker insight and lived experiences.

Study Snapshot

Design: Qualitative phenomenological study

Participants: Frontline construction workers in Houston, San Antonio, and Galveston

Data Collection: Semi-structured interviews

Analysis: Thematic analysis using NVivo

Framework: Theory of Planned Behavior

Key Findings

1. Perception and intention – the reporting gap

Workers' perception of what constitutes a near miss often differs from a company's stated intent, producing a gap between recognizing an event and intending to report it. Many participants could describe a near miss but had limited direct experience with one; they viewed near misses as important yet not always reportable. Perceived severity, fear of consequences, and doubts that reporting will lead to change reduced reporting intent.

2. Supervisor & Peer Influence

Production pressure, schedules, and supervisory expectations strongly shape whether workers act on near misses. Participants described situations where crews fixed problems on the spot and did not escalate them or avoided reporting to spare the company an investigation. Peer norms and supervisor behavior create systemic pressure—through trade stacking, congestion, or schedule impacts—that affects readiness to report even when workers express willingness. Recognition programs produced mixed effects: workers appreciated acknowledgment but were not uniformly motivated by incentives.

3. Defining a near miss across languages

Definitions of a near miss varied widely; many workers answered with broad phrases such as “something that could happen,” which aligns superficially with formal definitions but lacks operational clarity. Participants could not consistently state their company's definition, and assumptions about appropriate responses differed—

some believed reporting was required, while others did not act despite being willing. Language barriers compounded the problem: Spanish-speaking workers offered divergent translations and interpretations of “near miss,” producing inconsistent understanding and reporting behavior.

Public Health Implications

- Near miss reporting is a **preventive strategy** that can reduce injuries and fatalities.
- Worker experiences highlight **system-level blind spots** in reporting processes.
- Improving reporting systems strengthens safety culture and supports healthier worksites.

Recommendations

For Employers

- Standardize near miss definitions across all sites.
- Provide multilingual reporting tools and training.
- Train supervisors to respond without blame.
- Establish feedback loops so workers see the impact of their reports.
- Integrate near miss discussions into daily huddles.

For Safety Professionals

- Use near miss data to identify patterns and proactively address hazards.
- Conduct regular audits of reporting systems.
- Facilitate open conversations about near misses to normalize reporting.

For Policymakers & Industry Leaders

- Promote statewide guidance on near miss reporting.
- Support workforce development programs that include safety communication.
- Encourage industry-wide sharing of anonymized near miss data.

Contact Information

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Study: Lived Experiences of Texas Construction Workers Reporting Near Misses

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Appendix E: Interview Questions

The interview questions are intended to gain an understanding of the construction worker's lived experiences around near miss reporting. The interview questions are to gain insight around attitudes, subjective norms, and volitional control from the Theory of Planned Behavior (Hayden, 2017).

Schedule the appointment based on date and time that works for the interviewee and conduct the interview either in person or on a virtual platform using Microsoft Teams.

The participant will be placed at ease with the interview questions offered and their time taken for the response.

The first set of questions are to understand the construction worker's background and experience, including defining a near miss.

Interview Date: _____

Location of Interview: _____

Interview Recorded: _____

First bank of questions – Demographic Survey

1. How do you identify by gender?
2. What is your ethnicity?
3. How do you identify your race?
4. How old were you on your last birthday?
5. How many years of construction experience do you have?
6. What is your trade?
7. Have you ever worked in a supervisory capacity? What was your title?

8. Have you any experience working in a safety role? What was your title?
9. Did you volunteer to be here without any pressure from your employer, Gilbane Building Company, or me?

TPB Attitude

1. When you think of a near miss?
 - a. What comes to mind?
2. What is your understanding of what a near miss is?
 - a. What does it mean to you?
3. Have you witnessed or experienced a near miss?
 - a. Can you describe the example?
 - b. What happened when the near miss occurred?
 - c. Did you report it? If so, what happened when you did? If not, why was it not reported?
4. Do you think a near miss is important enough to stop work and report it?
 - a. Why do you think it is not important?
5. In your career, have near misses been emphasized as important to safety performance?
 - a. What are your thoughts on whether or not it should be a priority?
6. Have you ever discussed near misses with your peers, family, community members, or friends?
 - a. What do they think about it?

TPB Subjective Norms

1. In your career, how would you describe your different exposures to jobsite safety culture?
 - a. Does it influence your behavior around near miss reporting?
2. In your career, how would you describe the different work environments you have worked in around near misses?
 - a. Does it influence your behavior around near miss reporting?
3. In your career, how would you describe efforts around near miss reporting?
 - a. Does it influence your behavior around near miss reporting?
4. In your career, how would you describe your peer efforts around near miss reporting?
 - a. Did it influence your behavior around near miss reporting?
5. Did you ever feel pressure to “not stop” work because of a near miss?
 - a. Did it influence your behavior around near miss reporting?
6. In your career, have you ever been reprimanded or told not to report a near miss?
 - a. Does it influence your behavior around near miss reporting?
7. In your career, did a co-worker tell you not to report a near miss because they would get into trouble?
 - a. Did it influence your behavior around near miss reporting?

TPB Volitional Control

1. In your career, did you feel you had the ability to report a near miss?
 - a. Can you describe what that means to you and how you felt when it occurred?

- b. Did you feel satisfied or concerned about the actions taken?
- 2. In your career, did you think your co-workers have the same ability to report a near miss?
- 3. Have you ever been recognized for your efforts to report a near miss?
 - a. How did that influence your abilities to report future events?
- 4. Do external factors, like your family, union representation, community efforts, regulations, influence your ability to report near misses?
 - a. Describe how those factors influence you?
- 5. Do internal factors, like care for your co-workers, other trades, supervisors influence your ability to report near misses?
 - a. Describe how those factors influence you?

Additional Notes:

Appendix F: CITI Certification

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS*

* Scores on this [Requirements Report](#) (Part 1) reflect quiz completions at the time all requirements for the course were met. The Transcript Report (Part 2) lists more recent quiz scores, including those on optional (supplemental) course elements.

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• **Curriculum Group:** Student's
 • **Course Learner Group:** Doctoral Student Researchers
 • **Stage:** Stage 1 - Basic Course

• **Record ID:** 55541693
 • **Completion Date:** 23-Apr-2023
 • **Expiration Date:** N/A
 • **Minimum Passing:** 60
 • **Reported Score*:** 91

REQUIRED AND ELECTIVE MODULES ONLY

	DATE COMPLETED	SCORE
History and Ethical Principles - SBE (ID: 490)	23-Apr-2023	5/5 (100%)
Assessing Risk - SBE (ID: 503)	23-Apr-2023	4/5 (80%)
Informed Consent - SBE (ID: 504)	23-Apr-2023	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	23-Apr-2023	4/5 (80%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	23-Apr-2023	5/5 (100%)
Belmont Report and Its Principles (ID: 1127)	23-Apr-2023	3/3 (100%)
Research with Prisoners - SBE (ID: 506)	23-Apr-2023	4/5 (80%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** Scores on this [Transcript Report](#) (Part 2) reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. The Requirements Report (Part 1) lists the reported scores at the time all requirements for the course were met.

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 • **Course Learner Group:** Doctoral Student Researchers
 • **Stage:** Stage 1 - Basic Course

• **Record ID:** 55541693
 • **Current Score**:** 91

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES	MOST RECENT	SCORE
History and Ethical Principles - SBE (ID: 490)	23-Apr-2023	5/5 (100%)
Belmont Report and Its Principles (ID: 1127)	23-Apr-2023	3/3 (100%)
Assessing Risk - SBE (ID: 503)	23-Apr-2023	4/5 (80%)
Informed Consent - SBE (ID: 504)	23-Apr-2023	5/5 (100%)
Privacy and Confidentiality - SBE (ID: 505)	23-Apr-2023	4/5 (80%)
Research with Prisoners - SBE (ID: 506)	23-Apr-2023	4/5 (80%)
Unanticipated Problems and Reporting Requirements in Social and Behavioral Research (ID: 14928)	23-Apr-2023	5/5 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

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