

# **Construction Workers' Reasons for Not Reporting Work-Related Injuries: An Exploratory Study**

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*Although under-reporting of work-related injuries by workers is recognized as a significant problem in construction and other industries, little is known about the specific reasons for such occurrences. Qualitative and quantitative methods were used in this study to (a) identify reasons why construction workers may choose not to report work-related injuries, and (b) to investigate the frequency of the identified reasons. Twenty-seven percent of a sample of construction workers (N = 135) indicated that they had failed to report a work-related injury. The most frequent reasons given were related to perceptions of injuries as “small” and “part of the job” as well as fear of negative consequences, which may follow injury reporting. These findings are discussed in terms of practical implications. Strategies to overcome these reasons are suggested to decrease the under-reporting of injuries in the construction industry.*

occupational safety   injury under-reporting   construction

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## **1. INTRODUCTION**

A large body of evidence indicates that illnesses, traumatic injuries, and fatalities are more prevalent among workers in the construction industry

than in other occupational groups in the USA or other industrialized nations [1, 2, 3]. In fact, the most recent statistics for the U.S. construction industry show that there were 721 fatal occupational injuries and 71 600 reported occupational

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injuries and illnesses which resulted in days away from work in 2011 [4, 5]. These injuries and deaths have not only resulted in pain and suffering to the construction workers and their families but have also resulted in costs exceeding 10 billion dollars per year, or over USD 27000 per case [6].

Unfortunately, the high number of reported injuries may be drastically underestimating what is actually experienced by construction workers since research has shown that under-reporting of work-related injuries is a widespread phenomenon in construction and other industries [2, 7, 8, 9, 10, 11]. According to Rosenman, Kalush, Reilly, et al., up to 68% of work-related injuries and illnesses may not be captured by the national injury surveillance system [12]. More recently, Dong, Fujimoto, Ringen, et al. revealed that only 25% of severe injuries among Hispanic workers and 60% among white workers employed by small construction companies were captured in a national survey of occupational injuries and illnesses [7].

The issue of under-reporting of workplace injuries and illnesses has also caught the attention of policy makers. According to a U.S. government report addressing under-reporting of injuries, “accurate counting of injuries, illnesses and other safety and health indicators is essential to identify the root causes of workplace incidents and illnesses, to address unsafe workplace conditions, to ensure that workers get appropriate medical treatment and to establish an effective management safety system” (p. 4) [13]. More specifically, under-reporting of injuries and illnesses can compromise the accuracy of surveillance data [11], thus hindering the proper and timely identification of areas for organizational or industry interventions [2]. Additionally, unreported injuries can result in delays of treatment, which place a significant burden on the workers, their families, companies, health care systems, and national economies [14].

Considering these facts, it is imperative to identify the reasons that construction workers give for not reporting work-related injuries to their employers. It has been suggested that many construction workers do not report work-related injuries to their employer or seek early medical attention because of psychosocial, economic, and cul-

tural factors unique to the construction industry [2, 15, 16, 17]. The rough-and-tumble culture in the construction industry dissuades workers from reporting minor injuries and encourages workers to deal with the pain as just part of the job. However, these psychosocial, economic, and cultural factors have not been systematically investigated. If we know their reasons for not reporting injuries, we can find solutions to the under-reporting issue that is plaguing the construction industry. While only a handful of studies have investigated the reasons for under-reporting of injuries [14, 18], to the best of our knowledge, no published study to date has systematically examined this issue in the construction industry. Thus, in the current study, we used both qualitative and quantitative methods to identify the reasons for not reporting work-related injuries among construction workers.

### **1.1. Under-Reporting of Injuries in the Construction Industry**

Glazner, Borgerding, Lowery, et al. found that among the 433 construction companies building the Denver International Airport, injury rates according to workers’ compensation claims were twice the published Bureau of Labor Statistics injury rate for that industry and location [19]. Probst, Brubaker, and Barsotti similarly found under-reporting of injuries among 2400 construction workers working on a large semiconductor factory when comparing the number of injuries recorded in the federally-mandated record-keeping log of work-related injuries and illnesses with the number of injuries reported to the Owner Controlled Insurance Program [2]. Other studies also compared the number of work-related injuries from non-employer databases (e.g., medical records and workers’ compensation claims) with the survey data of the Bureau of Labor Statistics and found similar under-reporting levels (e.g., Dong et al. [7], Pransky, Snyder, Dembe, et al. [18] and Leigh, Marcin, and Miller [20]). While there remains little disagreement that under-reporting occurs, few studies have investigated why such under-reporting occurs, especially from the perspective of an individual worker.

## 1.2. Reasons for Not Reporting Work-Related Injuries

A handful of studies investigated the reasons for not reporting injuries at the organizational and individual level (e.g., Probst et al. [2] and Pransky et al. [18]). Probst et al. investigated the association between organizational safety climate and reporting of workplace injuries among 37 construction companies. Specifically, they found that companies with a poor safety climate had significantly higher rates of under-reporting compared with companies with a positive safety climate. However, they did not inquire as to the individual workers' specific reasons for not reporting injuries.

Pransky et al. investigated the role of safety incentive programs as a barrier to reporting injuries among workers in the manufacturing industry [18]. Through the use of a worker survey and interviews with key management, they found that while 30% of workers had reported either lost time from work or restrictions because of their injury, only 5% of all workers had an injury recorded in the the federally-mandated record-keeping log of work-related injuries and illnesses. These results provide evidence of significant under-reporting of injuries. Workers identified the following reasons for not reporting their injury: symptoms were not serious enough to seek help from the nurse (27%), the pain and discomfort were an inevitable consequence of the job (25%), they had informed the plant nurse of their symptoms and were given treatment and or light duty assignment but had since returned to their normal job with recurrence of the same symptoms (25%), and fear of disciplinary action (10%). Additional reasons for not reporting injuries were obtained from interviews with workers. Fear of being assigned to undesirable lighter-duty jobs, loss of overtime, separation from co-workers, concerns about abandoning their team, attributing their symptoms to age or seasonal production demands, fear of being labeled by their supervisors as unable to do their job or as a complainer, and belief that having symptoms was a sign of weakness were also reported as reasons.

Interviews with management further identified a number of organizational factors that might

have led to workers not reporting injuries [18]. First, unrealistic goals were set by upper level management about the number of recordable injuries. Furthermore, there were misconceptions among workers and supervisors about requirements for recording injuries. These researchers concluded that the unrealistic expectations of management, in the form of a safety incentive program, discouraged the accurate reporting of injuries.

Scherzer, Rugulies, and Krause investigated barriers to reporting work-related injuries among hotel room cleaners [14]. Among these workers, 67% had not reported work-related pain they had experienced and 18% had not reported a work-related injury. Barriers to reporting work-related pain or injury were measured with a checklist on a worker survey. Reasons for not reporting pain included "I thought it would get better" (44%), "I didn't know I should" (35%), "Too many steps to reporting" (23%), "We get in trouble if we get hurt at work" (13%), and "I was afraid I would get fired" (13%). Reasons for not reporting an injury included "It would be too much trouble" (43%), "I was afraid" (26%), and "I didn't know how" (18%). Scherzer et al. suggested that workers were dealing with work-related pain and injuries by self-medicating and using sick and vacation days instead of losing income or, potentially, their job. Not taking the necessary time to recover from injuries puts workers at risk for reinjury and additional lost time at work [18]. Scherzer et al. concluded that encouraging early reporting and a supportive working environment would help to reduce the burden of illness and disability among not only the workers, but also the employers and insurance companies.

The current study aims to extend the aforementioned research by focusing on perceptions of barriers to injury reporting among construction workers. Considering the unique nature and culture of work in the construction industry [15], it is possible that some reasons for not reporting injuries may be unique to construction workers. Thus, the goal of this study is to explore these reasons with both qualitative and quantitative methods. The exploratory nature of this study precluded formulation of specific hypotheses.

## 2. METHOD

### 2.1. Pilot Study

Union construction workers who had had at least one self-reported work-related injury in the past 2 years were recruited through union leadership to participate in semistructured focus groups lasting ~90 min. Twenty-six apprentices and journeymen<sup>1</sup> participated in two separate focus groups conducted by the fourth author. The types of conditions reported included low back pain, neck pain, shoulder strain, and carpal tunnel syndrome. Additional demographic information was not collected to maintain anonymity. A modified Delphi technique was used to conduct the face-to-face focus group meetings [21]. The Delphic process differs from the more traditional focus group discussion in that it is more structured and its purpose is idea-generation and prioritization, with the ultimate goal of obtaining group consensus. In this pilot study, we combined some of the Delphic process structure with the more unstructured quality of the focus group (hence “modified” Delphic process). The primary objective of the focus groups was to identify and discuss workers’ reasons for not reporting an injury to their employer. Through a consensus-building format, the two groups identified the following reasons for not reporting a work-related injury to their employer: (a) “I am afraid I will not be hired again by the contractor if I file a worker’s compensation claim”, (b) “I want the safety incentive for no lost work time”, (c) “I accept that injury and pain are a part of the job”, (d) “I’m worried about being labeled as a complainer by my co-workers or supervisors”, (e) “I’m concerned about being teased by co-workers for not being tough enough”, and (f) “the paperwork and process for filing workers’ compensation claims is complicated”. The information from the focus groups was supplemented with findings from past studies (e.g., Pransky et al. [18]) and yielded a list of 21 distinct reasons for not reporting work-related injuries, which were included in the main study.

### 2.2. Participants and Procedure

A total of 614 union members from a labor union in the U.S. Northwest were mailed a paper survey and a return addressed, stamped envelope. Completed surveys were returned by 135 workers, for a response rate of 22%. The participants were asked to mail the surveys directly to the researchers to ensure confidentiality. As part of the survey, the participants were asked if they had ever failed to report a work-related injury. If they answered affirmatively to this question, they were asked to endorse as many reasons for not reporting as applied to them from a list of 21 reasons. There were 57 (42%) plumbers, 37 (27%) pipefitters, and 36 (27%) steamfitters; 5 (4%) workers did not specify their trade. Their mean age was 45.3 (*SD* 9.0) and they were primarily male (99%) and Caucasian (92%). On average, participants had worked in their respective trade for 21 years (*SD* 10.2) and had been members of the union for an average of 14 years (*SD* 9.7).

### 2.3. Measures

*Failure to report work-related injuries.* The participants were asked, “Have you ever failed to report a work related injury?”. They responded by circling either *yes* or *no*. *Reasons for not reporting work-related injuries.* Those participants who indicated that they had failed to report a work-related injury were asked to indicate whether they had ever used any of the 21 listed reasons (see Table 1) for not reporting a work-related injury by putting a check mark next to those that applied to them.

## 3. RESULTS

Of the 135 participants, 36 (27%) indicated that they had failed to report a work-related injury at some point during their career in construction work. The five most commonly endorsed reasons for not reporting were (a) “My injury was small, so I don’t need to report it” (72%), (b) “I accept that pain is a natural part of my job” (47%), (c) “Home treatment, anti-inflammatories, pain med-

<sup>1</sup> Journeyman, someone who has completed an apprenticeship and is fully educated in a trade or craft, but not yet a master.

ication, heat, etc., are sufficient to deal with my problems” (47%), (d) “I am not sure if my pain or symptoms are the result of work activities” (36%), and (e) “I am afraid I won’t be hired again by the same or another contractor if I file a claim” (25%). Table 1 presents the complete list of reasons with the number and percentage of workers who endorsed each reason. There were no significant differences in reasons for not reporting work-related injuries among workers in different trades, areas, or for workers of varying ages and experience levels.

#### 4. DISCUSSION

The under-reporting of injuries is a major problem for the surveillance of work-related injuries as well as for intervention purposes [18]. Thus, identifying the reasons that workers give for not reporting work-related injuries is the first step to addressing the issue. Responses to our survey indicated that over a quarter (27%) of our sample

had not reported a work-related injury, providing further evidence that under-reporting occurs among construction workers. However, the primary goal of this study was not to study the degree of under-reporting, but rather the reasons that workers give for not reporting injuries.

The reasons for not reporting work-related injuries found in this study were consistent with previous research [11, 18]. For example, the most commonly endorsed reason in our study, “My injury was small, so I don’t need to report it”, was also acknowledged in a study of hospital workers [11]. While this reason for not reporting a work-related injury has been found in different occupations, what the workers interpret as a small injury may vary across occupations. Nurses may classify a sprained ankle as a major work-related injury, especially since they are required to be on their feet most of the day. However, a construction worker may perceive a similarly sprained ankle as “no big deal” and take a common pain reliever to reduce the pain and swelling, but continue working.

**TABLE 1. Frequency of Reasons for Not Reporting Injuries ( $n = 36$ )**

Reason	<i>n</i> (%)
My injury was small, so I don’t need to report it	26 (72)
I accept that pain is a natural part of the job	17 (47)
Home treatment, anti-inflammatories, pain medication, heat, etc., are sufficient to deal with my problems	17 (47)
I am not sure if my pain or symptoms are the result of work activities	13 (36)
I am afraid I won’t be hired again by the same or another contractor if I file a claim	9 (25)
I cannot afford to take time off work without pay to see a MD	8 (22)
I am afraid I will lose my current job	8 (22)
I am concerned about being labeled as a complainer by immediate foremen	6 (17)
I want to get the safety incentive for no lost work time	5 (14)
I am concerned about being labeled as a complainer by co-workers	5 (14)
I am afraid they will make a new safety rule as a result of my injury report that will make my job more difficult	4 (11)
The time that it takes to report the injury makes me fall behind on my work	4 (11)
I am concerned about being kidded by co-workers as not being tough enough	3 (8)
Filing a workers’ compensation claim is complicated	3 (8)
Contractor management will retaliate against me if I report the injury	3 (8)
Contractor management discourages me from reporting injuries	3 (8)
I do not want the “light duty” assignment that they will give me	3 (8)
I am worried that surgical procedures might be the recommended treatment	2 (6)
I do not have health insurance to cover the problem	1 (3)
I am afraid that I will prevent my coworkers from receiving incentives	1 (3)
The medical service provided by the contractor or client is not helpful	0 (0)

Notes. MD = medical doctor.

A second theme that emerged was that workers did not report injuries for fear of negative consequences, which is consistent with Pransky et al. [18]. These negative consequences included workers not wanting to lose a safety incentive, lose their job, or lose the potential of being rehired in the future.

Home treatment options, such as anti-inflammatories, pain medication, or heat, arose as another major reason why workers did not report work-related injuries. The use of these options in place of medical treatment may suggest that the injuries were minor. However, it is also possible that these workers chose them because of any of the other reasons on the list (e.g., the negative consequences mentioned previously). More importantly, workers who delay seeking proper medical treatment for a serious injury may be making the injury worse.

#### **4.1. Practical Implications**

Based on the results of this study, we propose a number of strategies to overcome these reasons for not reporting and to encourage workers to report injuries. One way for construction companies to alleviate fears of negative consequences and, thus, promote reporting of injuries is through the development and cultivation of a climate of open communication with a focus on problem-solving and learning, i.e., a positive error management climate (EMC) [22]. EMC has been defined as workers' perceptions of "organizational practices related to communicating about errors, to sharing error knowledge, to helping in error situations, and to quickly detecting and handling errors" (p. 1229) [23]. Previous research found that positive EMC in construction companies was associated with their workers' reports of feeling comfortable to raise and express safety concerns, improved safety behaviors, and less work-related pain [24]. This and other research (e.g., Hofmann and Mark [22] and Hofmann and Morgeson [25]) suggest that for construction management to increase the likelihood that workers will report safety problems and injuries, they need to endorse a constructive, nonpunitive approach to errors and explicitly encourage workers to talk about errors and safety concerns. Thus,

construction companies should consider implementing interventions targeting different levels of management (e.g., foremen, general foremen, superintendents) aiming to improve their EMC. Interventions for, e.g., foremen can focus on training them to build positive relationships and trust with workers [25] through supportive and proactive management skills, such as giving positive recognition and constructive feedback, and encouraging open communications about errors and near misses [26].

According to Pransky et al., safety incentive programs are a potential reason for under-reporting injuries [18]. They concluded that these programs could deter workers from accurate reporting of injuries. However, other researchers found that safety incentive programs could be associated with positive outcomes [27], such as reductions in accidents [28] and increases in preventative safety behaviors [29]. Haines, Merrheim, and Roy acknowledged that not all safety incentives resulted in positive outcomes and examined the factors that made these programs most effective [29]. They found that positive supervisor-subordinate relationships promoted positive reactions towards safety incentives. This finding can be partially explained with the social exchange theory, which suggests that subordinates, who have a positive relationship with their supervisor, will feel it necessary to give back to their supervisor [30]. Thus, workers who work well with their supervisor and are given safety incentives would be more likely to engage in desired behaviors than those who do not have this positive relationship. Haines et al. also found that group cohesiveness, safety-oriented norms, and task interdependence together had the strongest effect on reactions to safety incentives at the group level. This suggests that the effectiveness of safety incentive programs depends on the amount of influence workers have on each other's rewards. In the construction industry, these group characteristics are likely to be found, which suggests that safety incentive programs may be applicable for this industry. These findings demonstrate that safety incentives can be effective under the right conditions. To help foster these conditions, a safety culture needs to be developed within the

construction industry. The work of construction workers is inherently dangerous; however, with a safety culture combined with safety incentives, there are likely to be fewer injuries [31].

#### 4.2. Limitations and Directions for Future Research

The self-report nature of the worker survey may have affected how truthful the participants were in reporting whether they had failed to report an injury in the past because of fear of reprisal. They were assured that the surveys were completely anonymous with no personal identifying information collected and that the surveys would never be seen by their employer because they were directly mailed back to the researchers. However, it is still possible that they were uncomfortable admitting to not reporting an injury. Thus, the self-report nature of this study may have biased our findings towards the conservative side.

A second and related limitation of this study is that we did not collect any information on injury rates from the employers. Therefore, we had no direct access to injury data to see if there was true under-reporting in this population. However, the focus of the study was not under-reporting, but the reasons workers use for not reporting. Therefore, we believe that the use of both qualitative and quantitative methods to assess these reasons for not reporting, along with a consistency in results with other studies, demonstrates the strength of this study.

A third limitation of this study is that we did not examine the types of injuries that workers were not reporting. Our finding that a major reason for not reporting an injury was the perception that it was a small or minor injury begs the question of what injury a construction worker considers small or minor. If the injuries are truly small, minor ones, then under-reporting is not so important. However, it is more likely that what construction workers consider small or minor are actually major injuries that require, at the minimum, treatment or time off work. In this case, not reporting these injuries can cause delays in treatment and possibly result in more serious injuries and illness. Thus, future research should untangle

what construction workers perceive as a reportable injury (i.e., what injury is minor or major).

This study has contributed to the literature by examining reasons for not reporting a work-related injury specifically among a high-risk occupation, construction work. It is not sufficient to know that under-reporting exists, if we do not know its root causes. Workers' failure to report is a likely contributor to the under-reporting of injuries, especially in occupations where it is not the norm to admit a weakness. This study is a first step towards better understanding the reasons that construction workers give for not reporting work-related injuries.

## 5. CONCLUSION

The findings of this study shed light on the specific reasons that construction workers give for not reporting work-related injuries. Identification of these reasons makes it possible to propose specific recommendations to overcome these reasons. Hopefully, they will help to decrease the under-reporting. Most importantly, creating an environment that fosters accurate reporting of injuries will facilitate workers' receiving timely and adequate treatment.

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