

Best Practices for Improving Safety among Hispanic Construction Workers

Paul Thompson and Khalid Siddiqi, Ph.D.
Southern Polytechnic State University, Marietta Georgia

Abstract

Hispanic employees make up an increasing number of construction workers in most parts of the United States. Unfortunately, they incur more than their share of fatal and lost time injuries arising from construction work. Research was undertaken to determine the effectiveness of various methodologies used to address this problem. Contractors directly impacted by Hispanic construction workers' safety issues were interviewed. Results of those interviews were evaluated by consultation with experts in various Hispanic cultures, and compared to insurance company records. The research found that to be truly effective at reducing injuries in the Hispanic workforce, construction employers need to fully understand Hispanic culture issues, and use that knowledge to their advantage. If construction safety directors will take the time to learn about the individual cultures of their Hispanic employees, and to implement culturally appropriate employment and training procedures, they can significantly reduce employee injuries and fatalities in their Hispanic workforce.

Key Words

Construction Safety, Hispanic Workers, Strategic Initiatives, Culture, Spanish

Introduction

The objective of this research was to evaluate potential methodologies that construction employers can implement to improve safety results for their Hispanic workforce. Various methodologies have been tried; however, very little research has been done to determine their effectiveness. The cost of employee injuries is a significant portion of employers' cost of risk. Employers can reduce their risks and associated costs by investing in an effective Hispanic worker safety program. Research was conducted to find out what methodologies really work. Contractors with Hispanic workers were identified through contacts in the local Atlanta construction community. Key personnel with those contractors were identified. Contact persons were either a key employee involved in top management of the company, or an identified safety officer with the company. Respondents were asked to answer several questions. Discussions with respondents began using the questionnaire found in Appendix I. Respondents were also asked and encouraged to provide any additional information they wished about their successful experiences in their efforts to manage the safety of their Hispanic workers.

Hispanic workers make up increasing numbers of the construction workforce in the United States. By the year 2003, Brunette (2004) found that they represent 18% of all workers in construction, an increase of more than 100% over the prior decade. In some cases, like the Southwestern United States, Hispanic workers make up 60% of the workforce (Anonymous, 2004).

Construction is also one of the most dangerous industries in the United States with 7% of the workforce, and 20% of the occupational deaths in 2002 (Brunette, 2004). The United States Bureau of Labor Statistics indicates that there were a total of 5702 fatalities in the workforce in 2005. Of those, 1186, or 20.7%, were construction employees. However, construction employees only made up about 4.6% of the total workforce in 2005. The result of the combination of these two factors; that is, the inherent danger of construction and the increasing numbers of Hispanics in the industry, is a serious increase in occupational injuries to Hispanics in the construction industry. Richardson (2004) found that “Hispanic men in the South appear to be emerging as the group with the nation’s highest unintentional fatal occupational injury rate.” Fatalities among the Hispanic construction workforce increased 67% between 1992 and 2001 (Vazquez, 2004). These statistics may be under-reported because of the immigration status of some of these workers, and some of the fatalities may not have been reported at all (Vazquez, 2004). A review of statistics from the 1990’s revealed that Hispanics at that time made up less than 16% of the construction employees in the United States, while incurring 23.5% of fatal injuries (Dong, 2003). Richardson (1993) found that in Texas, during 1991 to 1993, as reported in the United States Bureau of Labor Statistics, that Hispanics made up 34% of construction workers employed, but accounted for 41% of fatalities.

Contractors face several problems, working to improve the safety of their Hispanic workers. One of these problems is cultural differences among Anglos and Hispanics but also between the cultures of various Latin American countries. The common perception that all construction workers are Mexican is incorrect. Brunette (2004) indicates that Mexicans make up only 55% of Hispanic construction workers. The rest are from other Central and South American countries, as well as Cuba and Puerto Rico.

Other cultural issues include fear of “rocking the boat” because of immigration status issues (Dominquez, 2003). Vazquez (2004) addresses issues including the importance of family, fear of employer punishment, respect for authority figures, and other cultural issues. Language is another obvious barrier. Vazquez (2004) indicates that as many as 30% of Hispanic workers do not speak English. Further, even though some Hispanic workers have a basic understanding of English, the construction industry uses some very technical terms. Nash (2004) and Mulhern (2005) speak of the need to train Hispanic workers in the technical language of construction. Finally, functional illiteracy of some Hispanic workers can make the situation worse. Some Hispanic workers are not literate in Spanish, let alone English.

Several methodologies have been proposed to attempt to deal with the problem of Hispanic workers’ safety. These include:

- Increased training
- Spanish language training for supervisors
- English as Second Language (ESL) training for Hispanic workers
- Cultural awareness training for supervisory personnel
- More emphasis on “hands-on” training
- Increased supervision
- Promotion of Hispanics to supervisory positions

Various organizations are trying to develop solutions to the problem of Hispanic safety. The Occupational Safety and Health Administration (OSHA) has implemented additional outreach

efforts, including running radio and television advertisements on Spanish language radio stations. The National Institute for Occupational Safety and Health (NIOSH) has done research into suggested improvements in Hispanic worker safety. Sokas (2002) documents NIOSH research into training procedures for Hispanic drywall workers. According to Platner (2001) the drywall trade has the highest percentage of Hispanic construction workers. The Georgia Institute of Technology Research Institute has undertaken an extensive program to translate OSHA regulations into Spanish. Becker (2003) documents the difficulties of this process, since much of the language used in OSHA safety standards is specific to English, and has no readily comparable language in Spanish.

Other authors have dealt with the problems of culture and language translation. Halverson (2003) addresses both these issues. He details the problems that arise when employers fail to carefully communicate with their Hispanic employees, taking care to acknowledge the effect of cultural issues.

Cultural research has been completed, referenced here because of the impossibility of separating Hispanic cultural issues from safety issues. Ortiz (1996) did extensive research on living standards and cultural issues facing Hispanic families in California. The paper generated by Ortiz discusses the effect of workers ending up in low skill non-union jobs, and the resultant steps taken by those families to survive financially in the United States.

Another study (Platner, 2000) focused on falls in construction. Platner suggested that, in addition to language and cultural barriers, structural changes in the construction industry have resulted in increased hazards to less educated and less skilled construction workers. These factors are made worse for Hispanic workers because of the language and cultural problems they face. Platner specifically mentions the increasing use of temporary employee leasing firms and the preponderance of small contractors handling specific portions of the work on jobsites. In summary, the literature documents the substantial problem of Hispanic construction worker safety, as well as efforts to improve results. However, “very little construction safety research targeted to the Hispanic workforce has been carried out” (Brunette 2004). The current research was undertaken to evaluate potential methodologies that contractors can implement to improve safety results in their Hispanic workforce.

Research Methodology

Semi structured interviews were conducted with construction project owners and safety directors according to the format provided in Appendix I. These individuals worked for companies who have successfully improved their Latino safety results. This improvement is evidenced by reductions in their workers compensation experience modifiers and employee injury numbers. Data collected through the interviews was compiled and sorted to see if a pattern exists for those who were successful in reducing lost time injuries, and fatalities. Interviews were also conducted with other individuals with special knowledge of Hispanic culture, for verification of findings from this study. All interviews were done either in person or by telephone, using the questionnaire provided in Appendix I.

All the companies interviewed had done several basic things, including provision of Spanish language signs around jobsites, provision of Spanish language training materials, and the use of interpreters to communicate safety instructions to their Hispanic workers. Beyond those basics, however, several trends emerged. Respondents were asked for their top two or three suggestions for improving Hispanic workers’ safety. Those results were tabulated for analysis purposes.

Respondents included three corporate officers, twenty safety directors or safety consultants, and a professor at Kennesaw State University. Seven of the respondents were from Hispanic or Latino backgrounds; the remainder spoke English as a primary language.

Results

Respondents were first asked if they had implemented one or more of several “best practice” procedural suggestions from the literature. Table 1 is a summary of respondents’ answers to whether or not they were using those suggested best practices.

Table 1: Suggested Best Practices versus Those Actually Used

Best Practice	Used (Yes)	Not Used (No)
Formal Cultural Training for Anglo Supervisors	3	13
Spanish language training for supervisors	3	13
Spanish language safety training for Hispanic employees	14	2
Promotion opportunities for Hispanic workers	14	2

Respondents were then asked to name from their own experience one or two methodologies that they had found to be especially effective in safety management of Hispanic employees. Table II lists individual responses when respondents were asked to discuss methodologies that they had personally implemented and found most effective.

Table II – Summary of Survey Questionnaire Responses

Respondent	Most Important Technique	Other Important Method
Masonry Contractor Owner	Train English speaking managers about cultural issues	Spanish language training for supervisors

General Building Contractor Safety Director	Intensive hands on training for Latino employees	Be aware of differences because of country of origin
General Building Contractor Executive	Cultural issues – encourage Latino employees to bring up problems	Train supervisors to be aware of cultural differences
Respondent	Most Important Technique	Other Important Method
Construction Industrial Hygienist	Train supervisors to be aware of cultural differences	Train Hispanics about differences in US culture
Road Contractor Safety Director	Make sure they know they're part of team	Ask about family, in Spanish, by name
General Building Contractor Field Safety Representative	Adequate training required - most workers here are country people and need training	Place emphasis on small contractors, who often don't have large budgets for safety
General Building Contractor Owner	Latino employees need strict understanding of work and safety rules	Supervisors must make extra effort to ensure the employees have a clear understanding
Site Contractor Safety Director	Provide extensive and ongoing safety training, include cost in budget analysis	Provide training in their individual dialect of Spanish
General Building Contractor Safety Officer	Provide clear training and expectations, Latino employees will do what they are told, if they understand it.	Companies who have problems with Hispanics don't have a good safety culture
General Building Contractor Safety Officer	Provide hands on specific job training	Implement procedures to train employees with low educations

General Building Contractor Field Safety Representative	Initially be firm. Appeal to their family ties. Ask “how will your family survive if you’re hurt on the job?”	Later, lighten up and secure their trust
General Building Contractor Field Safety Representative	Treat them like human beings	Recognize the importance of the family in Latino cultures
Oil and Gas Contractor Safety Officer	Recognize the importance of the family in Latino cultures, and use that to your advantage.	Explain US culture and procedures – things like taxes withheld from paychecks
Respondent	Most Important Technique	Other Important Method
Utility Contractor Safety Officer	Recognize importance of family	Cultural training - help with banking procedures - help with understanding of reporting injury claims
Concrete Contractor Owner	They are illiterate – do not bother training	Some will make the effort - promote them
Street and Road Contractor Safety Officer	Develop key Hispanic foremen	Make sure that your translations of training materials use accurate Spanish
General Building Contractor Safety Officer	Promote Hispanics to high positions in the company, based on their individual achievements	Concentrate on new employee orientation – should be language appropriate, and interactive
Street and Road Contractor Training Director	Provided the same training for Hispanics as English speaking employees	Translate every item - even non safety things like payroll procedures
Street and Road Contractor Safety Officer	Recognize importance of the family	Provide separate training for Latino employees, in separate classes away from English speaking employees

Site Prep Contractor Owner	Translate everything into Spanish	Promote Latino employees who do well and take initiative to learn safe and effective job procedures
-------------------------------	-----------------------------------	---

Based on the responses from Table II above, several broad categories were developed. These methodologies used by contractors can be broadly divided into seven general categories, as follows:

1. Culture
2. Appropriate Treatment
3. Training
4. Promotions
5. Basic, Hands On Training
6. United States Culture
7. Other

These categories are discussed individually below.

Culture

The most common methodology discussed was the need to understand the culture of Hispanic workers, and use that to an advantage. Typically, this did not involve formal cultural training for supervisors, as mentioned earlier, but simply discussions about cultural issues as they arose. The cultural issues can be divided into several areas, categorized under specific headings, as follows. These include *Importance of Family, Machismo, Immigration Status, Cultural Differences Between Countries, and Trustworthiness of Those who Wield Authority.*

Importance of family

Several respondents mentioned that they had failed when they tried to convince their Hispanic employees to be safe for their own protection. However, employees did respond appropriately when the safety director tied the employee’s potential for an injury to his inability to provide for his family. One respondent spoke of conducting an annual party, including invitations for the wives and children of the workers. The employer provided activities for the kids, but also spent some time promoting worker safety. Tying the kids and their family together with the safety message paid substantial dividends. Another respondent talked of trying to convince his Hispanic employees to wear appropriate fall protection. He was in the habit, with his English speaking employees, of talking about the dangers of injuries or death from falls. With that emphasis, he was generally successful at convincing his employees to use appropriate fall protection. When he used the same emphasis with his Hispanic employees, he failed. Recognizing the importance of family, though, he spoke to the Hispanic employees about the problems their wives would have if the worker was injured and could no longer provide for them. That was successful.

Machismo

Kalarao (2004) references this idea as well. One of the respondents to this survey called it the “sissy factor.” Hispanic workers may have a tendency to ignore safety issues because they feel that they are less “manly” if they bring them up to a supervisor. One respondent developed a specific and ongoing training program to educate their Hispanic employees that it is appropriate to bring up concerns about safety. He went further, though, with efforts to convince the employees through his ongoing training that he as the employer expects such a discussion of concerns.

Immigration Status

Sometimes the worker may be afraid to report accidents, because of their immigration status, choosing not to notify their supervisor when they are hurt. They fear detection when they go to the hospital and have to give their name and other particulars. Thus, when they get hurt, it might go unreported. A simple cut can become a serious injury because of failure to treat the injury in a timely manner. Several respondents spoke of specific training programs to convince Latino employees that the medical clinics would not turn them in to immigration authorities. A recent incident in North Carolina (Nash 2004) could have severely exacerbated this situation. Immigration authorities, posing as OSHA employees, invited several Hispanic employees to a safety meeting, then arrested and deported those working without appropriate papers. After some expressions of concern by safety advocates, the immigration authorities involved indicated they would not use this tactic again.

Cultural differences between countries

Employers need to be aware of differences between cultures belonging to different Latin countries. One respondent spoke about their experience of promoting a Mexican employee to a supervisory position over other Hispanics. They thought they were doing a “good thing”. The promotion failed though, because the crew being supervised came from Guatemala, and had a basic dislike for Mexicans.

Trustworthiness of Those Who Wield Authority

The worker also might have concerns about their authority figure. Due to corruption in Latin countries, government, police, and other official organizations are often perceived differently than they might be in the United States. Employers or their supervisors need to be aware that Hispanics may sometimes be suspicious of their good intentions or motives.

Appropriate Treatment

This of course should be a basic priority for any company, no matter who their employees are. One respondent, who has employed primarily Hispanics since 1981, made several suggestions. Know and use the names of their family members. Make them feel a part of a “team” that is bigger than themselves. Help them to understand where they fit into the organization.

Training

Provide the same training for Hispanics, in their own language, as is done for other workers. Two respondents, Hispanics themselves, spoke of the fact that there are often jobs for skilled

construction workers in their homelands. Thus, the ones who end up here are typically “country people,” as they indicated, and are not as likely to be skilled construction workers. Extensive training of workers may be necessary for many construction workers. O’Connor (2005) found that many young Hispanic employees did not receive adequate training.

Promotions

Employers need to make sure that good Hispanic employees have a career path available to them. For example, they might work towards being a machine operator, or a crew foreman. Employers must let workers know that they have opportunities to better themselves and their family, and that safety is an important factor in their advancement to the next level. One respondent spoke of their success with offering Latino employees promotions, from laborer positions to positions operating machinery. The chance of future advancement helped provide an incentive to work safely.

United States Culture

Employers must take time to explain US culture to their Latin employees. One respondent narrated an experience of hiring an employee, and telling him that his pay would be \$10 per hour. When the employee got his paycheck, he found that his take home pay was reduced because of various tax deductions. The employee perceived it as a deception because of lack of knowledge about US tax systems and procedures. Employers should explain to Latin workers about the banking and taxation systems in the US. Sometimes Hispanic workers are an easy prey for thieves. Criminals target Hispanic workers because it is known that the workers keep their cash close at hand.

Conclusions

Results from the study identified various methodologies that were found to be effective in improving safety of Hispanic construction workers. A review of the literature reveals significant emphasis on training. This research also found that training is important. However, appropriate training was mentioned as an effective safety procedure by only a minority of respondents interviewed for this research. On the other hand, appropriate recognition and understanding of cultural issues was discussed by almost half the respondents. Thus this research would tend to indicate that training, by itself, without an appropriate understanding of cultural differences, will not be as effective as possible at reducing Hispanic worker injuries. Contractors undertaking a program to improve the safety results of their Hispanic employees should address training and cultural issues. Training, without attention to cultural issues, will not be as effective.

Other commentators agree with the results of this research. One author indicates that a North Carolina task force “identified the language barrier and a culture gap as two important factors in many of the injuries and deaths” reviewed in their study.

One of the respondents is the Director of Industrial Hygiene for a major construction insurance carrier. He indicates that his company recognized the need for assisting their construction customers with the Hispanic safety issue. They considered several options for providing that assistance, including Spanish language training for supervisors, development of additional Spanish language training materials, etc. Ultimately, though, they decided to cooperate with a

local university to develop a cultural awareness training program, aimed at construction supervisors. When supervisors understand the cultural differences of their Hispanic employees, they can more effectively manage their safety.

Finally, it was felt that for validation purposes the research should be reviewed with an expert on Latino culture. For that purpose, the research was reviewed with a professor at Kennesaw State University, located in Kennesaw, GA. This individual is from Cuba, and works as a Spanish language professor at the university. She teaches Spanish classes, as well as classes in understanding Latino culture for individuals wishing to do business in those cultures. She concurred with the general research finding; that is, that to effectively manage the safety of their Latino employees, contractors must understand and address cultural differences.

This research did not attempt to initiate a dialogue with Hispanic workers themselves because of time and study scope constraints. Instead, interviews were completed only with safety directors and company owners. Future studies on the subject could consider interviews with the Hispanic workers themselves. A well planned questionnaire or interview might yield some additional information about their attitudes toward adoption of safe working methodologies in the construction industry.

In summary, various construction company respondents were asked how they managed the safety needs of their Hispanic workforce. Several different ideas were expressed.

Overwhelmingly, though, respondents felt that management personnel need to understand cultural differences, and use that understanding to manage their Hispanic employees.

Construction company managers should train their management staff to understand cultural differences, and effectively use that understanding to manage their employees.

One of the respondents said it best, “there are no excuses.” If a contractor has a problem with Hispanic worker safety results, it is only because that contractor has not taken the time to establish an appropriate safety culture at his company. Construction is a dangerous business but safe working procedures are quite well known. Such a culture of safety needs to be extended to Hispanic workers just as it is extended to the non-Hispanic workforce.

References

Anonymous. “Texas, North Carolina Worried About Hispanic Fatalities.” *Occupational Safety and Health*, Vol. 7, Iss. 11, p. 16

Anonymous. “Does a Poor Safety Environment Hurt Your Bottom Line?” *Contractors Business Management Report*, March, 2004, Iss. 3, p 4.

Becker, T. (2003) “Life and Death Learning: Georgia Tech Develops Safety Training Program for Hispanic Workers” *Georgia Tech Research News* (October, 2003)

Brunette, M. “Construction Safety Research in the United States; targeting the Hispanic workforce” *Injury Prevention Online*, 2004, 10:244-248

Dominguez, D. “Hispanic workers get injured on the Job More Frequently, Study Says” *Knight Ridder Tribune Business News Washington*, Nov 4, 2004, p. 1

Dong, X. and Platner, J (2003) “ Occupational fatalities of Hispanic Construction workers, from 1992 to 2000” *American Journal of Industrial Medicine* (45), 45-54

Halverson, M. “Lost in the Translation” *Electrical Construction and Maintenance* 6-1-03

Kalarao, N. “ Breaching the Language Barrier”. *Occupational Safety and Health Waco*, June 2004, Vol. 73, Iss. 6, p. 60-65.

Mulhern, B. “Managing Your Hispanic Workforce.” *Florida Grower Willoughby*, Feb. 2005. Vol. 98, Iss 2, p. 20.

Nash, J. “Construction Safety: Best Practices in Training Hispanic Workers.” *Occupational Hazards Cleveland*, Feb 2004, Vol. 66, Iss 2, p. 35-38

Nash, J. “Immigration Workers, Posing as OSHA Trainers, Arrest Workers.” *Occupational Hazards Cleveland*, Aug 2005, Vol. 67, Iss. 8, p.9-10

O’Connor, T., Loomis, D., Runyan, C., Abboud dal Santo, J., and Schulman, M. “Adequacy of Health and Safety Training Among Young Latino Construction Workers” *Journal of Occupational and Environmental Medicine*. Mar 2005, Vol 47, Iss. 3, Mar 2005

Ortiz, V et al (1996) “New Research on Latino Workers in the California Economy” Chicano/Latino Policy Project, University of California at Berkley, November, 1996

Platner, J. (2001) “Promoting Safer and Healthier Homes, Workplaces and Communities in the United States and Latin America” Hispanic Forum on a Safe and Healthy Environment, October 18-19, 2000

Richardson, D. “Fatal Occupational Injury Rates in Southern and Non-Southern States, by Race and Hispanic Ethnicity.” *American Journal of Public Health*, Oct. 2004, Vol. 94, Iss 10, pg 1756-1762

Richardson, S. “Fatal Work Injuries in Construction in Texas, 1991-1993” United States Bureau of Labor Statistics. <http://www.bls.gov/iif/oshwc/cfar0012.pdf>

Sokas, R. (2002) “CDC Efforts to Address the Health and Safety Needs of Immigrant Workers” Testimony before Congress, 2-27-02 <http://www.hhs.gov/asl/testify/t20020227.html>

Vazquez, F. “Latino Workers in the Construction Industry” *Professional Safety*, June, 2004, Vol. 49, Iss 6, p. 24-28

Appendix I

Questionnaire

1. Name

43rd Annual International Conference of Associated Schools of Construction Flagstaff, Arizona USA
Best Practices for Improving Safety among Hispanic Construction Workers By Siddiqi and Thompson

2. Name of company
3. Type of company – GC/ specialty/ heavy
4. What works
5. Length of time in business
6. Hispanic what percentage of workforce
7. Hispanics in foremen positions?
8. How long have you employed Hispanics
9. What efforts have you undertaken specifically to work with your Hispanic workforce
10. Training?
11. What types, lengths, expenditures – Spanish language?
12. Cultural training for your anglo supervisors
13. Education levels of your Hispanic workers
14. Where are they from
15. Efforts to keep them working for you year round? Reduce turnover?
16. Spanish language training for supervisors
17. Other outreach efforts? help with housing, etc
18. Why use Hispanic workers
19. Top two or three key issues